

Mini-Sentinel Distributed Query Tool

Investigator Manual

Powered by PopMedNet™

Based on release 3.3

November 2013

CONTACTS:

Jeffrey Brown, PhD

Harvard Pilgrim Health Care Institute

Jeff_brown@hphc.org

The PopMedNet™ application was developed under the Agency for Healthcare Research and Quality, US Department of Health and Human Services as part of the Developing Evidence to Inform Decisions about Effectiveness (DEcIDE) program, awarded to the DEcIDE centers at the HMO Research Network Center for Education and Research on Therapeutics (HMORN CERT) and the University of Pennsylvania. The Food and Drug Administration's Mini-Sentinel project provided additional support.

Contents

1	Introduction	1
2	System Overview.....	2
3	Registering for an Account.....	4
4	Login to the Web Portal	6
5	Project Based Requests.....	9
6	Submitting a Request.....	10
6.1	Scheduling Requests	14
7	Request Types.....	16
7.1	Summary Queries.....	16
7.1.1	Prevalence Queries	17
7.1.2	Incidence Queries	22
7.1.3	Most Frequently Used Queries	23
7.2	File Distribution.....	25
7.3	Modular Program Distribution.....	28
8	Checking the Request Status	32
8.1	Request Statuses.....	33
9	Viewing Request Results.....	35
9.1	Calculated Columns (Summary Table Requests)	36
9.2	Exporting Result Data.....	37
10	Changing DataMart Routings	38
10.1	Adding or Removing DataMarts from Submitted Requests	38
10.2	Resubmitting a Request to a DataMart	38
11	Administering your User Profile.....	39
11.1	Contact Information.....	39
11.2	Credentials	39
11.3	Notifications.....	40
12	Help	42
13	Development and Funding Statement.....	43
14	Frequently Asked Questions	44

Appendix A: Quick Reference for Investigators	45
---	----

Document History

The following table is a revision history for this document.

Table 1: Document History

Version	Author(s)	Date	Description
3.1	Lincoln Peak Partners	11/15/2012	Created.
3.2	Jeff Brown, Elizabeth Balaconis, Megan Mazza, Melanie Davies	5/13/2013	New Build. This new documentation represents a new release of the PMN software. Prior Mini-Sentinel query tool documentation was based on release 2.3.24 and this documentation is based on PMN 3.2.0. New features include User Registration, Plug-in Architecture, Security Group Access Control, and Projects.
3.3	Melanie Davies, Alison Leibowitz, Jessica Malenfant	11/13/2013	New Build. New features include ESP Query Composer and Modular Program Distribution. Text and screenshots edited for clarity. Additional screenshots added. Added Registering for an Account and Resubmitting a Request sections.

1 Introduction

The Mini-Sentinel Distributed Query Tool is based on the **PopMedNet™** software application that enables simple, efficient creation and use of distributed data networks, through a set of tools and web-based services. It is optimized to facilitate distributed analyses of medical product safety, comparative effectiveness, quality, medical resource utilization, cost-effectiveness, and related studies. The system provides secure, customized private portals, query tools, and file transfer capabilities. It supports both menu driven queries and distributed analyses using complex, single use or multi-use programs designed to execute against local data resources.

Data partners exercise full control over the files they make available for querying, the results returned to requestors, and the individuals who are permitted to submit requests.

This [Investigator Manual](#) describes the main features and functions for Investigators participating in the network. Investigators interact with the network through a secure web-based portal as described below.

The Department of Population Medicine at the Harvard Pilgrim Health Care Institute (HPHCI) led development of the system in collaboration with Lincoln Peak Partners (LPP). Lincoln Peak Partners provides support services and secure hosting for current system users, and leads development of system enhancements.

2 System Overview

The Mini-Sentinel Distributed Query Tool software is comprised of two separate applications, the web-based **Portal** and the **DataMart Client**. There is one Portal in the network and each data partner has one or more “DataMarts”. The Portal is the starting point for all information requests and controls all system communications, security, and governance policies. Data partners receive requests, process them, and securely return them to the Portal via their locally installed DataMart Client software application. Each data partner will have at least one DataMart; multiple DataMarts per data partner are possible. Each DataMart can contain different types of data and DataMarts can have different request processing settings. All requests and communications within the network are securely routed from the Portal to the DataMarts and then back to the Portal.

Note: The term **DataMart** is used in an information technology context referring to the place where the data are held for querying. Use of this term does not imply that data partner information is being sold or being made broadly available; data partners maintain control of all their data and all uses.

Browser Requirements

The Portal is designed to work with Internet Explorer (IE) 8 or later. Earlier versions of IE may not display the user interface properly. Although IE8 is the only officially supported browser, other browsers such as Firefox and Chrome may also work; Firefox and Chrome have been used extensively in testing.

The DataMart Client Application

The DataMart Client application allows the DataMart Administrator to view requests distributed to the DataMart, execute requests locally, review the results, and upload the results to the Portal. The DataMart Client is a .NET/C# Windows desktop application developed by LPP that is installed locally on a DataMart Administrator’s desktop. Note that the DataMart Client requires Microsoft .NET 4 to be installed on the user’s desktop. The free download for Microsoft.NET4 is available at the following link: <http://www.microsoft.com/enus/download/details.aspx?id=17851>. All communications between the DataMart Client application and the Portal use HTTP/SSL/TLS connections to securely transfer requests and results between the application and the Portal. The application uses ODBC connections to local databases or connections to a Postgres database in the pgAdmin application to process requests and generate results.

Audience

This manual is intended for Mini-Sentinel Investigators who want to:

- Submit a request to the available DataMarts
- Monitor the status of a request
- Review the results of a request

Related Documents

For more information about the PopMedNet™ system, see the following documents available on the PopMedNet public website (popmednet.org):

PopMedNet Distributed Query Tool DataMart Administrator Manual

The *DataMart Administrator Manual* describes the tasks and activities required to install and manage a DataMart. This includes:

- Installing the DataMart Client
- Processing requests distributed to the DataMart
- Administering DataMart settings and accessibility

PopMedNet Distributed Query Tool Overview and Administrator's Guide

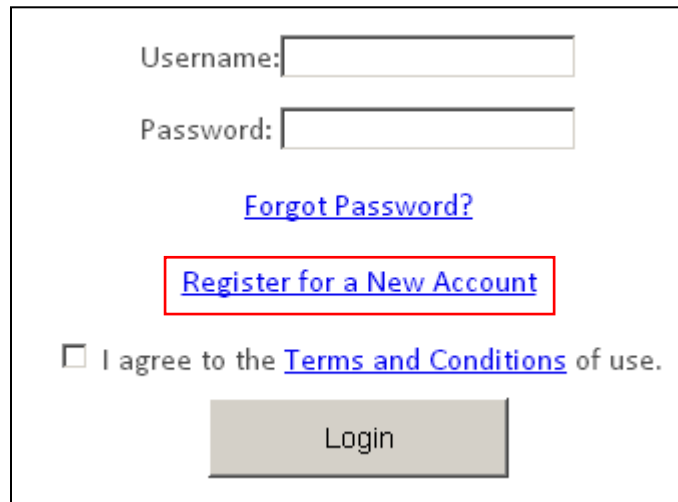
The *Overview and Administrator's Guide* describes the overall network system architecture, key querying features, and hosting and security details. This includes:

- System overview and workflow
- Policies and features
- Technical architecture and security
- Installing an instance of a Portal and an associated database
- Performing the initial administrative setup
- Performing typical System Administrator functions such as adding new users and DataMarts, creating new roles, and deleting users and DataMarts
- Hosting configurations

3 Registering for an Account

Register for an account in order to receive login credentials to the query tool portal.

1. Navigate to the logon page.
2. Click on “Register for a New Account”



Username:

Password:

[Forgot Password?](#)

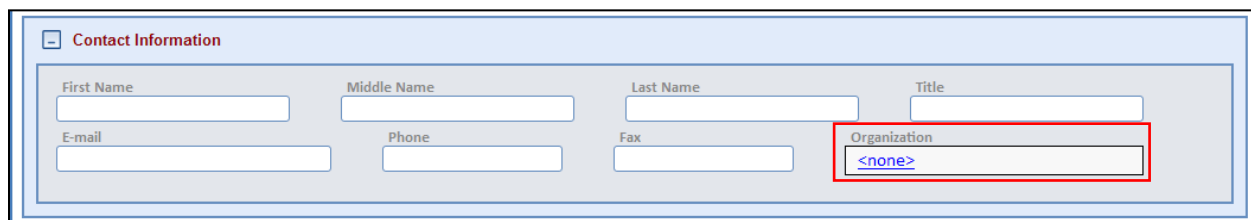
[Register for a New Account](#)

☐ I agree to the [Terms and Conditions](#) of use.

Login

Figure 1: Portal Logon - Register for a New Account Link

3. Enter contact information
 - a. First name, last name, and email are required fields.
 - b. Click on the hyperlink in the “Organization” box and select your organization from the list within a pop-up box. This box must be filled in.

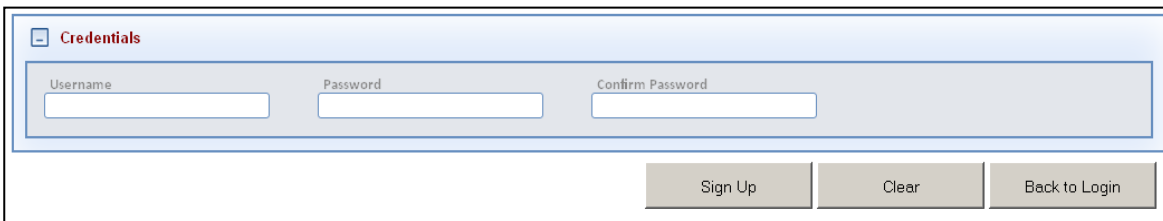


☐ Contact Information

First Name <input type="text"/>	Middle Name <input type="text"/>	Last Name <input type="text"/>	Title <input type="text"/>
E-mail <input type="text"/>	Phone <input type="text"/>	Fax <input type="text"/>	Organization <none>

Figure 2: User Registration Form – Organization Selector

4. Create credentials
 - a. Enter username with the format [first initial][last name] in the box provided
 - b. Create and confirm desired password
 - c. The password must be at least 8 characters and contain a combination of upper case, lower case, digits, and special characters.



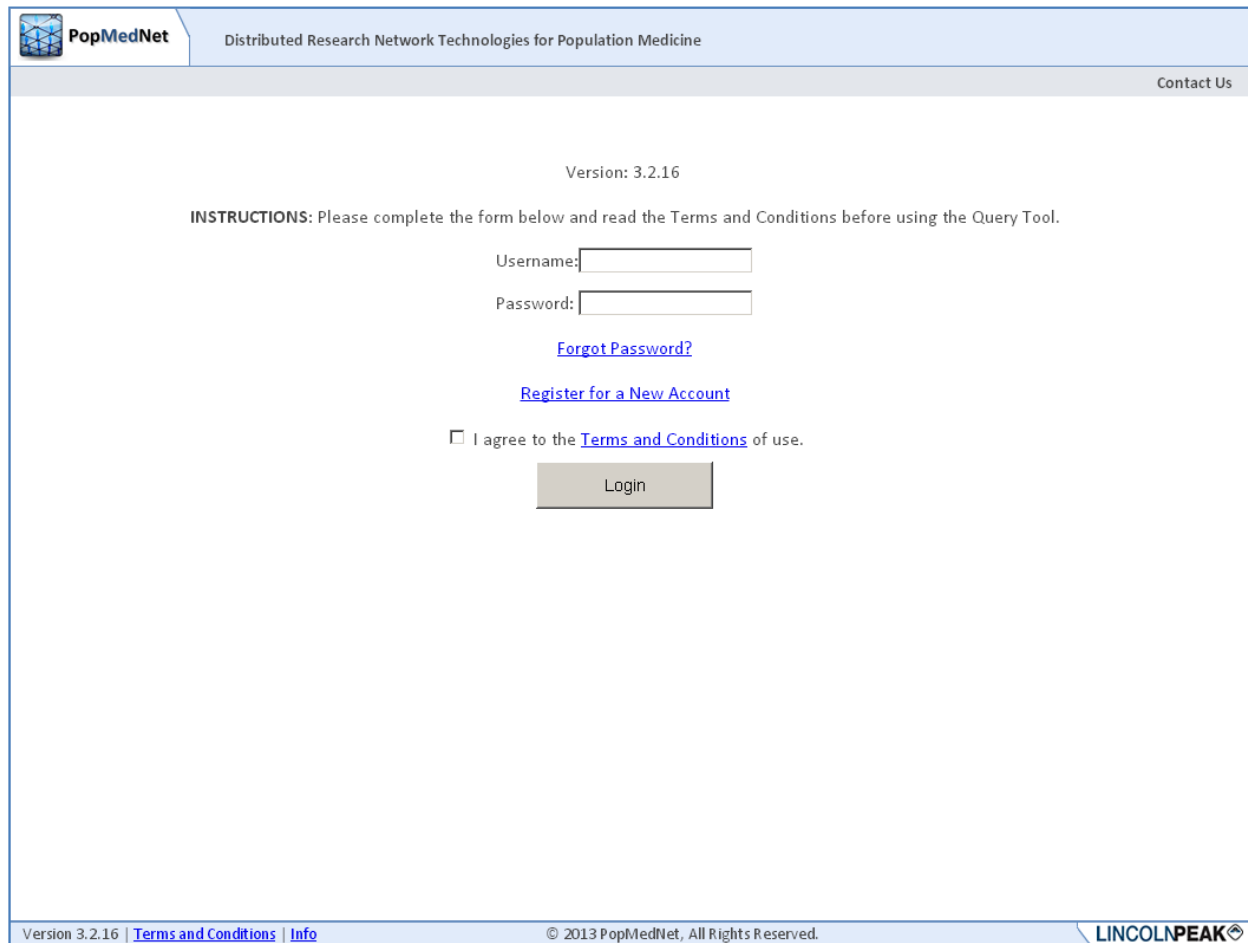
The image shows a web form titled "Credentials" with a minus icon in the top left corner. Inside the form, there are three input fields labeled "Username", "Password", and "Confirm Password". Below these fields, there are three buttons: "Sign Up", "Clear", and "Back to Login".

