RESOURCE AND PATIENT MANAGEMENT SYSTEM

iCare Population Management GUI

(BQI)

Improving Patient Care (IPC) User Manual

Version 2.5
June 2016

Office of Information Technology (OIT)
Division of Information Technology

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Preface

The purpose of this manual is to provide you with the information you need to use the latest enhancements of the iCare (BQI) population management application that support the IHS Improving Patient Care (IPC) initiative.

This manual contains reference information about iCare views, examples of its processes, and step-by-step procedures to show you how to perform activities related to IPC functionality in the latest version of the iCare application.

For more information about iCare basic functionality, iCare usage, or training for iCare, you may consult these resources:

- iCare – IHS OIT available at http://www.ihs.gov/icare/

- iCare Population Management GUI, User Manual Version 2.2 (July 2011) available at http://www.ihs.gov/RPMS/PackageDocs/bqi/bqi_022u.pdf

- iCare Training available at http://www.ihs.gov/icare/index.cfm?module=dsp_icare_cmet_training

- Recorded AdobeConnect sessions for iCare available at https://ihs.adobeconnect.com/r6yazmoz1gm

- Join the iCare listserv by sending an e-mail to icare@listserv.ihs.gov

1.0   Introduction

iCare is a Windows-based, client-server graphical user interface (GUI) to the IHS Resource and Patient Management System (RPMS). iCare retrieves key patient information from various components of the RPMS database and brings it together under a single, user-friendly interface. iCare is intended to help providers manage the care of their patients. The ability to create multiple panels of patients with common characteristics (e.g., age, diagnosis, community) allows users to personalize the way they view patient data.

The information included in this IPC-specific manual covers iCare IPC-support functionality enhancements in iCare Version 2.5. For more information about iCare basic functionality, iCare usage, or training for iCare, you can consult the resources listed above in the Preface.

1.1   Background

Along with the rest of the healthcare industry, IHS has already developed a set of chronic condition management (or register) applications, including for diabetes, asthma, and HIV. This type of application provides a way for healthcare providers to manage a specific group (register) of patients for a single disease state. Register management applications assist healthcare providers to identify high-risk patients, proactively track care reminders and health status of individuals or populations, provide more standardized and appropriate care by embedding evidence-based guidelines, and report outcomes.

Many patients, however, have more than one diagnosed disease. For instance, at the current time within the Indian Health system, a diabetic asthmatic woman could be a member of four RPMS registers (diabetes, asthma, women's health, and immunizations). This 'silo' approach to patient care could potentially result in fragmented care, and could increase the risk of inadequate patient care management due to misidentification of the true level of risk.

1.2   iCare Graphical User Interface

The iCare GUI is intended to allow providers to see a more complete view of patients with multiple conditions, while maintaining the integrity of the user-defined, disease-specific registers.

iCare can help IHS providers by:

- Proactively identifying and managing different groups (populations) of patients who share user-defined characteristics.

- Providing an integrated view of a patient's conditions that would minimize "stove piped" care management.

- Providing an intuitive and integrated interface to the diverse patient data elements of the RPMS database.

- Facilitating providers a review of clinical quality of care measures for their own patients to enable improvement in the quality of healthcare delivery.

- Enabling views of traditional healthcare information from the perspectives of community, population and public health.

- Providing the default tag selection as Proposed and Accepted. You can change the tag selection for any record by selecting or de-selecting any checkbox.

- Clicking the "use AND?" check box when there are multiple tags selected. The "And" option searches for patients who have ALL of the user-defined tags.

1.3   Who Should Use iCare?

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 obese 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 the ages of 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.

2.0 Improving Patient Care (IPC) Support in iCare

IPC is an IHS initiative to improve the health care of American Indian and Alaska Native ITU patients. You can find more information about IPC at the following sources:

- http://www.ihs.gov/ipc/

- http://improvingindianhealth.org/

- Improving Patient Care Collaborative (IPCIII), Measures Guide, Version 1.1, February 2011

2.1 Package Manager

A new IPC Package Manager key has been created. The user must have been granted this key permission by the iCare Package Manager in order to manage the IPC site parameters.

