

RPMS iCare (BQI v1.0)

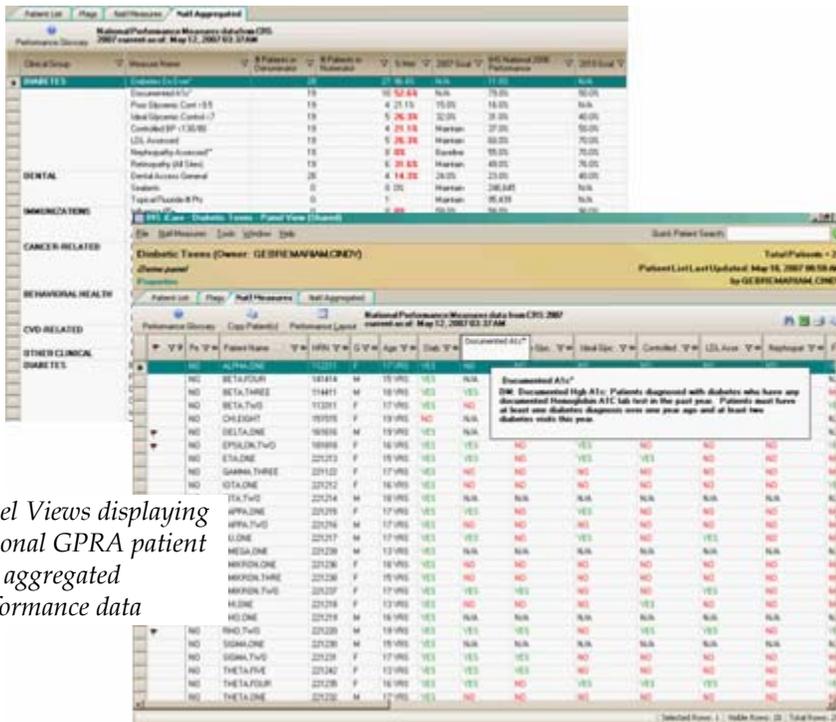
The Next Step to Electronic Patient Population Management (Released May 2007)

What Is iCare?

iCare (BQI) is a Windows-based graphical user interface (GUI) component of the IHS Resource and Patient Management System (RPMS) that presents diverse patient data in one user-friendly view. IHS initiated this population health care management project to provide an easy-to-use tool with multiple uses to a wide variety of providers.

iCare will provide this by retrieving important patient information from the various components of the RPMS database and bringing it together under a single interface. There were five main concerns that inspired the development of iCare:

1. proactively identifying and managing different groups (populations) of patients who share user-defined characteristics;
2. providing an integrated view of a patient's conditions that would minimize "stovepiped" care management;
3. providing an intuitive and integrated interface to the diverse patient data elements of the RPMS database;
4. facilitating provider review of clinical quality of care measures for their own patients to enable improvement in the quality of healthcare delivery; and
5. enabling views of traditional healthcare information from the perspectives of community, population and public health.



Panel Views displaying national GPR patient and aggregated performance data

Current Features

The initial version of iCare will provide IHS providers the ability to view patient data in a "population-centric" way of thinking. This will assist the user in identifying trends in care and increase awareness of the services that patients need by highlighting the status of key clinical prevention and treatment measures.

User-defined patient lists (panels) can be created, sorted and filtered in a variety of ways to form the core functionality of iCare. The Windows-based GUI application makes panel creation more intuitive for end users by providing a variety of customizable ad hoc search criteria, including standard elements such as age, gender, community, and visit dates.

A key element of iCare is the "tagging" of all patients in the facility's database with one or more clinical diagnoses, such as diabetes or asthma, predefined for the user based on national definitions developed for the Clinical Reporting System (CRS). Currently the patient

clinical "tag" is used in iCare to easily create panels of patients; for example, a provider can create a list of patients within a certain age range who had a visit in the past year and is "tagged" as at high risk for cardiovascular disease.

Specific functionality in version 1.0 include:

- The ability for individual providers to create and manage patient lists or panels using specific criteria.
- The ability to share patient lists with other providers as read only or read/write.
- Display of the national GPR and non-GPR performance measures for any panel of patients.
- "Auto-tagging" of patients with one or more clinical diagnoses.
- Flag displays to make users aware of Abnormal Labs; Hospital Admissions; Emergency Room Visits; or Unanticipated Returns to the Emergency Room.
- Customization of layouts and data elements displayed.