Figure 3: User Registration Form - Registration Credentials and Sign Up

5. Click the "Sign Up" button to submit your registration
 - a. After signing up, you will receive an email from the query tool confirming that your registration was submitted. This email is confirmation that your registration was submitted; it does not indicate that your request has been processed or that your account has been created.
 - b. Once your request has been processed, you will receive another email from the query tool indicating that your registration has been approved. Once you receive this email, you will be able to use your credentials to access the portal from the login page.

4 Login to the Web Portal

Once your registration has been approved, follow the steps below to log into the website portal.



PopMedNet Distributed Research Network Technologies for Population Medicine

Contact Us

Version: 3.2.16

INSTRUCTIONS: Please complete the form below and read the Terms and Conditions before using the Query Tool.

Username:

Password:

[Forgot Password?](#)

[Register for a New Account](#)

☐ I agree to the [Terms and Conditions](#) of use.


Login

Version 3.2.16 | [Terms and Conditions](#) | [Info](#) © 2013 PopMedNet, All Rights Reserved. LINCOLNPEAK

Figure 4: Logon Page

1. Navigate to the network portal logon page.
2. Enter your username and password.
3. If this is your first login, read and acknowledge your agreement to the Terms and Conditions of use.
4. Click the “Login” button to enter the Portal.

Once you have logged in, the Portal displays the home page shown below. From the home page, you can view your notifications, view existing requests, and create a new request.


PopMedNet

Distributed Research Network Technologies for Population Medicine
Welcome, MDDemoEl

Home Requests Profile Resources Reports Network
Contact Us Logoff

Network Browser <<

- Network
- Requests
- Groups
- Organizations

What's New

Software Version 3.2.12 Features and Enhancements

- PopMedNet 3.2 Feature Enhancements:
 - Projects - Project based request processing and administration
- PopMedNet 3.1 Feature Enhancements:
 - User Workspaces - Built-in folders that allow requests to be automatically organized into sub-folders
 - Shared Folders - Allows users to share requests with other users.
 - Network Navigator - Visual tools network browser that allows the user to navigate through the network hierarchy.
 - Bread-crumbs Navigation Control - Control the maintains position within the network hierarchy providing context and allowing the user to easily back up through the hierarchy
 - Sticky User Settings - Remembers users settings, such as collapsible controls, the number of requests shown on the request page will be remember from session to session.
 - Auto DataMart Configuration - this will make it easier for datamart administrators to configure their datamart client. This feature streamlines the datamart client configuration process as it can be done from the portal.
 - User Registration - Allows users to register for an account by entering contact information, username, and password in addition to the traditional user creation process performed by Administrators.
 - User registration Workflow Process - User registration requests enter a task based workflow process used by Administrators to approve or reject user registrations via a new Task panel displayed on the home page.
- PopMedNet 3.0 ONC Query Health Enhancements:
 - Query Envelope - Formalization of the PMN request tunnel to comply with ONC Query Health requirements
 - Enhanced Security - Implementation of mutual authentication over TLS using X.509 certificates
 - I2B2 Request Plugin - Integration of I2B2 request composer that submits request to the PMN network that are routed to I2B2 end-points used to process the request
- MDPHnet Feature Enhancements:
 - Menu-driven query builder request plugin used to compose ICD-9 Diagnosis requests and Reportable Disease Requests submitted against ESP databases.
- PopMedNet 3.0 Design and Technical enhancements:
 - New Request Model Plug-in architecture allowing the application to be easily extended to accommodate new request types and data models.
 - Upgraded technology platform that includes Microsoft .NET 4, Entity Framework 4, MVC 3, WCF, and MEF under Visual Studio 2010 solution.
 - Consolidation of all request and response data into documents that may be displayed using built-in viewer or downloaded to for use by custom applications.
 - Redesigned/revritten DataMart Client application that uses a simplified threading model to process requests.
 - Use of the Windows Credential Manager to store local DataMart Client credentials.

Notifications

Date	Event	Message
11/13/2013 11:16:48 AM	Results Reminder	Results Reminder: DataMarts = Demo DM 1, Demo DM 2, Request = Prev: ICD-9 Diagnoses (3 digit codes) - 15 (83), RequestType = Prev: ICD-9 Diagnoses (3 digit codes), Project = Demo
11/12/2013 11:16:18 AM	Results Reminder	Results Reminder: DataMarts = Demo DM 1, Demo DM 2, Request = Prev: ICD-9 Diagnoses (3 digit codes) - 15 (83), RequestType = Prev: ICD-9 Diagnoses (3 digit codes), Project = Demo
11/11/2013 11:15:48 AM	Results Reminder	Results Reminder: DataMarts = Demo DM 1, Demo DM 2, Request = Prev: ICD-9 Diagnoses (3 digit codes) - 15 (83), RequestType = Prev: ICD-9 Diagnoses (3 digit codes), Project = Demo
11/10/2013 11:15:38 AM	Results Reminder	Results Reminder: DataMarts = Demo DM 1, Demo DM 2, Request = Prev: ICD-9 Diagnoses (3 digit codes) - 15 (83), RequestType = Prev: ICD-9 Diagnoses (3 digit codes), Project = Demo

[Showing 10 notifications per page](#)

Requests

Name	Id	Date	User	Status	Type	Project
Counts of diabetes	108	09/20/2013 02:16 PM	MDDemoEl	Completed	Prev: ICD-9 Diagnos	Demo
Counts of diabetes (Copy)	127	10/11/2013 12:36 PM	MDDemoEl	Draft	Prev: ICD-9 Diagnos	Demo
ICD-9 Diagnosis - 21	122	10/07/2013 02:30 PM	MDDemoEl	Draft	ICD-9 Diagnosis	Demo
Prev: Enrollment - 3	124	10/25/2013 03:22 PM	MDDemoEl	Submitted	Prev: Enrollment	Demo
Prev: ICD-9 Diagnoses (3 digit codes) - 15	83	09/11/2013 11:47 AM	MDDemoEl	Completed	Prev: ICD-9 Diagnos	Demo
Prev: ICD-9 Diagnoses (3 digit codes) - 20	109	09/20/2013 02:44 PM	MDDemoEl	Draft	Prev: ICD-9 Diagnos	Demo
Reportable Disease - 7	123	10/09/2013 03:42 PM	MDDemoEl	Scheduled	Reportable Disease	Demo

[Showing 20 requests per page](#) [New](#)

Version 3.2.12 | [Terms and Conditions](#) | [Info](#)
© 2013 PopMedNet, All Rights Reserved.
LINCOLNPEAK

Figure 5: Home Page

The home page is a landing page that contains a set of content panels that provide you with recent information relevant to your tasks.

The network browser on the left side of the screen allows you to view and navigate through the network entities, including requests, groups, organizations, DataMarts, and users. Click "<<" to minimize it.

The following panels are available on the home page:

- What's New message panel – used to communicate system wide information site upgrades, new features and functions
- Notifications – list of recent notifications. See section 11.3 for information on subscribing to notifications.
- Requests list – your recent requests or requests that require your approval or review

Collapsible content panels are used throughout the user interface that allow you to collapse, expand, and maximize the content panel within the page. Additionally, for panels that contain grid controls, you may specify the number of items displayed in the grid, and set column sort orders and column filters. All these settings are preserved across your sessions.

Note: The term "request" may be used interchangeably with "query." With the introduction of PopMedNet Release 3, the application has the ability to compose and route a variety of queries, commands, and general requests to DataMarts through a "plugin" framework that allows the network to be easily extended to introduce new requests types.

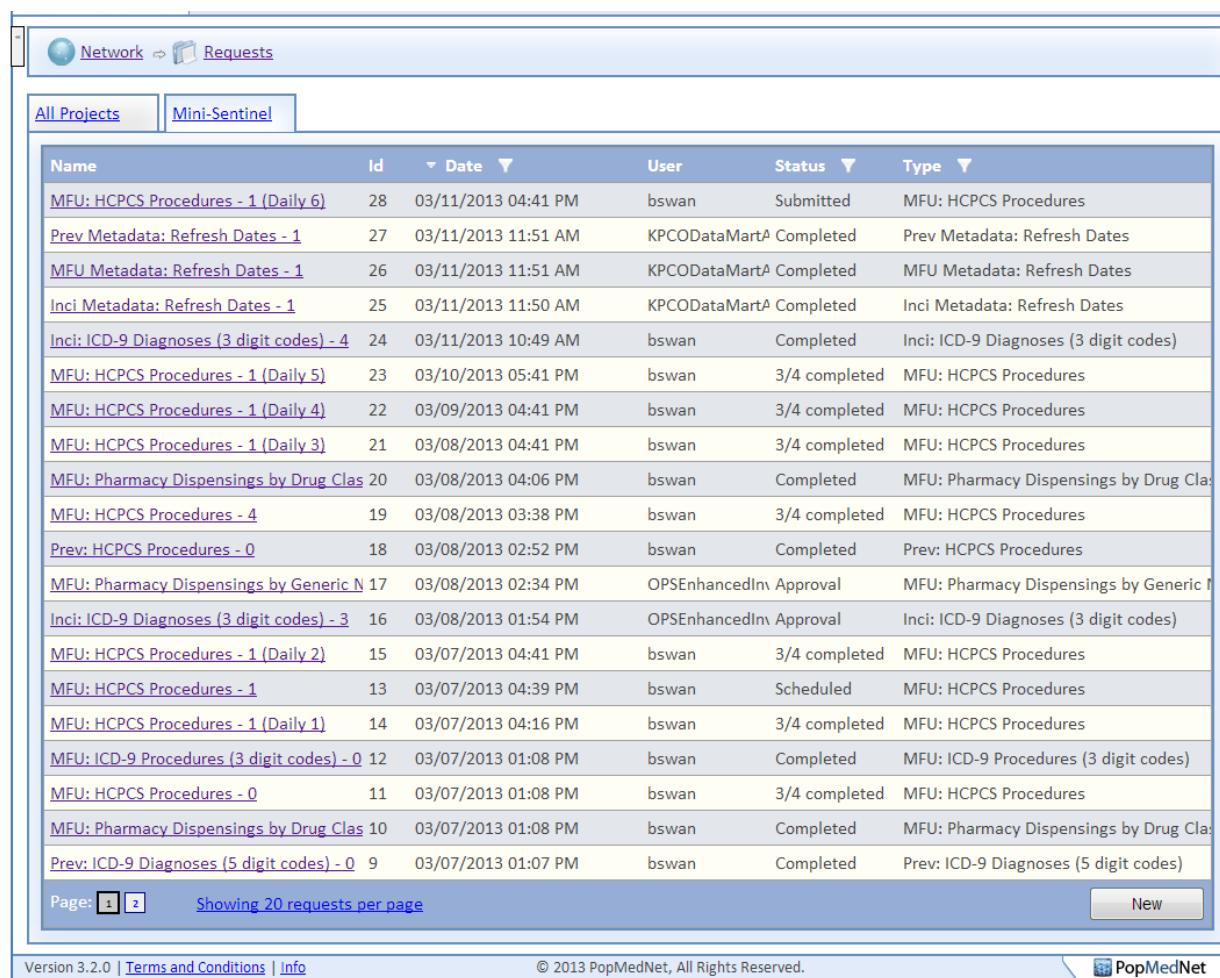
5 Project Based Requests

Projects allow networks to group activities and access controls within one or more Projects. A project establishes security policies for composing and executing requests for users and DataMarts assigned to the project. Projects are created within an organizational Group. Groups have one or more member organizations whose users and DataMarts may participate within projects owned by the group. Note that the network may have one or more groups, and an organization may be a member of one or more groups.

Network Administrators have the rights to modify and administer the Groups, Organizations, and Projects and may grant access to a project and configure its security policies. Other users such as Group and Project Administrators may also be granted these rights, depending on network governance. See the PopMedNet Overview and Administrator's Guide for more information.

6 Submitting a Request

The Requests panel lists the queries that have been composed by the user. A full page dedicated to requests is available by clicking the Requests tab at the top of the page. The following figure shows the Requests page and project tabs.



Name	Id	Date	User	Status	Type
MFU: HCPCS Procedures - 1 (Daily 6)	28	03/11/2013 04:41 PM	bswan	Submitted	MFU: HCPCS Procedures
Prev Metadata: Refresh Dates - 1	27	03/11/2013 11:51 AM	KPCODataMartA	Completed	Prev Metadata: Refresh Dates
MFU Metadata: Refresh Dates - 1	26	03/11/2013 11:51 AM	KPCODataMartA	Completed	MFU Metadata: Refresh Dates
Inci Metadata: Refresh Dates - 1	25	03/11/2013 11:50 AM	KPCODataMartA	Completed	Inci Metadata: Refresh Dates
Inci: ICD-9 Diagnoses (3 digit codes) - 4	24	03/11/2013 10:49 AM	bswan	Completed	Inci: ICD-9 Diagnoses (3 digit codes)
MFU: HCPCS Procedures - 1 (Daily 5)	23	03/10/2013 05:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 4)	22	03/09/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 3)	21	03/08/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: Pharmacy Dispensings by Drug Clas	20	03/08/2013 04:06 PM	bswan	Completed	MFU: Pharmacy Dispensings by Drug Clas
MFU: HCPCS Procedures - 4	19	03/08/2013 03:38 PM	bswan	3/4 completed	MFU: HCPCS Procedures
Prev: HCPCS Procedures - 0	18	03/08/2013 02:52 PM	bswan	Completed	Prev: HCPCS Procedures
MFU: Pharmacy Dispensings by Generic N	17	03/08/2013 02:34 PM	OPSEnhancedIn	Approval	MFU: Pharmacy Dispensings by Generic N
Inci: ICD-9 Diagnoses (3 digit codes) - 3	16	03/08/2013 01:54 PM	OPSEnhancedIn	Approval	Inci: ICD-9 Diagnoses (3 digit codes)
MFU: HCPCS Procedures - 1 (Daily 2)	15	03/07/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1	13	03/07/2013 04:39 PM	bswan	Scheduled	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 1)	14	03/07/2013 04:16 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: ICD-9 Procedures (3 digit codes) - 0	12	03/07/2013 01:08 PM	bswan	Completed	MFU: ICD-9 Procedures (3 digit codes)
MFU: HCPCS Procedures - 0	11	03/07/2013 01:08 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: Pharmacy Dispensings by Drug Clas	10	03/07/2013 01:08 PM	bswan	Completed	MFU: Pharmacy Dispensings by Drug Clas
Prev: ICD-9 Diagnoses (5 digit codes) - 0	9	03/07/2013 01:07 PM	bswan	Completed	Prev: ICD-9 Diagnoses (5 digit codes)

Page: 1 2 Showing 20 requests per page New


Version 3.2.0 | [Terms and Conditions](#) | [Info](#) © 2013 PopMedNet, All Rights Reserved. 

