



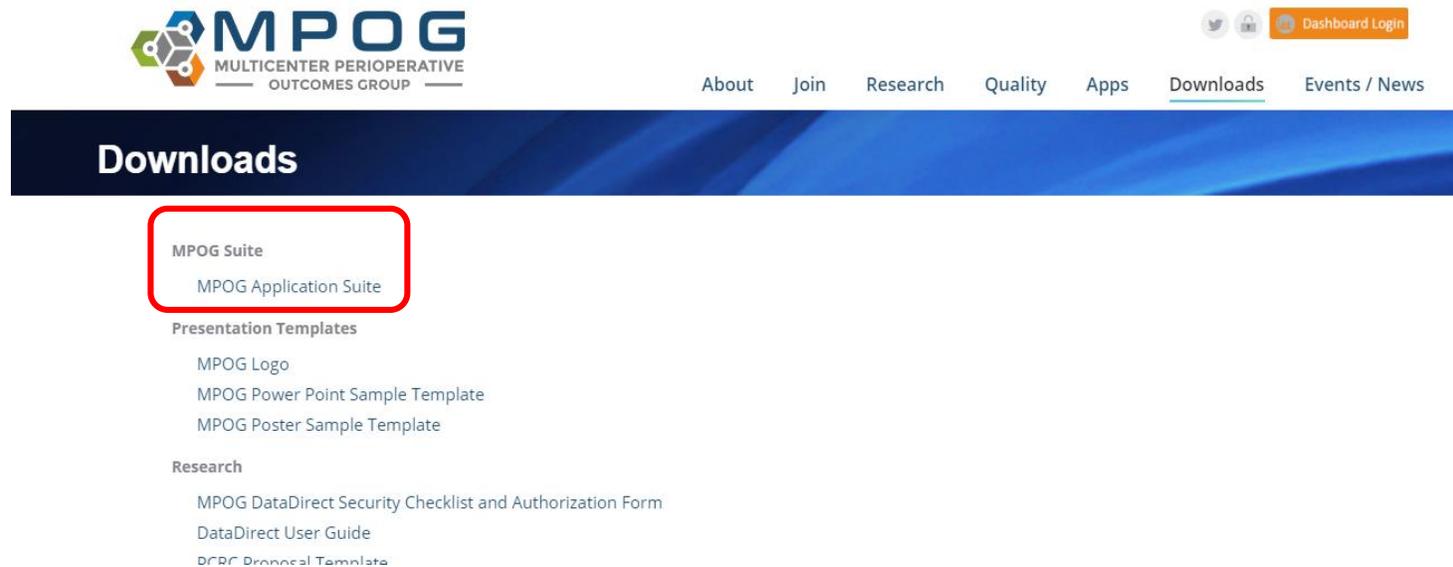
Module 1

Downloading and Accessing the MPOG Application Suite



Downloading and Accessing the MPOG Application Suite

- Obtain administrative rights from site's IT department. You will need this level of access to download the MPOG application to your workstation.
- Go to the [Downloads Page](#) on the MPOG website to download the app suite



MPOG
MULTICENTER PERIOPERATIVE
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MPOG Suite
MPOG Application Suite

