



RESOURCE AND PATIENT MANAGEMENT SYSTEM

iCare Population Management GUI

(BQI)

Installation Guide and Release Notes

Version 2.4
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1.0 Release Notes

Version 2.4 is the tenth release of the iCare application. The site should have already installed up to the latest version, which is Version 2.3 Patch 4. Version 2.4 includes functionality to support the implementation of Internal Classification of Diseases, 10th Revision (ICD-10) in the Indian Health Service (IHS) Certified Electronic Health Record (EHR) and enhancements to iCare Taxonomy View/Edit.

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.

iCare allows providers to proactively track 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.

iCare 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.

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

2.0 Installation Notes

Prefix: BQI

Current Version: 2.4

Note: Read entire notes file (if included) prior to attempting any installation.

2.1 Contents of Distribution

Table 2-1 includes the contents' file names and their descriptions:

Table 2-1: Contents of Distribution

File	Description
bqi_0240.k	Version 2.4 KIDS installation file
bqi_024i.pdf	Installation Guide and Release Notes
bqi_024t.pdf	Technical Manual
bqi_0240gui.zip	Version 2.4 GUI installation files in Compressed (zipped) Folder format
bqi_024u_cmet.pdf	User Manual – CMET
bqi_024u_hiv_aids.pdf	User Manual – Care Management – HIV/AIDS
bqi_024u_mu.pdf	User Manual – Meaningful Use
bqi_024u_natl_measures.pdf	User Manual – National Measures
bqi_024u_panel_def.pdf	User Manual – Panel Definition
bqi_024u_panel_list.pdf	User Manual – Panel List
bqi_024u_panel_view.pdf	User Manual – Panel View
bqi_024u_patient_rec.pdf	User Manual – Patient Record

2.2 Required Resources

2.2.1 RPMS

The RPMS server portion of the iCare application does not require a specific version, cache or operation 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: Releases BQI*2.3*5, AICD*4.0,ATX*5.1*11 and BGP*15.0 are all pre-requisites for iCare Version 2.4.

Table 2-2 shows required RPMS server software:

Table 2-2: RPMS Software

Module	Minimum Version
IHS ICD/CPT Lookup & Grouper (AICD)	4.0
Taxonomy (ATX)	5.1 Patch 11
VA FileMan (DI)	v22.0 Patch 1017
VA Kernel (XU)	v8.0 Patch 1017
BMXNet (BMX)	v4.0 Patch 3
IHS/VA Utilities (XB)	v3.0 through Patch 11
Patient Information Management System (PIMS)	v5.3 through Patch 1016
IHS Clinical Reporting (BGP)	v15.0
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)	v2.1
IHS Asthma Register (BAT)	v1.0
IHS PCC Suite (BJPC)	v2.0 Patch 11
Referred Care Info System (BMC)	v4.0 Patch 8
Patient Registration (AG)	v7.1 Patch 10
Immunization (BI)	v8.5 Patch 7
iCare (BQI)	v2.3 Patch 5
IHS User Security Audit (BUSA)	v1.0

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, Windows Vista®, Windows® XP SP2, Windows 2003 Server®, Windows® 2000 SP3+, Windows ME®, Windows 98/98SE®
Microsoft® .NET Framework (The iCare installation package will check for the .NET framework prerequisite and will assist the user with download and installation if needed)	V4.0 (minimum client version)
Suggested client PC hardware	Processor: Minimum: Pentium III 800MHz Suggested: Pentium 4 2GHz+ Memory (RAM): Minimum: 2048MB Suggested: 4096MB+
Approximate disk space requirements	iCare application footprint ≈55MB

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.

3.0 Installation Instructions

iCare 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 (for Windows[®] XP and prior versions), or the Programs and Features option for Windows Vista[®]. Select the entry in the list for the iCare version to uninstall, and click the **Uninstall** option.

In addition, the iCare client PC installation program will check for Microsoft[®] .NET 4.0 Framework on the client PC, and if it has not been previously installed, it will assist with the download and installation as part of the iCare setup.

3.1 Special Considerations for Multi-Divisional Sites

Different facilities that use the same RPMS database are considered to be “multi-divisional” sites. Once installed the KIDS 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 Section 5.0 in this document for descriptions of some of the available deployment options, including options for automated installation.

Coordinate with all iCare users when the KIDS is going to be installed with the GUI so the GUI is ready to go when the KIDS is installed.

