



RESOURCE AND PATIENT MANAGEMENT SYSTEM

iCare Population Management GUI

(BQI)

Installation Guide and Release Notes

Version 2.8
September 2019

Office of Information Technology
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Preface

Version 2.8 is the 17th release of the iCare application. The site should have already installed up to the latest version, which is Version 2.7 Patch 2. Version 2.8 includes functionality to implement change requests from iCare users and updates to the current iCare GUI.

The intended audiences for the Installation Guide and Release Notes are Indian Health Service (IHS) site managers and other technical staff. Technical documentation accompanies this installation document in this release. Please refer to the Technical Manual for additional information.

The iCare system is an integrated case management system intended to provide any IHS direct, tribal, or urban (I/T/U) healthcare providers with decision support and patient management for single or multiple disease states and care conditions for a single patient or for user-defined groups of patients. iCare provides a graphical interface to existing Resource and Patient Management System (RPMS) data, presenting different views to include individual patient provider-defined groups, and population and community-centric views of patient data.

The iCare application allows providers to proactively track the conditions and health statuses of their patients, any individual patient, or populations of patients, based on specific or multiple user-defined clinical concerns. A more complex and integrated level of logic for certain chronic conditions is defined in underlying RPMS components and is accessible through iCare to assist non-specialist providers in improving clinical decision-making and compliance with clinical guidelines. This type of integrated system provides a mechanism to inform healthcare providers about and follow up on clinical interventions and information about single or multiple disease states and conditions.

The iCare package is intended for use by both general and specialist healthcare providers, as well as disease-specific case managers at any I/T/U using RPMS. The experience and skill level of all hands-on users of RPMS will range from non-expert to expert. The providers' knowledge of clinical guidelines and disease-specific treatment will range from general to specialists.

The iCare system consists of two components—the RPMS M programming language and the graphical user interface (GUI)—both of which must be installed and functioning for this application to work.

1.0 Release Notes

Table 1-1 lists the iCare v2.8 Change Requests (CRs).

Table 1-1: iCare v2.8 CR IDs and Descriptions

CR ID	CR Description
6017	BQI – National Measures Aggregated Tab in Panel View Times Out on Large Panels [HEAT# 426630]
9024	BQI – Panel View – Patient List Tab – Implement Column Tooltips
9143	BQI – Panel Def – Inpatient – TRANSFERRED Parameter Not Working
10085	BQI – Panel Definition – PCC Lab Filter – Labs in Taxonomy not dropping to be resulted
10900	BQI – Add Hospital Location to Historical PCC Data Entry in iCare
10901	BQI – Auto-update iCare Measurement File
10051	HMS (BKM) – Update BKM GONORRHEA TESTS CPTS Taxonomy
10552	BTPW – Modify CMET Manual Event narrative
9140	BQI – Add Exam to PCC in Panel Definition
10448	BQI – IPC Cycle Time Measure
10774	BQI – Fix IPC Continuity of care by team by provider
10811	BQI – Update IPC Export Files Based on NDW Feedback
10822	BQI – Graphing - Expand to Graph All Numeric Measurements
10812	BQI – Do Not Allow Editing of Message Agent
10902	BQI – Fix the IPC Site Parameters
10903	BQI – Add Last Measurements to Patient Demo Layout Columns

2.0 Installation Notes

Prefix: BQI

Current Version: 2.8

2.1 Contents of Distribution

Table 2-1: Contents of distribution — files and descriptions

File	Description
bqi_0280.k	Version 2.8 KIDS installation file
bqi_028i.pdf	Installation Guide and Release Notes
bqi_028t.pdf	Technical Manual
bqi_0280gui.zip	Version 2.8 GUI installation files in Compressed Folder (zipped) format
bqi_028u_cmet.pdf	CMET User Manual
bqi_0280u_ipc.pdf	Improving Patient Care User Manual
bqi_028u_panel_def.pdf	Panel Definition User Manual
bqi_028u_panel_list.pdf	Panel List User Manual
bqi_028u_panel_view.pdf	Panel View User Manual
bqi_028u_patient_rec.pdf	Patient Record User Manual

2.2 Required Resources

2.2.1 RPMS

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

Note: iCare Version 2.7 Patch 2, IHS CLINICAL REPORTING 19.0 (BGP), and ATX*5.1*29 are required installs.

Table 2-2 lists required RPMS server software.

