



DataDirect 2.2 User Guide



DataDirect Overview

- DataDirect is an application that allows users to create queries using data submitted to MPOG for quality improvement (QI) and research purposes.
- It contains multiple filters that can help easily identify a cohort of patients and access data following appropriate approvals.
- Researchers can use DataDirect to identify patient, case, and institution counts for the cohort they are interested in studying.
- Quality Champions can generate a list of patients to audit outcomes or processes of case. As an example, the Quality Champion for the site may be interested in identifying patients who received reversal for neuromuscular blockade and compare that to institution reintubation rates to identify if any correlation exists.

Gaining DataDirect Access

- DataDirect contains a limited dataset. Protected Health Information is excluded except for dates of service.
- However, because DataDirect may contain information regarding hospital level quality indicators (i.e. hospital mortality), approval from the appropriate hospital department (i.e. Quality or Health Information Management) is required.

- To gain access to DataDirect, an authorization form must be completed. This process is automated via signNow. The link to the form can be found here: [MPOG DataDirect Affidavit](#)
- Please complete the form and enter your Authorized Hospital Leader's email where indicated. This signature is required for all requests.

SIGN NOW
UNIVERSITY OF MICHIGAN

Send invite link for MPOG DataDirect Affidavit.

Thank you for your interest in requesting access to MPOG DataDirect. Please note that access will only be granted if you:

1. Are an active faculty or staff at an active MPOG institution; adjunct appointments are not included
2. User Reviews/Signs this affidavit
3. User Obtains permission and signature to this document by an Authorized Hospital Leader (ie Anesthesiology Chair or Director for Clinical Research)

Below you'll complete a few fields:

1. Rename the Document - FirstLastInstitution_MPOG DataDirect Affidavit
2. Add in email address for the user that is requesting access to MPOG Application Suite (Signing Step 1)
3. Add the email of the Authorized Hospital Leader (ie Anesthesiology Chair or Director of Clinical Research) to receive review. (Signing Step 2)
4. Click Send Invite.

After sending invite, the email you added in the MPOG DataDirect User will receive an email that they need to complete the required affidavit fields and sign - once the user has completed, the document will automatically be sent to the Authorized Hospital Leader (ie Anesthesiology Chair or Director of Clinical Research) which was added in Signing Step 2. When a decision has been made by your Authorized Hospital Leader, and if the decision is to approve access and signature is secured and affidavit submitted, the MPOG team will be notified and will review request and respond appropriately; After access has been granted, MPOG team will update this authorization form notifying of completion.

You will receive a copy of the completed form with all signatures, which means you have been granted access to MPOG DataDirect and your request is complete. If you have any issues or questions, please reach out to support@mpog.zendesk.com. Please keep a copy of your completed and signed request form.

Rename Document: MPOG DataDirect Affidavit

Signing Step 1

Email Address*

MPOG DataDirect User: Signer Email Address

Show Custom Email Message Settings

Signing Step 2

Email Address*

Authorized Hospital Leader (ie Anesthesiology Chair or Director of Clinical Research): Signer Email Address

Show Custom Email Message Settings

Signing Step 3

Email Address Set By Template

MPOG User: Signer Email Address

Show Custom Email Message Settings

* Required Fields

Send Invite

Powered by signNow



Creating a Query

When creating a query, there are three modes you can choose from.

- Cohort Only - only generating case counts for a research project ⓘ
- Quality Report - downloading MPOG data for a QI project ⓘ
- Research - downloading MPOG data for a research project ⓘ

• Cohort Only

- Generates a *count* to rapidly determine feasibility of a research or QI project. There is no ability to download data, and no additional approval (e.g. Institutional Review Board) is required for access.
- Public dissemination of counts (e.g. journal publication, conference abstract, invited talk, social media post, etc.) is NOT allowed. However, counts may be used as preliminary data for multicenter PCRC proposals, and/or shared solely with authorized individuals (see [MPOG DataDirect Affidavit](#)).

• Quality Report

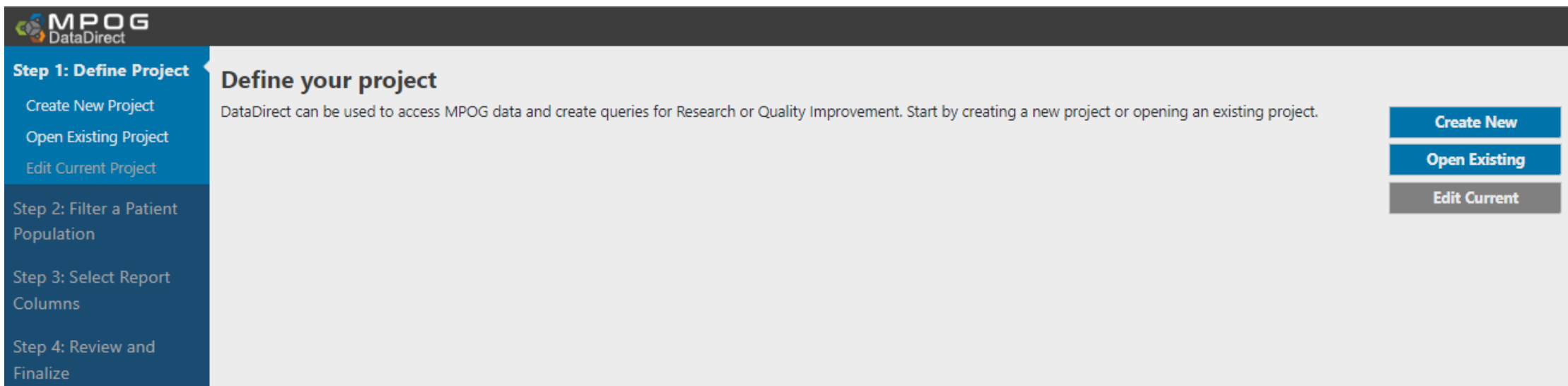
- Generates a cohort count, data query, and case list for a specific site. Although DataDirect will display final case counts, institutions will remain anonymized.

• Research

- Allows for cohort identification across all sites and downloading sample data from your site only.
- Public dissemination of single-center study findings (e.g. journal publication, conference abstract, invited talk, social media post, etc.) must be first approved by your Authorized Hospital Leader (see [MPOG DataDirect Affidavit](#)).