2.2 Creating IPC Panels (Microsystems)

In the Panel Definition View, newly created patient panels can now be designated as IPC panels. These designated IPC panels will appear with this designation in the Panel List View. This facilitates the creation of IPC teams/microsystems for IPC compliance monitoring.
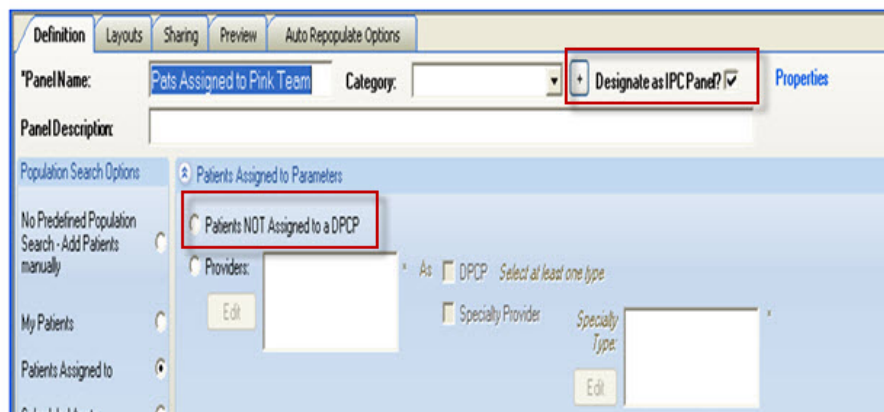
Figure 2-1: Designation of New Patient Panel as IPC Panel; Patients NOT Assigned to a DPCP

As shown in Figure 2-1, iCare now also allows users to create panels of patients that are not assigned to a DPCP. This should facilitate clinical quality improvement efforts where patients are required to have an assigned PCP.

Primary Care Clinics – This is the list of primary care clinics that are used for the Continuity of Care to a Provider measure. The default list of clinics defined upon installation is: GENERAL (01), FAMILY PRACTICE (28), INTERNAL MEDICINE (13) and PEDIATRIC (20).

Microsystem Providers – This is the list of providers who are to be defined as the site's microsystem. Monthly data aggregation will automatically be calculated for any provider who has been designated as a Primary Care Provider and who has at least one patient assigned to them.

2.3   IPC Main View

2.3.1   Main View Tab

As shown in Figure 2-2, there is one IPC Main View tab.

Figure 2-2: IPC Main View Major Tab and Sub-Tabs – Patient Detail Data Displayed

2.3.2   Sub-Tabs and Measures View

As shown in Figure 2-2, there are four IPC Main View sub-tabs:

- **Patient Detail**
- **Panel Detail**
- **Provider Aggregated**
- **Facility Aggregated**

For the **Patient Detail** sub-tab, Core and Supplemental IPC measures compliance data for each patient (aggregated by provider) are shown in the table by Yes (compliant), No (noncompliant), NDA (no data available) or N/A (not applicable to patient) designations (Figure 2-2). In the Panel dropdown above the data table, the user can select single IPC measure data to display for all listed patients for the listed providers simply by selecting the measure name.

To reduce the amount of horizontal scrolling to see a large number of measure data columns, the right sidebar Category Filter selector can be used to limit columnar data display to each of these IPC measures or measure sets individually:

- Cancer Screening Bundle

- Continuity of Care

- Core

- Health Risk Screening

- Outcome Measures

- Self-Management

- Supplemental

- Tobacco

For a panel designated as an IPC panel, Patient Detail displays all patients with the values of their IPC measures. The values are the values calculated based on the last time the iCare nightly job or weekly National Measures job completed.

For the **Panel Detail** sub-tab, Core and Supplemental IPC measures compliance data for each provider are shown in the table by display of measure numerator, denominator, and compliance (% Met = numerator/denominator) (Figure 2.3). In the Panel dropdown above the data table, the user can select single IPC measure data to display for all listed providers simply by selecting the measure name.