3.3 Disk Space

With version 2.4 of iCare and the addition of Auditing for Meaningful Use 2014 Certification with iCare version 2.3 Patch 4, be sure that there is sufficient disk space. See *IHS User Security Audit 1.0* manual for more information.

3.4 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 being upgraded to Ensemble[®] or other higher version of cache, the ^BQIPAT and ^BTPWPQ globals should be placed in the same special non-journaled database as globals; TMP and XTMP.

4.0 Sample Installation

This section provides instructions on how to install iCare.

4.1 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 4.2) and the Sample RPMS Client Installation (Section 4.5) for the applicable prompts and user responses. User responses appear in bold type.
3. Ensure that the BMX system is installed and that a BMX monitor process is running. BMX's 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.

4.2 RPMS Server Install Instructions

1. On the RPMS server, load and install bqi_0240.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_0240.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. Type **Yes** (or press Enter to accept the default) at the "Want to Continue with Load? YES/" prompt.
5. KIDS file bqi_0240.k contains three KIDS builds bundled into one:

ICARE MANAGEMENT SYSTEM 2.4
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 2.4** 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 2.4** 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 2.4**.
 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 6.0 for further information and setup instructions.

Note: Please read the Post-Installation notes for more information.

4.3 Client Installation

Determine the method of installing the GUI for all iCare users. Note that the bqi-iCareInstall-v2_4.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 Section 5.0 for descriptions of some of the available deployment options, including options for 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 be installed after the KIDS is installed.

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_0240gui.zip file into a local directory or centrally accessible network share directory, and extract its contents:

- a. bqi-iCareInstall-v2_4.msi
- b. setup.exe
2. Log into the client PC with administrator privileges.
3. Copy bqi-iCareInstall-v2_4.msi and setup.exe to the client PC from the network share directory.
4. Install the iCare software by executing setup.exe on the client PC.
5. When prompted with the **Destination Folder** dialog, press **Next** to confirm and complete the installation.
6. To run the iCare package:
 - a. Click **Start**.
 - b. Choose **All Programs**.
 - c. Select **IHS iCare**.
 - d. Click **iCare**.

4.4 Sample RPMS Server Installation

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 2.3 Patch 5, AICD*4.0, ATX*5.1*11 and BGP*15.0 are required installs.

As shown in Figure 4-2, other prompts are available.

```

Enter a Host File: d:\pub\bqi_0240.k <Enter> (Note: Type the appropriate
path for your system.)

KIDS Distribution saved on Oct 10, 2014@08:34:21
Comment: iCare, CMET, and HMS ICD10 Builds

This Distribution contains Transport Globals for the following Package(s):
  ICARE MANAGEMENT SYSTEM 2.4
  CARE MANAGEMENT EVENT TRACKING 1.1
  HIV MANAGEMENT SYSTEM 2.2
Distribution OK!

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

  ICARE MANAGEMENT SYSTEM 2.4
  CARE MANAGEMENT EVENT TRACKING 1.1
  HIV MANAGEMENT SYSTEM 2.2
Use INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.4 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:

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

```

Figure 4-2: Installation prompts

As shown in Figure 4-3, other prompts are shown on subsequent pages of the installation.

```

Select Installation Option: 2 Verify Checksums in Transport Global
Select INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.4      Loaded from
Distribution
  Loaded from Distribution 10/10/14@08:41:57
  => iCare, CMET, and HMS ICD10 Builds ;Created on Oct 10,
2014@08:34:21

This Distribution was loaded on Oct 10, 2014@08:41:57 with header of
iCare, CMET, and HMS ICD-10 ;Created on Oct 10, 2014@09:57:04
It consisted of the following Install(s):
ICARE MANAGEMENT SYSTEM 2.4CARE MANAGEMENT EVENT TRACKING 1.1HIV MANAGEMENT
SYST
EM 2.2

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

```

```

PACKAGE: ICARE MANAGEMENT SYSTEM 2.4      Oct 15, 2014 2:10 pm      PAGE 1
-----

66 Routines checked, 0 failed.

PACKAGE: CARE MANAGEMENT EVENT TRACKING 1.1  Oct 15, 2014 2:10 pm  PAGE 1
-----

15 Routines checked, 0 failed.

PACKAGE: HIV MANAGEMENT SYSTEM 2.2      Oct 15, 2014 2:10 pm      PAGE 1
-----

29 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

4.4.1 Installation

As shown in Figure 4-5, the installation completed successfully.