Table 2-2: Required RPMS software

Module	Minimum Version
IHS ICD/CPT Lookup & Grouper (AICD)	v4.0 Patch 1
Taxonomy (ATX)	v5.1 Patch 29

Module	Minimum Version
VA FileMan (DI)	v22.0 Patch 1019
VA Kernel (XU)	v8.0 Patch 1018
BMXNet (BMX)	v4.0 Patch 4
IHS/VA Utilities (XB)	v3.0 through Patch 11
Patient Information Management System (PIMS)	v5.3 through Patch 1019
IHS Clinical Reporting (BGP)	v19.0
PCC Data Entry (APCD)	v2.0 through Patch 10
PCC Health Summary (APCH)	v2.0 through Patch 17
Q-Man (AMQQ)	v2.0 through Patch 21
HIV Management System (BKM)	v2.2 Patch 2
IHS Asthma Register (BAT)	v1.0
IHS PCC Suite (BJPC)	v2.0 Patch 22
IHS MU Performance Reports (APCM)	v1.0 Patch 9
Referred Care Info System (BMC)	v4.0 Patch 13
Patient Registration (AG)	v7.2 Patch 7
Immunization (BI)	v8.5 Patch 16
iCare (BQI)	v2.7 Patch 2
IHS User Security Audit (BUSA)	v1.0
Diabetes Management System (BDM)	v2.0 Patch 12
Designated Provider Mgt System (BDP)	v1.0 Patch 1
Electronic Health Record (EHR)	v1.1 Patch 24
Clinical Reminders (PXRМ)	v2.0 Patch 1009
Text Integration Utilities (TIU)	v1.0 Patch 1020
Taxonomy (ATX)	v5.1 Patch 29

2.2.2 GUI Client

Table 2-3 shows client workstation specification details.

Table 2-3: GUI client

Client PC	Minimum Versions
Microsoft Windows (any Windows OS that supports .NET 4.0 Framework)	Windows 7 or newer, Windows 2012 Server or newer
Microsoft .NET Framework	V4.0 (minimum client version)

Client PC	Minimum Versions
Suggested client PC hardware	Processor: <ul style="list-style-type: none"> • Minimum: Pentium III 800MHz • Suggested: Pentium 4 2GHz+ Memory (RAM): <ul style="list-style-type: none"> • Minimum: 2048MB • Suggested: 4096MB+
Approximate disk space requirements	iCare application footprint ≈ 50MB

2.3 Before You Begin: Installation Issues

- Make a copy of this distribution for offline storage.
- Print all notes and readme files.
- Capture the terminal output during the installation using an auxport printer attached to the terminal where the software installation is performed to ensure a printed audit trail if any problems should arise.
- iCare users should be offline.

3.0 Installation Instructions

The iCare package contains components that run on both the RPMS server and the client personal computer (PC). Installation of the RPMS server components is conventional and consists of a Kernel Installation and Distribution System (KIDS) build.

The client PC component is currently deployed via a standard Windows installation package application as an “msi” file. New versions of the client software can be installed on the client PC as updates are available so that the client software version matches the version of iCare installed on the server. Previous versions of the client software will be automatically removed from the client workstation when the new version is installed.

If desired, the iCare client may be uninstalled via the Windows control panel in the **Add/Remove Programs** option or the **Programs and Features** option for Windows. Select the entry in the list for the iCare version to uninstall and click the **Uninstall** option.

3.1 Special Considerations for Multi-Divisional Sites

Different facilities that use the same RPMS database are considered multi-divisional sites. Once KIDS is installed on the RPMS server, all facilities will be affected.

3.2 Before Installation

Determine the method of installing the new iCare GUI client for all iCare users. Refer to Appendix A for descriptions of some of the available deployment options, including automated installation.

Coordinate with all iCare users when the KIDS will be installed with the GUI, so the GUI is ready to go when the KIDS is installed. The following sections provide instructions on how to install iCare.

3.3 Pre-Installation Instructions

1. If possible, initially load the software into a test account, then into the production account. There are no routines or globals to remove after the installation is complete.
2. Refer to the RPMS Server Installation Instructions (Section 3.4) and the Sample RPMS Client Installation (Section 3.5) for the applicable prompts and user responses. User responses display in bold type.

3. Ensure that the BMX system is installed and that a BMX monitor process is running. The BMX Integrated Security feature allows connection to RPMS without having to re-specify access and verify codes every time. For this feature to work, the integrated security field of the BMX monitor port must be set to Yes. See the BMX user and installation manuals for details on BMX.

3.4 RPMS Server Install Instructions

1. On the RPMS server, load and install the bqi_0280.k file using the KIDS menu options. From the **KIDS** menu, select the **Installation** menu.
2. From the **Installation** menu, select **Option 1: Load a Distribution**.
3. Type **bqi_0280.k** at the “Enter a Host File” prompt (the file name might need to be preceded with the appropriate host path to retrieve from the appropriate software directory).
4. The KIDS file bqi_0280.k contains the following: ICARE MANAGEMENT SYSTEM 2.8 and BTPW*1.2*2.
5. Type **Yes** (or press Enter to accept the default) at the “Want to Continue with Load? YES//” prompt.
6. From the **Installation** menu, select **Option 2: Verify Checksums in Transport Global**, which provides a mechanism for ensuring the integrity of routines by verifying checksums for the components of the Transport global and reports any errors uncovered.
7. Type **ICARE MANAGEMENT SYSTEM 2.8** as the install name.