➤ Step 1: Define Project

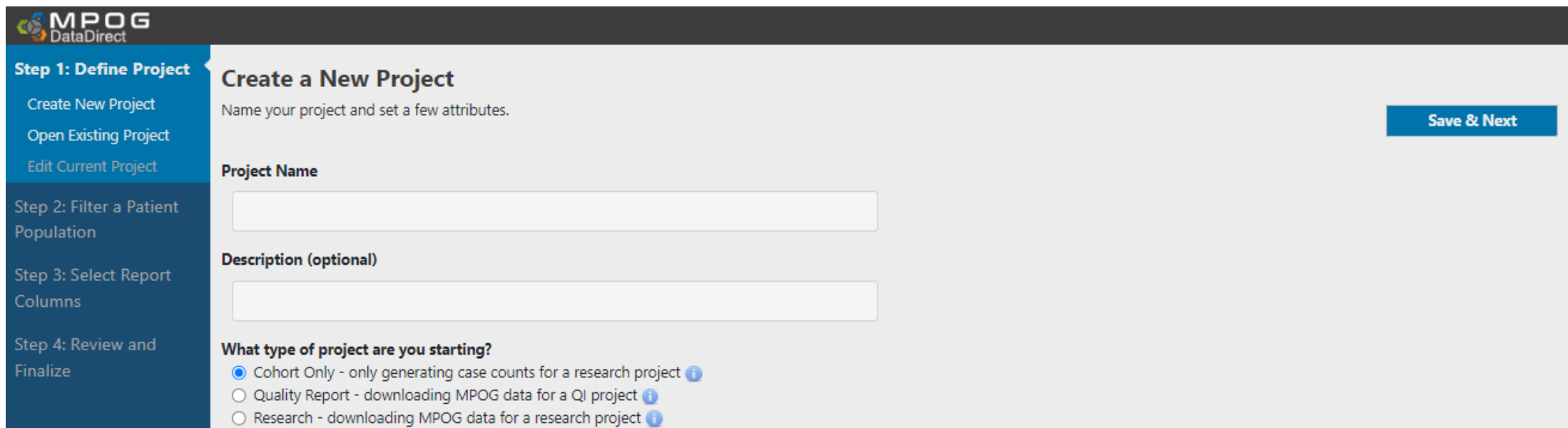
- Choose from **Create New**, **Open Existing**, or **Edit Current**



The screenshot shows the MPOG DataDirect web interface. At the top left is the logo 'MPOG DataDirect'. A dark blue sidebar on the left contains a list of steps: 'Step 1: Define Project' (highlighted), 'Step 2: Filter a Patient Population', 'Step 3: Select Report Columns', and 'Step 4: Review and Finalize'. The main content area is titled 'Define your project' and contains the text: 'DataDirect can be used to access MPOG data and create queries for Research or Quality Improvement. Start by creating a new project or opening an existing project.' On the right side of this area are three buttons: 'Create New' (blue), 'Open Existing' (blue), and 'Edit Current' (grey).

➤ Step 1: Creating a New Query

- Enter a name, description (optional), and select a type of project.



The screenshot shows the MPOG DataDirect interface for creating a new project. The left sidebar contains a navigation menu with the following items: 'Step 1: Define Project' (highlighted), 'Create New Project', 'Open Existing Project', 'Edit Current Project', 'Step 2: Filter a Patient Population', 'Step 3: Select Report Columns', and 'Step 4: Review and Finalize'. The main content area is titled 'Create a New Project' and includes the instruction 'Name your project and set a few attributes.' A 'Save & Next' button is located in the top right corner. The form fields are: 'Project Name' (a text input field), 'Description (optional)' (a text input field), and 'What type of project are you starting?' (a radio button selection). The radio button options are: 'Cohort Only - only generating case counts for a research project' (selected), 'Quality Report - downloading MPOG data for a QI project', and 'Research - downloading MPOG data for a research project'. Each radio button option has a small information icon to its right.

Filtering data

- Each filter can be **individually selected** by clicking the **+** symbol to the right of the item name.
- Once added to the filtering algorithm, additional specifications, such as ranges or categories, may be added to the filter.

Demographics

Patient characteristics from administrative registration systems. Data is mostly case-level and reflects the most recent value for a given patient (e.g. smoking status), regardless of time period specified in Cases. Next

Available Filter Items	Selected Filter Items
Sex Categorical patient sex	BMI Patient body mass index (BMI)
Race Categorical patient race / ethnicity	Filtered by 10 ≤ BMI ≤ 80
Age Patient age in years	
Age (groups) Neonate, Infant, Toddler, Child, Adolescent, Adult	
BMI Percentile (Pediatric) Patient body mass index (BMI) for age percentile for patients 2 - 19 years old	
BMI Classification (Pediatric) Underweight, Healthy Weight, Overweight, Obese	

➤ Step 2: Filter Patient Population

- Next, apply filters to define your cohort and return only cases that you're interested in. The available filters are listed on the left sidebar while the size of your cohort will be dynamically updated on the right.

The screenshot shows a web application interface for filtering a patient population. The main heading is "Filter a Patient Population". Below the heading, a message states: "Here you will apply filters to define your cohort and return only cases that you're interested in. The available filters are listed on the left sidebar while the size of your cohort will be dynamically updated on the right." A "Next" button is visible in the top right corner of the main content area.

The left sidebar contains a navigation menu with the following items:

- Step 1: Define Project
- Step 2: Filter a Patient Population**
- Step 3: Select Report Columns
- Step 4: Review and Finalize
- Email Support/Feedback

The right sidebar contains project information and filter status:

- Project**
- User Guide
- Project ID: T4045
- Mode: Cohort Only
- Filters** (with a Refresh button)
- Starting Population
- Intraoperative Research Standard
- 21,145,608 cases
- 91 institutions
- Edit Filters button
- + Final Counts by Institution
- Status: Not Processed

➤ Filter: Population

- This section begins to narrow the population of cases for your project. Additionally, based on the type of project and your role, you may be able to choose cases for your institution or for all institutions in MPOG. Please select the most relevant starting population if differing from the default.

Step 1: Define Project

Step 2: Filter a Patient

Population

This section begins to narrow the population of cases for your project. Additionally, based on the type of project and your role, you may be able to choose cases for your institution or for all institutions in MPOG. Please select the most relevant starting population if differing from the default.

Available Filter Items

Filter Item	Count
Institution	70 Institutions
Medical School Affiliation	70 Institutions
Pediatric Hospital Affiliation	70 Institutions
US Institution	70 Institutions

Selected Filter Items

Starting Population	Patients	Cases	Institutions
<input type="radio"/> All Patients	13,115,516	21,827,237	70
<input checked="" type="radio"/> Intraoperative Research Standard	12,815,445	21,145,608	70
<input type="radio"/> Outcome Research Standard - Mortality	11,088,980	18,217,251	67
<input type="radio"/> Outcome Research Standard - Non-outpatient Discharge Diagnoses	6,279,394	9,272,037	70

Project

User Guide
Project ID: 14045
Model: Cohort Only

Filters

Starting Population
Intraoperative Research Standard
21,145,608 cases
91 Institutions

Status

Final Counts by Institution
 Not Processed

➤ Filter: Demographics

- Patient characteristics from administrative registration systems. Data is mostly case-level and reflects the most recent value for a given patient (e.g. BMI), regardless of time period specified in Cases.

