

RESOURCE AND PATIENT MANAGEMENT SYSTEM

## Electronic Clinical Quality Measures Export Tool

# (BQRE)

### **Installation Guide and Release Notes**

Version 7.0 January 2025

Office of Information Technology Division of Information Technology

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### Preface

This manual describes the installation of the Electronic Clinical Quality Measures (eCQM) Export Tool (BQRE).

BQRE is a browser-enabled Graphical User Interface (GUI) for the Indian Health Service (IHS) deployed locally on an application server for extracting eCQM measures data from IHS-site Resource and Patient Management System (RPMS) databases. It provides functionality to extract Quality Reporting Document Architecture Category I (QRDA I) files that can be securely transmitted to the eCQM Engine (ECQM) to generate QRDA Category III (QRDA III) files to submit to reporting entities.

### 1.0 Release Notes

#### Prefix: BQRE

#### Current Version: 7.0

This is the sixth release of the locally deployed BQRE eCQM Export tool as defined by the following change requests:

Table 1-1: Change Requests

Feature ID	Title
108079	BQRE: Implement Logic to Extract for CMS844v3 and CMS529v3 Measures
107398	BQRE: CMS844v3 & 529v3 Mapping to O2 saturation Measurement
107399	BQRE: CMS844v3 & 529v3 Mapping to Respirations Measurement

### 1.1 Contents of Distribution

Table 1-2: Distribution files and descriptions

File	Description
bqre0700.install.msi	BQRE Application Installer
bqre0700.xml	BQRE Data Description File
bqre070i.pdf	BQRE v7.0 Installation Guide and Release Notes
bqre070t.pdf	BQRE v7.0 Technical Manual
bqre070u.pdf	BQRE v7.0 User Manual

### 1.2 Required Resources

This section lists the computer resources required for each deployment strategy.

#### 1.2.1 Local Application Server Resources

For the BQRE/ECQM local install option, *do not* install on the same server as BPRM. However, the ECQM Application (IIS) and Database (RavenDB) and BQRE could be installed on ONE machine. The minimum specification for that server is Window OS with Microsoft .NET Core Runtime version 8.0+ and above with 2.4 Ghz+ quadcore with 8-12 GB RAM and 60 GB free space.

For the BQRE local / ECQM central option, the BQRE could be installed on BPRM application server. The minimum specification for that server is Window OS with Microsoft .NET Core Runtime version 8.0+ and above with 2.4 Ghz+ quadcore with 8-12 GB RAM and 60 GB free space.

#### 1.2.2 Browser Standard

The following browsers are recommended for any workstations accessing the BQRE Extract tool:

- Google Chrome® Version 68 or higher
- Microsoft Edge
- Mozilla Firefox

#### 1.3 Before You Begin: Installation Issues

Internet connectivity on the application server is necessary to download the required installation items.

#### 1.4 BQRE Prerequisites

- BCQM-v1.0 p12
- BMC–v4 p14
- BMW-v2024.4
- BJPC-v2.0 p28
- BGO-v1.1 p34
- DTS–Cycle 57
- HealthShare–2017.2.x or IRIS-2022.1.x

### 2.0 Installation Overview

The BQRE v7.0 installation requires two files. The bqre0700.xml data description file and the bqre0700.install.msi application installation file are specific to the eCQM Export Tool. These two files are included in the BQRE distribution package.

- 1. Install bqre0700.xml. Follow instructions in Section 3.2.
- 2. Install bqre0700.install.msi. Follow instructions in Section 3.3.

Warning:	Previous versions of BQRE must be un-installed from the
	Control Panel and the server restarted, if prompted,
	before proceeding.

The local RPMS database and Ensemble instance need to be accessible from the application server on which the BQRE installation is locally deployed.

### 3.0 BQRE Installation and Configuration

This section outlines the steps essential for setting up and configuring an IHS RPMS database server for the BQRE application to be executed against the RPMS database. It also provides steps to set up such an environment.

### 3.1 Assumptions

This section assumes the following:

- The Ensemble/IRIS server is already set up.
- An RPMS database is already set up on the Ensemble/IRIS server.
- The person performing the installation and configuration has the appropriate rights to mount databases, create a namespace, and edit namespace settings for the RPMS database.
- The BMW IRIS.DAT file as described in the *BMW IRIS.DAT Installation Guide* is installed.

### 3.2 Import a New BQRE XML File

A separate XML file is included with the release; follow the steps in Sections 3.2.1 through 3.2.2 to import a new BQRE XML file.

