



# Data Direct 2.1 Feature Updates

# Filtering data

- Users can now apply more **granular filters**.
- 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.

**MPOG DataDirect**

Step 1: Define Project

Step 2: Filter

Population

Demographics

Cases

Diagnoses

Procedures

Concepts

Outcomes

Step 3: Choose Output

Step 4: Finalize

### 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**

| Filter Item   | Selection |
|---|-----------|
| CPT Base Units<br>Primary anesthesia CPT code for the case (single)                           | ?         |
| Surgical Duration (in Minutes)<br>Difference of (Surgery End - Surgery Start)                 | ?         |
| Patient In Room Duration (in Minutes)<br>Difference of (Patient Out Of Room - Patient InRoom) | ?         |
| Anesthesia Technique: General<br>General anesthetic attempted operatively                     | ?         |
| Anesthesia Technique: Neuraxial<br>Neuraxial block attempted perioperatively                  | ?         |
| Anesthesia Technique: Peripheral Nerve Block<br>Peripheral block attempted perioperatively    | ?         |

**Selected Filter Items**

Procedure Date  
Documented anesthesia start time/date

Filtered by: 01/01/2000 ≤ Procedure Date ≤ 11/01/2020

Weekend  
Determines if the case was performed on the weekend

Filtered by: ☒ Weekday ☐ Weekend

Holiday  
Determines if the case was performed on a holiday

Filtered by: ☒ non-Holiday ☐ Holiday

ASA Status  
ASA Physical Status Classification System Status

Filtered by: ☒ ASA Class 1 ☒ ASA Class 2 ☒ ASA Class 3 ☒ ASA Class 4 ☐ ASA Class 5 ☐ ASA Class 6 ☐ Unmapped ☐ Invalid Value ☐ Missing or Unknown

Emergency Status  
ASA "E" physical status classification

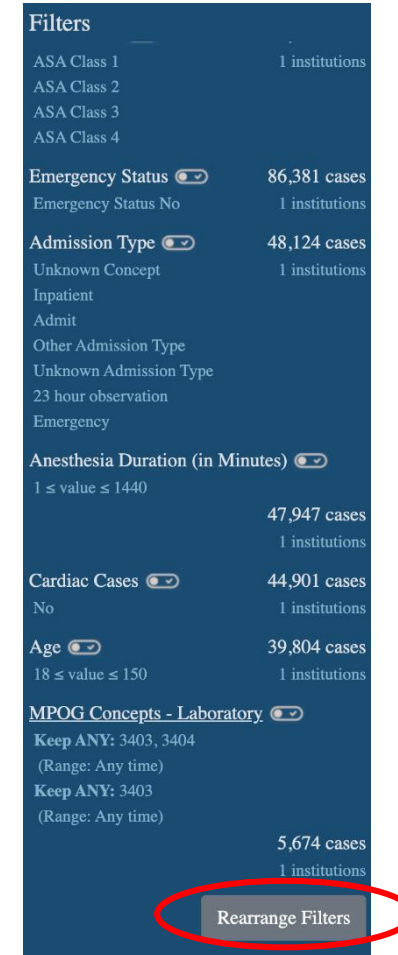
Filtered by: ☒ Emergency Status No ☐ Emergency Status Yes ☐ Conflicting ☐ Invalid ☐ Missing

Admission Type



# Rearranging filters

- Users can 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 on the **Rearrange Filters** button toward the bottom, right-hand side of the screen.