The screenshot displays the 'Demographics' filter configuration interface. On the left, a sidebar shows the project setup steps: Step 1: Define Project, Step 2: Filter a Patient (selected), Step 3: Select Report Columns, and Step 4: Review and Finalize. The main area is titled 'Demographics' and contains a description: 'Patient characteristics from administrative registration systems. Data is mostly case-level and reflects the most recent value for a given patient (e.g. smoking status), regardless of time period specified in Cases.' Below this, there are two columns: 'Available Filter Items' and 'Selected Filter Items'. The 'Available Filter Items' list includes: Sex (Categorical patient sex), Race (Categorical patient race / ethnicity), Age (Patient age in years), Age (groups) (Neonate, Infant, Toddler, Child, Adolescent, Adult), BMI (Patient body mass index (BMI)), BMI Percentile (Pediatric) (Patient body mass index (BMI) for age percentile for patients 2 - 19 years old), and BMI Classification (Pediatric) (Underweight, Healthy Weight, Overweight, Obese). The 'Selected Filter Items' column is currently empty. On the right, a 'Project' panel shows 'User Guide', 'Project ID: 14045', 'Model: Cohort Only', and 'Filters' with a 'Refresh' button. Below this, it displays 'Starting Population' as 'Intraoperative Research - Standard' with '21,145,608 cases' and '91 institutions', and an 'Edit Filters' button. At the bottom right, there are options for 'Final Counts by Institution' and 'Status' (Not Processed).

➤ Filter: Cases

- Perioperative case characteristics from the clinical documentation and professional fee billing systems. Some patient characteristics (ASA status) may change from one case to another and reflect the information known at the time of that case.

Step 1: Define Project

Step 2: Filter a Patient Population

Population
Demographics
Cases
Diagnoses
Procedures
Concepts
Outcomes
Laboratories
Quality Measures

Step 3: Select Report Columns

Step 4: Review and Finalize

Email Support/Feedback

Cases
Perioperative case characteristics from the clinical documentation and professional fee billing systems. Some patient characteristics (ASA status) may change from one case to another and reflect the information known at the time of that case.

Available Filter Items

- Case Scheduling**
 - Procedure Date
Documented anesthesia start time/date
 - Weekend
Determines if the case was performed on the weekend
 - Holiday
Determines if the case was performed on a holiday
 - Admission Type
Admission type for the case (e.g. outpatient)
- Anesthesia Technique**
 - Anesthesia Technique: General
General anesthetic attempted operatively
 - Anesthesia Technique: Neuraxial
Neuraxial block attempted perioperatively
 - Anesthesia Technique: Peripheral Nerve Block
Peripheral block attempted perioperatively
 - Induction Type
Mask, IV, Rapid Sequence Induction
- Patient Characteristics**
 - ASA Status
ASA Physical Status Classification System Status
 - Emergency Status
ASA 'E' physical status classification
 - Smoking Tobacco Classification (new)
categorical assessment of patient smoking status
 - Motion Sickness History Classification
Motion Sickness History
 - PONV History Classification
PONV Hx
- Case Duration**
 - Anesthesia Duration (in Minutes)
Difference of Anesthesia End - Anesthesia Start
 - Surgical Duration (in Minutes)
Difference of Nurses End - Surgery Start

Selected Filter Items

Project
User Guide
Project ID: 14048
Mode: Research

Filters Refresh

Starting Population
Intraoperative Research Standard
21,145,608 cases
91 institutions
Edit Filters

+ Final Counts by Institution

Status
Not Processed

Next

➤ Filter: Diagnoses

- MPOG derives diagnoses information from professional billing sources, discharge diagnoses codes, or clinician entered information in the health record. In this section you will primarily see [Elixhauser Comorbidities](#). However, MPOG has also derived other diagnoses from diagnoses codes or clinician entered data.

The screenshot displays the 'Diagnoses' filter interface. The left sidebar shows the navigation menu with 'Diagnoses' selected under 'Step 2: Filter a Patient'. The main content area is titled 'Diagnoses' and contains a list of 'Available Filter Items' with checkboxes and plus signs. The items include:

- Diagnosis Codes (ICD-9 / ICD-10 diagnosis codes)
- Elixhauser Comorbidity - AIDS \ HIV
- Elixhauser Comorbidity - Alcohol Abuse
- Elixhauser Comorbidity - Blood Loss Anemia
- Elixhauser Comorbidity - Cardiac Arrhythmias
- Elixhauser Comorbidity - Chronic Pulmonary Disease
- Elixhauser Comorbidity - Coagulopathy
- Elixhauser Comorbidity - Congestive Heart Failure
- Elixhauser Comorbidity - Deficiency Anemia
- Elixhauser Comorbidity - Depression
- Elixhauser Comorbidity - Diabetes (Complicated)
- Elixhauser Comorbidity - Diabetes (Uncomplicated)
- Elixhauser Comorbidity - Drug Abuse
- Elixhauser Comorbidity - Fluid/Electrolyte Disorde...
- Elixhauser Comorbidity - Hypertension (Complicated...
- Elixhauser Comorbidity - Hypertension (Uncomplicat...
- Elixhauser Comorbidity - Hypothyroidism

The right sidebar shows 'Project' information: 'User Guide', 'Project ID: 14045', 'Mode: Cohort Only', and 'Filters' with a 'Refresh' button. Below that, 'Starting Population' is shown as '21,145,608 cases' and '91 institutions', with an 'Edit Filters' button. At the bottom, there are 'Final Counts by Institution' and 'Status' options: 'Final Counts by Institution' (selected) and 'Not Processed'.

Use this section to narrow your cohort to the specific diagnoses you are interested in.