In the Panel Detail View, a new column will display the total number of IPC patients who have No Data Available (Total #NDA) (Figure 2-3). To the left of the NDA column, a new Total Deceased column is also displayed that totals the suspected number of deceased patients erroneously included in each measure.

Figure 2-3: IPC Panel Detail View with **Total NDA** Column Highlighted

When the user clicks the **Aggregate** button next the dropdown box, the data in the table will change to an aggregated view for all measures and for all providers. The Aggregate View will hide the provider column and display the aggregated totals for all providers for each measure.

IPC goals for the indicated measures also appear in this data table (Figure 2-4).

For a panel designated as an IPC panel, **Panel Detail** displays aggregated data for all patients in the panel for all IPC measures by provider. The values are the values calculated based on the last time the iCare nightly job or weekly National Measures job completed.

Figure 2-4: IPC Panel Detail View with IPC Goals Displayed

For the **Provider Aggregated** sub-tab, Core and Supplemental IPC measures compliance data for each provider are shown in the table by display of the compliance rate (% Met = numerator/ denominator) for the indicated month (Figure 2-4). By moving your cursor to each data cell in the table, you can see the numerator and the denominator (in a hover box) used for calculating that displayed compliance rate.

The checkboxes above the data table on the **Provider Aggregated** tab also allow the user to filter the displayed data by microsystem (team) and to aggregate the data by microsystem (team).

IPC goals for the indicated measures also appear in this data table (Figure 2-5).

As each month is processed, Provider Aggregated is a view of all providers who are Primary Care Providers for all IPC measures. These values are not refreshed after they are calculated. They are a snapshot for the previous month that is calculated the next month on the day specified in the IPC site parameter for data collection.

Provider	Measure Set	Measure	IPC Goal	Aug 2011	Sep 2011
QBPROVIDER,MARINA	Core	Total Patients		N/A	154
		Empanelled Primary Care Provider	90%	N/A	N/A
		DM: Comprehensive Care	70%	0%	0%
		Health Risk Screening Bundle	80%	0%	0%
		Alcohol Screen: 12-75 (Dev)		1%	1%
		BMI Measured 2-74		66%	64%
		20+: BP Assessed		71%	70%
		Depression: Screening or Diagnosis 18+		0%	0%
		IPV/DV Screen Females 15-40		0%	0%
		Tobacco Use/Exposure Assessment 5+		0%	0%
		Cancer Screening Bundle	70%	13%	13%
		Mammogram Rates 52-64		17%	17%
		Pap Smear Rates 21-64		34%	34%
		Colorectal Cancer Screen 51-80		10%	10%
		Outcome Measures Bundle	70%	N/A	0%
		A1C in Control		N/A	N/A
		BP in Control		N/A	N/A
		LDL in Control		N/A	N/A
		Tobacco Use Prevalence 5+		0%	0%
		Tobacco Cessation: Counseling, RX or Quit	70%	0%	0%
		Goal Setting: Goal Set	70%	0%	0%
		Continuity of Care Primary Provider	80%	N/A	0%
	Supplemental	ER/Urgent Care visits		N/A	0%
		Revenue Generated Per Visit		N/A	$0
		Peds IZ 4:3:1:3:3:1:4 Active IMM	90%	0%	0%
		Patients 5+: Comprehensive Health Screening: Physical Activity	70%	0%	0%
		DM: Dental Access	70%	0%	0%
		Topical Fluoride: 2-15 (Dev)		0%	0%

Figure 2-5: Provider Aggregated Data Displayed

Clicking on the **Graph It!** icon above the table will present a user-definable graphical display of the data in the table. The appropriate IPC goals will also be displayed in the graphs.