Who Should Use iCare and Why?

Any provider who needs to identify a group of patients for long-term management or to create a temporary list should think about using iCare. Do you fit any of the following scenarios?

- I am a nurse at a facility that assigns a primary care provider to each patient. Every day, I want to create a list of scheduled patients for two different doctors in my clinic.
- I want to identify which of my patients are considered overweight so I can recommend nutrition counseling.
- Because providers at our clinic have performance goals related to annual GPRA clinical measures, I want to identify which of my patients are missing key clinical data.
- Our Women's Health clinic wants to focus on two clinical performance improvement initiatives this year. We want to identify the performance problem areas for female patients between ages 18 and 50.
- I am one of two part-time case managers for a group of children, and I want to create a patient list that we both can use.

The screenshot displays the IHS iCare software interface. At the top, there's a menu bar with 'File', 'Tools', 'Window', and 'Help'. Below it is a 'Quick Patient Search' field. The main area is divided into several sections:

- Patient Information:** Name (LASTNAME, FIRST M), HRN (89999), SSN (111-11-1111), Gender (M), Age (53), DOB (Aug 19, 1998), and Insurance details.
- Diagnostic Tags:** A list of tags including 'CVD Highest Risk', 'Diabetes', 'Hypertension', and 'Obesity'. A 'Factor' column lists 'Diabetes Log', 'SUGGESTED HYPERTENSION LOGS', and 'BMI'.
- Recent Visits and Appointments:** A table showing dates (Sep 02, 2005) and provider narratives like 'New Medication Order DIABETES HELLITUS, TYPE II (B7C)'.
- Providers:** A table listing 'DESIGNATED PRIMARY PROVIDER' as 'PROVIDER, FIRST' with a last visit date of 'Feb 17, 2005'.
- RPMS Registers:** A table listing various medical conditions like 'ACM DYSLIPIDEMIA' and 'ACM DYSMETABOLIC SYNDROME X' with their respective creators.

Upcoming Features

iCare is being developed and deployed in phased versions. Some features that you can look forward to include:

- Individual GUIs to existing RPMS register management systems (e.g. HIV, Asthma, Women's Health, Diabetes)
- A user-friendly GUI for most key elements of Q-Man, the current RPMS query tool
- A patient snapshot that presents the most relevant recent results and upcoming clinical needs (reminders) based on gender, age, key diagnostic conditions and national performance priorities at your site
- Integrated healthcare reminders and treatment prompts based on patient diagnostic "tags"

Patient Record Cover Sheet

- User-friendly letter creation
- Community Alerts; Community and Household Profiles
- Individual and group order entry
- Group notes

Server Requirements

RPMS Module	Minimum Version
VA FileMan	v22.0
VA Kernel	v8.0
BMXNet	V2.0
IHS/VA Utilities	v3.0 through patch 11
Patient Information Management System (PIMS)	v5.3 through patch 1004
IHS Clinical Reporting (BGP)	v6.1 or higher

RPMS Module	Minimum Version
PCC Data Entry (APCD)	v2.0 through patch 8
PCC Health Summary (APCH)	v2.0 through patch 15
Q-Man (AMQQ)	v3.0 through patch 18
Taxonomy (ATX)	v5.1 through patch 8
HIV Management System (BKM)	v1.0
IHS Asthma Register (BAT)	v1.0

Client Requirements

Client PC	Minimum Version
Microsoft Windows (Any Windows OS that supports .NET 2.0 Framework)	Windows XP SP2, Windows 2003 Server, Windows 2000 SP3+, Windows ME, Windows 98/98SE
Microsoft .NET Framework	V2.0
Suggested Client PC Hardware	Processor: Minimum: Pentium III 800MHz; Suggested: Pentium 4 2GHz+ Memory (RAM): Minimum: 256MB; Strongly Recommended: 512MB+
Approximate Disk Space Requirements	iCare Application Footprint ~10MB .NET 2.0 Framework ~ 100MB (if not already installed via Windows Updates)