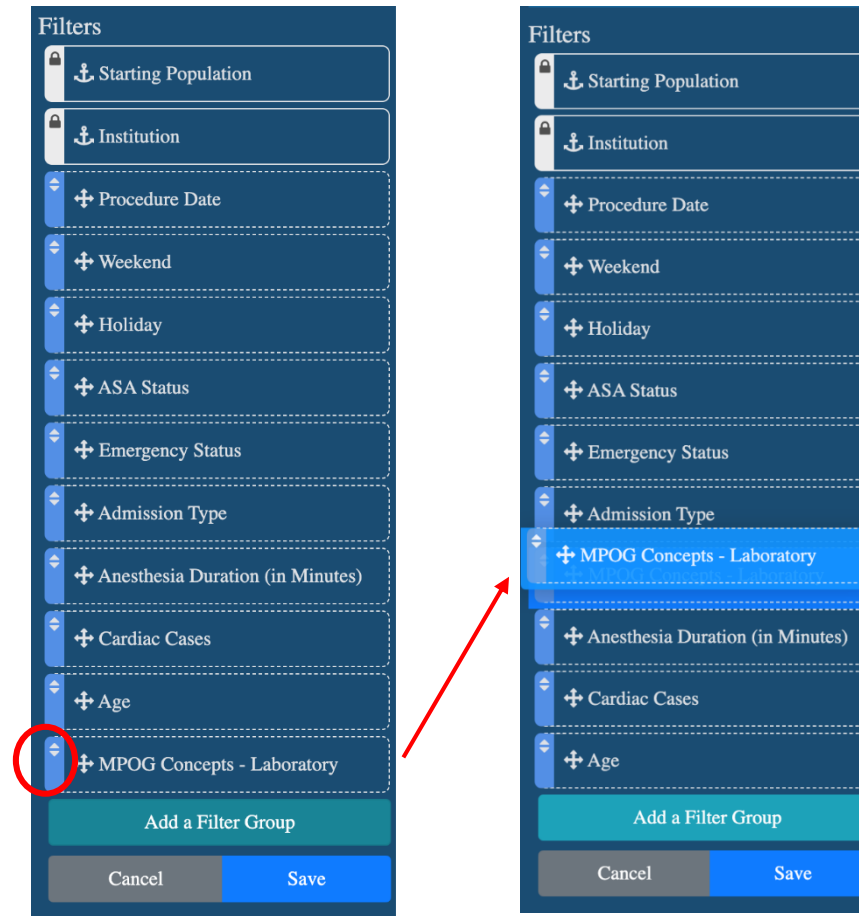
The screenshot shows a 'Filters' panel with the following sections:

- ASA Class**: 1 institutions (includes ASA Class 1, 2, 3, 4)
- Emergency Status**: 86,381 cases (includes Emergency Status No, 1 institutions)
- Admission Type**: 48,124 cases (includes Unknown Concept, 1 institutions; Inpatient; Admit; Other Admission Type; Unknown Admission Type; 23 hour observation; Emergency)
- Anesthesia Duration (in Minutes)**: 47,947 cases (includes 1 ≤ value ≤ 1440, 1 institutions)
- Cardiac Cases**: 44,901 cases (includes No, 1 institutions)
- Age**: 39,804 cases (includes 18 ≤ value ≤ 150, 1 institutions)
- MPOG Concepts - Laboratory**: 5,674 cases (includes 1 institutions)
  - Keep ANY: 3403, 3404 (Range: Any time)
  - Keep ANY: 3403 (Range: Any time)

A 'Rearrange Filters' button is located at the bottom right of the panel, circled in red.

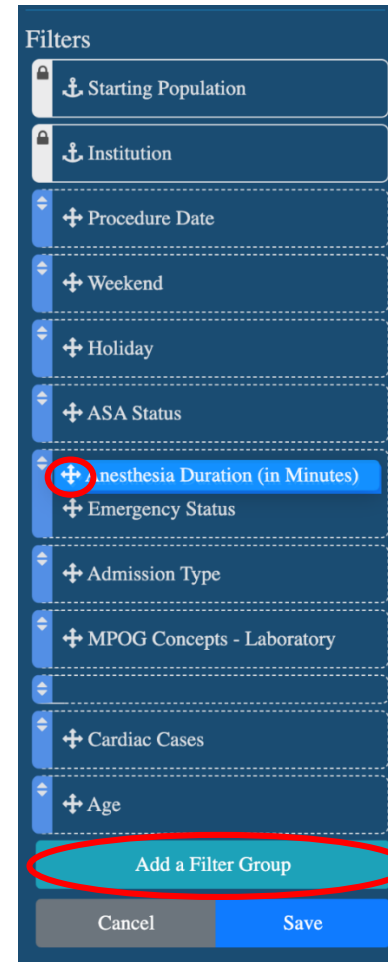
# Reordering a filter

- 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.