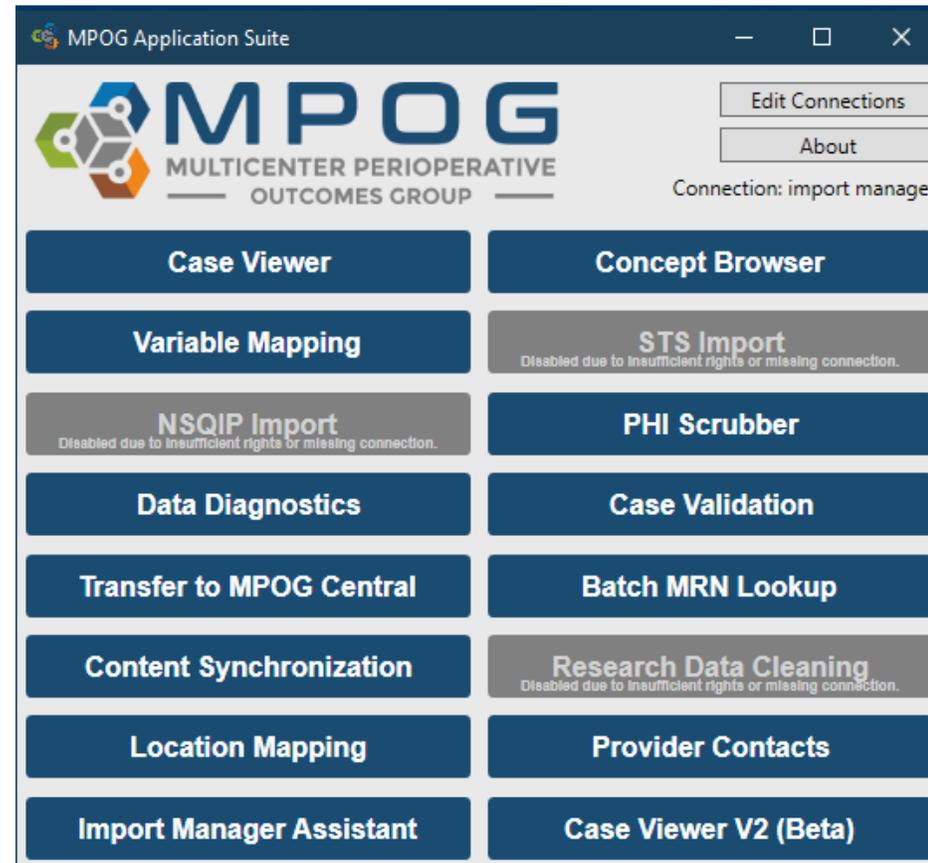
Presentation Templates

- MPOG Logo
- MPOG Power Point Sample Template
- MPOG Poster Sample Template

Research

- MPOG DataDirect Security Checklist and Authorization Form
- DataDirect User Guide
- DCRP Proposal Template

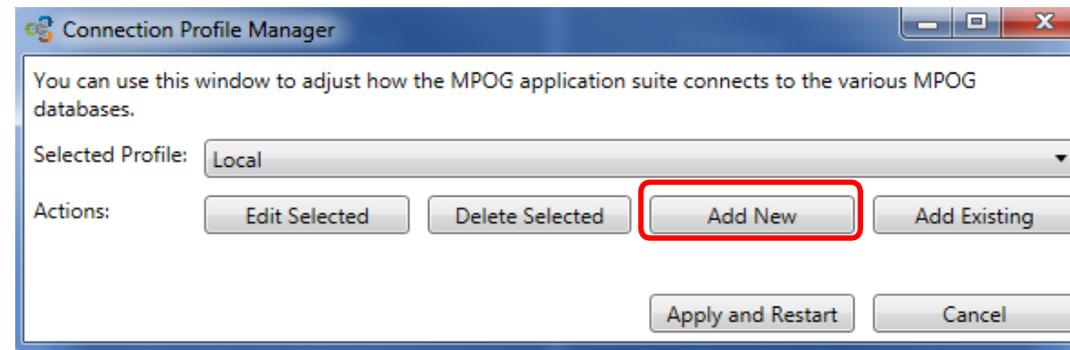
- Follow steps to download the suite to your computer. The MPOG Application Suite should automatically open. *Some tools may display in gray.



- Next, set up a connection to your local MPOG database by clicking: ‘Edit Connections’



- Click “Add New” if there are no profiles available for connection. Otherwise, choose the appropriate connection- ‘LOCAL,’ ‘Whichever site you plan to map for...’ Click “Edit Selected”:



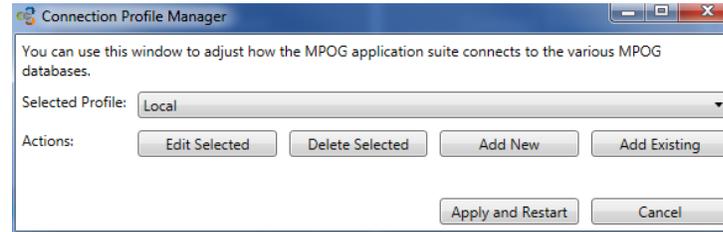
- Fill in the server address in both the top and middle sections of this form.
- Ask the MPOG technical lead at your site for the server connection.
- In the Config Connection section, select 'Import Manager' and make sure the database name is listed as MPOG_Import_Manager.
- Click OK

The screenshot shows the 'Edit Connection Profile' dialog box with the following details:

- Profile Name:** Local
- Main Connection (Required):**
 - Server: [Empty field, highlighted with a red box]
 - Database: MPOG_MAS
 - Authentication: Trusted Authentication (Uses your Windows credentials)
 - Username: [Empty field]
 - Password: [Empty field]
- Config Connection (Optional):**
 - Choose your configuration type:
 - Import Manager (Recommended for new hospitals)
 - Legacy Epic
 - Legacy
 - Server: [Empty field, highlighted with a red box]
 - Database: MPOG_Import_Manager
 - Authentication: Trusted Authentication (Uses your Windows credentials)
 - Username: [Empty field]
 - Password: [Empty field]
- Research Connection (Optional):**
 - Server: [Empty field]
 - Database: MPOG_Research
 - Authentication: Trusted Authentication (Uses your Windows credentials)
 - Username: [Empty field]
 - Password: [Empty field]

Buttons: OK, Cancel

- The ‘Connection Profile Manager’ form will repopulate as follows. Click “Apply and Restart.”



- The MPOG Application should run again and open as follows. *More tools should have turned blue. If not, contact your site technical team to update your database roles.



- Click on 'Variable Mapping' to test connection. A utility that looks like this should open up.
- If yes, the MPOG Application is ready to go!