Figure 6: Request Page

The Requests page allows you to create requests within a selected project. The criteria that you can enter vary for each request type. However, the basic steps are the same for all requests. Once you select a request type, the Request Composer page shows a common header panel that identifies the request, a common run mode section to schedule a request or have it run immediately, a common footer panel that contains the DataMarts where the request will be routed, and a content panel in the middle that displays controls used to enter criteria settings for the particular request type.

Request

Prev: Enrollment

Enrollment figures stratified by age group, sex, and eligibility type.

Name

Prev: Enrollment - 3

Priority

Normal

Due Date

Project

Demo [x]

Description

Request Metadata

Activity

Task

Run Mode

Run Immediately After I Click "Submit"

Schedule to Run Later

Run Mode

Coverage

<not specified>

Age Stratification

10 Stratifications (0-1,2-4,5-9,1)

Sex Stratification

Male and Female

Observation Period Selector

Quarterly data not available.

Start Period

End Period

Request Type Specific Criteria

DataMart Routing

Please select DataMarts to which this query will be sent

<input checked="" type="checkbox"/>	DataMart	Organization	
<input checked="" type="checkbox"/>	Demo DM 2	Demo Organization	Submit
<input checked="" type="checkbox"/>	Demo DM1	Demo Organization	Copy
			Delete

DataMart Routing

Figure 7: Sections of the Request Composer Page

Procedure

Follow these basic steps to submit a request:

1. Click the "New" button in the Request panel.

All Projects		Demo				
Name	Id	Date	User	Status	Type	
Prev: Enrollment - 3	124	10/10/2013 10:10 AM	MDDemoEI	Draft	Prev: Enrollment	
Reportable Disease - 7	123	10/09/2013 03:42 PM	MDDemoEI	Scheduled	Reportable Disease	
ICD-9 Diagnosis - 21	122	10/07/2013 02:30 PM	MDDemoEI	Draft	ICD-9 Diagnosis	
Prev: ICD-9 Diagnoses (3 digit codes) - 20	109	09/20/2013 02:44 PM	MDDemoEI	Draft	Prev: ICD-9 Diagnoses (3 digit codes)	
Counts of diabetes	108	09/20/2013 02:16 PM	MDDemoEI	Completed	Prev: ICD-9 Diagnoses (3 digit codes)	
Prev: ICD-9 Diagnoses (3 digit codes) - 15	83	09/11/2013 11:47 AM	MDDemoEI	Completed	Prev: ICD-9 Diagnoses (3 digit codes)	
Showing 20 requests per page						New

Figure 8: Request Panel

- Choose a request model and type from the drop down menu.

Choose Request Type

Please choose a model, then click a request type to create a request

Summary: Prevalence Queries

[Prev: Enrollment](#)
[Prev: HCPCS Procedures](#)
[Prev: ICD-9 Diagnoses \(3 digit codes\)](#)
[Prev: ICD-9 Diagnoses \(4 digit codes\)](#)
[Prev: ICD-9 Diagnoses \(5 digit codes\)](#)
[Prev: ICD-9 Procedures \(3 digit codes\)](#)
[Prev: ICD-9 Procedures \(4 digit codes\)](#)
[Prev: Pharmacy Dispensings by Drug Class](#)
[Prev: Pharmacy Dispensings by Generic Name](#)

Cancel

Figure 9: Request Type Dialog

- On the Request Composer page, enter the metadata for the request. This must include a unique name and a brief description of the request and its purpose. If a project is not specified, do so by clicking on the hyperlink in the Project field and selecting from a list of projects that you have permission to submit requests within.

Name
Counts of diabetes
Priority
Normal
Due Date
09/21/2013
Project
Demo [x]

Description
Query for counts of diabetes in any care setting in 2008-2010 for prep-to-research purposes

Figure 10: Request Composer Page – Request Metadata

All metadata is distributed to the DataMarts with the request and should be detailed enough to allow data partners to identify the request and determine how to respond.

4. Select the run mode for the requests. Requests may be submitted immediately or set to run later according to a schedule. See section 1.



Figure 11: Request Composer Page – Run Mode

5. Specify the request specific criteria and settings. See Section 7: Request Types for information on the criteria associated with each request type.

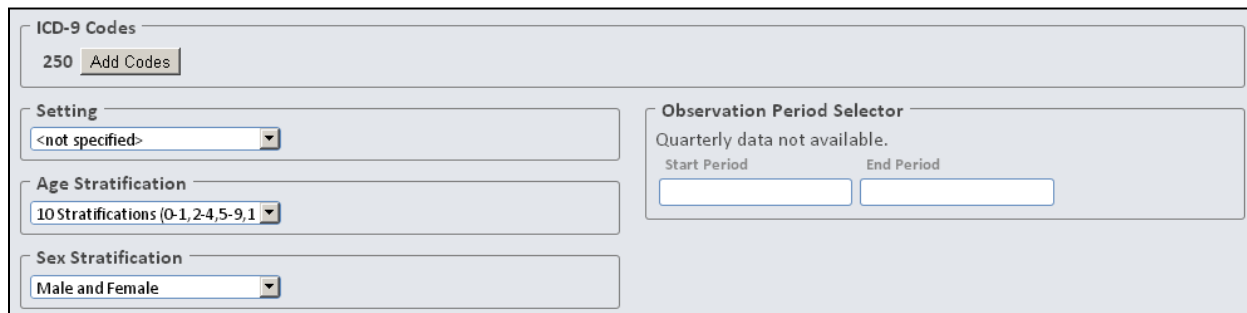
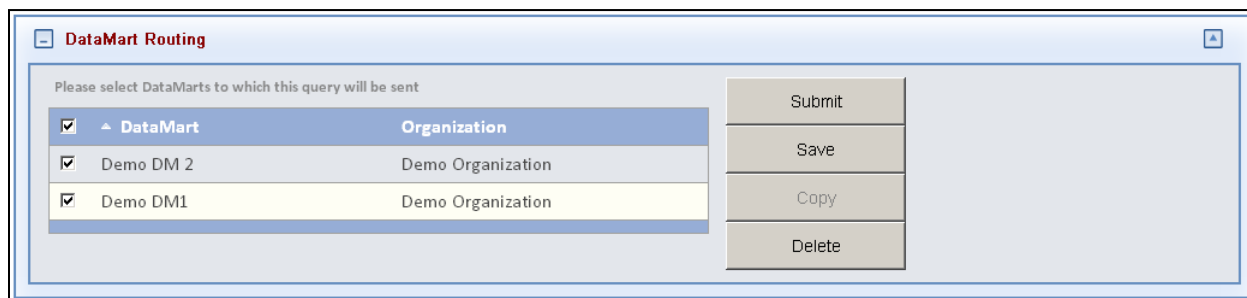


Figure 12: Request Composer Page – Request Specific Criteria

6. In the DataMart Routing panel, use the checkboxes to select the DataMarts to submit the request to. Only those DataMarts that you have the rights to submit to will be displayed.



✓	▲ DataMart	Organization
✓	Demo DM 2	Demo Organization
✓	Demo DM1	Demo Organization

Figure 13: Request Composer Page – DataMart Routing

7. Click “Submit” to submit the request to the selected DataMarts, “Save” to save the request in draft form, or “Delete” to delete the draft.

6.1 Scheduling Requests

A request may be immediately submitted upon clicking “Submit” or set to run later, according to a schedule of your choice. To schedule a request, click the “Schedule to Run Later” radio button in the Run Mode section of the request composer page. This will display a “Set Schedule” hyperlink that will display a popup dialog box.

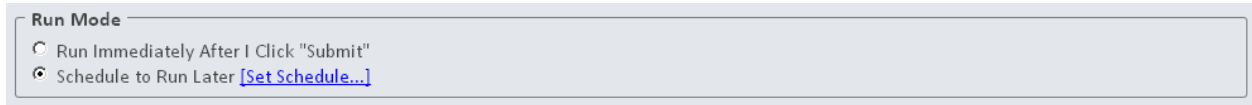


Figure 14: Request Composer Page - Run Mode

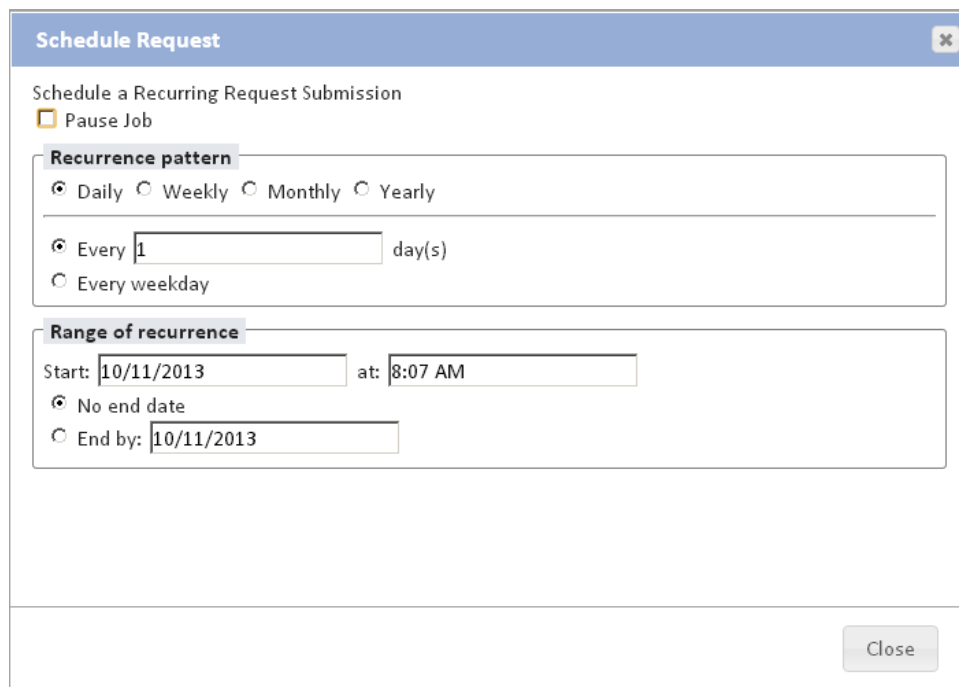


Figure 15: Schedule Request Dialog

Set the schedule by selecting the recurrence pattern and range of recurrence. Requests may be submitted daily, weekly, monthly, or yearly.

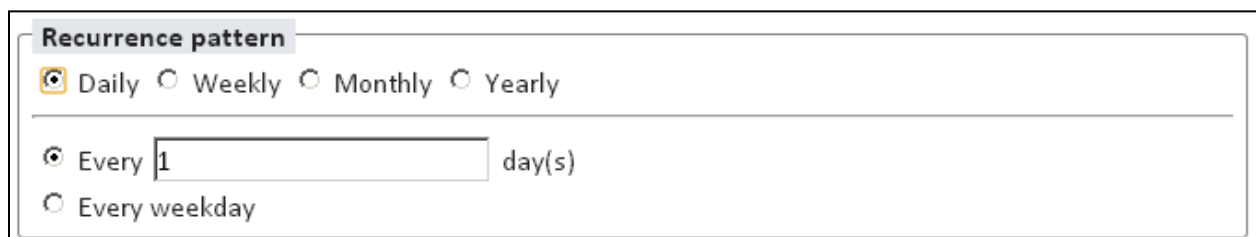


Figure 16: Schedule Request Dialog – Daily Recurrence Pattern

Recurrence pattern

☐ Daily
 ☒ Weekly
 ☐ Monthly
 ☐ Yearly

Recur every week on:

☐ Sunday
 ☒ Monday
 ☐ Tuesday
 ☐ Wednesday
 ☐ Thursday
 ☐ Friday
 ☐ Saturday

Figure 17: Schedule Request Dialog – Weekly Recurrence Pattern

Recurrence pattern

☐ Daily
 ☐ Weekly
 ☒ Monthly
 ☐ Yearly

☒ Day of every month(s)

☐ The of every month(s)

Figure 18: Schedule Request Dialog – Monthly Recurrence Pattern

Recurrence pattern

☐ Daily
 ☐ Weekly
 ☐ Monthly
 ☒ Yearly

Recur every year on:

☒ On

☐ On the of

Figure 19: Schedule Request Dialog - Yearly Recurrence Pattern

Once the schedule is set and the rest of the request parameters are entered, select DataMarts to submit the request to and click “Save.” This will schedule the request to run based on the settings that you entered. Back in the request list on the homepage and under the Requests tab, the status of the request will read “Scheduled.” When it comes time to run the request, a copy of it is made and submitted to the DataMarts that were selected in the base request, with its name modified to reflect the scheduled copy (e.g. *BaseRequestName_Weekly_1*). Once submitted, the request behaves like any other request that was submitted.

To make any changes to the scheduled request, open the base request and modify it from the Request Composer page. To modify the request or its schedule, make any changes on the Request Composer page and click “Save.” To pause the request, click the “Set Schedule” hyperlink in the Run Mode section to open the Request Schedule dialog, select “Pause Job,” and save the request. Unschedule the request by changing the run mode to “Run Immediately” and saving the base request as a draft or click “Delete” under the DataMart Routing panel to delete the base request. Note that modifying or deleting the base request will not affect any previously submitted requests.

7 Request Types

The Mini-Sentinel Distributed Query Tool supports a number of request types:

- Menu-driven requests that execute against Mini-Sentinel Common Data Model Summary Table databases.
- File distribution and modular program distribution requests used to exchange documents and program files between the portal and DataMarts.

7.1 Summary Queries

The PopMedNet software supports querying against Mini-Sentinel Common Data Model Summary Tables. The summary tables are created through distributed SAS code written by the Mini-Sentinel Operations Center and executed against the Mini-Sentinel Distributed Database held by each data partner. These tables provide summary counts of individuals by period, age group, and sex. The summary counts include information on medication use (e.g., number of dispensings, users, and days supplied), diagnoses (e.g., number of individuals with the diagnosis), procedures, and the overall data partner population. The structure of the tables is described in separate documentation.