For the **Facility Aggregated** sub-tab, Core and Supplemental IPC measures compliance data for all providers combined are shown in the table by display of the compliance rate (% Met = numerator/ denominator) for the indicated month (Figure 2-6). By moving your cursor to each data cell in the table, you can see the numerator and the denominator (in a hover box) used for calculating that displayed compliance rate.

IPC goals for the indicated measures also appear in this data table (Figure 2-6).

Facility Aggregated provides a view on a month-by-month basis for all IPC measures for all providers who are Primary Care Providers. These values are not refreshed once they are calculated. They are a snapshot for the previous month that is calculated the next month on the day specified in the IPC site parameter for data collection.

Clicking on the **Graph It!** icon above the table will present a user-definable graphical display of the data in the table. The appropriate IPC goals will also be displayed in the graphs.

Figure 2-6: Facility Aggregated Data Displayed

2.3.3   Glossary/Tips/Tooltips

As shown in Figure 2-2, there are Tips for some IPC tabs that describe the information being displayed. These Tips can be hidden or displayed using the Tips "Plus" and "Minus" buttons.

By moving your cursor over IPC column names, measure names, and data cells, you can also view informational IPC Tooltips that appear in hover boxes.

There is also an IPC Glossary that can be accessed by clicking on **Help** in the top tool banner, then selecting **IPC Glossary** (Figure 2-7).
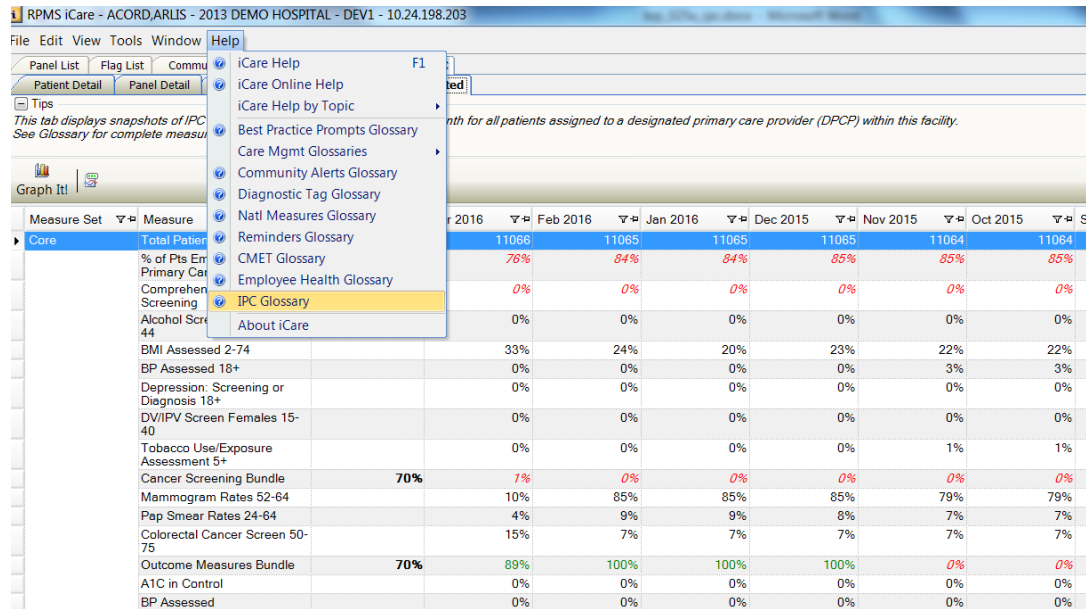
Figure 2-7: IPC Glossary

2.3.4   User Preferences

By clicking on **Tools** in the top tool banner, the IPC User Preferences screen can be accessed. The IPC Package manager can select from among four user preferences to set:

1. Patient Detail – Default Panel (microsystem)

2. Provider Detail – Default Panel (microsystem)

3. Patient Detail – Default Category filter(s)

4. Provider Detail – Default Category filter(s)

2.4   IPC Data Collection and Transfer to Data Portal

2.4.1   IPC Data Aggregation in iCare

IPC data aggregation will be automatically performed on the day of the month (as defined in the IPC site parameter for data collection) during the iCare nightly job. The default value is the 1st of the month. Depending on the timeliness of data entry at each site, this can be adjusted up to the 7th of the month.