Optional: At this time, an optional election to exercise one of the following installation options is available. Use ICARE MANAGEMENT SYSTEM 2.8 as the install name.

- a. **Back Up a Transport Global:** Creates a MailMan message that will back up all current routines on the system that would be replaced by this release (because this is a new release no files will be replaced).
 - b. **Compare Transport Global:** Previews all changes that will result from the installation of this patch and compares them with the values currently loaded on the system (routines, data dictionaries, templates, etc.).
8. From the **Installation** menu, select the **Install Packages(s)** option.
 9. At the “Select Install Name” prompt, type **ICARE MANAGEMENT SYSTEM 2.8**.
 10. Respond to the following prompts as indicated:

- a. At the “Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES//” prompt, type **NO**.
 - b. At the “Want KIDS to INHIBIT LOGONs during the install?// YES” prompt, type **NO**.
 - c. At the “Want to DISABLE Scheduled Options, Menu Options and Protocols?// YES” prompt, type **NO**.
11. Type the device that will print the install messages. Exit the **Installation** menu.

Proceed to Section 5.0 for further information and setup instructions.

Note: Please see Section 5.3 for information on post-installation.

3.5 Client Installation

Determine the method of installing the GUI for all iCare users. Note that the bqi-iCareInstall-v2_8.msi file is a Microsoft installation file intended to be suitable for use with automated workstation install “push” technologies, such as Microsoft Active Directory Group Policy deployment. Refer to Appendix A for descriptions of some of the available deployment options, including automated installation.

The installation of the iCare client must be coordinated with the installation of the KIDS on the RPMS server so that the GUI is ready to install after the KIDS installation.

To install the iCare Windows GUI client portion of the iCare application for a basic single-workstation, perform the following tasks:

1. Copy the bqi_0280gui.zip file into a local directory or centrally accessible network share directory and extract its contents:
 - a. **bqi-iCareInstall-v2_8.msi**
2. Log into the client PC with administrator privileges.
3. Copy bqi-iCareInstall-v2_8.msi to the client PC from the network share directory.
4. Install the iCare software by executing bqi-iCareInstall-v2_8.msi on the client PC.
5. When prompted with the **Destination Folder** dialog, click **Next** to confirm and complete the installation.
6. To run the iCare package, click **Start**.
 - a. Select **All Programs | IHS iCare**.
 - b. Click **iCare**.

4.0 Sample Installations

4.1 Sample Cache Install

Note: User responses appear in bold type.

As shown in Figure 4-1, an installation option must be selected to begin the installation process.

```
Select OPTION NAME: XPD MAIN   Kernel Installation & Distribution System

    Edits and Distribution ...
    Utilities ...
    Installation ...

Select Kernel Installation & Distribution System Option: Installation

1   Load a Distribution
2   Verify Checksums in Transport Global
3   Print Transport Global
4   Compare Transport Global to Current System
5   Backup a Transport Global
6   Install Package(s)
    Restart Install of Package(s)
    Unload a Distribution

Select Installation Option: 1   Load a Distribution
```

Figure 4-1: Selecting installation option

Note: iCare Version 2.7 Patch 2, IHS CLINICAL REPORTING 19.0 (BGP), and ATX*5.1*29 are required installs.

```
Enter a Host File: d:\pub\bqi_0280.k <Enter> (Note: Type the appropriate
path for your system.)

KIDS Distribution saved on Jun 07, 2019@15:55:11
Comment: iCare Version 2.8

This Distribution contains Transport Globals for the following Package(s):
  ICARE MANAGEMENT SYSTEM 2.8
  BTPW*1.2*2
Distribution OK!

Want to Continue with Load? YES//
Loading Distribution...

  ICARE MANAGEMENT SYSTEM 2.8
  BTPW*1.2*2
Use INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.8 to install this Distribution.

1   Load a Distribution
2   Verify Checksums in Transport Global
3   Print Transport Global
```

```

4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation Option: Verify Checksums in Transport Global <Enter>

```

Figure 4-2: Installation prompts

```

Select Installation Option: 2  Verify Checksums in Transport Global
Select INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.8      Loaded from
Distribution
6/7/19@15:57:35
=> iCare Version 2.8 ;Created on Jun 07, 2019@15:55:11

This Distribution was loaded on Jun 07, 2019@15:57:35 with header of
iCare Version 2.8 ;Created on Jun 07, 2019@15:55:11
It consisted of the following Install(s):
ICARE MANAGEMENT SYSTEM 2.8      BTPW*1.2*2

Want each Routine Listed with Checksums: Yes// NO
DEVICE: HOME//      VIRTUAL

PACKAGE: ICARE MANAGEMENT SYSTEM 2.8      Jun 07, 2019 3:57 pm      PAGE 1
-----

42 Routines checked, 0 failed.

PACKAGE: BTPW*1.2*2      Jun 07, 2019 3:57 pm      PAGE 1
-----

3 Routines checked, 0 failed.