The summary queries are grouped into three request models as follows:

Table 2: Summary Table Request Models and Types

Request Model	Request Type
Prevalence	Enrollment
	ICD-9 Diagnosis (3 digit codes)
	ICD-9 Diagnosis (4 digit codes)
	ICD-9 Diagnosis (5 digit codes)
	ICD-9 Procedures (3 digit codes)
	ICD-9 Procedures (4 digit codes)
	HCPCS Procedures
	Pharmacy Dispensings by Drug Class
	Pharmacy Dispensings by Generic Name
Incidence	ICD-9 Diagnosis (3 digit codes)
	Pharmacy Dispensings by Drug Class

Request Model	Request Type
	Pharmacy Dispensings by Generic Name
Most Frequently Used	ICD-9 Diagnosis (3 digit codes)
	ICD-9 Diagnosis (4 digit codes)
	ICD-9 Diagnosis (5 digit codes)
	ICD-9 Procedures (3 digit codes)
	ICD-9 Procedures (4 digit codes)
	HCPCS Procedures
	Pharmacy Dispensings by Drug Class
	Pharmacy Dispensings by Generic Name

7.1.1 Prevalence Queries

The Prevalence query types are based on the Prevalence MSCDM Summary Tables. The Prevalence summary tables represent prevalence counts of diagnoses, procedures, and drug utilization.

7.1.1.1 Enrollment Queries

The Enrollment query provides a count of unique individuals who are members/patients during the period. The count is stratified by age group, sex, year, drug coverage status, and medical coverage status. The member counts and days covered in the enrollment table can be used as denominators to calculate crude prevalence rates for Prevalence, Incidence, and Most Frequent Utilization query types. See Section 0: for more details.

To compose an Enrollment query, click on the “New” button in the request panel, choose “Summary: Prevalence Queries”, and then choose the “Enrollment” request type. This will display the Request Composer page for Enrollment queries. The following figure shows the request-specific criteria for an Enrollment query.

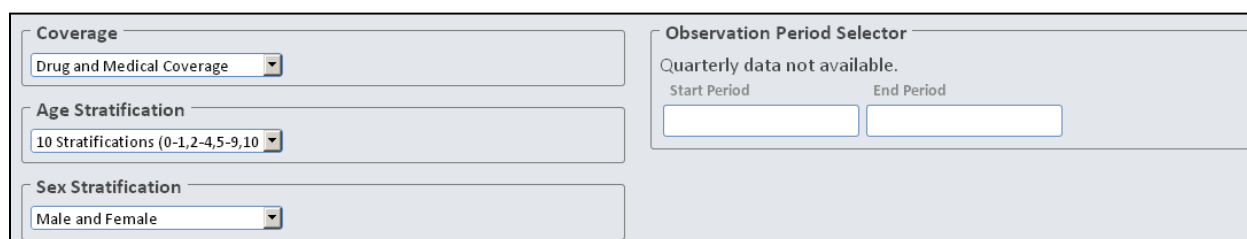


Figure 20: Enrollment Query Request Composer Page – Request Specific Criteria

Enter the following criteria for an Enrollment query:

Table 3: Enrollment Query Criteria

Control	Description
Coverage	Select the coverage type from the dropdown menu. Options include Drug and Medical Coverage, Drug Coverage Only, Medical Coverage Only, or All Members (a union of the previous three coverage types)
Age Stratification	Select the age stratification from the dropdown menu. Options include ten, seven, four, two, or no age stratifications.
Sex Stratification	Select the sex stratification from the dropdown menu. Options include female only, male only, male and female, or male and female aggregated.
Observation Period Selector	Enter the start year and ending year for the observation period range.

7.1.1.2 Prevalence Diagnosis and Procedure Queries

The Prevalence Diagnosis and Procedure queries provide counts of unique members with a diagnosis or procedure observed during the period and a count of events experienced within each stratum. The counts are stratified by code, setting of visit, age group, sex, and year.

The Prevalence Diagnosis and Procedure queries include ICD-9 3-, 4-, or 5-digit Diagnosis, HCPCS Procedure, and ICD-9 3-, and 4-digit Procedure queries. To compose a Prevalence Diagnosis or Procedure query, click on the “New” button in the request panel, select “Summary: Prevalence Queries”, and select the request type. This will display the Request Composer page for the specific query type.

The request specific criteria for the Prevalence Diagnosis and Procedure query types only vary from one another by the codes that are queried. Note that you cannot query across code types. For example, you may not include codes for ICD-9 3-digit and 5-digit diagnoses in the same query. The following figure shows the request specific criteria for a Prevalence ICD-9 3-digit Diagnosis query type:

ICD-9 Codes

250 ,251 [Add Codes](#)

Setting

Any Setting

Age Stratification

10 Stratifications (0-1,2-4,5-9,10)

Sex Stratification

Male and Female

Observation Period Selector

Quarterly data not available.

Start Period

End Period

Figure 21: Prevalence ICD-9 3-digit Diagnosis Request Composer Page - Request Specific Criteria

The Prevalence Diagnosis and Procedure queries use a list of codes provided by OptumInsight (previously Ingenix). The query tool software uses the short name description, as opposed to the long name description, to match code names. The following figure shows a 3-digit ICD-9 Diagnosis code selector dialog:

Select one or more codes

Search by specific code, range of codes (e.g., 250-255) or keyword to identify codes for the query; wildcards (*) can be used.

The code set used for the specifications for HCPCS, ICD-9 Diagnosis (3, 4 and 5 digit) and ICD-9 Procedure (3 and 4 digit) query types are provided by Ingenix, Inc.

Type in a text query:

Or choose a category:

(240-279) ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS

Search Results

	Code	Name
[add]	240	SIMPLE AND UNSPECIFIED GOITER
[add]	241	NONTOXIC NODULAR GOITER
[add]	242	THYROTOXICOSIS W/WO GOITER
[add]	243	CONGENITAL HYPOTHYROIDISM
[add]	244	ACQUIRED HYPOTHYROIDISM
[add]	245	THYROIDITIS
[add]	246	OTHER DISORDERS OF THYROID

Page:
1
2
3
4
5
6

Selected Codes

	Code	Name
[remove]	250	DIABETES MELLITUS

Close

Figure 22: Request Composer Page – 3-digit ICD-9 Diagnosis Code Selector Dialog

Enter the following criteria for a Diagnosis or Procedures query:

Table 4: Prevalence Diagnosis and Procedures Query Criteria

Control	Description
Code Selection	<p>Click “Add Codes” to open the code selector dialog.</p> <p>There are two ways to search for codes:</p> <ol style="list-style-type: none"> 1. Search by text string or code. Wildcards (*) and ranges of codes (e.g., “240-250”) may be used. 2. Select a category from the dropdown menu. <p>The Search Results panel will populate with a list of codes and their short names. Click “[Add]” to add the code to the Selected Codes list. Click “[Remove]” to remove a code from the list.</p> <p>Click “Close” to close the code selector dialog and insert the codes into the query.</p>
Setting	Select the care setting from the dropdown menu. Options include inpatient, outpatient (ambulatory), emergency department, or any setting.
Age Stratification	Select the age stratification from the dropdown menu. Options include ten, seven, four, two, or no age stratifications.
Sex Stratification	Select a sex grouping from the dropdown menu. Options include female only, male only, male and female, or male and female aggregated.
Observation Period Selector	Enter the start year and ending year for the observation period range.

7.1.1.3 Prevalence Drug Queries

The Prevalence Drug queries include Pharmacy Dispensings by Drug Class and Pharmacy Dispensings by Generic Name. They provide counts of unique members who had a drug dispensing during the period, a count of dispensing received by all of these members, and total days supplied by strata. Counts are stratified by drug category/generic drug name, age group, sex, quarter-year, and year.

To compose a Prevalence Drug query, click on the “New” button in the request panel, select “Summary: Prevalence Queries”, and select the request type. This will display the Request Composer page for the specific query type.

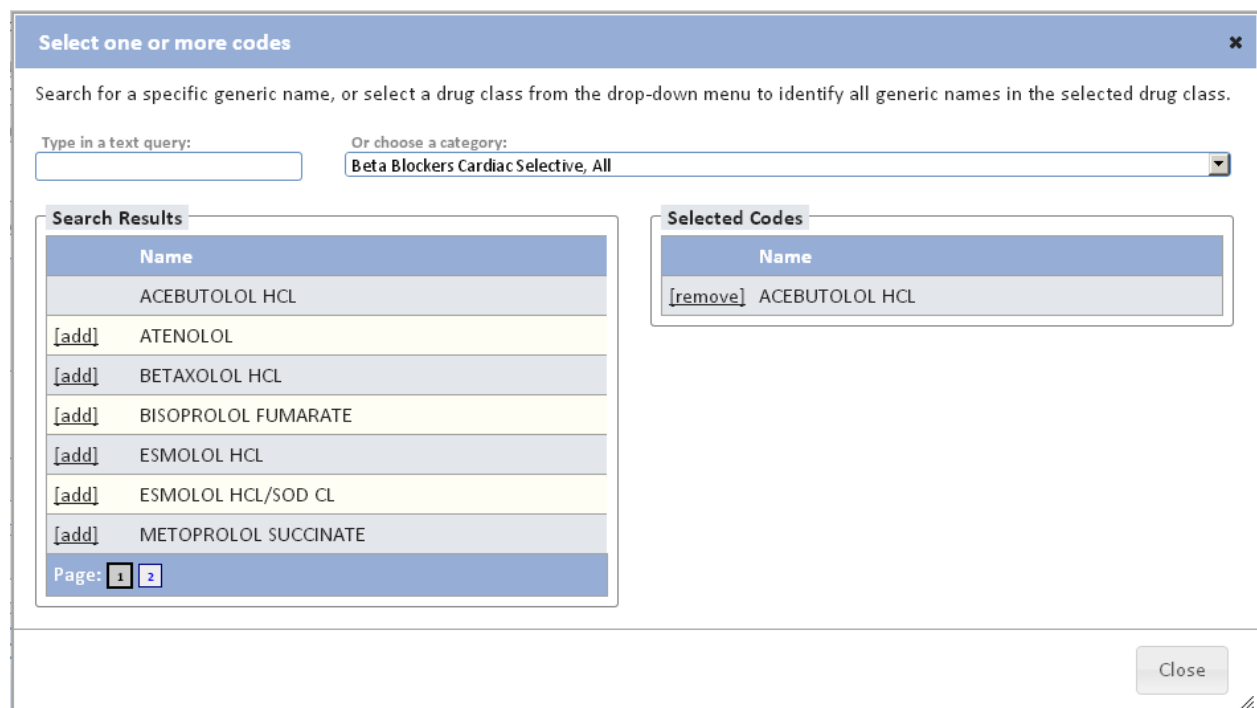
The request specific criteria for the Prevalence Drug query types only vary based on whether drug categories or specific generic drug names are queried. The following figure shows the request specific criteria for a Pharmacy Dispensings by Generic Name query type:



The figure shows a web form for specifying request criteria. It includes a 'Drug Names' section with a text input containing 'ACEBUTOLOL HCL' and an 'Add Codes' button. Below this are 'Age Stratification' and 'Sex Stratification' dropdown menus. The 'Age Stratification' menu is set to '10 Stratifications (0-1, 2-4, 5-9, 1)'. The 'Sex Stratification' menu is set to 'Male and Female'. To the right is an 'Observation Period Selector' with radio buttons for 'By Years' (selected) and 'By Quarters', and input fields for 'Start Period' and 'End Period'.

Figure 23: Prevalence Pharmacy Dispensings by Generic Name Request Composer Page - Request Specific Criteria

The Prevalence Drug queries use a standardized list of drug categories and generic names provided by the Mini-Sentinel Operations Center and mapped from National Drug Codes provided by First DataBank. The following figure shows a generic drug name code selector dialog:



The figure shows a dialog box titled 'Select one or more codes'. It contains a search bar with the text 'Type in a text query:' and a dropdown menu with the text 'Or choose a category:'. The dropdown menu is currently set to 'Beta Blockers Cardiac Selective, All'. Below the search bar is a 'Search Results' table with a header 'Name' and a list of drug names: ACEBUTOLOL HCL, ATENOLOL, BETAXOLOL HCL, BISOPROLOL FUMARATE, ESMOLOL HCL, ESMOLOL HCL/SOD CL, and METOPROLOL SUCCINATE. Each row has an '[add]' button to its left. To the right of the search results is a 'Selected Codes' table with a header 'Name' and a single row containing 'ACEBUTOLOL HCL' with a '[remove]' button to its left. At the bottom right of the dialog is a 'Close' button.

Figure 24: Request Composer Page –Generic Drug Name Code Selector Dialog

Enter the following criteria for a drug query:

Table 5: Drug Query Criteria

Control	Description
Drug Selection	<p>Click “Add Codes” to open the code selector dialog.</p> <p>For Pharmacy Dispensings by Generic Name, there are two ways to search for codes:</p> <ol style="list-style-type: none"> 1. Search by text string. Wildcards (*) may be used. 2. Select a category from the dropdown menu. <p>For Pharmacy Dispensings by Drug Class, only searching by text string is available. Wildcards (*) may be used.</p> <p>The Search Results panel will populate with a list of codes and their short names. Click “[Add]” to add the code to the Selected Codes list. Click “[Remove]” to remove a code from the list.</p> <p>Click “Close” to close the code selector dialog and insert the codes into the query.</p>
Age Stratification	Select the age stratification from the dropdown menu. Options include ten, seven, four, two, or no age stratifications.
Sex Stratification	Select a sex grouping from the dropdown menu. Options include female only, male only, male and female, or male and female aggregated.
Period Type	Select the period type: Quarterly or Yearly.
Observation Period Selector	Enter the start year and ending year for the observation period range and select Q1 –Q4 for the start and ending years if applicable.

7.1.2 Incidence Queries

Incidence queries are based on the Incidence MSCDM Summary Tables. The Incidence summary tables represent incidence counts of diagnoses and drug utilization.

Incidence is defined as a member with an encounter with the diagnosis of interest (i.e., the index date), in the care setting of interest, in the year of interest with no evidence of that diagnosis in the 90, 180 and 270 days (i.e., the look back periods) before the index date in any care setting. Both medical and drug coverage are required during the 3 possible look back periods, allowing for eligibility gaps of <=45

days. In addition, the tables also report number of encounters in the care setting of interest with that diagnosis in the 90, 180, 270 days after the index date (including the index event). Only the first incident event/index date within each year is considered.

The request composition for Prevalence and Incidence query types follow the same format. For the request specific criteria for Incidence queries, see the corresponding Prevalence sections.