# Creating filter groups

- Users can also create **filter groups** to combine individual filters using “or” logic from within the **Rearrange Filters** screen.
- Cases meeting **any** of the criteria within a **filter group** are included in the cohort.
- To create 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.



# Understanding filter groups vs. filters

- Below is an example to illustrate the difference between applying individual filters versus filter groups to a cohort.

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.

**Filters**

Starting Population  
Perioperative Research Standard  
6,826,595 cases  
59 institutions

Institution   
University of Michigan Health System  
645,309 cases  
1 institutions

Procedure Date   
01/01/2018 ≤ date  
192,427 cases  
1 institutions

Age   
18 ≤ value  
168,674 cases  
1 institutions

Holiday   
non-Holiday  
168,200 cases  
1 institutions

ASA Status   
ASA Class 1  
ASA Class 2  
ASA Class 3  
ASA Class 4  
167,633 cases  
1 institutions

**Procedure Text**   
Keep ANY: coronary  
959 cases  
1 institutions

**Procedure Codes**   
Keep ANY: Surg[33510]  
70 cases  
1 institutions

Rearrange Filters

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

**Filters**

Starting Population  
Perioperative Research Standard  
6,826,595 cases  
59 institutions

Institution   
University of Michigan Health System  
645,309 cases  
1 institutions

Procedure Date   
01/01/2018 ≤ date  
192,427 cases  
1 institutions

Age   
18 ≤ value  
168,674 cases  
1 institutions

Holiday   
non-Holiday  
168,200 cases  
1 institutions

ASA Status   
ASA Class 1  
ASA Class 2  
ASA Class 3  
ASA Class 4  
167,633 cases  
1 institutions

**Any of the following**  
973 cases  
1 institutions

**Procedure Text**   
Keep ANY: coronary  
959 cases  
1 institutions

**Procedure Codes**   
Keep ANY: Surg[33510]  
84 cases  
1 institutions

Rearrange Filters

# Finalizing query

- The **Finalize** step of the query process has been simplified to include only a **single pop-up screen** for capturing the filename, attestations and password for the file.
- Additionally, users can **edit or rerun a previously completed query** without having to make a copy of it.

### Download Query Result

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

**Name**  
Covid

**Description**

**Filename**  
.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.

Please specify a password that can be used to regenerate your Excel file download.

**Set Password**

Enter password

Retype password

[Download Package](#) [Cancel](#)

### Review and Finalize

Here you can review your choices in detail and save documents relevant to your proposal.

**Project ID:** 6556  
**Project Name:** Covid  
**Query Mode:** Research

**Cohort Details**

| Filter              | Cases     | Patients  | Institutions |
|---------------------|-----------|-----------|--------------|
| <b>Population</b>   | 6,785,580 | 4,307,875 | 59           |
| Starting Population |           |           |              |
| <b>Population</b>   | 103,429   | 66,719    | 1            |
| Institution         |           |           |              |
| <b>Cases</b>        | 101,283   | 65,505    | 1            |
| Procedure Date      |           |           |              |
| <b>Cases</b>        | 93,364    | 61,631    | 1            |
| Weekend             |           |           |              |
| <b>Cases</b>        | 92,898    | 61,392    | 1            |
| Holiday             |           |           |              |
| <b>Cases</b>        | 92,425    | 61,188    | 1            |
| ASA Status          |           |           |              |
| <b>Cases</b>        | 66,381    | 57,930    | 1            |
| Emergency Status    |           |           |              |
| <b>Cases</b>        | 48,124    | 36,125    | 1            |
| Admission Type      |           |           |              |
| <b>Cases</b>        | 47,947    | 35,970    | 1            |

[Done: Re-run](#)  
[Download Package](#)