2.4.2   Interacting with the IPC Data Portal in iCare

Below are detailed instructions on how to download the IPC Excel template from the IPC Data Portal, how to fill it out, and how to upload it back to the Data Portal using iCare.

1. Navigate to the iCare **IPC** Tab.

2. Open the **Provider Aggregated** view.

3. In the IPC section of the banner above the data table, click on **Data Portal** (Figure 2-8).
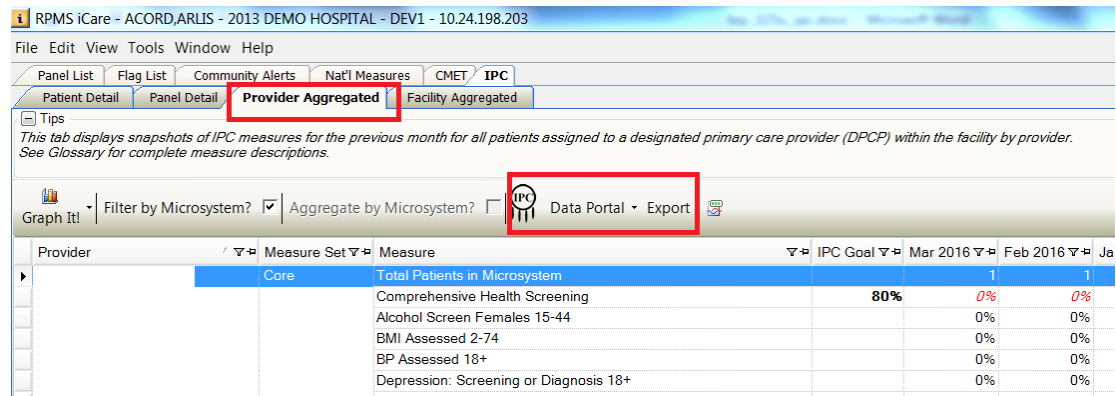
Figure 2-8: IPC Section of the Banner in the Provider Aggregated View

4. In the dropdown window that appears, select **Download** (Figure 2-9).

Figure 2-9: Dropdown Box in the IPC Section of the Banner

5. Log onto the IPC Data Portal as you normally do and select the Excel template that you want.

6. Give the template a name and file location, then download it.

7. To automatically populate the downloaded template using iCare, click on **Export** in the IPC section of the banner (Figure 2-10).

Figure 2-10: Export Button in the IPC Section of the Banner

8. In the dropdown box that appears, add the provider(s) that you want to the **Provider** box.

9. Use the **Edit** button to edit the listing(s) in the **Provider** box (Figure 2-11 below). You can also select the reporting month; this has to be month for which iCare has already done the calculations and saved the data.
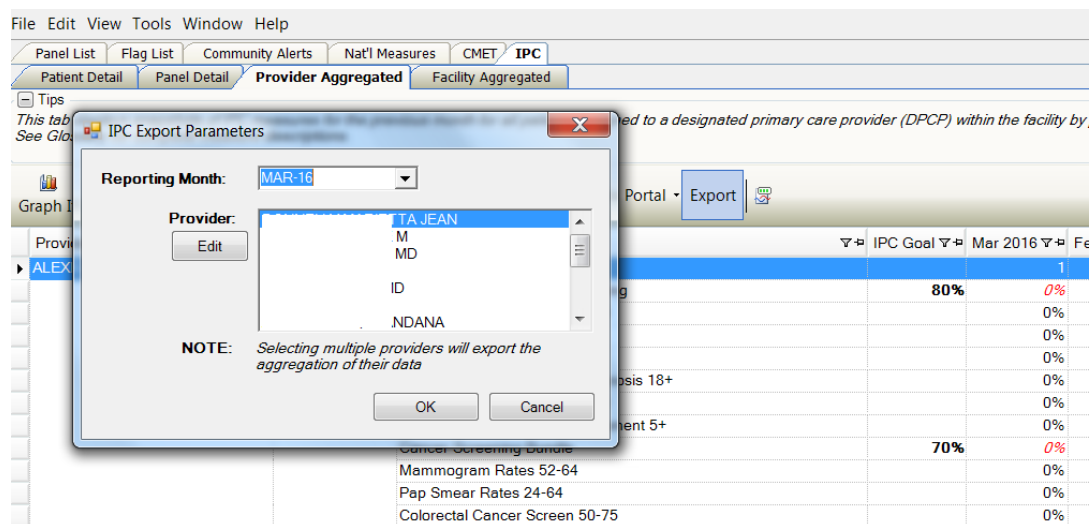
Figure 2-11: Export Button Dropdown Box for Editing Providers