7.1.3 Most Frequently Used Queries

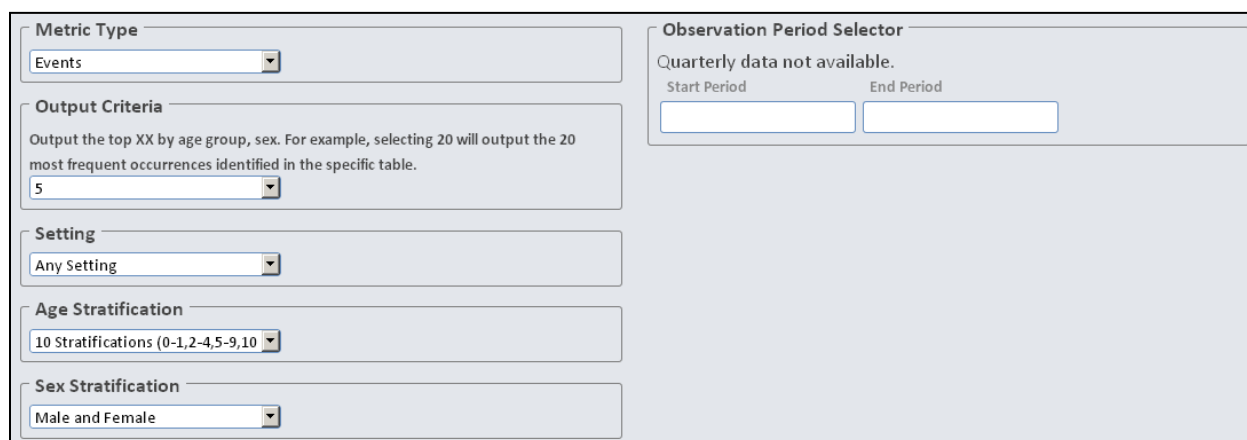
The Most Frequently Used (MFU) feature allows you to query the top n events, members, days supply, or dispensing within a specified query type (drugs, diagnoses, or procedures) within the Prevalence tables.

7.1.3.1 Most Frequently Used Diagnosis and Procedure Queries

The MFU Diagnosis and Procedure queries provide the top n events or members within the Prevalence tables. The counts are stratified by code, setting of visit, age group, sex, and year.

The MFU Diagnosis and Procedure queries include ICD-9 3-, 4, or 5-digit Diagnosis, HCPCS Procedure, and ICD-9 3-, and 4-Digit Procedure queries. To compose an MFU Diagnosis or Procedure query, click on the “New” button in the request panel, select “Summary: Most Frequently Used Queries”, and select the request type. This will display the Request Composer page for the specific query type.

The request specific criteria for the MFU Diagnosis and Procedure query types only vary from one another by the codes that are included. Note that you cannot query across code types. For example, a single query may not return codes for ICD-9 3-digit and 5-digit diagnoses. The following figure shows the request specific criteria for an MFU ICD-9 3-digit Diagnosis query type:



The screenshot shows a web interface for configuring a query. It includes several sections with dropdown menus and text boxes:

- Metric Type:** A dropdown menu with "Events" selected.
- Output Criteria:** A text box explaining the output and a dropdown menu with "5" selected.
- Setting:** A dropdown menu with "Any Setting" selected.
- Age Stratification:** A dropdown menu with "10 Stratifications (0-1,2-4,5-9,10)" selected.
- Sex Stratification:** A dropdown menu with "Male and Female" selected.
- Observation Period Selector:** A section with the text "Quarterly data not available." and two empty text boxes for "Start Period" and "End Period".

Figure 25: MFU ICD-9 3-digit Diagnosis Query Request Composer Page - Request Specific Criteria

Enter the following criteria for an MFU Diagnosis or Procedures query:

Table 6: Most Frequently Used Diagnosis or Procedures Query Criteria

Control	Description
Metric Type	Select the metric type from the dropdown menu. Options include Events and Users.
Output Criteria	Select the number of rankings to return per strata. For example, selecting 20 for an MFU HCPCS query will return the 20 most frequent occurrences of HCPCS codes (by event or user, depending on the metric selected above) per strata. Options include 5, 10, 20, 25, 50, or 100.
Setting	Select the care setting from the dropdown menu. Options include inpatient, outpatient (ambulatory), emergency department, or any setting.
Age Stratification	Select the age stratification from the dropdown menu. Options include ten, seven, four, two, or no age stratifications.
Sex Stratification	Select a sex grouping from the dropdown menu. Options include female only, male only, male and female, or male and female aggregated.
Observation Period Selector	Enter the start year and ending year for the observation period range.

7.1.3.2 Most Frequently Used Drug Queries

The MFU Drug queries provide the top n users, days supplied, or dispensings within the Prevalence tables. The counts are stratified by drug category/name, age group, sex, and year.

The MFU Drug queries include Pharmacy Dispensings by Drug Class and Pharmacy Dispensings by Generic Name. To compose an MFU Drug query, click on the “New” button in the request panel, select “Summary: Most Frequently Used Queries”, and select the request type. This will display the Request Composer page for the specific query type.

The request specific criteria for the MFU Drug query types only vary from one another by the results that are returned. The following figure shows the request specific criteria for an MFU Pharmacy Dispensings by Drug Class query type:

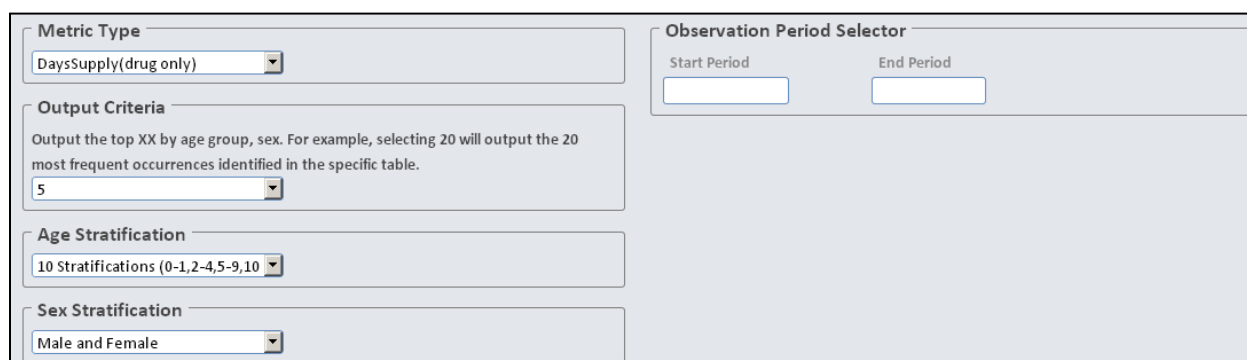


Figure 26: MFU Pharmacy Dispensings by Drug Class Query Request Composer Page - Request Specific Criteria

Enter the following criteria for an MFU Drug query:

Table 7: Most Frequently Used Drug Query Criteria

Control	Description
Metric Type	Select the metric type from the dropdown menu. Options include Days Supply, Dispensings, and Users.
Output Criteria	Select the number of rankings to return per strata. For example, selecting 20 for an MFU Pharmacy Dispensings by Drug Class query will return the 20 most frequent occurrences of drug classes (by user, days supply, or dispensings, depending on the metric selected above) per strata.
Age Stratification	Select the age stratification from the dropdown menu. Options include ten, seven, four, two, or no age stratifications.
Sex Stratification	Select a sex grouping from the dropdown menu. Options include female only, male only, male and female, or male and female aggregated.
Observation Period Selector	Enter the start year and ending year for the observation period range.

7.2 File Distribution

The File Distribution request type allows you to distribute any type of file to the network DataMarts. To compose a File Distribution request, click on the “New” button in the request panel, select the “File Distribution” request model and the “File Distribution” request type. This will display the Request Composer page for the File Distribution request. The following figure shows the request specific criteria for the File Distribution request type:

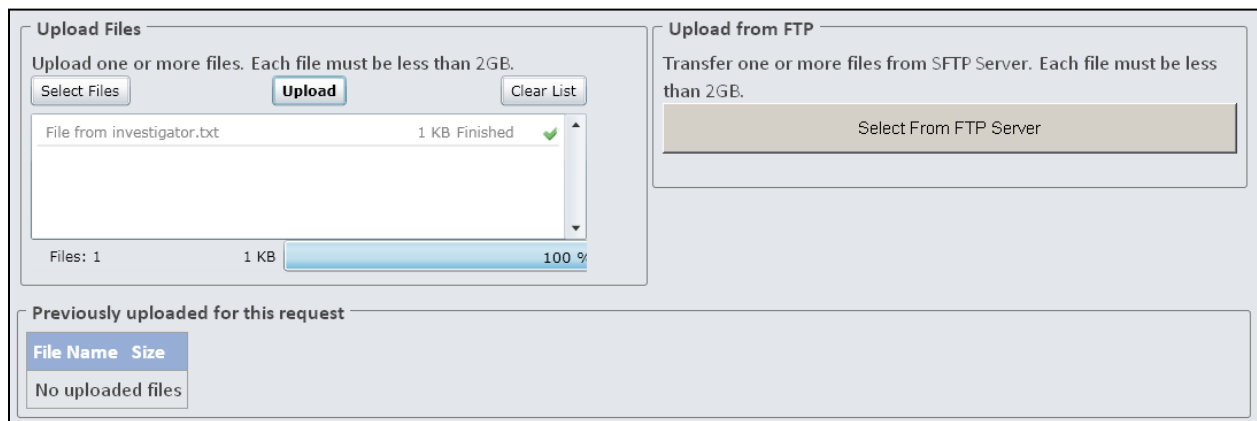


Figure 27: File Distribution Request Composer Page - Request Specific Criteria

Files may be uploaded to a File Distribution request via your local computer or an FTP site.

Upload a file from your local computer

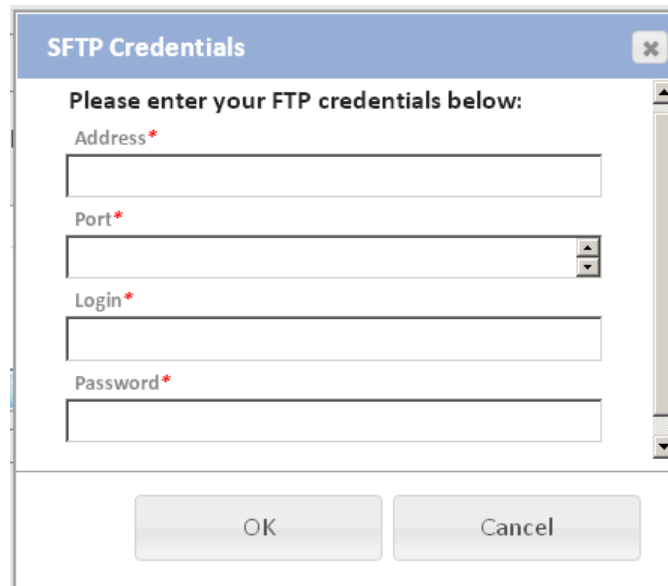
Follow these steps to upload a file from your computer:

1. In the Upload Files panel, click “Select Files.”
2. Browse your computer’s folders to find the desired file(s) and click “Open.”
3. The box will display a list of files. Click the trashcan symbol to delete a file from the list. Click “Clear list” to delete all files. Click “Upload” to upload all files to the Portal.

Upload a file from an FTP site

Follow these steps to upload a file from an FTP site. Note that the FTP server must have an open port and you must have valid user credentials to connect to the FTP server. Contact your FTP server administrator for help.

1. In the Upload from FTP panel, click “Select From FTP Server.”
2. In the SFTP Credentials dialog box, enter the following information and click “OK” to connect to the FTP server.
 - a. Address: the address of the FTP server. Note that this address should not include http:// or https://.
 - b. Port: contact your FTP server administrator for help in locating an open port.
 - c. Login: your username for the FTP server.
 - d. Password: your password for the FTP server.



SFTP Credentials

Please enter your FTP credentials below:

Address*

Port*

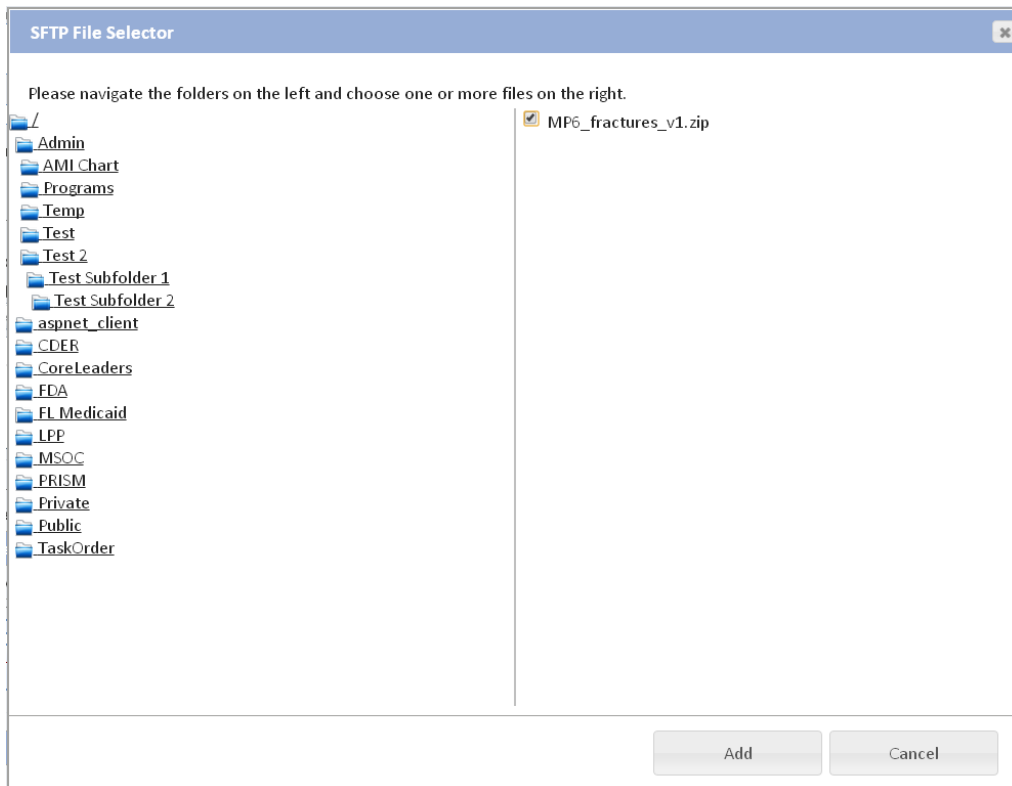
Login*

Password*

OK Cancel

Figure 28: File Distribution Request Composer Page - SFTP Credentials Dialog

- The SFTP File Selector dialog displays folders to the left and files to the right. Open a parent folder by clicking on it to display its child files and folders. Select your file(s) by checking the checkboxes next to each one and click “Add” to upload the file(s) to the Portal.