```

Figure 4-3: Installing iCARE

As shown in Figure 4-4, other prompts are shown on subsequent installation pages.

```

Select Installation Option:
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution
Select Installation Option: Install Package(s)

```

Figure 4-4: Installation options

4.1.1 Installation

```
Select INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.8      Loaded from
Distribution
6/7/19@15:57:35
=> iCare Version 2.8 ;Created on Jun 07, 2019@15:55:11

This Distribution was loaded on Jun 07, 2019@15:57:35 with header of
iCare Version 2.8 ;Created on Jun 07, 2019@15:55:11
It consisted of the following Install(s):
ICARE MANAGEMENT SYSTEM 2.8      BTPW*1.2*2
Checking Install for Package ICARE MANAGEMENT SYSTEM 2.8

Install Questions for ICARE MANAGEMENT SYSTEM 2.8

Incoming Files:

90505      ICARE USER
Note: You already have the 'ICARE USER' File.

90505.4    ICARE PROVIDER
Note: You already have the 'ICARE PROVIDER' File.

90505.6    ICARE FACILITY
Note: You already have the 'ICARE FACILITY' File.

90505.7    ICARE CLINIC

90505.8    ICARE TEAM
Note: You already have the 'ICARE TEAM' File.

90506.3    ICARE FILE DEFINITION (including data)
Note: You already have the 'ICARE FILE DEFINITION' File.
I will OVERWRITE your data with mine.

90506.9    ICARE TIMEFRAMES (including data)
Note: You already have the 'ICARE TIMEFRAMES' File.
I will OVERWRITE your data with mine.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//

Checking Install for Package BTPW*1.2*2

Install Questions for BTPW*1.2*2

Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.
```

```
DEVICE: HOME//    VIRTUAL

Install Started for ICARE MANAGEMENT SYSTEM 2.8 :
      Jun 07, 2019@15:58:15

Build Distribution Date: Jun 07, 2019

  Installing Routines:
      Jun 07, 2019@15:58:15

Running Pre-Install Routine: ^BQI28PRE

Installing Data Dictionaries:
      Jun 07, 2019@15:58:15

Installing Data:
      Jun 07, 2019@15:58:16

Installing PACKAGE COMPONENTS:

Installing REMOTE PROCEDURE

Installing OPTION
      Jun 07, 2019@15:58:16

Running Post-Install Routine: ^BQI28POS.....
Updating [BKM GONORRHEA TESTS CPTS] taxonomy...

Updating Routine file...

Updating KIDS files...

ICARE MANAGEMENT SYSTEM 2.8 Installed.
      Jun 07, 2019@15:58:16

Not a VA primary domain

NO Install Message sent

BTPW*1.2*2

  Install Started for BTPW*1.2*2 :
      Jun 07, 2019@15:58:16

Build Distribution Date: Jun 07, 2019

  Installing Routines:
      Jun 07, 2019@15:58:16

Updating Routine file...

Updating KIDS files...

BTPW*1.2*2 Installed.
      Jun 07, 2019@15:58:16

Not a VA primary domain
```

```
NO Install Message sent  
Install Completed
```

Figure 4-5: Installation Completed

4.2 Sample GUI Client Installation

The following section outlines the installation procedure for loading the iCare GUI client application onto a single workstation. Options are available to install the iCare client on multiple workstations through automated deployment methods. Please refer to Appendix A for descriptions of these options.

1. As shown in Figure 4-6, navigate to the folder on the client machine that contains the iCare installation program and launch the `bqi-iCareInstall-v2_8.msi` program.