Diagnosis Codes



Mode: Keep only if a case has ANY of the following

Codes: Click here to search codes

Type an ICD code or a diagnosis name

- Begin typing the desired diagnosis name (or associated ICD-9 and ICD-10 codes) into the Diagnosis Code field. ICD-10 codes were required as of October 1, 2015, therefore historical data may only include ICD-9 codes.
- If you are interested in capturing diagnosis data for a case that occurred before this date, please choose both ICD-9 and ICD-10 codes. Select the codes you desire, then click **Save changes**

➤ Filter: Procedures

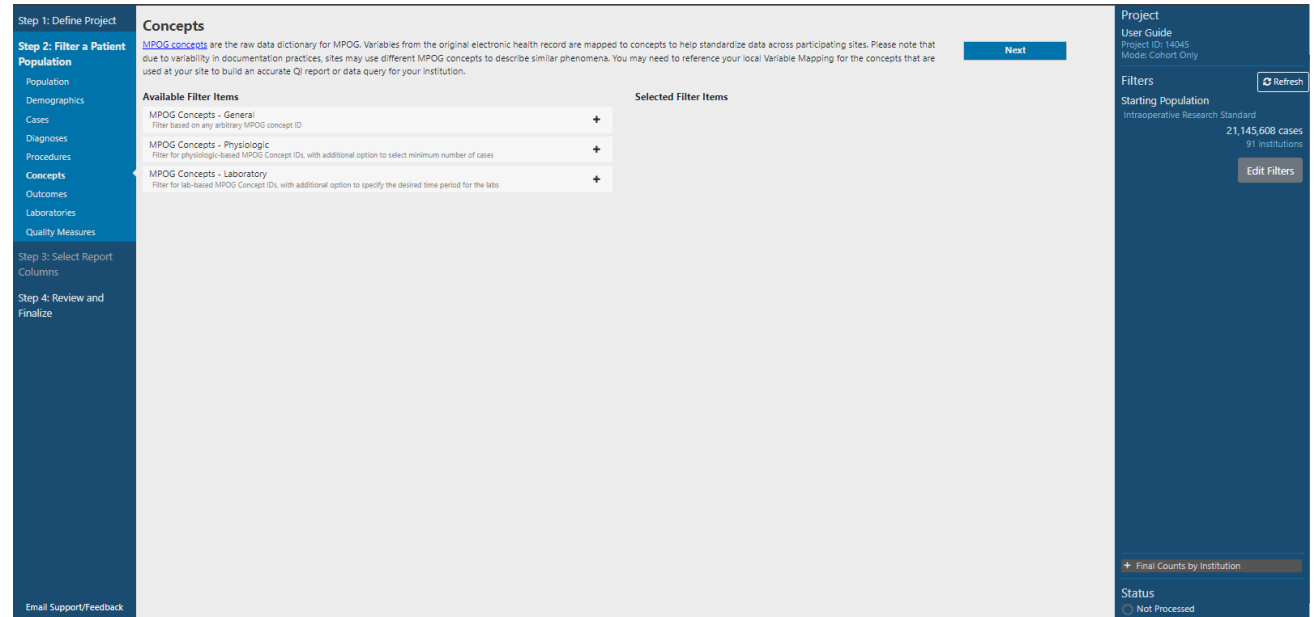
- Perioperative procedures activity identified using Current Procedure Terminology (CPT) codes, professional fee charges, or using free text procedure descriptions.

The screenshot displays the 'Filter: Procedures' interface in the MPOG system. It is organized into three main vertical sections:

- Left Sidebar (Navigation):** Contains a vertical menu with steps: 'Step 1: Define Project', 'Step 2: Filter a Patient Population' (highlighted), 'Step 3: Select Report Columns', and 'Step 4: Review and Finalize'. Under 'Step 2', sub-categories include Population, Demographics, Cases, Diagnoses, Procedures (highlighted), Concepts, Outcomes, Laboratories, and Quality Measures.
- Main Content Area:** Titled 'Procedures', it includes a description: 'Perioperative procedures activity identified using Current Procedure Terminology (CPT) codes, professional fee charges, or using free text procedure descriptions.' Below this is a list of 'Available Filter Items' with expand/collapse icons (minus/plus signs). Items include: 'Procedure Type: Adenotonsillectomy', 'Procedure Type: Intubation Only', 'Procedure Type: Cardiac (new)', 'Procedure Type: ECT', 'Procedure Type: Endoscopy', 'Procedure Type: Liver Transplant', 'Procedure Type: Lung Transplant', 'Procedure Type: MRI', 'Obstetric Anesthesia Type', 'Procedure Type: Strabismus', 'Intentional Hypothermia', 'Procedure Type: TEE/Cardioversion', 'Procedure Type: Tympanoplasty', 'Procedure Codes', and 'Procedure Text'. A 'Selected Filter Items' column is currently empty.
- Right Sidebar (Project Info):** Displays 'Project User Guide' (Project ID: 14045, Model: Cohort Only), 'Filters' (with a Refresh button), 'Starting Population' (Intraoperative Research Standard, 21,145,608 cases, 91 institutions, with an Edit Filters button), and 'Status' (Final Counts by Institution, Not Processed).

➤ Filter: Concepts

- MPOG concepts are the raw data dictionary for MPOG. Variables from the original electronic health record are mapped to concepts to help standardize data across participating sites. Please note that due to variability in documentation practices, sites may use different MPOG concepts to describe similar phenomena.



The screenshot shows the 'Concepts' filter page in the MPOG system. The left sidebar contains navigation options: Step 1: Define Project, Step 2: Filter a Patient (selected), Step 3: Select Report Columns, and Step 4: Review and Finalize. Under 'Step 2: Filter a Patient', there are sub-options for Population, Demographics, Cases, Diagnoses, Procedures, Concepts (selected), Outcomes, Laboratories, and Quality Measures. The main content area is titled 'Concepts' and includes a 'Next' button. It contains a paragraph explaining that MPOG concepts are raw data dictionary items mapped to standardize data across sites. Below this, there are two columns: 'Available Filter Items' and 'Selected Filter Items'. The 'Available Filter Items' column lists three options: 'MPOG Concepts - General' (Filter based on any arbitrary MPOG concept ID), 'MPOG Concepts - Physiologic' (Filter for physiologic-based MPOG Concept IDs, with additional option to select minimum number of cases), and 'MPOG Concepts - Laboratory' (Filter for lab-based MPOG Concept IDs, with additional option to specify the desired time period for the labs). The 'Selected Filter Items' column is currently empty. The right sidebar shows 'Project' information (Project ID: T4945, Model: Cohort Only), 'Filters' (Starting Population: Intraoperative Research Standard, 21,145,608 cases, 91 institutions), and 'Status' (Not Processed). There are also links for 'User Guide', 'Refresh', and 'Edit Filters'.

You may need to reference your local Variable Mapping for the concepts that are used at your site to build an accurate QI report or data query for your institution.

➤ Filter: Outcomes

- Clinical outcomes derived from Electronic Health Record and Administrative Data.