SFTP File Selector

Please navigate the folders on the left and choose one or more files on the right.

Left pane (folders):

- /
- Admin
- AMI Chart
- Programs
- Temp
- Test
- Test 2
- Test Subfolder 1
- Test Subfolder 2
- aspnet_client
- CDER
- CoreLeaders
- FDA
- FL Medicaid
- LPP
- MSOC
- PRISM
- Private
- Public
- TaskOrder

Right pane (files):

- ☒ MP6_fractures_v1.zip

Add Cancel

Figure 29: File Distribution Request Composer Page - SFTP File Selector Dialog

7.3 Modular Program Distribution

The Modular Program Distribution request model allows you to distribute modular program packages to the network DataMarts and define the package manifest. The Modular Program request model provides three request types: Modular Program, Ad Hoc, and Beta Testing. The request specific criteria for the Modular Program request types do not differ. The following figure shows the request specific criteria for a Modular Program request type:

Package Manifest
This is the list of programs in the package

<input type="checkbox"/> Program Type	Program Name	Scenarios	Description
<input type="checkbox"/> Program 1	Program 1		
<input type="checkbox"/> Program 2	Program 2		
<input type="checkbox"/> Program 3	Program 3		
<input type="checkbox"/> Program 4	Program 4		
<input type="checkbox"/> Program 5	Program 5		
<input type="checkbox"/> Program 6	Program 6		
<input type="checkbox"/> Program 7	Program 7		
<input type="checkbox"/> Drug Use	Drug Use		
<input type="checkbox"/> Other	Other		

Upload Files
Upload one or more files. Each file must be less than 2GB.

Upload from FTP
Transfer one or more files from SFTP Server. Each file must be less than 2GB.

Previously uploaded for this request

File Name	Size
No uploaded files	

Figure 30: Modular Program Request Composer Page - Request Specific Criteria

Define the package manifest

The package manifest specifies the modular programs included in the request. Enter the following criteria for the package manifest:

Table 8: Package Manifest Criteria

Control	Description
Program Type	Use the checkboxes to select the program type. Options include Modular Programs 1-7, Drug Use, and Other.
Program Name	Enter the name of the modular program.
Scenarios	Enter the number of scenarios in the modular program.
Description	Enter a description for the modular program.

Files may be uploaded to a Modular Program Distribution request via your local computer or an FTP site.

Upload a file from your local computer.

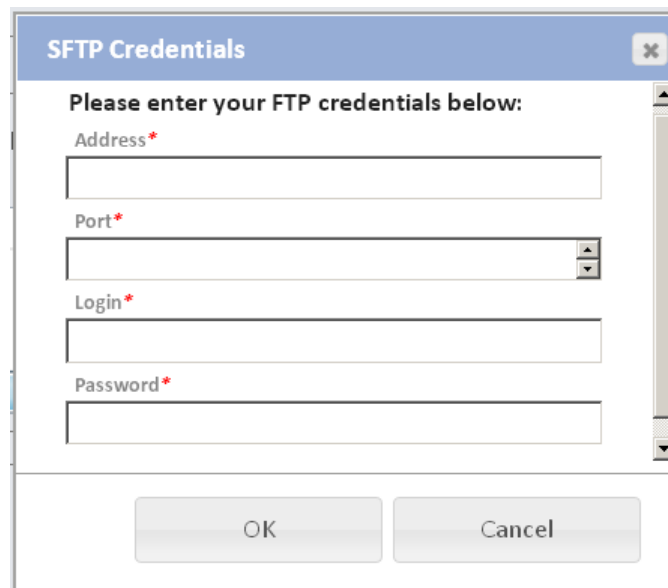
Follow these steps to upload a file from your computer:

1. In the Upload Files panel, click “Select Files.”
2. Browse your computer’s folders to find the desired file(s) and click “Open.”
3. The box will display a list of files. Click the trashcan symbol to delete a file from the list. Click “Clear list” to delete all files. Click “Upload” to upload all files to the Portal.

Upload a file from an FTP site.

Follow these steps to upload a file from an FTP site. Note that the FTP server must have an open port and you must have valid user credentials to connect to the FTP server. Contact your FTP server administrator for help.

1. In the Upload from FTP panel, click “Select From FTP Server.”
2. In the SFTP Credentials dialog box, enter the following information and click “OK” to connect to the FTP server.
 - a. Address: the address of the FTP server. Note that this address should not include http:// or https://.
 - b. Port: contact your FTP server administrator for help in locating an open port.
 - c. Login: your username for the FTP server.
 - d. Password: your password for the FTP server.



The image shows a dialog box titled "SFTP Credentials" with a close button (X) in the top right corner. Below the title bar, the text "Please enter your FTP credentials below:" is displayed. There are four input fields, each with a red asterisk indicating a required field: "Address*", "Port*", "Login*", and "Password*". The "Port" field has a small up/down arrow on its right side. At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

Figure 31: Modular Program Distribution Request Composer Page - SFTP Credentials Dialog

3. The SFTP File Selector dialog displays folders to the left and files to the right. Open a parent folder by clicking on it to display its child files and folders. Select your file(s) by checking the checkboxes next to each one and click "Add" to upload the file(s) to the Portal.

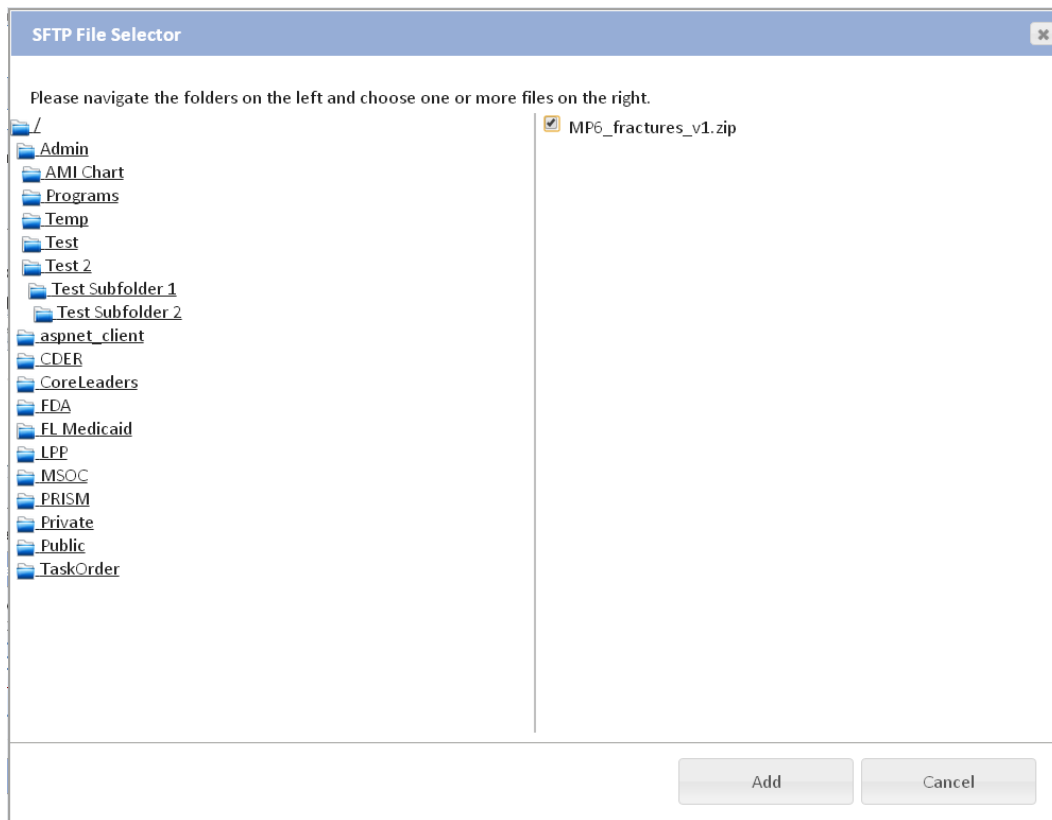
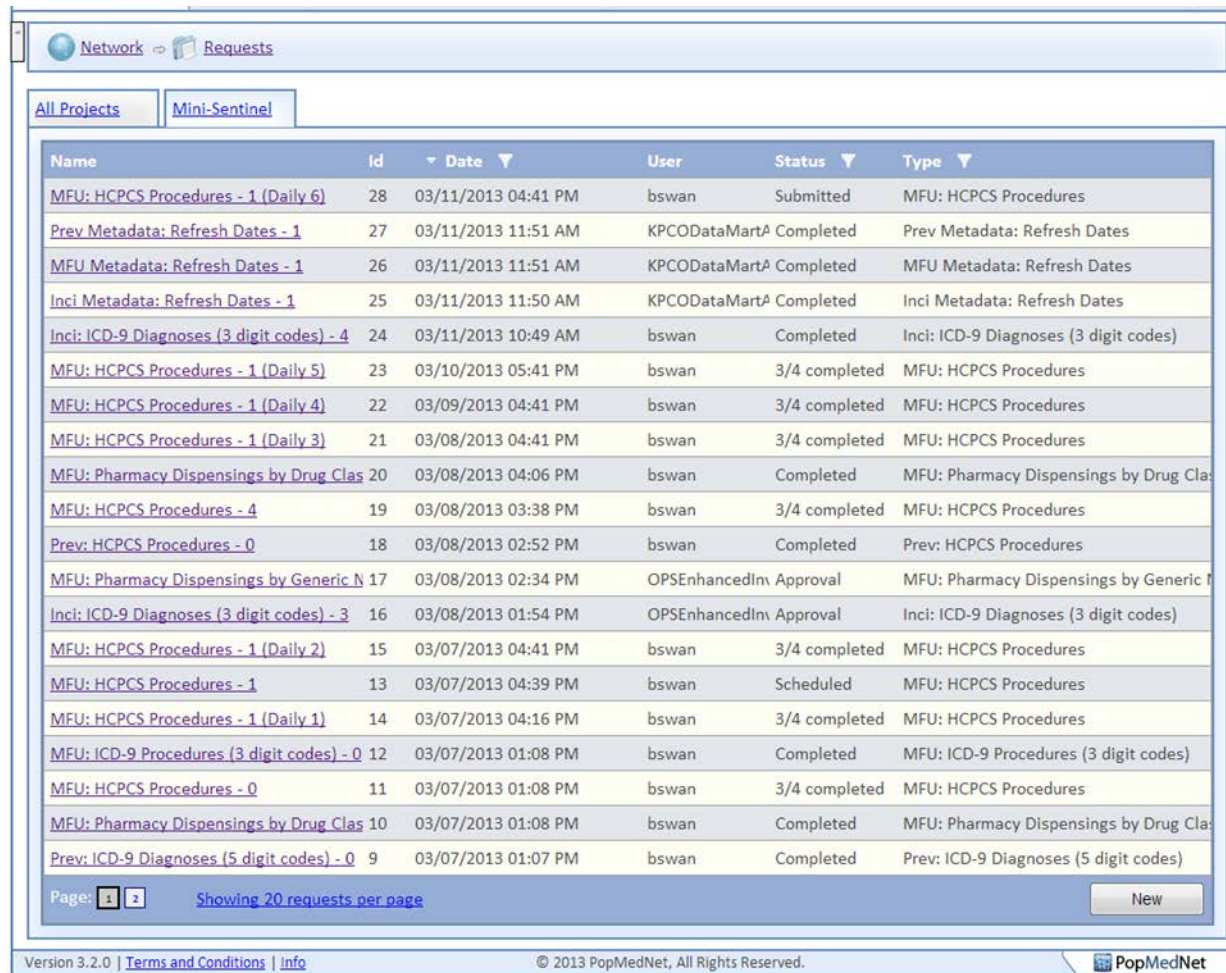


Figure 32: Modular Program Distribution Request Composer Page - SFTP File Selector Dialog

8 Checking the Request Status

View the status of your requests in the Requests panel on the home page or the Request page.



Name	Id	Date	User	Status	Type
MFU: HCPCS Procedures - 1 (Daily 6)	28	03/11/2013 04:41 PM	bswan	Submitted	MFU: HCPCS Procedures
Prev Metadata: Refresh Dates - 1	27	03/11/2013 11:51 AM	KPCODataMartA	Completed	Prev Metadata: Refresh Dates
MFU Metadata: Refresh Dates - 1	26	03/11/2013 11:51 AM	KPCODataMartA	Completed	MFU Metadata: Refresh Dates
Inci Metadata: Refresh Dates - 1	25	03/11/2013 11:50 AM	KPCODataMartA	Completed	Inci Metadata: Refresh Dates
Inci: ICD-9 Diagnoses (3 digit codes) - 4	24	03/11/2013 10:49 AM	bswan	Completed	Inci: ICD-9 Diagnoses (3 digit codes)
MFU: HCPCS Procedures - 1 (Daily 5)	23	03/10/2013 05:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 4)	22	03/09/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 3)	21	03/08/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: Pharmacy Dispensings by Drug Clas	20	03/08/2013 04:06 PM	bswan	Completed	MFU: Pharmacy Dispensings by Drug Clas
MFU: HCPCS Procedures - 4	19	03/08/2013 03:38 PM	bswan	3/4 completed	MFU: HCPCS Procedures
Prev: HCPCS Procedures - 0	18	03/08/2013 02:52 PM	bswan	Completed	Prev: HCPCS Procedures
MFU: Pharmacy Dispensings by Generic N	17	03/08/2013 02:34 PM	OPSEnhancedIn	Approval	MFU: Pharmacy Dispensings by Generic N
Inci: ICD-9 Diagnoses (3 digit codes) - 3	16	03/08/2013 01:54 PM	OPSEnhancedIn	Approval	Inci: ICD-9 Diagnoses (3 digit codes)
MFU: HCPCS Procedures - 1 (Daily 2)	15	03/07/2013 04:41 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1	13	03/07/2013 04:39 PM	bswan	Scheduled	MFU: HCPCS Procedures
MFU: HCPCS Procedures - 1 (Daily 1)	14	03/07/2013 04:16 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: ICD-9 Procedures (3 digit codes) - 0	12	03/07/2013 01:08 PM	bswan	Completed	MFU: ICD-9 Procedures (3 digit codes)
MFU: HCPCS Procedures - 0	11	03/07/2013 01:08 PM	bswan	3/4 completed	MFU: HCPCS Procedures
MFU: Pharmacy Dispensings by Drug Clas	10	03/07/2013 01:08 PM	bswan	Completed	MFU: Pharmacy Dispensings by Drug Clas
Prev: ICD-9 Diagnoses (5 digit codes) - 0	9	03/07/2013 01:07 PM	bswan	Completed	Prev: ICD-9 Diagnoses (5 digit codes)

Page: 1 2 Showing 20 requests per page New

Version 3.2.0 | [Terms and Conditions](#) | [Info](#) © 2013 PopMedNet, All Rights Reserved. PopMedNet

Figure 33: Request Page

View the detailed status of a request by clicking on the request name to navigate to the Request Status detail page. This page displays the metadata information for the request, the request criteria, and the statuses of the request at each DataMart to which you submitted the request.