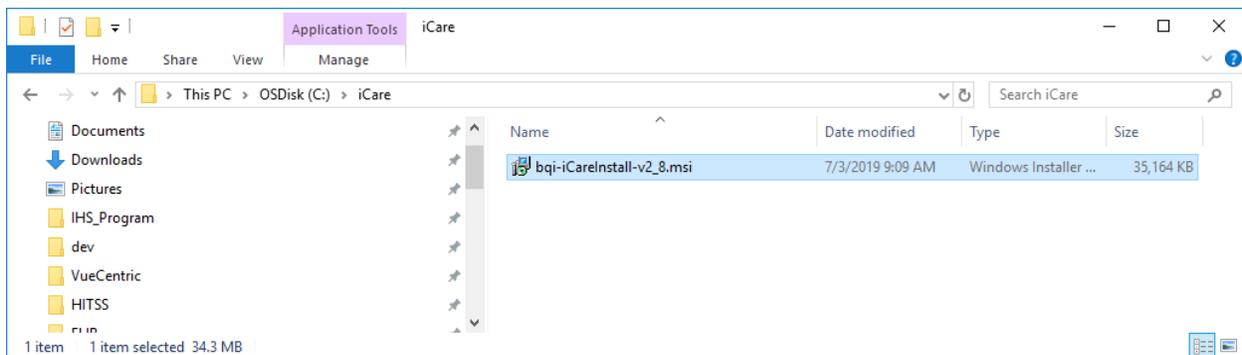


Figure 4-6: iCare installation program

2. As shown in Figure 4-7, click **Next** on the Welcome screen to continue.

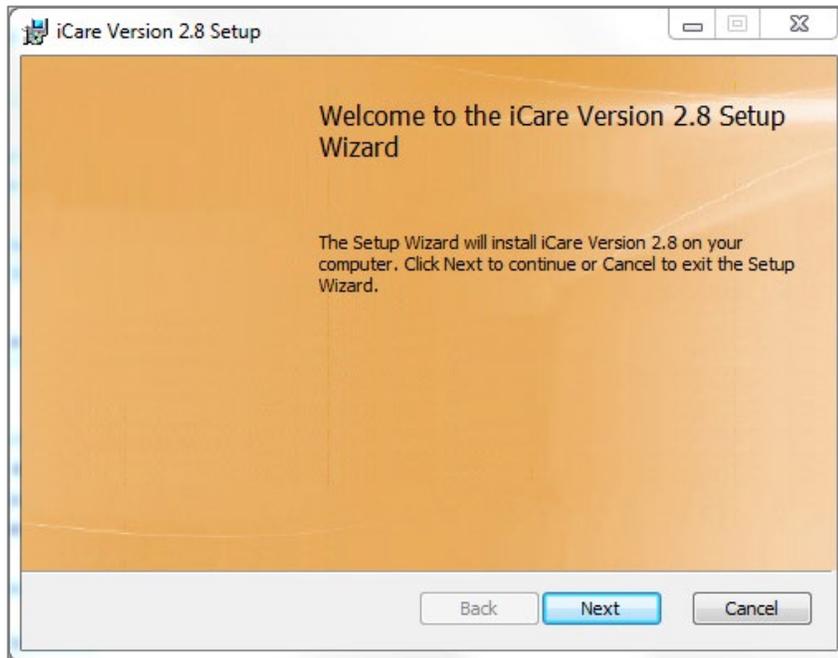


Figure 4-7: iCare Version 2.8 Setup — Welcome screen

3. As shown in Figure 4-8, click **Next** on the **Destination Folder** screen to continue.

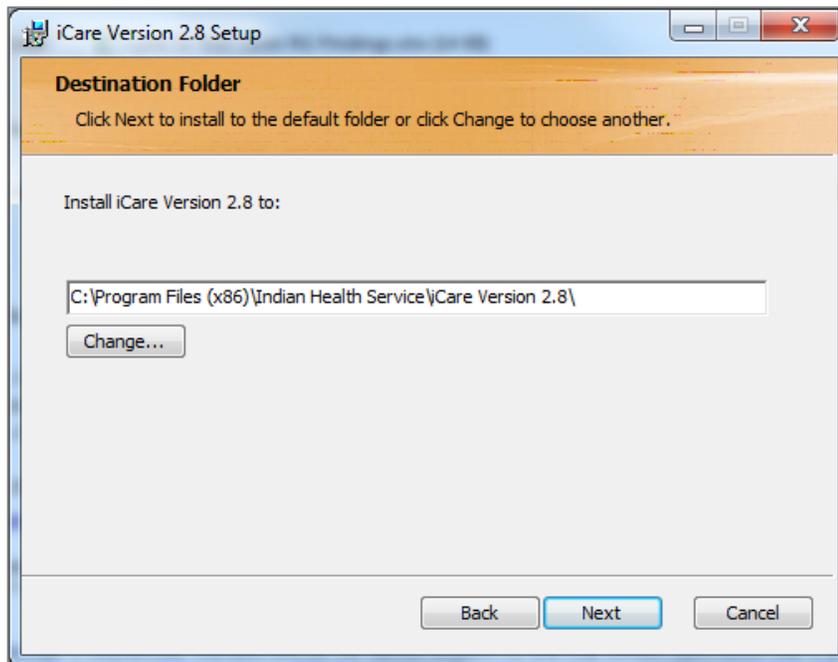


Figure 4-8: Destination Folder screen

4. As shown in Figure 4-9, click **Install** to confirm installation.

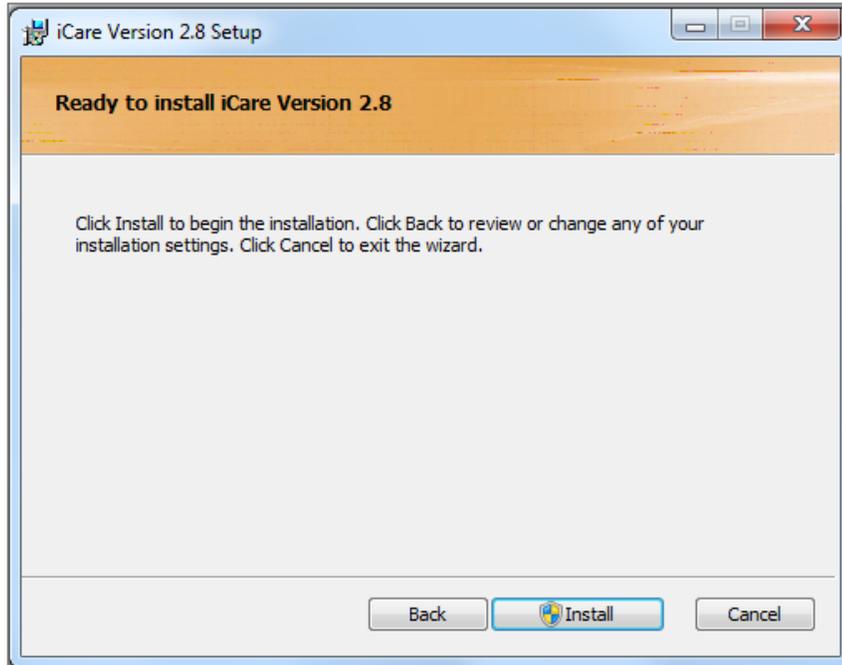