### 3.2.1 Disable Read Only

To import the bqre0700.xml file, you must set the BMW database to allow write access. If the database is set to **Read Only**, do the following:

1. Browse to the Local Databases window of the Ensemble Management Portal following this path:

```
Home > System Administration > Configuration > System Configuration > Local Databases.
```

Figure 3-1: Browsing path to Local Databases window

- 2. Click **Edit** in the row corresponding to the BMW database.
- 3. In the displayed window, set the **Read Only** field to No.

Once the patch is installed, you can re-enable **Read Only** mode by repeating these steps and setting the **Read Only** field to **Yes**.

#### 3.2.2 Import the BQRE XML File

To import the **bqre0700.xml** file, do the following:

1. From the Ensemble/IRIS System Management Portal Home window, click System Explorer, then Classes. The Classes dialog displays (Figure 3-2).

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(←) ●	🔎 🗕 🖻 🖒 🥝 Background Tasks	🤪 Classes	🖨 Classes	× û☆@
Menu Home   About   H	elp   Logout System > Classes			Ensemble
Classas	Server: Training	Namespace: BMWS	all Capital Indexes FUEFUD	InsisterSystems
Classes	User.	Licensed to: Property of the Indian He	ann service Instance: EN SEMBI	LETZ
Compile Export	Import Delete	ROUTINES GLOBALS	Clas	ses
Lookin: «	Page size: 0 Results: 1000+ Page:   « 1	»⇒ of1		
Namespace V	Name		Date	Size
BMW V	BMW.ABBRFILE.ds		2013-04-18 16:15:36.412131	1839 Documentation
	BMW.ABERDEENGPRADATA.cls		2013-04-18 16:15:37.169236	54461 Documentation
System items	BMW.ABERDEENGPRADATASOCQUARTER.ds	3	2013-04-18 16:15:41.600951	588 Documentation
Generated items	BMW.ABMCASHIERINGDETAILMEW.cls		2013-04-02 14:37:43.881108	1947 Documentation
Begin date (yyyy-mm-dd)	BMW.ABMCASHIERINGSESSIONVIEW.cls		2013-04-02 14:37:22.997526	567 Documentation
3	BMW.ABSPCERTIFICATION.cls		2013-04-18 16:15:44.396978	4155 Documentation
End date (yyyy-mm-dd)	BMW.ABSPCERTIFICATIONSOCSWITCHTYPE.	cls	2013-04-18 16:33:10.050057	606 Documentation
3	BMW.ABSPCLAIMS.cls		2013-04-18 16:15:44.612298	18896 Documentation
Class name	BMW.ABSPCLAIMSSOCTransmitFlag.cls		2013-04-18 16:33:10.585186	594 Documentation
*.cls	BMW.ABSPCOMBINEDINSURANCE.cls		2013-04-18 16:33:13.503878	3010 Documentation
Maximum row s	BMW.ABSPDATAINPUT.cls		2013-04-18 16:33:24.801473	5369 Documentation
1000	BMW.ABSPDATAINPUTSOCASKFILLDATE.cls		2013-04-18 16:33:28.455803	601 Documentation
	BMW.ABSPDATAINPUTSOCASKINSURANCE.d	s	2013-04-18 16:33:28.636364	602 Documentation
	BMW.ABSPDATAINPUTSOCASKNCPDPOVERF	RIDES.cls	2013-04-18 16:33:28.787789	619 Documentation
	BMW.ABSPDATAINPUTSOCASKPREAUTHNUN	BER.cls	2013-04-18 16:33:28.922493	616 Documentation
	BMW.ABSPDATAINPUTSOCASKPRICING.cls		2013-04-18 16:33:29.045058	596 Documentation
	BMW.ABSPDATAINPUTSOCDEFAULTNDC.cls		2013-04-18 16:33:29 236464	604 Documentation
	BMW.ABSPDIAGNOSISCODE.cls		2013-04-18 16:15:44.75683	3542 Documentation

Figure 3-2: Classes dialog

- 2. Select the **BMW** namespace in the **LookIn** pane in the upper-left corner of the dialog.
- 3. Click Import. The Import Classes dialog displays (Figure 3-3).



Figure 3-3: Import Classes dialog

- 4. Click **Browse** and navigate to the **bqre0700.xml** file in the folder where it was saved in Section 2.0.
- 5. Select the **bqre0700.xml** file and click **Next**.
- 6. A listing displays (Figure 3-4) showing the contents of the XML file.

Warning: If installing in a non-HealthShare environment, then uncheck the BMW.NEWBORN9000106490000106411.cls file before clicking Import.