Request

Prev: Enrollment

Enrollment figures stratified by age group, sex, and eligibility type.

Name

Prev: Enrollment

Priority

Normal

Due Date

N/A

Purpose of use

Level of PHI Disclosure

Project

Demo

Project Description

Description

Activity

Sub-Activity

Copy

Run Mode

Request was submitted immediately.

Show Documents List

Coverage

All Members

Age Stratification

10 Stratifications (0-1,2-4,5-9,10-14,15-18,19-21,22-74,75+)

Sex Stratification

Male and Female

Observation Period Selector

Start Period

2008

End Period

2010

Received Responses

	Last Response	Status	Message
<input checked="" type="checkbox"/> DataMart			
<input checked="" type="checkbox"/> Demo DM 2	10/22/2013 4:10:07 PM	Completed	Low cells counts have been zeroed [history]

View Results Resubmit

Incomplete Routings

	Status
<input checked="" type="checkbox"/> DataMart	
<input type="checkbox"/> Demo DM1	Submitted [history]

Add DataMarts Remove DataMarts

Figure 34: Sections of the Request Details Page

8.1 Request Statuses

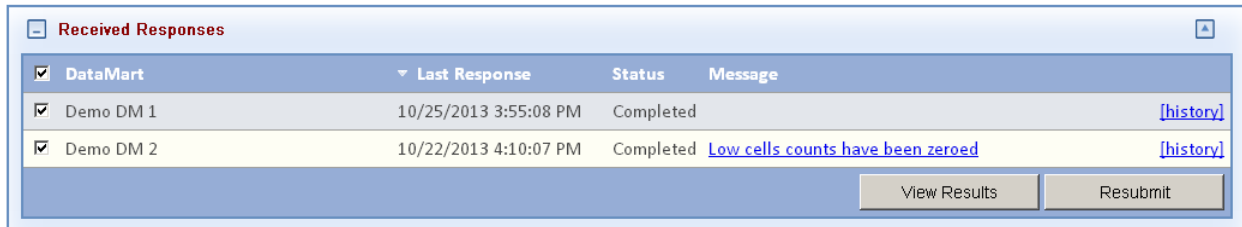
The table below contains the request statuses that may be displayed for each DataMart.

Table 9: DataMart Client Request Statuses

Status	Description
Submitted	The request has been submitted to the DataMart, but the DataMart Administrator has not updated the status from the DataMart Client.
Completed	The results of the request have been uploaded to the Portal. Requests are marked Completed when results have been uploaded manually by a DataMart Administrator or via unattended operation.
Awaiting Approval	The results have been uploaded to the Portal, but are awaiting Group Administrator approval before you may view the results.
Hold	The request has been placed on hold by the DataMart Administrator.
Rejected	The request has been rejected by the DataMart Administrator. Rejecting a request ends the life of the request submitted to that DataMart.
Canceled	You have removed the DataMart from the request.
Failed	The request encountered errors while processing or failed to upload results.

9 Viewing Request Results

View the results of a request from the Request Detail page by selecting the DataMarts to view in the Received Responses panel and clicking “View Results.” Select to view individual or aggregate site results.

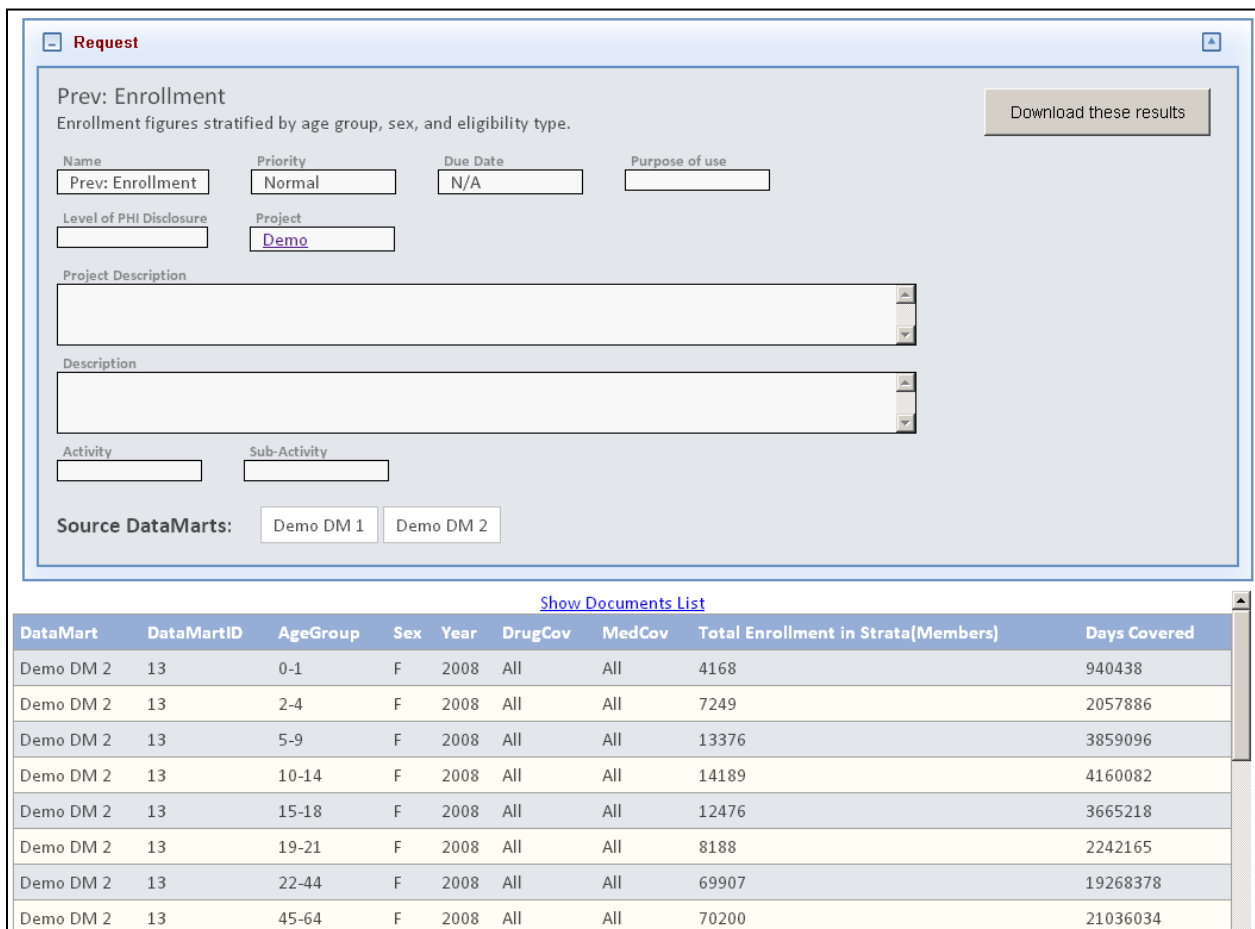


<input checked="" type="checkbox"/> DataMart	Last Response	Status	Message
<input checked="" type="checkbox"/> Demo DM 1	10/25/2013 3:55:08 PM	Completed	[history]
<input checked="" type="checkbox"/> Demo DM 2	10/22/2013 4:10:07 PM	Completed	Low cells counts have been zeroed [history]

View Results Resubmit

Figure 35: Request Detail Page – Received Responses Panel

In the results table, multiple individual site results are displayed stacked on top of one another and labeled by DataMart, such as in the figure below.



Prev: Enrollment
Enrollment figures stratified by age group, sex, and eligibility type.

Download these results

Name: Prev: Enrollment Priority: Normal Due Date: N/A Purpose of use:

Level of PHI Disclosure: Project: Demo

Project Description:

Description:

Activity: Sub-Activity:

Source DataMarts: Demo DM 1 Demo DM 2

[Show Documents List](#)

DataMart	DataMartID	AgeGroup	Sex	Year	DrugCov	MedCov	Total Enrollment in Strata[Members]	Days Covered
Demo DM 2	13	0-1	F	2008	All	All	4168	940438
Demo DM 2	13	2-4	F	2008	All	All	7249	2057886
Demo DM 2	13	5-9	F	2008	All	All	13376	3859096
Demo DM 2	13	10-14	F	2008	All	All	14189	4160082
Demo DM 2	13	15-18	F	2008	All	All	12476	3665218
Demo DM 2	13	19-21	F	2008	All	All	8188	2242165
Demo DM 2	13	22-44	F	2008	All	All	69907	19268378
Demo DM 2	13	45-64	F	2008	All	All	70200	21036034

Figure 36: Request Response Page - Individual Site Results

Files uploaded in response to a file distribution or modular program distribution request are displayed in a list. Click each file to download it.

Aggregate results are displayed in a table, such as in the figure below.

Request

Prev: Enrollment

Enrollment figures stratified by age group, sex, and eligibility type.

Download these results

Name

Prev: Enrollment

Priority

Normal

Due Date

N/A

Purpose of use

Level of PHI Disclosure

Project

Demo

Project Description

Description

Activity

Sub-Activity

Source DataMarts:

Demo DM 1

Demo DM 2

[Show Documents List](#)

AgeGroup	Sex	Year	DrugCov	MedCov	Total Enrollment in Strata[Members]	Days Covered
0-1	F	2008	All	All	8336	1880876
2-4	F	2008	All	All	14498	4115772
5-9	F	2008	All	All	26752	7718192
10-14	F	2008	All	All	28378	8320164
15-18	F	2008	All	All	24952	7330436
19-21	F	2008	All	All	16376	4484330
22-44	F	2008	All	All	139814	38536756
45-64	F	2008	All	All	140400	42072068

Figure 37: Request Response Page - Aggregate Site Results

9.1 Calculated Columns (Summary Table Requests)

Note: This section applies only to results from summary table requests.

The calculated columns are included to give supporting information for the codes of interest. The Enrollment summary tables for each category are used with the selected request type to calculate the rates.

Medical Queries: HCPCS Procedures, ICD-9 Diagnoses, and ICD-9 Procedures

- Total Enrollment in Strata (Members): Total count includes members with both medical and drug coverage plus those with medical coverage only.
- Prevalence Rates: Users per 1000 enrollees

- Event Rate: Events per 1000 enrollees
- Events per Member

Drug Queries: Pharmacy Dispensings by Generic Name and Drug Class

- Total Enrollment in Strata (Members): Total count includes members with both medical and drug coverage plus those with drug coverage only.
- Prevalence Rates: Users per 1000 enrollees
- Dispensing Rate: Dispensings per 1000 enrollees
- Days per Dispensing
- Days per User

9.2 Exporting Result Data

Export the result data to a CSV File or to Excel from the Request Response page.

Follow these steps to export your results:

1. Click "Download These Results."
2. Select Excel or CSV.

10 Changing DataMart Routings

Enhanced Investigators may change the DataMart routings after a request has been submitted. Note that Limited Investigators do not have these rights.

10.1 Adding or Removing DataMarts from Submitted Requests

Before a request is complete at all DataMarts, you may add or remove DataMarts from the Incomplete Routings panel. Note that you cannot remove a DataMart after it has uploaded results.



Figure 38: Request Detail Page - DataMart Routing Buttons

To add a DataMart to the request, click “Add DataMarts” and select the new DataMart from the list of DataMarts that you have the rights to query and click “OK.”

To remove a DataMart from the request, select the DataMart from the Incomplete Routings panel and click “Remove DataMarts.” When a DataMart is removed from a request, it will continue to appear in the Incomplete Routings panel, but with a status of “Canceled.” The DataMart Administrator for that DataMart will still see the request in their DataMart Client, but will not be able to upload results.

10.2 Resubmitting a Request to a DataMart

After a DataMart has uploaded results, you may resubmit the request to that DataMart. To resubmit the request, select the DataMart and click “Resubmit.” The DataMart will move to the Incomplete Routings panel, with a status of “Resubmitted.”