Figure 4-9: Confirm Installation screen

5. As shown in Figure 4-10, wait for the installation to complete.

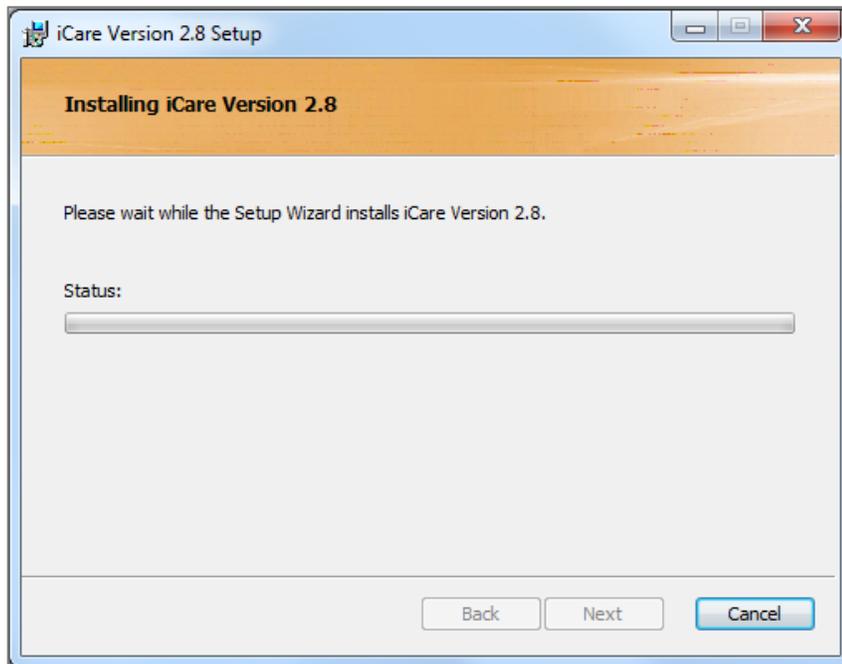


Figure 4-10: Installing screen

6. As shown in Figure 4-11, click **Finish** to complete the installation.

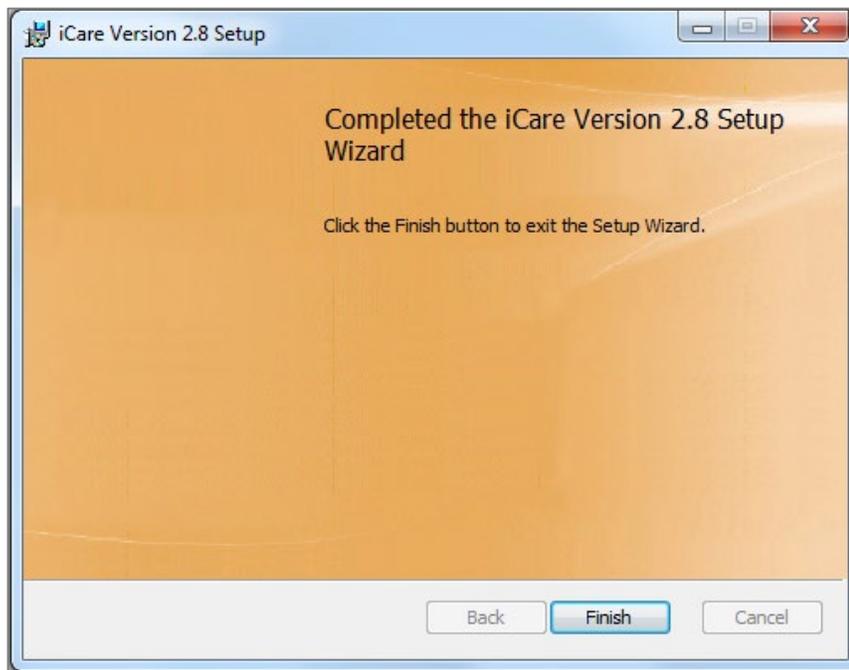


Figure 4-11: Installation Complete screen

5.0 Installation Configuration

5.1 Disk Space

Auditing was implemented for Certification and for each iCare release after v2.3 Patch 4; be aware of disk space. See *IHS User Security Audit 1.0* manual for more information.