The screenshot shows the 'Outcomes' filter configuration page in the MPOG system. The interface is divided into several sections:

- Step 1: Define Project** (top left)
- Step 2: Filter a Patient** (left sidebar, active)
- Population** (left sidebar, sub-sections: Population, Demographics, Cases, Diagnoses, Procedures, Concepts, Outcomes, Laboratories, Quality Measures)
- Outcomes** (main content area, title: 'Clinical outcomes derived from Electronic Health Record and Administrative Data.'):
 - Available Filter Items:** A list of outcomes with checkboxes and plus signs:
 - MPOG Complication - Renal Recovery (Complication defined by ICD-9, ICD-10 diagnoses)
 - AHRQ Complication - Pulmonary - All (Complication defined by ICD-9, ICD-10 diagnoses)
 - 30-day In-Hospital Mortality (In-hospital mortality within 30 days of case)
 - Length of Stay After Procedure (Days) (Preoperative length of stay)
 - MPOG Complication - Acute Kidney Injury (AKI) (The patient's status of kidney injury (if any) after surgery)
 - PONV Reported (PONV Outcome Y/N)
 - Postop Troponin (Highest) (Postop Troponin (Highest))
 - Selected Filter Items:** (Empty)
- Next** (button)
- Project** (top right):
 - User Guide
 - Project ID: 14045
 - Model: Cohort Only
 - Refresh button
- Filters** (right sidebar):
 - Starting Population: Intraoperative Research Standard
 - 21,145,608 cases
 - 91 Institutions
 - Edit Filters button
- Status** (bottom right):
 - Final Counts by Institution (toggle)
 - Not Processed (radio button)
- Email Support/Feedback** (bottom left)

➤ Filter: Laboratories

- Laboratory values in this screen are curated lab phenotypes, available for the most common labs and use cases. These are distinct from the Laboratory Concepts that can be selected from the Concept screen include all MPOG laboratory data.

Step 1: Define Project

Step 2: Filter a Patient

Population

Population
Demographics
Cases
Diagnoses
Procedures
Concepts
Outcomes
Laboratories
Quality Measures

Step 3: Select Report Columns

Step 4: Review and Finalize

Email Support/Feedback

Laboratories

Laboratory values in this screen are curated lab phenotypes, available for the most common labs and use cases. These are distinct from the Laboratory Concepts that can be selected from the Concept screen include all MPOG laboratory data.

Available Filter Items

- Preop EGFR (Most Recent)
- Preop EGFR (Most Recent within 60 days)
- Preop Albumin
- Preop Alk Phosphatase
- Preop ALT
- Preop Arterial pH
- Preop AST
- Preop Bicarbonate
- Preop BUN
- Preop Calcium Ionized
- Preop Calcium Total
- Preop carbon dioxide (pCO₂), arterial
- Preop carbon dioxide (pCO₂), mixed venous
- Preop carbon dioxide (pCO₂), venous
- Preop Chloride
- Preop Creatinine
- Preop EGFR (Lowest within 60 Days)
- Preop Glucose
- Preop HCG

Selected Filter Items

Project

User Guide
Project ID: 14045
Mode: Cohort Only

Filters

Starting Population
Intraoperative Research Standard
21,145,608 cases
91 institutions

Final Counts by Institution

Status
 Not Processed

➤ Filter: Quality Measures

- MPOG Quality Improvement measure data, derived from Electronic Health Record and Administrative Data. Please review specification before selecting a measure from the list.

The screenshot displays the 'Quality Measures' selection interface. On the left, a sidebar contains navigation options: 'Step 1: Define Project', 'Step 2: Filter a Patient Population' (selected), 'Step 3: Select Report Columns', 'Step 4: Review and Finalize', and 'Email Support/Feedback'. The 'Quality Measures' section is expanded, showing a list of measures with their IDs and descriptions. A 'Selected Filter Items' panel is visible on the right, and a 'Next' button is at the top right. The right-hand panel shows project details: 'Project User Guide', 'Project ID: 14048', 'Moore Research', 'Filters' (with a 'Refresh' button), 'Starting Population' (21,187,873 cases, 70 institutions), and 'Edit Filters' button. At the bottom right, there is a 'Status' section with 'Ready to Download' and a '+ Final Counts by Institution' link.

Quality Measure ID	Description
SUS-03	Carbon Footprint, Induction
SMOK-01	Smoking Tobacco Status Documentation
SMOK-02	Smoking Tobacco Cessation Intervention
TEMP-06 (Cardiac)	Post-bypass normothermia, open cardiac
TEMP-05 (OB)	Postoperative Hypothermia, Obstetrics
TEMP-07 (Cardiac)	Post-bypass Hyperthermia, Open Cardiac
ABX-01 (OB)	Antibiotic Timing (OB)
AKI-01	Acute Kidney Injury
BP-01	Low MAP > 55mmHg
BP-02	BP Monitoring Gap
BP-03	Blood Pressure < 65mmHg for greater than 15 minutes
BP-04 (OB)	Hypotension during C-section
BP-05	Blood Pressure < 55mmHg during induction
CARD-02	Myocardial Infarction
CARD-03	Myocardial Infarction, High Risk
FLUID-01-C	Minimizing Colloid, Cardiac
FLUID-01-NC	Minimizing Colloid, Non-Cardiac
FLUID-02-C (PEDS)	Minimizing Colloids, Cardiac, Pediatric

Edit Filters

- This allows you to rearrange the order in which filters are applied to the cohort.
- Please note that individual **filters** are joined to one another using “**and**” logic. Therefore, cases must meet **all** filter criteria in sequential order to be included in the cohort.
- To rearrange the filter order, click the **Edit Filters** button in the right-side panel. A brief on-screen guide will pop-up that details the functionality. This guide can also be viewed via the **Guide** button within the **Edit Filters** section.