MPOG Configuration

Variable Mapping Administration Totaling Observation Entry

Mapping Type: Administration Type

Organization: All Assigned Organizations (Merged)

Display Mode: All Variables

Search Filter:

ID	Org	Name	Times Used	Mapped As	Type
FLO-11201000	Multiple	FiO2	11,305,175	Variable Excluded from Import	Meta
FLO-11210000	Multiple	SpO2	10,815,067	Variable Excluded from Import	Meta
FLO-11201000	Multiple	ETCO2	10,105,037	Variable Excluded from Import	Meta
FLO-11201000	Multiple	O2	8,803,598	Variable Excluded from Import	Meta
FLO-11201000	Multiple	Tidal Volume Exp	7,160,671	Variable Excluded from Import	Meta
FLO-11210000	Multiple	PIP Observed	7,141,726	Variable Excluded from Import	Meta
FLO-11210000	Multiple	PEEP	3,886,678	Variable Excluded from Import	Meta
FLO-11201000	Multiple	Sevoflurane	3,830,019	Variable Excluded from Import	Meta
FLO-11201000	Multiple	Air	2,835,786	Variable Excluded from Import	Meta
FLO-11210000	Multiple	Arterial Line MAP	1,967,259	Variable Excluded from Import	Meta
FLO-11201000	Multiple	Desflurane	1,864,289	Variable Excluded from Import	Meta
FLO-11201000	Multiple	Isoflurane	1,613,381	Variable Excluded from Import	Meta
FLO-10444	Multiple	Press Support	1,401,688	Variable Excluded from Import	Meta
FLO-10	Multiple	SpO2	1,280,006	Variable Excluded from Import	Meta
FLO-11210000	Multiple	ET N2O	681,928	Variable Excluded from Import	Meta
FLO-11201000	Multiple	CVP	522,897	Variable Excluded from Import	Meta
FLO-11201000	Multiple	N2O	454,719	Variable Excluded from Import	Meta
FLO-11210000	Multiple	PAP (Mean)	338,881	Variable Excluded from Import	Meta
FLO-1121820	Multiple	CCO	337,234	Variable Excluded from Import	Meta
ERX-11150	Multiple	propofol (DIPRIVAN) 10mg/ml injection	311,232	PROPOFOL	Medicati
ERX-4318	Multiple	lactated ringers infusion	281,923	LACTATED RINGERS	Fluids In
FLO-250026	Multiple	O2 Flow Rate (L/min)	255,456	Variable Excluded from Import	Meta
ERX-3037	Multiple	fentaNYL (PF) (SUBLIMAZE) 50 mcg/mL injection	189,945	FENTANYL	Medicati
ERX-27838	Multiple	0.9% NaCl infusion 1,000 ml	181,085	SALINE 0.9%	Fluids In
FLO-11210000	Multiple	Auxiliary O2	144,648	Variable Excluded from Import	Meta
FLO-61	Multiple	Urine	138,845	URINE OUTPUT	Fluids Ou
FLO-11201000	Multiple	FiO2	113,864	Unknown Concept	Meta
FLO-11210000	Multiple	SpO2	112,698	Unknown Concept	Meta
FLO-11201000	Multiple	ETCO2	110,880	Variable Excluded from Import	Meta
FLO-11201000	Multiple	O2	110,794	Unknown Concept	Meta
FLO-11201000	Multiple	ETCO2	107,426	Unknown Concept	Meta
FLO-11201000	Multiple	ETCO2	107,310	Unknown Concept	Meta