5.2 Journaling

The main iCare patient data global ^BQIPAT does not need to be journaled, as it can be refreshed if needed. For Care Management Event Tracking (CMET), data global ^BTPWPQ does not need to be journaled as it also can be refreshed if needed.

If the site is upgrading to Ensemble or another higher version of cache, the ^BQIPAT and ^BTPWPQ globals should be placed in the same special non-journaled database as the globals TMP and XTMP.

5.3 Post-Installation

During the post-install process, a background job called IPC Update Compile will be set up in TaskMan. This job will re-compile the IPC monthly and weekly data since Jan 1, 2019 in order to update for the new Appointment Cycle measure and to update the Continuity of Care by team by provider measure. New files will be created to be sent to the National Data Warehouse (NDW). They will be placed in the normal folder where the Community Alerts (CANES) data and IPC data files are saved (the FILE EXPORT PATH in the RPMS SITE file).

A new entry, DATA WAREHOUSE TEST SEND will be created in the ZISH SEND PARAMETERS file. This will be used to send data file exports during alpha and beta test cycles to the NDW. Production files use DATA WAREHOUSE SEND.

Appendix A: GUI Deployment Options

A.1 Basic Single-Workstation Installation

The basic single-workstation procedure is outlined in Section 3.5. Step-by-step instructions are provided for executing the iCare GUI client install package directly on a user's workstation.

A.2 Terminal Services/Citrix Server Installation

For sites that use thin client/terminal services such as Citrix or Microsoft Terminal Services to manage application delivery, the update process for multiple users is simplified, as the iCare client version will only need to be updated on the terminal server machines via standard application install procedures for publishing applications.

A.3 Windows SMS

Some IHS sites may utilize Microsoft Systems Management Server (SMS) to assist with management of software on desktop machines. The iCare GUI client installation files were created with automated deployment in mind and should be compatible with SMS deployment. The iCare GUI client install is provided as an "msi" Microsoft installer package, along with a setup.exe file that provides .Net bootstrapping to check for an installed .Net framework environment, if required.

Based on site administrator feedback from previous versions, the default behavior for the .msi installation includes the automatic removal of previous iCare GUI versions to simplify the deployment process.

The details of deploying/publishing applications via SMS are beyond the scope of this document. Please refer to the Microsoft SMS documentation to identify the procedure to deploy the application with appropriate installation options such as silent install, etc.

A.4 Active Directory Application Deployment

Microsoft Active Directory is another option for deploying the iCare GUI Client to desktops through an automated process. To use this method, the installation files are placed in a shared network folder that allows at least reader access for all users that will be installing the application. Once this has been created, an Active Directory administrator can go into the Group Policy Editor and assign the application to the appropriate group(s) of users, or machines that are registered in the Active Directory.

Additional details and a walk-through of this process are available:

- Windows 2003/2008 Server: <http://support.microsoft.com/kb/816102>

A.5 Command Line Argument Options

Command-line arguments are available to provide additional options for managing the server connection list that is provided to the user upon login.

If no command-line arguments are provided, the application will present a blank server connection list and allow the user to enter new connection entries that will be stored in the user's Windows roaming local application folder. The roaming local application folder was chosen based on feedback from sites using Citrix thin-client deployments.

The available arguments are defined below. The options may be used together to achieve desired server connection management results.

A.5.1 /configpath:{File path}

```
Example:  
"C:\Program Files (x86)\Indian Health Service\iCare Version 2.7\bqi-  
iCare.exe" /configpath:\\appserver1\shared\iCareConfig\
```

Figure A-1: Configuration path

When the /configpath argument is specified as shown in Figure A-1, the application will check in the defined file path location for the server connection configuration file named bmx_config.xml. If a configuration file is found, it will load the connection items for the user to select from in the login screen. If no configuration file is found and the folder path specified is valid, a new blank bmx_config.xml configuration file will be created in that location, and changes will be stored and managed at that location.

The file location may be any valid storage location, including network shares and local system directories. The user must however have read/write access to the directory.

If an invalid directory is specified, the application will display a message indicating that the location is not valid, and it will ignore the parameter and use the default location.