10. Click the **OK** button; your Excel should indicate that it is ready to be opened.

Figure 2-12: Excel file

11. Select the Provider's Excel template that you want to use (downloaded above through iCare or the standard one that you have been manually filling out for your site).Click the **OK** button, and the Excel template will automatically be filled out for the provider(s) that you specified in #8 above.

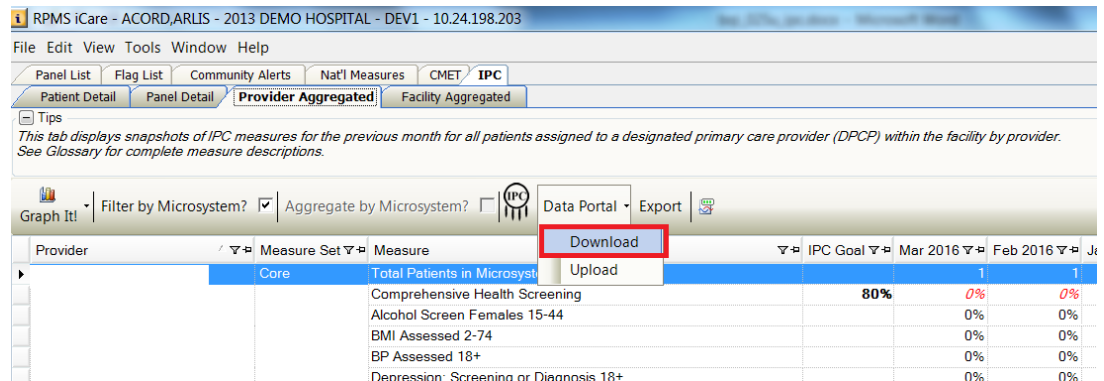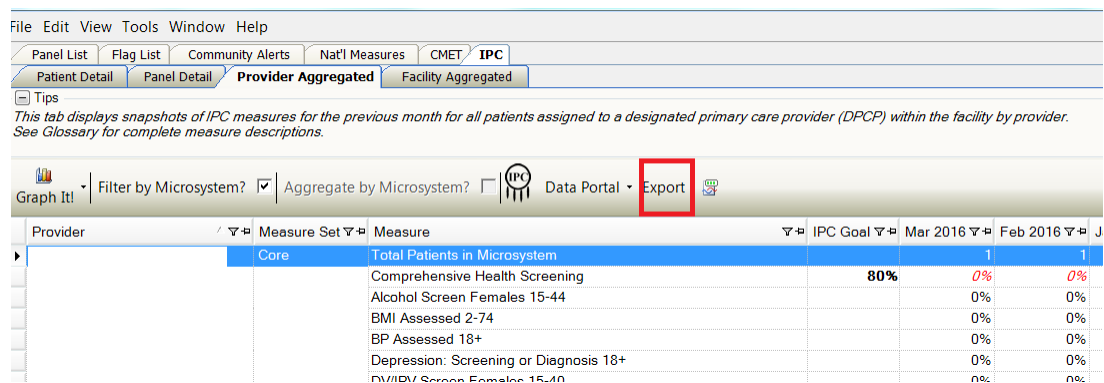12. In the IPC section of the banner above the data table, click on **Data Portal** again.