```

Select INSTALL NAME: ICARE MANAGEMENT SYSTEM 2.4      Loaded from
Distribution
   Loaded from Distribution 10/10/14@08:41:57
   => iCare, CMET, and HMS ICD10 Builds ;Created on Oct 10,
2014@08:34:21

```

```
This Distribution was loaded on Oct 10, 2014@08:41:57 with header of
  iCare, CMET, and HMS ICD10 Builds ;Created on Oct 10, 2014@08:34:21
  It consisted of the following Install(s):
ICARE MANAGEMENT SYSTEM 2.4CARE MANAGEMENT EVENT TRACKING 1.1HIV MANAGEMENT
SYSTEM 2.2
Checking Install for Package ICARE MANAGEMENT SYSTEM 2.4

Install Questions for ICARE MANAGEMENT SYSTEM 2.4

Incoming Files:

  90506.2  ICARE DIAGNOSIS CATEGORIES (including data)
Note: You already have the 'ICARE DIAGNOSIS CATEGORIES' File.
I will OVERWRITE your data with mine.

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

  90507    ICARE REGISTRY INDEX (including data)
Note: You already have the 'ICARE REGISTRY INDEX' File.
I will OVERWRITE your data with mine.

  90507.8  ICARE COMMUNITY ALERTS DEFINITIONS (including data)
Note: You already have the 'ICARE COMMUNITY ALERTS DEFINITIONS' File.
I will OVERWRITE your data with mine.

  90508.2  ICARE GLOSSARIES (including data)
Note: You already have the 'ICARE GLOSSARIES' File.
I will OVERWRITE your data with mine.

  90508.3  ICARE TAXONOMY CATEGORY
Note: You already have the 'ICARE TAXONOMY CATEGORY' File.

  90508.4  ICARE TAXONOMY FILES (including data)
Note: You already have the 'ICARE TAXONOMY FILES' File.
I will OVERWRITE your data with mine.

  90508.5  ICARE TREATMENT PROMPTS (including data)
Note: You already have the 'ICARE TREATMENT PROMPTS' File.
I will OVERWRITE your data with mine.

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

Checking Install for Package CARE MANAGEMENT EVENT TRACKING 1.1

Install Questions for CARE MANAGEMENT EVENT TRACKING 1.1

Incoming Files:

  90621    CM EVENT (including data)
Note: You already have the 'CM EVENT' File.
I will OVERWRITE your data with mine.
```

```
Checking Install for Package HIV MANAGEMENT SYSTEM 2.2

Install Questions for HIV MANAGEMENT SYSTEM 2.2

Incoming Files:

    90451      HMS REGISTRY
Note:  You already have the 'HMS REGISTRY' File.

    90454      HMS STI SCREENING (including data)
Note:  You already have the 'HMS STI SCREENING' File.
I will OVERWRITE your data with mine.

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

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//

DEVICE: HOME//  Virtual

Install Started for ICARE MANAGEMENT SYSTEM 2.4 :
      Oct 10, 2014@08:43:26

Build Distribution Date: Oct 10, 2014

Installing Routines:
      Oct 10, 2014@08:43:31

Running Pre-Install Routine: EN^BQI24PRE

Installing Data Dictionaries:
      Oct 10, 2014@08:43:36

Installing Data:
      Oct 10, 2014@08:43:38

Installing PACKAGE COMPONENTS:

Installing REMOTE PROCEDURE

Installing OPTION
      Oct 10, 2014@08:43:41

Running Post-Install Routine: EN^BQI24POS
Updating [BQI NON TOBACCO USER FACTORS] taxonomy...
Updating [BQI MMR IZ CVX CODES] taxonomy... ..

Updating Routine file...

Updating KIDS files...

ICARE MANAGEMENT SYSTEM 2.4 Installed.
```

```
Oct 10, 2014@08:43:52

Not a VA primary domain

NO Install Message sent

Install Started for CARE MANAGEMENT EVENT TRACKING 1.1 :
    Oct 10, 2014@08:43:52

Build Distribution Date: Oct 10, 2014

Installing Routines:
    Oct 10, 2014@08:43:54

Running Pre-Install Routine: PRE^BTPW11PS

Installing Data Dictionaries:
    Oct 10, 2014@08:43:55

Installing Data:
    Oct 10, 2014@08:43:55

Running Post-Install Routine: POST^BTPW11PS
Updating [BTPW CONE BX CPTS] taxonomy...
Updating [BTPW ECTOCERVICAL BX CPTS] taxonomy...
Updating [BTPW ENDOCERVICAL CURR CPTS] taxonomy...
Updating [BTPW FINE NEEDLE ASP CPTS] taxonomy...
Updating [BTPW LASER CONE CPTS] taxonomy...
Updating [BTPW LUMPECTOMY CPTS] taxonomy...
Updating [BTPW MASTECTOMY UNS CPTS] taxonomy...
Creating [BTPW CLIN BRST EXAM CPTS] taxonomy...