Direction: Normal

Options: Auto Search On Auto Select On

Search Filter: white

Map Unmap Exclude

Examine



Module 2

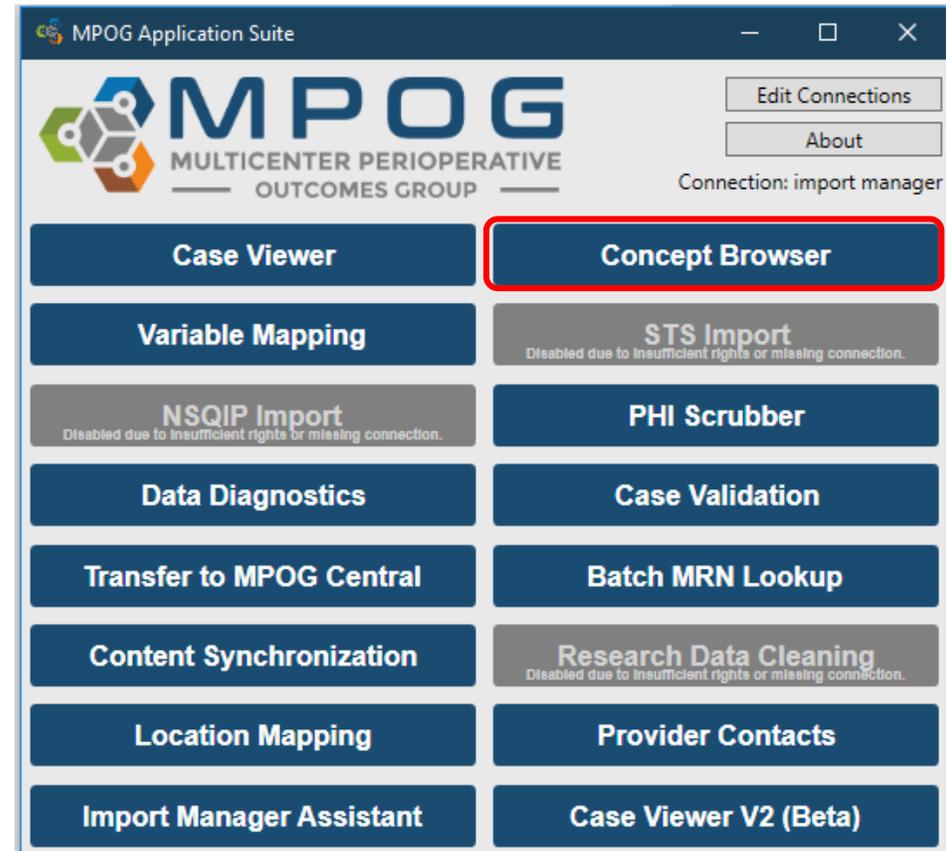
Concept Browser



Concept Browser

- Contains a comprehensive list of all available MPOG Concepts.
- Allows you to search the dictionary of MPOG concepts to identify an appropriate MPOG concept for mapping purposes.
- For more information on variable mapping, please refer to Module 3: Variable Mapping.

Access Concept Browser in the MPOG Suite



- The MPOG Application Suite will open to the '[Concept Browser](#)' webpage, where you can select specific search criteria
- To search the dictionary of all MPOG concept types, use the 'Query String' field and maintain default settings in all other fields

Please select a concept type and query string

Concept type [All concept types]

Query string e.g. id:concept ID# or any text

Count Mode Concept occurrences

Hide inactive concepts

Each MPOG Concept ID includes:

- **Concept ID Number:** The MPOG Concept ID number associated with each particular concept.
- **Concept Name:** Names associated with the concept (including ICD-9 & ICD-10 Codes)
- **Concept Type:** Indicates the location details associated with the concept (i.e. Access Location, Intraoperative Events, Interventions, and Observations).
- **Concept Occurrences:** Displays the number of concept occurrences that have been submitted to MPOG as well as the, number of unique patients, or number of unique cases associated with each MPOG Concept ID depending on the count mode selected in the last search field.

ID	Concept Name	Concept Type	# of Occurrences
50140	Noninvasive blood pressure cuff location	Intraoperative Events, Interventions, and Observations	4,169,149

- Based on your search criteria, scan the results for the most appropriate MPOG concept for mapping purposes.
- You can utilize the ‘Query String’ field to identify a desired MPOG concept:
 - Type the name associated with the MPOG concept you are attempting to identify.
 - For example, you may want to find an MPOG concept ID for an interscalene block. Simply type ‘interscalene’ into the query string field as shown below

Please select a concept type and query string

Concept type

Query string

Count Mode

Hide inactive concepts

ID	Concept Name	Concept Type	# of Occurrences
50384	Regional - Interscalene Block	Intraoperative Events, Interventions, and Observations	21,940
50034	Neuraxial - Vertebral interspace final (Unspecified)	Intraoperative Events, Interventions, and Observations	1,185
50147	Neuraxial - Spinal vertebral interspace final	Intraoperative Events, Interventions, and Observations	159,863
50155	Epidural vertebral interspace final	Intraoperative Events, Interventions, and Observations	278,557
100011	Internal Jugular	Access Location	225,187

To search by MPOG ID, type “id:” prior the number

Please select a concept type and query string

Concept type [All concept types]

Query string id:50099

Count Mode Concept occurrences

Hide inactive concepts

Submit

ID	Concept Name	Concept Type	# of Occurrences
50099	Intubation - Nasal approach note	Intraoperative Events, Interventions, and Observations	110,133

- You may also use the ‘Concept type’ search field in addition to the ‘Query string’ when searching for a matching MPOG concept.
- For example, you may want to find an intraoperative fluid such as dextrose or a dextrose mixture. To search all available intraoperative MPOG fluid concepts, select the Intraoperative Fluids concept type.

Please select a concept type and query string

Concept type [All concept types]

Query string

Count Mode

Hide inactive

- [All concept types]
- Access Location
- Access Side
- Access Size
- Access Type
- Administrative Admission Type
- Charge capture
- Extraction Preferences
- Intraoperative Blood Products In
- Intraoperative Fluids In (Excluding Blood Products)**
- Intraoperative Medications (Administered Mixtures)
- Intraoperative Outputs
- Laboratory or Testing Observations
- Laboratory Testing Abnormal Flags
- Outcome Observations
- PHI Dictionary Type - Do NOT Remove
- PHI Dictionary Type - Do Remove
- Physiologic Observations
- Preoperative Observations

- Enter 'dextrose' into the query string and select 'submit.'
- A group of intraoperative fluids that include the word 'dextrose' will display in the menu below.