13. In the dropdown window that appears, select **Upload** (Figure 2-12). The completed Excel template from #10 above will be automatically uploaded to the IPC Data Portal site.
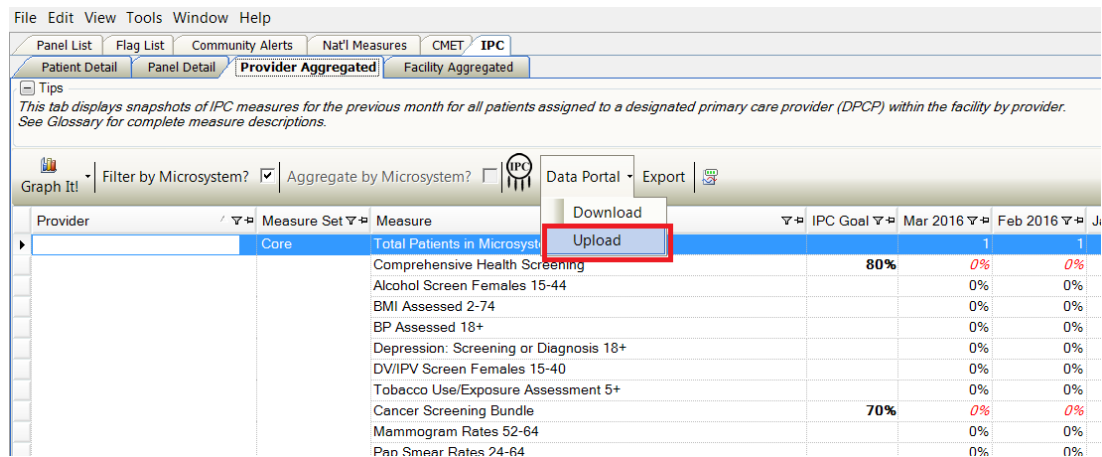

Figure 2-13: Dropdown Box in the IPC Section of the Banner

> **Note**: Alternatively, you can save the Excel template that is filled out by iCare (#10 above) and upload it manually to the Data Portal in the manner that you have previously been using for your site.

Glossary

Context Menu

The menu of options that displays when you right-click on an entity.

Designated Primary Care Provider (DPCP)

In RPMS, the provider name that is assigned as the primary care physician for a patient or group of patients at a specific facility. This is not a required function.

Free Text Field

A field where the user can type text, just like typing a note to someone.

iCare Package Manager

The designated person with authority to manage all information settings for iCare.

Panel List

The list of patient panels owned by the user.

Providers

Any staff member in an I/T/U facility who provides direct healthcare to patients, e.g. general practice or specialty physicians, registered nurses, social workers, physician assistants, etc.

Taxonomy

In RPMS, a grouping of functionally related data elements, such as ICD codes, that are created and maintained within the RPMS Taxonomy Setup application. Taxonomies will be used as definitions for diagnoses, procedures, lab tests, medications, and other clinical data types.

If you need a change or addition to an existing taxonomy, please see your CRS coordinator.

Tooltip/Hover Help

A common GUI element used to provide additional information to users. To display a Tooltip, hover the mouse pointer, without clicking, over a column heading or field.

Acronym List

Acronym	Term Meaning
BQI	Namespace for iCare
CMET	Care Management Event Tracking
CQM	Clinical Quality Measures
CRS	Clinical Reporting System
DPCP	Designated Primary Care Provider
GPRA	Government Performance and Results Act
GUI	Graphical User Interface
HHS	Health and Human Services
ICD	International Classification of Diseases
IHS	Indian Health Service
IPC	Improving Patient Care
I/T/U	Indian Health Service, or Tribal or Urban Indian health programs
OIT	Office of Information Technology
PM	Performance Measures
RPMS	Resource and Patient Management System

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