Updating Routine file...

Updating KIDS files...

CARE MANAGEMENT EVENT TRACKING 1.1 Installed.
    Oct 10, 2014@08:43:55

Not a VA primary domain

NO Install Message sent

Install Started for HIV MANAGEMENT SYSTEM 2.2 :
    Oct 10, 2014@08:43:55

Build Distribution Date: Oct 10, 2014

Installing Routines:
    Oct 10, 2014@08:44:08

Running Pre-Install Routine: EN^BKM22PRE

Installing Data Dictionaries:
    Oct 10, 2014@08:44:09

Installing Data:
    Oct 10, 2014@08:44:09

Installing PACKAGE COMPONENTS:
    HIV MANAGEMENT SYSTEM 2.2
-----
-----
```

```

Installing INPUT TEMPLATE

Installing OPTION
      Oct 10, 2014@08:44:11

Running Post-Install Routine: EN^BKM22PST

Updating Routine file...

Updating KIDS files...

HIV MANAGEMENT SYSTEM 2.2 Installed.
      Oct 10, 2014@08:44:49

Not a VA primary domain

NO Install Message sent

-----

100%      [-----]
Complete [-----]

Install Completed

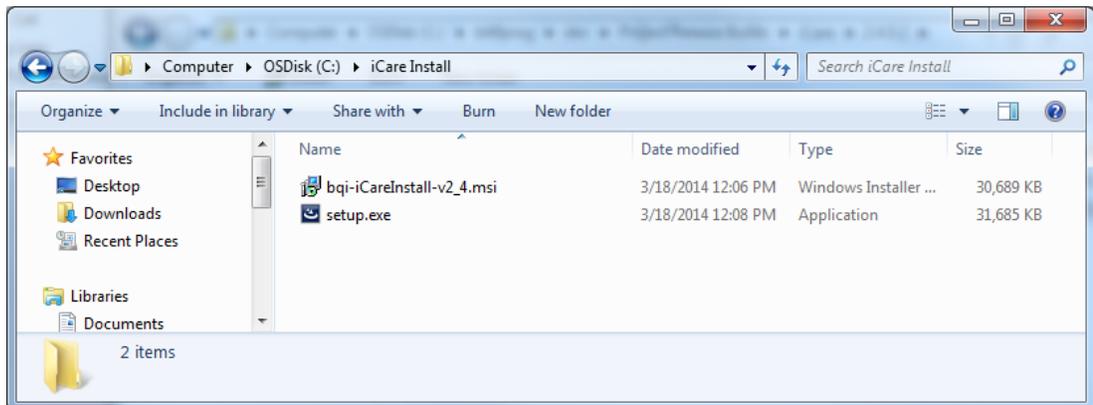
```

Figure 4-5: Installation Completed

4.5 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 Section 5.0 GUI Deployment Options for descriptions of these other 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 **setup.exe** program:

Figure 4-6: **Setup.exe** program

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

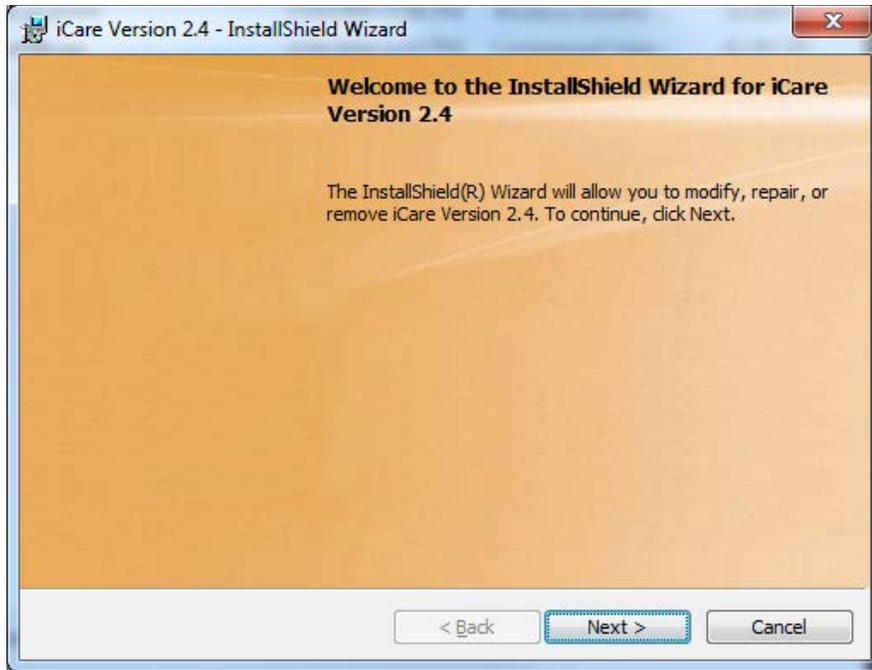


Figure 4-7: Welcome screen

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

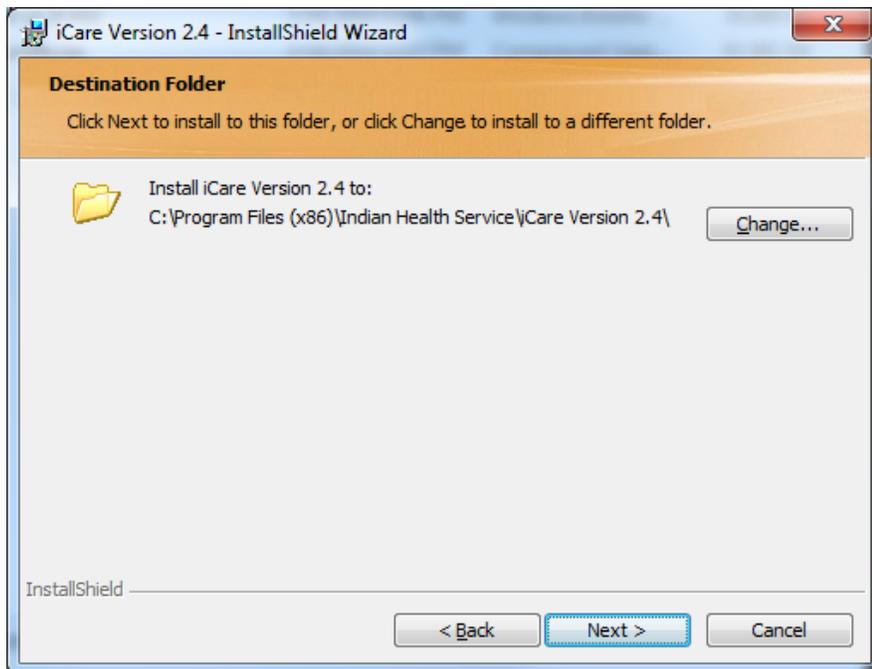


Figure 4-8: Select Installation Folder screen

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

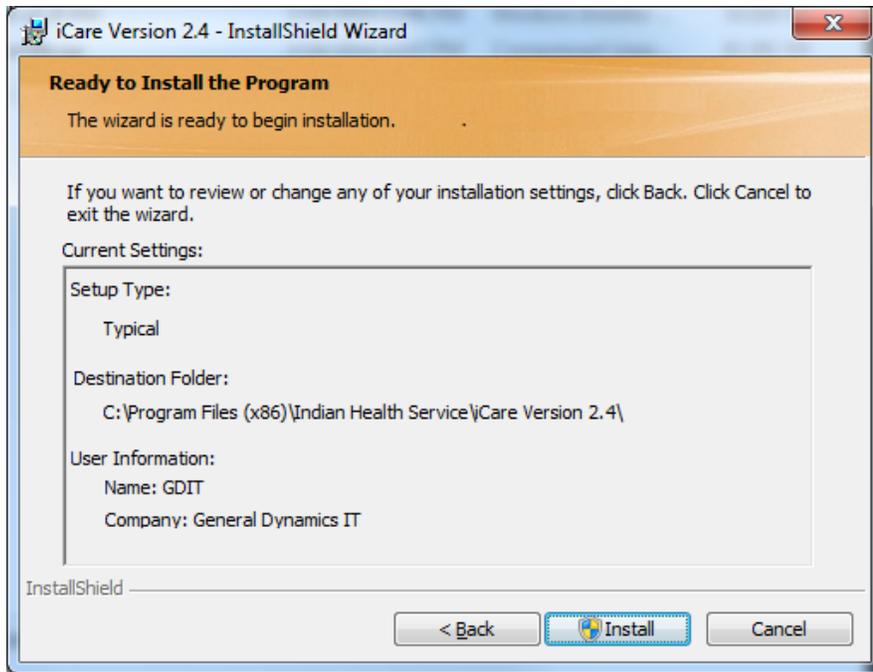


Figure 4-9: Confirm Installation screen