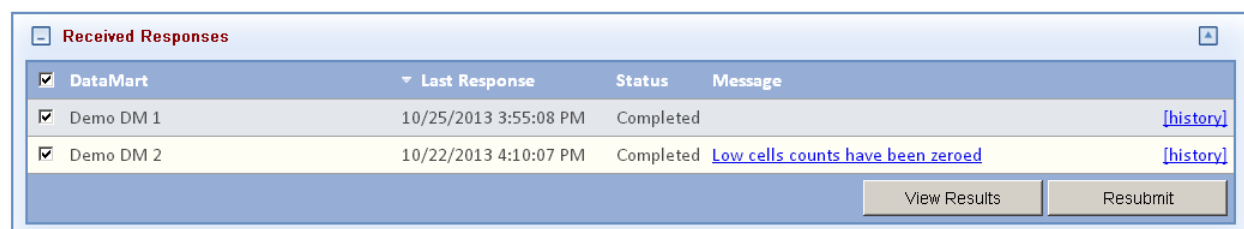
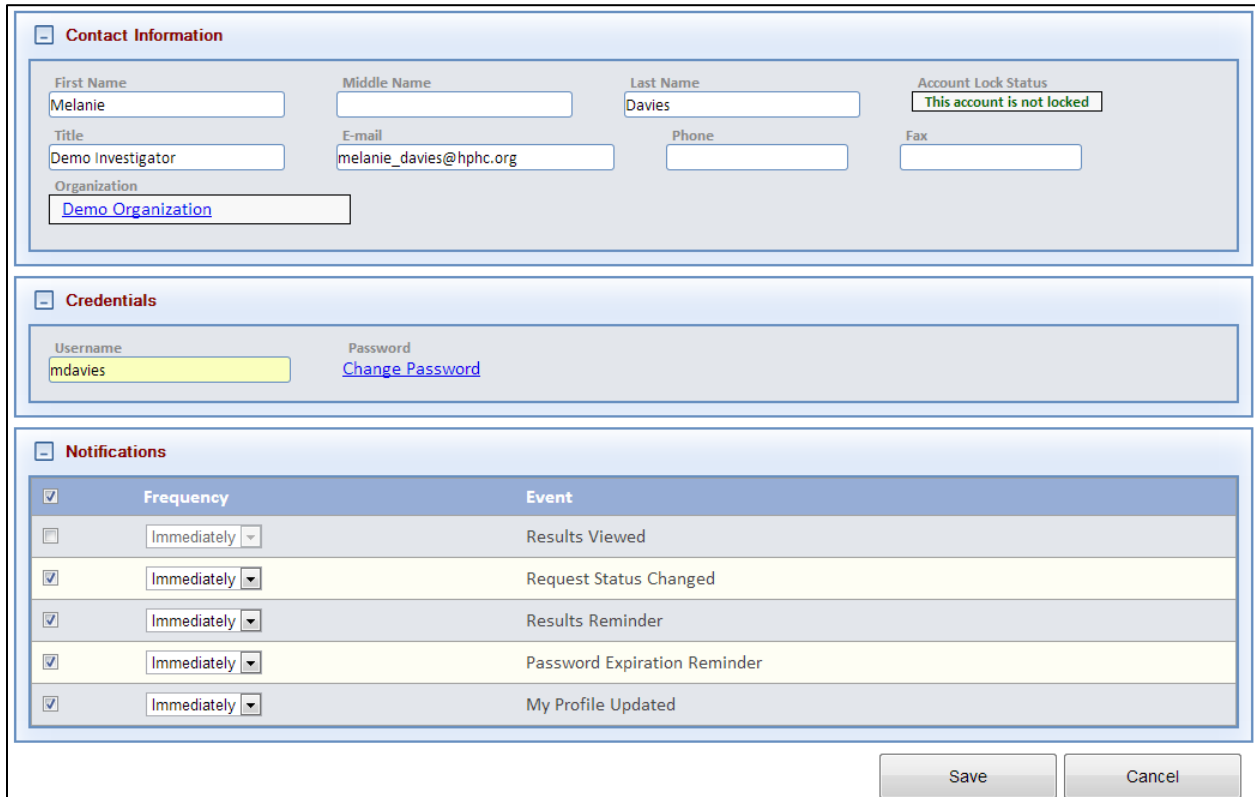


Figure 39: Request Detail Page - Resubmit Button

11 Administering your User Profile

Select the Profile tab to display your user profile. Use this page to change your contact information, password, and notification settings.



Contact Information

First Name: Middle Name: Last Name: Account Lock Status: This account is not locked

Title: E-mail: Phone: Fax:

Organization:

Credentials

Username: Password: [Change Password](#)

Notifications

<input checked="" type="checkbox"/>	Frequency	Event
<input type="checkbox"/>	Immediately	Results Viewed
<input checked="" type="checkbox"/>	Immediately	Request Status Changed
<input checked="" type="checkbox"/>	Immediately	Results Reminder
<input checked="" type="checkbox"/>	Immediately	Password Expiration Reminder
<input checked="" type="checkbox"/>	Immediately	My Profile Updated

Figure 40: User Profile Page

11.1 Contact Information

Enter or update your information in the Contact Information panel. First name, last name, email, and organization are required fields.

11.2 Credentials

You may change your password at any time. Passwords expire periodically based on network settings.

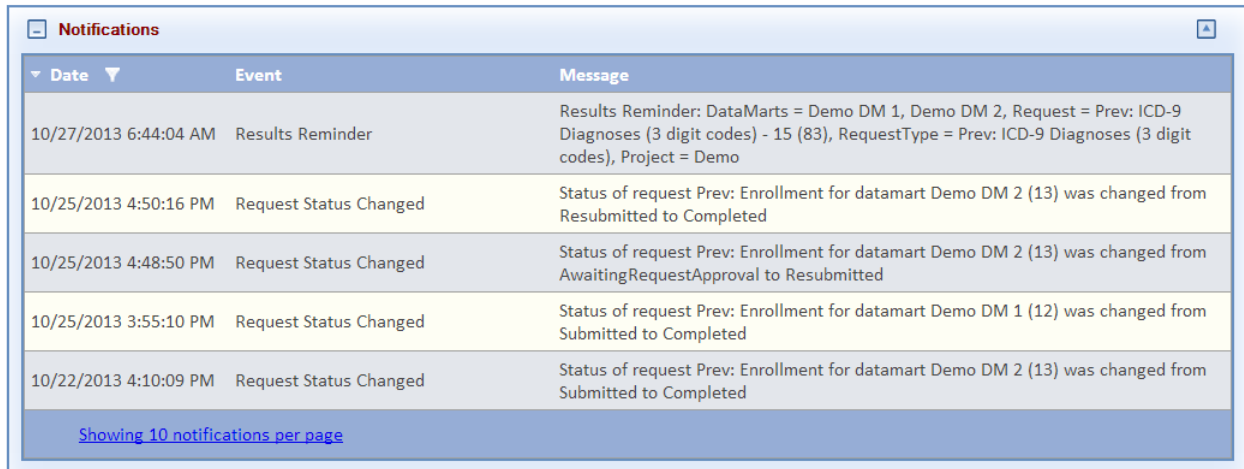
Your user profile has two boxes for passwords. To change your password, click “Change Password” in the Credentials panel and enter your new password into the boxes.

Note: All passwords must meet the following complexity standard:

- At least 8 characters long
- Include at least 1 upper case letter, 1 lower case, 1 number, and 1 symbol.

11.3 Notifications

Notification options allow you to manage notifications that are triggered due to actions performed by you or related to your role. Notifications are sent to the email address associated with your account and are displayed in the Notifications panel on the Portal home page. The Notifications panel on the home page displays all notifications immediately after the action has occurred.

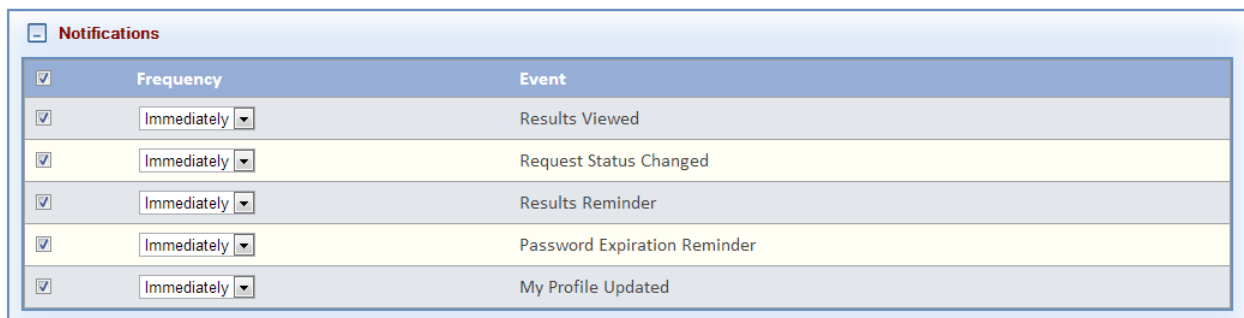


Date	Event	Message
10/27/2013 6:44:04 AM	Results Reminder	Results Reminder: DataMarts = Demo DM 1, Demo DM 2, Request = Prev: ICD-9 Diagnoses (3 digit codes) - 15 (83), RequestType = Prev: ICD-9 Diagnoses (3 digit codes), Project = Demo
10/25/2013 4:50:16 PM	Request Status Changed	Status of request Prev: Enrollment for datamart Demo DM 2 (13) was changed from Resubmitted to Completed
10/25/2013 4:48:50 PM	Request Status Changed	Status of request Prev: Enrollment for datamart Demo DM 2 (13) was changed from AwaitingRequestApproval to Resubmitted
10/25/2013 3:55:10 PM	Request Status Changed	Status of request Prev: Enrollment for datamart Demo DM 1 (12) was changed from Submitted to Completed
10/22/2013 4:10:09 PM	Request Status Changed	Status of request Prev: Enrollment for datamart Demo DM 2 (13) was changed from Submitted to Completed

[Showing 10 notifications per page](#)

Figure 41: Home Page - Notifications Panel

The frequency of email notifications may be set on the Profile page.



Frequency	Event
<input checked="" type="checkbox"/> Immediately	Results Viewed
<input checked="" type="checkbox"/> Immediately	Request Status Changed
<input checked="" type="checkbox"/> Immediately	Results Reminder
<input checked="" type="checkbox"/> Immediately	Password Expiration Reminder
<input checked="" type="checkbox"/> Immediately	My Profile Updated

Figure 42: User Profile Page - Notifications Panel

Table 10: Email Notification Frequency Options

Frequency	Description
Immediate	Sends an email immediately after the action has occurred.
Daily	Batches notification events and sends an email every 24 hours.

Frequency	Description
Weekly	Batches notification events and sends an email every 7 days.
Monthly	Batches notification events and sends an email every 28 days.

The notification options displayed in your profile are dependent on the roles or privileges that have been granted to you. Below are the recommended notification options for investigators.

Table 11: Investigator Notifications

Notification	Description	Frequency
Password Expiration Reminder	Notifies you that your password is about to expire.	One notification per day for 7 days prior to the password expiring.
My Profile Change	Notifies you that there was an update to your profile.	One notification per change.
Request Status Changed	Notifies you that the status of your request has changed to completed, awaiting approval, held, or reject.	One notification per DataMart per change per request.
Results Reminder	Notifies you that there are results waiting to be viewed on the Portal for your request.	One notification every 24 hours per results awaiting viewing.

12 Help

The Resource tab contains contact information, documentation, and related links.

Resources

Contact Information

Mini-Sentinel Operations Center Contact: querytool@mini-sentinel.org; Lincoln Peak Partners Contact: support@lincolnpeak.com

Documentation

[Overview and Technical Documentation](#)

This document describes the overall distributed querying system architecture and details the technical and security approaches implemented.

[DataMart Administrator Manual](#)

This DataMart Administrator Manual describes the main features and functions for DataMart Administrators participating in the network.

[Investigator Manual](#)

This Investigator Manual describes the main features and functions for Investigators participating in the network.

[DataMart Client Application Setup Instructions](#)

This Setup presentation for DataMart Administrators describes how to configure the DataMart Client application.

[Group DataMart Administrators Manual](#)

This Group DataMart Administrators Manual describes the main features and functions for Group Administrators participating in the network.

[Summary Table Description](#)

This Summary Table Description document describes the schema and format of the summary tables used in the network.

[Release Notes](#)

This document outlines and describes software changes for the most current version of software used by the network.

DataMart Availability

[Query Types by DataMart - Time Period Availability](#)

This table contains information on supported query types for DataMarts within the network.

Related Links

[FDA Mini-Sentinel](#)

A pilot project sponsored by the U.S. Food and Drug Administration (FDA) to inform and facilitate development of a fully operational active surveillance system, the Sentinel System, for monitoring the safety of FDA-regulated medical products.

Version 3.0.29 | [Terms and Conditions](#) | [Info](#)

© 2012 PopMedNet, All Rights Reserved.

LINCOLNPEAK

Figure 43: Resources Page

If you have trouble accessing the Portal or your user account, click on the Contact Us link on the login page and describe your issue to request help from the PopMedNet support staff.

13 Development and Funding Statement

The PopMedNet™ software application was developed as part of several contracts awarded by the Agency for Healthcare Research and Quality (AHRQ) to the HMO Research Network (HMORN) Center for Education and Research on Therapeutics (CERT) DEcIDE Center housed in the Department of Population Medicine at the Harvard Pilgrim Health Care Institute (HPHCI). Additional development was funded by AHRQ under the Scalable PARTnering Network for CER: Across Lifespan, Conditions, and Settings (SPAN) project. Additional support has been provided by The Food and Drug Administration's Mini-Sentinel project (Contract No. HHSF223200910006I) and the US Department of Health and Human Services Office of the National Coordinator for Health Information Technology (ONC) MDPHnet project.

The system was developed by Lincoln Peak Partners under the direction of HPHCI.

14 Frequently Asked Questions

This section lists some of the most frequently asked questions.

- What is the difference between Groups and Organizations?
 - Organizations have one or more users and zero, one, or more DataMarts. Groups are collections of one or more Organizations and an Organization may be a member of zero, one, or more Groups. Groups allow the management of a collection of organizations by a set of administrators.
- What are my rights as a user and how can I change them?
 - As a user, you belong to one or more security groups that have a set of rights and permissions. Security group membership is assigned to you by Network or Organization Administrators. Contact these administrators to request a change to your rights.
- Where can I get more information on the PopMedNet™ application?
 - You may contact the Operations Center for more information:

Jeffrey Brown, PhD
Harvard Pilgrim Health Care Institute
Jeff_brown@hphc.org
www.popmednet.org

Appendix A: Quick Reference for Investigators

Quick Reference: Investigator

- 1) How to Submit a Query
 - a) Log into the Portal with your credentials.
 - b) Click the Requests tab and select your project.
 - c) Click “New” in the Request panel and select the request model and type.
 - d) Complete the request form by entering a name, brief description of the query, and selecting the relevant parameters.
 - e) Select the DataMarts (Data Partners) who you would like to send the request.
 - f) Click “Submit.”

- 2) How to Distribute a File
 - a) Log into the Portal with your credentials.
 - b) Click the Requests tab and select your project.
 - c) Click “New” in the Request panel and select the request model and type.
 - d) Complete the request form by entering a name and a brief description of the file(s) you are sending.
 - e) Browse and upload your file(s) you wish to send to DataMarts.
 - f) Select the DataMarts (Data Partners) who you would like to send the file(s).
 - g) Click “Submit.”

- 3) How to View Results on the Portal
 - a) Log into the Portal and go to the Requests panel on the home page or click the Requests tab.
 - b) Find and click on the request name to navigate to the Request Status page.
 - c) Limited Investigators, click “View Results” after all sites have responded. Enhanced Investigators, select the DataMarts whose results you wish to view, click “View Results,” and select whether to view individual or aggregate site results.
 - d) Export result data to Excel/CSV or download files for review.