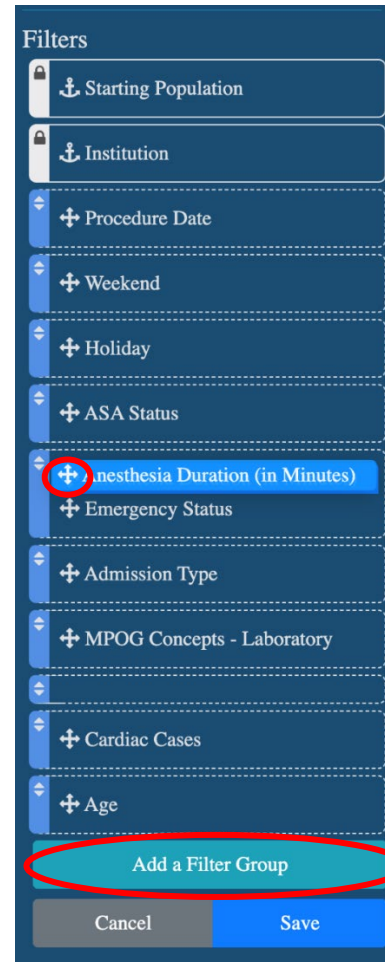
A screenshot of a software interface titled 'Project' with 'User Guide' and 'Project ID: 14048' and 'Mode: Cohort Only'. Below this is a 'Filters' section with a 'Refresh' button. The filters are listed as follows:

Filter	Cases	Institutions
Starting Population Intraoperative Research Standard	21,187,873 cases	70 institutions
BMI Classification (Pediatric) Healthy Weight	946,872 cases	70 institutions
Emergency Status Emergency Status No	899,940 cases	69 institutions
Holiday	2,080 cases	64 institutions
PAIN-01 (PEDS) Passed	903 cases	49 institutions

At the bottom right of the panel is an 'Edit Filters' button. A large red arrow points upwards from the bottom of the slide towards this button.

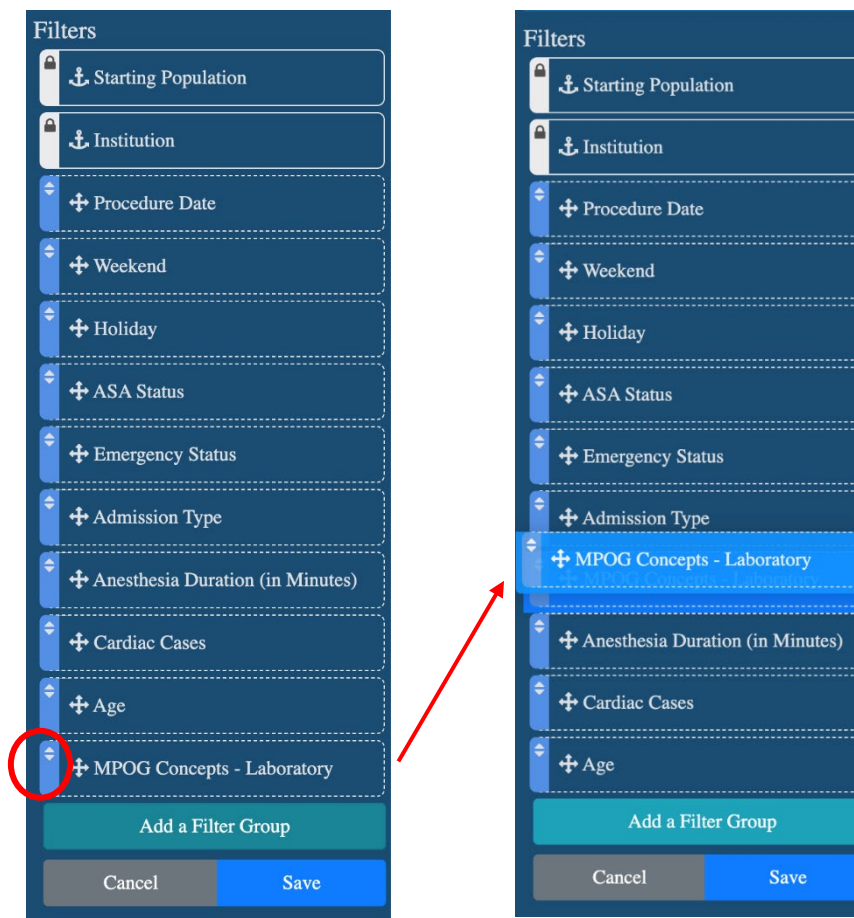
➤ Adding filter groups

- Users can also add **filter groups** to combine individual filters using “**or**” logic from within the **Edit Filters** screen.
- Cases meeting **any** of the criteria within a **filter group** are included in the cohort.
- To add a **filter group**, click the **Add a Filter Group** button at the bottom or drag and drop a filter (using the **+** symbol) next to another filter.
- Please note that any empty filter groups will be ignored.



➤ Reordering a filter

- A **filter** can be rearranged by dragging and dropping the **light blue bar** or the **◆** symbol located to the left of the filter name.
- Please note that any filter displayed with a lock (🔒) and anchor (⚓) cannot be reordered.



➤ Individual Filters vs. Filter Groups

This query uses **individual filters** to combine procedure text and procedure codes using **“and”** logic → cases need to meet **both filter** criteria to be included

Starting Population	6,939,723 cases	Starting Population	6,939,723 cases
Perioperative Research Standard	59 institutions	Perioperative Research Standard	59 institutions
Institution		Institution	
University of Michigan Health System	652,250 cases	University of Michigan Health System	652,250 cases
	1 institutions		1 institutions
Age	558,259 cases	Age	558,259 cases
18 ≤ value	1 institutions	18 ≤ value	1 institutions
Sex	558,259 cases	Sex	558,259 cases
Male	1 institutions	Male	1 institutions
Female		Female	
Procedure Date	171,709 cases	Procedure Date	171,709 cases
01/01/2018 ≤ date	1 institutions	01/01/2018 ≤ date	1 institutions
Holiday	171,223 cases	Holiday	171,223 cases
non-Holiday	1 institutions	non-Holiday	1 institutions
ASA Status	170,622 cases	ASA Status	170,622 cases
ASA Class 1	1 institutions	ASA Class 1	1 institutions
ASA Class 2		ASA Class 2	
ASA Class 3		ASA Class 3	
ASA Class 4		ASA Class 4	
Any of the following	1,001 cases	Any of the following	1,001 cases
	1 institutions		1 institutions
Procedure Text	985 cases	Procedure Text	985 cases
Keep ANY: coronary	1 institutions	Keep ANY: coronary	1 institutions
Procedure Codes	71 cases	Procedure Codes	87 cases
Keep ANY: Surg[33510]	1 institutions	Keep ANY: Surg[33510]	1 institutions

This query utilizes the **filter group** to combine procedure text and procedure codes using **“or”** logic → cases can meet **either filter** criteria to be included