5. As shown in Figure 4-10, click **Finish** to complete the installation.

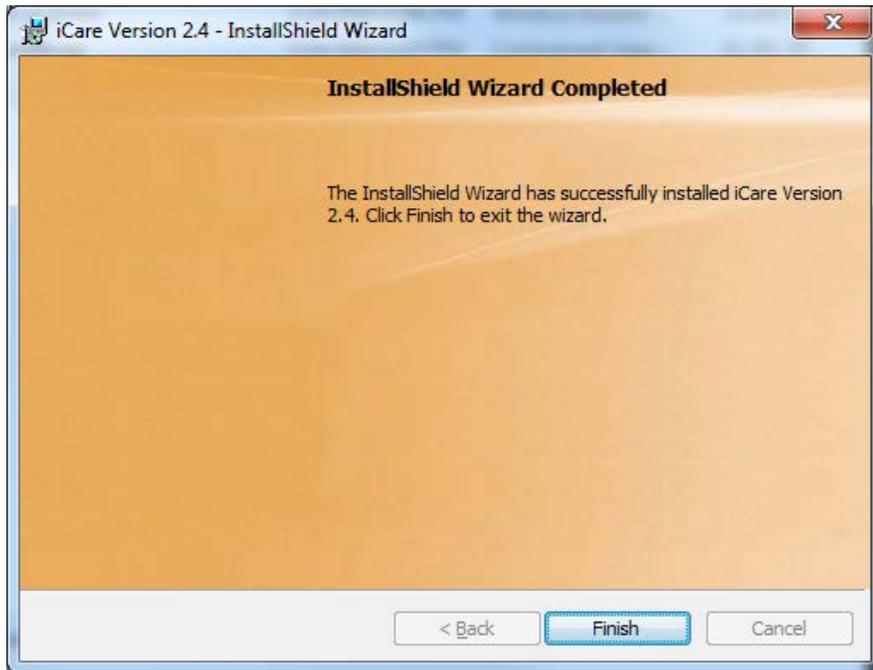


Figure 4-10: Installation Complete screen

5.0 GUI Deployment Options

There are several methods available to deploy the iCare GUI application. The installation package is created as an “msi” file, which provides wide compatibility with automated deployment approaches.

5.1 Basic Single-Workstation Installation

The basic single-workstation procedure is outlined in Section 4.5 of the *iCare Population Management GUI (BQI) –Installation Guide and Release Notes* manual. Step-by-step instructions are provided for executing the iCare GUI client install package to install directly on a user’s workstation.

5.2 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.

5.3 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 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.

5.4 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 2000 Server®

<http://support.microsoft.com/kb/314934/>

Windows 2003 Server®

<http://support.microsoft.com/kb/816102>

General Walk-through

http://www.window networking.com/articles_tutorials/Group-Policy-Deploy-Applications.html

5.5 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 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.

5.5.1 /configpath:"{File path}"

```
Example:  
bqi-iCare.exe /configpath:"\\appserver1\shared\iCareConfig\"
```

Figure 5-1: Configuration path

When the “/configpath” argument is specified as shown in Figure 5-1, 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, then 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 a valid then 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 present a message indicating that the location is not valid, and it will ignore the parameter and use the default location.

5.5.2 /lockedit

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

Figure 5-2: Lockedit argument

When the “/lockedit” argument is included as shown in Figure 5-2, 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 drop-down list.

/lockedit 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 5.5.4 for more details.

5.5.3 /rpms:

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

Figure 5-3: RPMS argument

The “/rpms” argument as shown in Figure 5-3, 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 appear as an entry in the server connection drop-down 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:

- 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 drop-down list)
- Name space (optional)
- Windows® Authentication (set to Win for Windows® authentication)
- Receive Timeout (in milliseconds, recommended 60000)
- Send Timeout (in milliseconds, recommended 40000)

5.5.4 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 or 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_config.xml` file with the server connections that are desired.
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 connection(s) 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.

6.0 Post-Installation Configuration Instructions

No special post-installation configuration is needed for this release.

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/>

Email: support@ihs.gov