Impo	rt Classes Besuits: 1000+ Page Loss 1 Days of 1	Union	udoc in new window
	Import Classes		User: Namespace: BMW17
Se	lect items you wish to import.		
	Item	Exists	Last Modified
	BMW.BSF.SP.CoreAuthenticateUser.cls	No	
	BMW.BSF.SP.CqmGetPatientAdmissionOrderList.cls	No	
	BMW.BSF.SP.CqmGetPatientRefusalList.cls	No	
	BMW.BSF.SP.CqmGetpatientLabOrderList.cls	No	
	BMW.BSF.SP.CqmGetpatientMedicationList.cls	No	
	BMW.BSF.SP.CqmGetpatientRadOrderList.cls	No	
	BMW.EKGFINDINGS900001062C90000106214.cls	Yes	2018-11-08 09:38:09.81546
	BMW.NEWBORN900001064C90000106411.cls	No	
	BMW.PROTOCOLSTANDINGORDERS900001062C90000106213.cls	Yes	2018-11-08 09:38:09.81146
	BMW.SYMPTOMS900001062C90000106215.cls	Yes	2018-11-08 09:38:09.80844
	BMW.VAMI.cls	Yes	2018-11-08 09:38:09.74277
	BMW.VDELIVERY.cls	No	
	BMW.VDELIVERYSOCENTEREDINERROR.cls	No	
	BMW.VDELIVERYSOCLABORINDUCED.cls	No	
	BMW.VDELIVERYSOCREASONENTEREDINERROR.cls	No	
Tota	ii: 15		
			>
	Back	Next	Import Cancel

Figure 3-4: Import Classes window-Content listing

7. Click **Import**. After a few moments of processing, a listing of the imported classes displays (Figure 3-5).

🖉 Import Classes - Internet Explorer	<u>- 0 ×</u>
Import Classes	∧ User: pace: BMWT
Import result:	_
Importing Selected Classes from C:\InterSystems\Ensemble2012\m	
Import to Namespace BMWT.	
Load started on 03/20/2015 13:33:42	
Loading file C:\InterSystems\Ensemble2012\mgr\Temp\importfroml	
Imported class: BMW.BSF.SP.AbmApproveClaim	
Imported class: BMW.BSF.SP.AbmCancelBill	
Imported class: BMW.BSF.SP.AbmCancelClaim	
Imported class: BMW.BSF.SP.AbmGetChargeForCode	
Imported class: BMW.BSF.SP.AbmSetBillCreation	
Imported class: BMW.BSF.SP.AbmSetCashieringSessionSignIn	
Imported class: BMW.BSF.SP.AbmSetCashieringSessionSignOut	
Imported class: BMW.BSF.SP.AgCheckAndSetSilentSPTAccess	
Imported class: BMW.BSF.SP.AgCheckSPTAccess	
Imported class: BMW.BSF.SP.AgGetIncompleteChartStatistics	
	-
Back Next Import Done	~

Figure 3-5: Import Classes window-Import result listing

8. Scroll to the bottom of the listing to confirm that the **Load finished successfully** message displays (Figure 3-6).



Figure 3-6: Import Classes window-Load finished successfully

At this point, the BMW database configuration is complete.

#### 3.3 Install the MSI File

To install the BQRE Application:

- 1. Navigate to the location where the **BQRE Application Installer** file (**bqre0700.install.msi**) is stored.
- 2. Copy the MSI file to the application server (Windows operating system).
- 3. Double-click the MSI file.
- 4. In the Setup Wizard dialog (Figure 3-7), click Next.

🤁 BQRE v7.0.0 Setup		_		×
Ð	Welcome to the BQRE v7 Wizard	7.0.0 S	etup	
	The Setup Wizard will install BQRE v Click Next to continue or Cancel to e	7.0.0 on y xit the Se	our compu tup Wizard	uter. d.
	Back Ne:	xt	Cano	:el

Figure 3-7: BQRE v7.0 Setup window

- 5. In the **BQRE v7.0 Setup** dialog (Figure 3-8), click **Finish**.
- 6. If setup says that **BQRE** is already installed, please go to Appendix A.2 for uninstalling existing version of **BQRE**.



Figure 3-8: Completed the BQRE v7.0 Setup Wizard window

**Note:** If an error message displays indicating that you do not have sufficient privileges to run the installer, refer to Appendix A for instructions on running the installer from the Administrator Command Prompt.

### 3.4 Configuration

#### 3.4.1 QRDA Storage Directory

On the site application server, a storage directory must be configured by site staff to store the exported QRDA 1 and QRDA III files. This directory can optionally be shared with eCQM Export Tool (BQRE) users. All applicable security protocols should be enforced to ensure that the patient data is restricted to those who will submit files to the eCQM Engine or other registries as required by the site.

Configuration of this directory is performed in two steps:

- Create a folder on an appropriate drive on the application server (e.g., D:\QrdaStorage\).
- 2. When configuring the site profile settings in the eCQM Export Tool (BQRE), provide the **QRDA storage path** and save the changes.