Please select a concept type and query string

Concept type: Intraoperative Fluids In (Excluding Blood Products)

Query string: dextrose

Count Mode: Concept occurrences

Hide inactive concepts

ID	Concept Name	Concept Type	# of Occurrences
10260	DEXTROSE / SODIUM ACETATE 10% / 19.25MEQ	Intraoperative Fluids In (Excluding Blood Products)	0
10460	DEXTROSE / WATER 5%	Intraoperative Fluids In (Excluding Blood Products)	45,229
10461	DEXTROSE / LACTATED RINGERS 5%	Intraoperative Fluids In (Excluding Blood Products)	73,228
10462	DEXTROSE / WATER 10%	Intraoperative Fluids In (Excluding Blood Products)	20,679

- Once you have identified an appropriate MPOG Concept to match the AIMS variable, you can utilize the MPOG Concept ID for mapping purposes.
- Logging into the MPOG website will also allow you to view other institutions that have used the concepts available in Concept Browser.
- This is helpful for research purposes to know which institutions are using a given concept. To obtain an MPOG website username and password, please contact the Coordinating Center (support@mpog.zendesk.com)



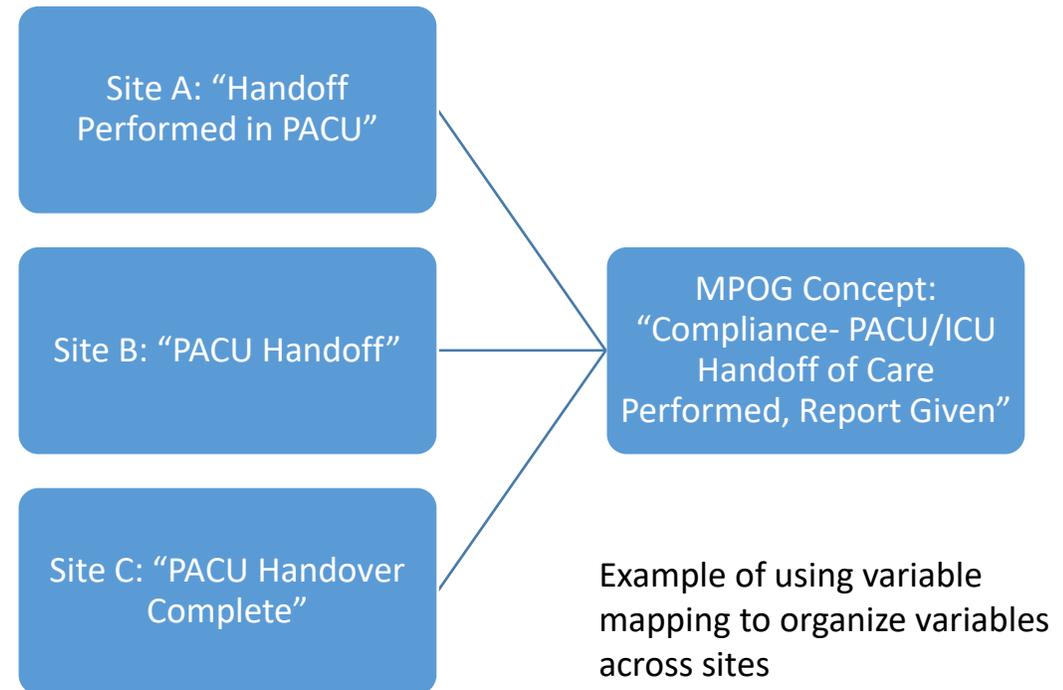
Module 3

Variable Mapping Utility



Variable Mapping

- The Variable Mapping utility provides sites the ability to map electronic health record (EHR) variables to standardized MPOG concepts.
- This process of standardizing terms across multiple EHRs and across multiple sites allows for common data elements to be used for research or quality improvement purposes.



Variable Mapping

- Once a variable is mapped, source data from the local EHR will always map to the corresponding MPOG concept automatically unless mapping is modified.
- The MPOG Variable Mapping utility simplifies the mapping process by allowing MPOG clinical reviewers to select data variables (source concepts) and match them to corresponding MPOG concepts

Variable Mapping

- **Important Note:** Institutional data needs to be pulled into the MPOG database before mapping can begin.
- Typically, sites begin mapping with a small amount of data (one day to one week) and then load more data after mapping is started.
- Usually sites will automate the process of applying mappings after one month of data is loaded and mapped in the database.
- Automatic updates are typically scheduled to occur each night.

Pre-Mapping

- For new **Epic** sites, a select amount of variables will map automatically prior to beginning manual mapping.
- Your site technical team will be asked to run a script to complete the pre-mapping.
- Once the script is run, pre-mapped variables will show as 'green' in the variable mapping utility.