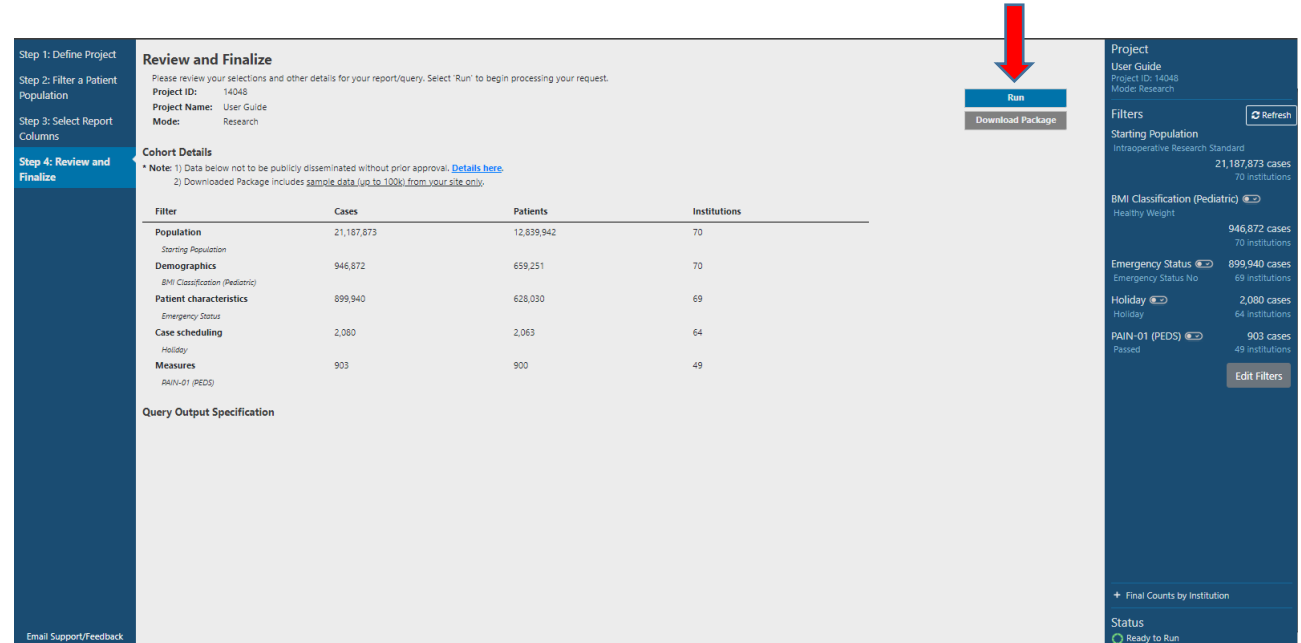
➤ Step 3: Select Report Columns

- Now that you've chosen which cases should be included, you will need to define which data elements should be returned in the result set. This includes pre-computed [MPOG Phenotypes](#) and raw [MPOG Concepts](#).

More information about MPOG Phenotypes is [available here](#).

➤ Step 4: Review and Finalize

- Please review your selections and other details for your report/query. Select **Run** to begin processing your request.



The screenshot displays the 'Review and Finalize' step of the MPOG software. The interface includes a sidebar with navigation steps, a main content area with project details and a data table, and a right-hand panel with filter settings. A red arrow points to the 'Run' button in the top right corner.

Review and Finalize
Please review your selections and other details for your report/query. Select 'Run' to begin processing your request.

Project ID: 14048
Project Name: User Guide
Mode: Research

Cohort Details
• Note: 1) Data below not to be publicly disseminated without prior approval. [Details here](#)
2) Downloaded Package includes sample data (up to 100%) from your site only.

Filter	Cases	Patients	Institutions
Population	21,187,873	12,639,942	70
Starting Population			
Demographics	946,872	659,251	70
BMI Classification (Pediatric)			
Patient characteristics	899,940	628,030	69
Emergency Status			
Case scheduling	2,080	2,063	64
Holiday			
Measures	903	900	49
PAIN-01 (PEDS)			

Query Output Specification

Project
User Guide
Project ID: 14048
Mode: Research

Filters Refresh

Starting Population
Intraoperative Research Standard
21,187,873 cases
70 institutions

BMI Classification (Pediatric)
Healthy Weight
946,872 cases
70 institutions

Emergency Status Filter
Emergency Status No
899,940 cases
69 institutions

Holiday Filter
Holiday
2,080 cases
64 institutions

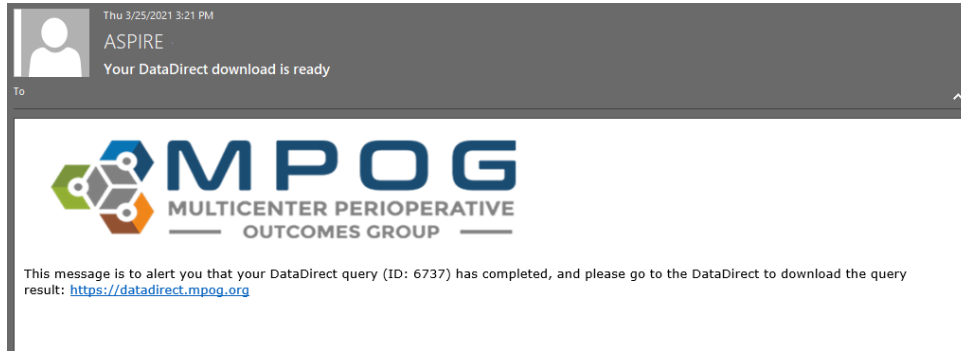
PAIN-01 (PEDS) Filter
Passed
903 cases
49 institutions

Edit Filters

+ Final Counts by Institution

Status
Ready to Run

- When the query is done running, an auto-generated email is sent.



- Click the **Download Package** button to proceed to the attestation screen.

Review and Finalize
Please review your selections and other details for your report/query. Select 'Run' to begin processing your request.

Project ID: 14048
Project Name: User Guide
Mode: Research

Cohort Details
* **Note:** 1) Data below not to be publicly disseminated without prior approval. [Details here.](#)
2) Downloaded Package includes **sample data (up to 100k)** from your site only.

Done: Re-run
Download Package

Project
User Guide
Project ID: 14048
Mode: Research

Filters

Starting Population
Intraoperative Research Standard
21,187,873 cases
70 Institutions

- After specifying filename, completing attestations and password-protecting the Excel Spreadsheet, click the **Download Package** button.