A.5.2 /lockedit

```
Example:  
bqi-iCare.exe /lockedit
```

Figure A-2: Lockedit argument

When the `/lockedit` argument is included as shown in Figure A-2, the application will disallow the user from editing the defined server connection information and will be limited to the items that are defined in the list.

The `/lockedit` argument is useful in conjunction with the `/configpath` argument specified above to achieve a centrally-managed configuration in which users are not allowed to edit the shared configuration file. Refer to section A.5.4 for more details.

A.5.3 `/rpms`

```
Example:  
bqi-iCare.exe /rpms:"server1,10501,MyServer  
Connection,PRD1,Win,60000,40000"
```

Figure A-3: RPMS argument

The `/rpms` argument, as shown in Figure A-3, allows the specification of a specific server connection entry to be passed into the application from the command-line. The entry that is specified will display as an entry in the server connection list. This argument may be used in conjunction with the `/lockedit` option to force the user to connect to a single specific location.

The comma-delimited arguments are as follows:

- Server Address (Numeric IP or server name)
- Port Number for the BMXNet listener
- Display name of connection (this will be the title used in the list)
- Name space (optional)
- Windows Authentication (set to Win for Windows authentication)
- Receive Timeout (in milliseconds, recommended 60000)
- Send Timeout (in milliseconds, recommended 40000)

A.5.4 Setting Up a Central Shared Server Configuration List

Site managers may choose to implement a central `bm_x_config.xml` configuration file to be shared by multiple users; new users will not need to enter the server configuration settings when first connecting the iCare GUI to the RPMS server(s). Also, if configuration changes are made to the RPMS server such as a change, network address, or BMXNet port number, the changes can be centrally managed by editing the single configuration file.

To configure this approach, the following steps may be followed:

1. An administrator should create the `bm_x_user_config.xml` file with the server connections that are desired.

- a. Install iCare GUI on one client machine and configure the BMX connection(s) via the BMX connection tool.
- b. Find the `bm_x_user_config.xml` file on the client machine after you have setup the valid connection(s) by searching within the Users folder for `bm_x*.xml`. A sample file location is shown as an example:

```
Example:
C:\Users\firstname.lastname\AppData\Roaming\IndianHealthService\iCare\bm_x_
ser_config.xml
```

Figure A 4: RPMS argument

```
Example:

<?xml version="1.0" ?>
- <ArrayOfRpmsConnectionSpec xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <RpmsConnectionSpec Name="DEV6" Server="DEMOSRVR01"
ReceiveTimeout="900000" SendTimeout="40000" Port="10561" Namespace="DEV6"
IsDefault="false" UseWindowsAuthentication="false"
UseDefaultNamespace="false" />
  <RpmsConnectionSpec Name="TEST6" Server="DEMOSRVR01"
ReceiveTimeout="900000" SendTimeout="40000" Port="10562" Namespace="TEST6"
IsDefault="false" UseWindowsAuthentication="false"
UseDefaultNamespace="false" />
</ArrayOfRpmsConnectionSpec>
```

Figure A 5: RPMS argument

2. The administrator should start the iCare application using the `/configpath` command line argument to specify the network location where the file is to be stored.
3. Then, the administrator can specify the connections that are desired to be available to the users sharing this configuration file.

Note: After signing in to the iCare GUI application, the file at the specified `/configpath` location will contain the connection entries that were entered.

4. Once the `bm_x_config.xml` file has been created in the desired shared location with the appropriate connection entries, each user's application shortcut/launch string should be edited to include the same `/configpath` location so that the connection settings are loaded when the user starts the application.

Note: It is recommended that the `/lockedit` argument also be used so that user's sharing the central configuration file are not allowed to edit that file, but instead can only select from the available choices.

5. If you are pushing the iCare application via msi or other Active Directory approach and can edit the shortcut, add the parameter from section A.5.4 using the /configpath parameter from Section A.5.1 to identify the shared configuration file.
6. The /configpath parameter should be added to each user's iCare shortcut as shown below. The /configpath value should be the shared folder where the shared bmx_user_config.xml file is stored. The shortcut with parameter would have to be updated this way for each iCare user's GUI instance.

Alternatively, you could copy the standard bmx_user_config.xml file (based on the first user you set up to define the connections) to each user's AppData location rather than having to create the connection for each user.

...\AppData\Roaming\IndianHealthService\iCare\

Acronym List

Acronym	Meaning
BMX	BMXNet
CMET	Care Management Event Tracking
CR	Change Request
GUI	Graphical User Interface
HIV	Human Immunodeficiency Virus
HMS	HIV Management System
IHS	Indian Health Service
KIDS	Kernel Installation and Distribution System
NDW	National Data Warehouse
OIT	Office of Information and Technology
OS	Operating System
PC	Personal Computer
PCC	RPMS Patient Care Component
PIMS	Patient Information Management System
RPMS	Resource and Patient Management System
SMS	Microsoft Systems Management Server

Contact Information

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