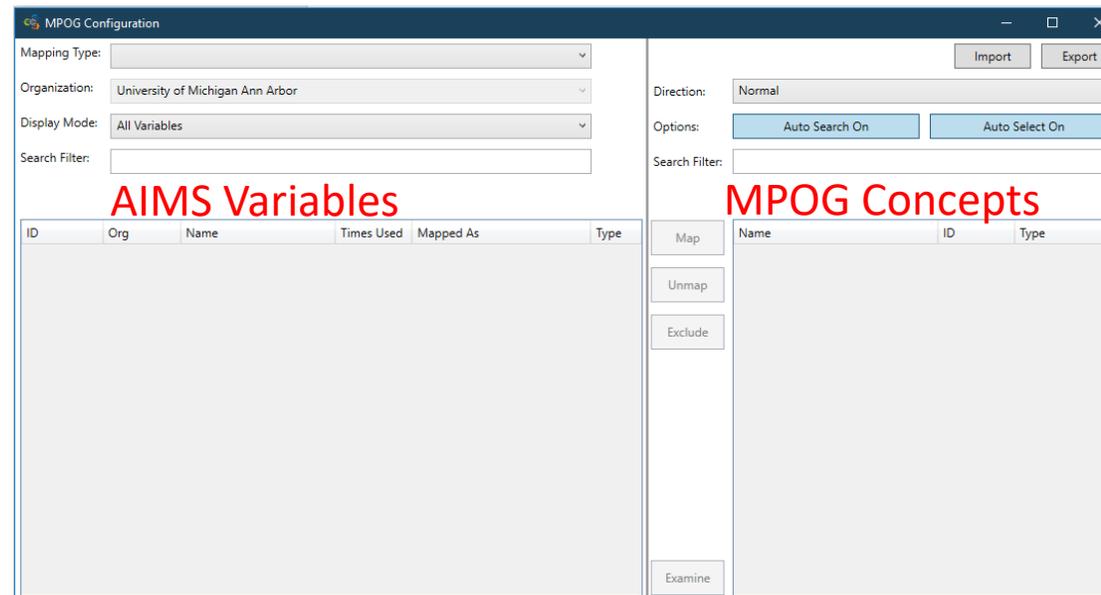
ID	Org	Name	Times Used	Mapped As	Type
FLO-4010000	OHSU	Airway Resp Rate	9,472	Respiratory Rate Actual from EtC	Physiolog
FLO-4010000	OHSU	ETCO2	9,405	End Tidal CO2 (mmHg)	Physiolog
FLO-4010000	OHSU	SpO2	9,335	SpO2 %	Physiolog
FLO-4010000	OHSU	Pulse - Plethysmograph	9,333	Physical Exam - Pulse Rate	Preop
FLO-4010000	OHSU	Pmean/PAW	9,262	Mean Inspiratory Pressure	Physiolog
FLO-4010000	OHSU	max Pos Airway P	9,229	Unknown Concept	Meta
FLO-4010000	OHSU	ETO2	9,216	Oxygen Exp %	Physiolog
FLO-4010000	OHSU	FIO2	9,216	Oxygen Insp %	Physiolog
FLO-4010000	OHSU	Heart Rate	9,047	Unknown Concept	Meta
FLO-4010000	OHSU	PeeP	8,910	Unknown Concept	Meta
FLO-1120016	OHSU	O2 FR Avance (Total Liters	8,263	Flows Oxygen (L/Min)	Physiolog
FLO-4010000	OHSU	Circuit O2	8,048	Unknown Concept	Meta
FLO-4010000	OHSU	Vent Mode	8,048	Ventilator Mode	Physiolog
FLO-4010000	OHSU	RR freq/Min	7,541	Ventilator Respiratory Rate Actu	Physiolog
FLO-4010000	OHSU	MV (L/min)	7,519	Minute ventilation	Physiolog
FLO-4010000	OHSU	Vte	7,496	Tidal Volume actual	Physiolog
FLO-4010000	OHSU	ST-II	7,357	ST Lead II	Physiolog
FLO-4010000	OHSU	Vt	6,946	Tidal Volume Set	Physiolog

Using the Variable Mapper

- Open the MPOG Suite and select “Variable Mapping”



- The 'Variable Mapping' utility should open and look similar to the image below. The left side of the utility will list your institution (AIMS) variables and the right side will list MPOG concepts available to map to.
- You will also notice four fields within the MPOG Configuration that allow you to filter by category. These include Mapping Type, Organization, Display Mode, and Search Filter.



- **Mapping Type:** This is a general mapping category that can be further filtered to subcategories
- **Organization:** This field will be populated with your institutional name.
- **Display Mode:** This feature allows you to filter by ‘All Variables,’ ‘Unmapped Variables,’ or ‘Mapped Variables.’
- **Search Filter:** This function allows you to search for a specific AIMS variable.
 - Can search by original variable ID using prefix “ID” (example “ID:1448”)

 MPOG Configuration

Mapping Type:

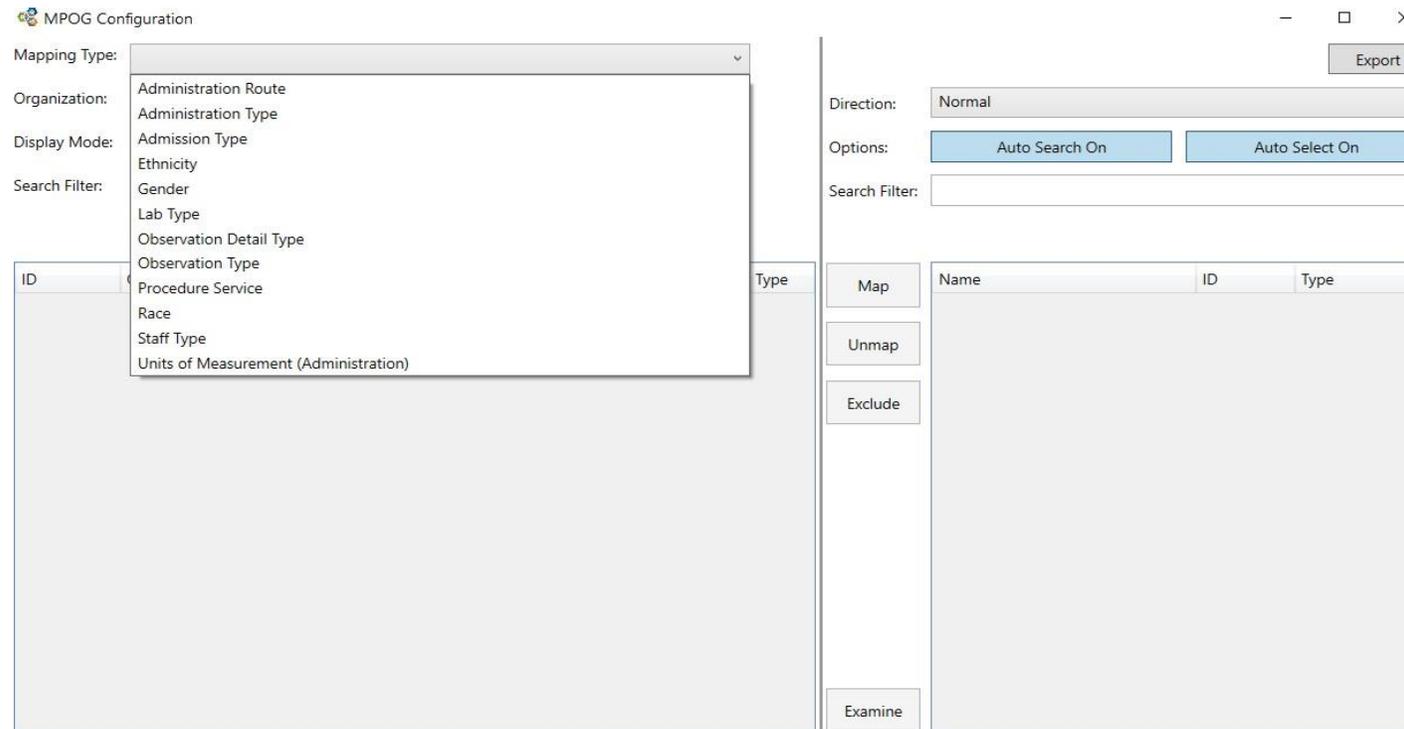
Organization:

Display Mode:

Search Filter:

**There may be additional sites in the dropdown menu for multi-site institutions in which you are assigned (i.e. Henry Ford Detroit, Henry Ford West Bloomfield). For institutions with multiple sites, It is recommended that mapping is completed under the Merged Organization.*

- To utilize the category filter option, click on the 'Mapping Type' field. A dropdown menu will appear and you may select from the various options
- Select from the desired category from the 'Mapping Type' dropdown menu, as shown below



- In the example below, we have selected the Mapping Type ‘Race.’

 MPOG Configuration

Mapping Type: Race

Organization: University of Michigan Ann Arbor

Display Mode: All Variables

Search Filter:

- Once ‘Race’ has been selected from the dropdown menu, you will notice a variety of race related variables populate the window as shown below. You may notice lines of existing variables on the left side of the screen if variables have been populated or mapped by the MPOG Coordinating Center technical team or premapping has been completed

- Click the ‘Race’ variable you wish to map. Once the row has been selected, it will turn blue and a corresponding “guess” MPOG concept will appear in the ‘Description’ field on the right side. If several options appear, you can click on one of the bold terms above the MPOG concept window to narrow the search. If the desired concept does not appear, use the search filter on the right side to modify your search
- In this example, we have selected ‘American Indian/Alaska Native.’

MPOG Configuration

Mapping Type: Race

Organization: University of Michigan Ann Arbor

Display Mode: All Variables

Search Filter:

ID	Org	Name	Times Used	Mapped As	Type
W	University of Michigan	White	10,068	White	Race
B	University of Michigan	Black	1,182	Black	Race
H	University of Michigan	Unknown	430	Unknown	Race
O	University of Michigan	Other	338	Other	Race
U	University of Michigan	Unknown	329	Unknown	Race
A	University of Michigan	Unknown Concept	55	Unknown Concept	Meta
D	University of Michigan	Unknown	47	Unknown	Race
<No ID Given	University of Michigan	<No ID Given>	14	Unknown	Race
P	University of Michigan	Unknown Concept	6	Unknown Concept	Meta

Direction: Normal

Options: Auto Search On Auto Select On

Search Filter: Native alaska indian

A

Name	ID	Type
American Indian or Alaska Native	304	Race

Map Unmap Exclude Examine

- Click the MPOG Variable you wish to map to. This will highlight it in blue.
- Click “Map”. Your variable is now mapped to an MPOG Concept and will turn green. You can also map by double clicking the MPOG concept. The “Mapped As” column will be updated to reflect this change

MPOG Configuration

Mapping Type: Race

Organization: University of Michigan Ann Arbor

Display Mode: All Variables

Search Filter:

ID	Org	Name	Times Used	Mapped As	Type
W	University of Michigan	White	10,068	White	Race
B	University of Michigan	Black	1,182	Black	Race
H	University of Michigan	Unknown	430	Unknown	Race
O	University of Michigan	Other	338	Other	Race
U	University of Michigan	Unknown	329	Unknown	Race
A	University of Michigan	Unknown Concept	55	Unknown Concept	Meta
D	University of Michigan	Unknown	47	Unknown	Race

Direction: Normal

Options: Auto Search On Auto Select On

Search Filter: Native alaska indian

A

Name	ID	Type
American Indian or Alaska Native	304	Race

Map

Unmap

Exclude

Export

- You may also filter by 'Display Mode' to visualize 'All Variables,' 'Unmapped Variables Only,' or 'Mapped Variables' to focus mapping efforts. By selecting from the dropdown menu, only the variables within the selected category will appear.