Download Result ×

** Only data from your institution will be included in the download. Data from other institutions requires formal PCRC approval.*

Name User Guide

File Name .xlsx

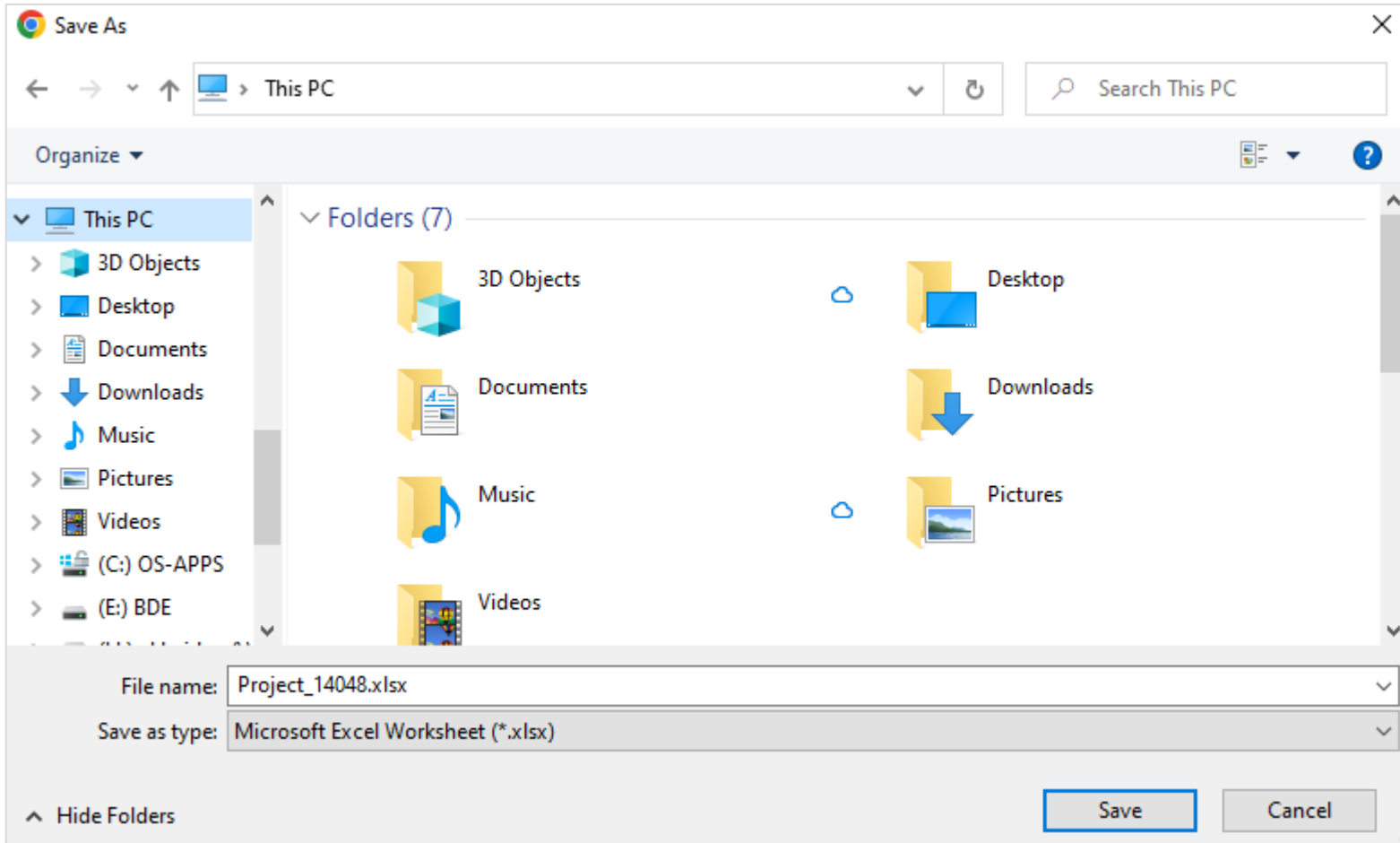
Attestations

- I confirm that my dataset meets the "minimum necessary standard" for requested PHI.
- I attest that I will NOT store my dataset on portable drives, or computers not approved/managed by my hospital, and will NOT remove password encryption.
- I am responsible for protecting the privacy of the individuals' PHI contained my dataset throughout the life of my project.
- I agree to not disclose, transmit or share PHI outside my hospital and health system without appropriate approvals and agreements in place.
- I understand that my activity on this tool will be audited.

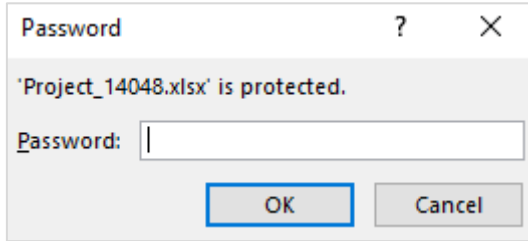
Password for Excel Spreadsheet
Enter password



- Download the Excel Spreadsheet.



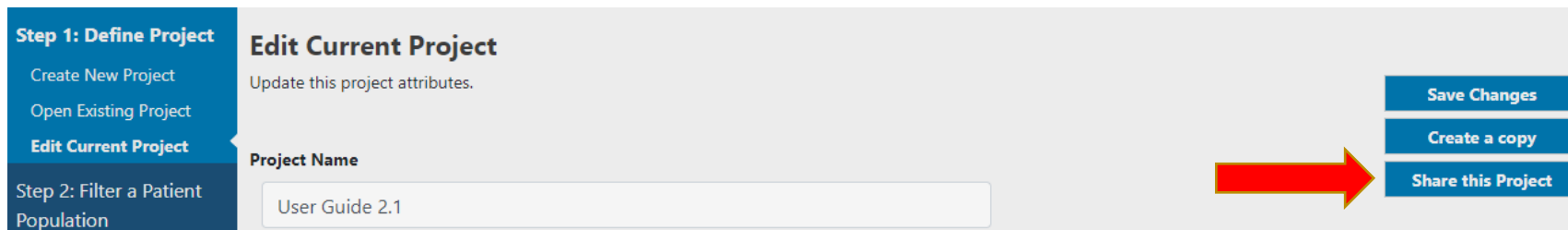
- Enter the password previously set to view the spreadsheet.



- A summary of the data, and characteristics of the data queried, are among the tabs available in the Excel Spreadsheet.
- Due to row limits in Excel, results that exceed 1 million rows are split into multiple numbered tabs.
- These results will need to be merged into a single file using a text editor to have complete data.

➤ Sharing DataDirect Queries

- Click **Edit Current** (Step 1), then click **Share this Project**



Step 1: Define Project

Create New Project

Open Existing Project

Edit Current Project

Step 2: Filter a Patient Population

Edit Current Project

Update this project attributes.

Project Name

User Guide 2.1

Save Changes

Create a copy

Share this Project

Share this Project

You can share your current project with another DataDirect user.

Please Note:

- The user you share with will receive a copy of this query in its current form.
- The other user will not see future changes you make to this project
- You will not see any changes the other user makes to their copy
- Output part will not be included in the shared project

Please enter the name or userid of the person below.

Share by name or userid:

Click here to search users

Share

Please enter 3 or more characters

Close

Click the **Share** button after selecting a user