# 3.5 Confirm Application Launch and Application version via Logon

Open your internet browser and type in the **IP address** of the application server where eCQM Export Tool (BQRE) is installed. The default port for eCQM Export Tool (BQRE) is **37019** (e.g., <u>http://IPAddressofBQREApplicationServer:37019</u>).

 BQRE
 Sites
 Register Site

 Sites
 Register Site

 Name
 Server
 Namespace

 2013 DEMO HOSPITAL
 Mathematical Server
 Server

 BQRE 7.0.0
 Server
 Namespace

Verify Application version is BQRE 7.0.0.0 (Figure 3-9).

**Note:** Figure 3-9 displays the **Sites** list with one site set up. When accessing this screen for the first time, the list will be empty.

Refer to the *eCQM Export Tool (BQRE) User Manual* for details on the process of registering the first site.

Figure 3-9: BQRE Sites list

### Appendix A Installing and Uninstalling MSI File from the Command Prompt (as Administrator)

Warning: Previous versions of BQRE must be un-installed from the Control Panel (or Command Prompt–Administrator Mode) and the server restarted, if prompted, before proceeding.

### A.1 Run the Application Installer

- 1. Navigate to C:\Windows\system32 on your application server.
- 2. Locate the cmd.exe file, right-click, and select Run as Administrator.
- 3. Navigate to the location where the **BQRE Application Installer** file (**bqre0700.install.msi**) is saved, as shown in the example below:

C:\Windows\system32>cd C:\Temp\BQRE

Figure A-1: File location for BQRE Application Installer

4. At the resulting prompt, type the **name** of the installation file (**bqre0700.install.msi** in this example) and press Enter.

C:\Temp\BQRE>bqre0700.install.msi

Figure A-2: Enter name of the installation file in prompt

This will launch the BQRE Setup Wizard

5. In the Setup Wizard dialog (Figure A-3), click Next.



Figure A-3: BQRE v7.0 Setup window

6. In the **BQRE v7.0 Setup** dialog (Figure A-4), click **Finish**.



Figure A-4: Completed the BQRE v7.0 Setup Wizard

- 7. Open the %ProgramFiles% folder, usually found at C:\Program Files (x86)\.
- 8. Confirm that the **%ProgramFiles%** folder contains the **BQRE** folder.
- 9. Open the System Services list (Administrative Tools > Services).
- 10. Confirm that **BQRE\_Extraction\_Service** is in the **Services** list.
- 11. Confirm that **BQRE\_Extraction\_Service** is running.

#### A.2 Uninstall the Existing BQRE Application

Go to **Programs and Features** in the **Control Panel**, find BQRE and Uninstall the program, Once Uninstall is complete, go to the directory **C:\Program Files** (**x86**)**\BQRE** and delete everything remaining in the **BQRE** directory. If uninstall fails, please follow the steps below:

- 1. Download and run the <u>Microsoft Install Uninstall Utility</u> (https://support.microsoft.com/en-us/help/17588/windows-fix-problems-thatblock-programs-being-installed-or-removed) prior to running the command prompts.
- 2. Navigate to C:\Windows\system32 on your application server.

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- 3. Locate the cmd.exe file, right-click and select Run as Administrator.
- 4. To uninstall the existing BQRE .msi file, run the following command:

msiexec /x bqre0700.install.msi

Figure A-5: Uninstall existing BQRE msi file

5. To manually remove the existing BQRE Service, run the following command (name of the Service must match exactly as it appears under Administrative Tools > Services):

```
sc delete "BQRE_Extraction_Service"
```

Figure A-6: Run command to remove existing BQRE Service

6. If successful, the following message should display:

[SC] DeleteService SUCCESS

Figure A-7: Message prompt on successful removal of BQRE Service

- 7. Navigate to Control Panel > Programs and Features (or Add / Remove Programs).
- 8. Confirm that **BQRE Application** is no longer displayed.
- 9. Open the %ProgramFiles% folder, usually found at C:\Program Files (x86)\.
- 10. Confirm that the %ProgramFiles% folder no longer contains the BQRE folder.
- 11. Open the System Services list (Administrative Tools > Services).
- 12. Confirm that **BQRE\_Extraction\_Service** is *not* listed in the **Services** list.

### Acronym List

Acronym	Term Definition
CQM	Clinical Quality Measure
eCQM	Electronic Clinical Quality Measures
DTS	Distributed Terminology Services
IHS	Indian Health Service
MIPS	Merit-based Incentive Payment System
MSI	Microsoft Installer
OIT	Office of Information Technology
QPP	Quality Payment Program
QRDA	Quality Reporting Document Architecture
RPMS	Resource and Patient Management System
SQA	Software Quality Assurance
XML	Extensible Markup Language

### **Contact Information**

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

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