 MPOG Configuration

Mapping Type:

Organization:

Display Mode:

Search Filter:

ID	Org	Name	Times Used	Mapped As	Type

Additional Functions within Variable Mapping

Examine

- The 'Examine' function allows you to view the Epic variable in greater detail by values from different cases this variable has been documented. This is beneficial when you desire additional context related to the variable you wish to map.

ID	Org	Name	Times Used	Mapped As	Type
FLO-4010000	OHSU	Airway Resp Rate	9,472	Respiratory Rate Actual from EtC	Physiolog
FLO-4010000	OHSU	ETCO2	9,405	End Tidal CO2 (mmHg)	Physiolog
FLO-4010000	OHSU	SpO2	9,335	SpO2 %	Physiolog
FLO-4010000	OHSU	Pulse - Plethysmograph	9,333	Physical Exam - Pulse Rate	Preop
FLO-4010000	OHSU	Pmean/PAW	9,262	Mean Inspiratory Pressure	Physiolog
FLO-4010000	OHSU	max Pos Airway P	9,229	Unknown Concept	Meta
FLO-4010000	OHSU	ETO2	9,216	Oxygen Exp %	Physiolog
FLO-4010000	OHSU	FIO2	9,216	Oxygen Insp %	Physiolog
FLO-4010000	OHSU	Heart Rate	9,047	Unknown Concept	Meta
FLO-4010000	OHSU	Peep	8,910	Unknown Concept	Meta
FLO-1120016	OHSU	O2 FR Avance (Total Liters	8,263	Flows Oxygen (L/Min)	Physiolog
FLO-4010000	OHSU	Circuit O2	8,048	Unknown Concept	Meta
FLO-4010000	OHSU	Vent Mode	8,048	Ventilator Mode	Physiolog
FLO-4010000	OHSU	RR freq/Min	7,541	Ventilator Respiratory Rate Actu	Physiolog
FLO-4010000	OHSU	MV (L/min)	7,519	Minute ventilation	Physiolog
FLO-4010000	OHSU	Vte	7,496	Tidal Volume actual	Physiolog
FLO-4010000	OHSU	ST-II	7,357	ST Lead II	Physiolog
FLO-4010000	OHSU	Vt	6,946	Tidal Volume Set	Physiolog
FLO-4010000	OHSU	ST-V	6,704	Unknown Concept	Meta

Examine

- Highlight the variable row you wish to examine and click “Examine”.
- A window will open containing detailed information related to the selected variable.

The screenshot shows the MPOG Configuration interface. On the left, there are settings for Mapping Type (Observation Type), Organization (University of Michigan Ann Arbor), Display Mode (All Variables), and a Search Filter. Below these is a table of variables. The 'Examine' button at the bottom right of the table is highlighted with a red box. A 'Variable Details' window is open, displaying a table of data for the selected variable.

Variable ID	Org	Name	Times
201424	University of	Monitor ETCO2 Resp	94
201408	University of	Monitor Oxygen Insp	94
1448	University of NFF-	End Tidal CO2	94
201405	University of	Monitor Nitrous Insp	94
201407	University of	Monitor Oxygen Exp	94
201404	University of	Monitor Nitrous Exp	94
42603	University of	Vent Flows O2	91
15	University of	NFF-CV Pulse	90
308	University of	NFF-CV SpO2	90
9066	University of	CBD - SpO2 HR	89
450	University of	NFF-Pul FIO2 %	886,864
457	University of	NFF-Pul Vent PIP	884,712
651	University of	NFF-Pul Vent PEEP	882,105
201020	University of	Vent Mean Airway pressu	868,590
201028	University of	Vent Rate Setting	861,569
201032	University of	Vent vent mode	860,404
7686	University of	NFF-Pul Inspired CO2	838,969
504	University of	NFF- RR	695,978
501015	University of	Vent Minute volume /Min	696,202

Variable Name	ObservationTime	EnteredTime	WasDeleted	WasUser_Entered	WasUser_Entry_Expected	ObsValue
Oxygen Exp	10/29/2017 12:44:42 PM	10/29/2017 12:44:43 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18
Oxygen Exp	10/29/2017 12:48:46 PM	10/29/2017 12:48:48 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20
Oxygen Exp	10/29/2017 12:59:57 PM	10/29/2017 12:59:58 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29
Oxygen Exp	10/29/2017 1:03:30 PM	10/29/2017 1:03:33 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	27
Oxygen Exp	10/29/2017 12:53:51 PM	10/29/2017 12:53:52 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26
Oxygen Exp	10/29/2017 12:57:55 PM	10/29/2017 12:57:56 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28
Oxygen Exp	10/29/2017 12:52:50 PM	10/29/2017 12:52:51 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26
Oxygen Exp	10/29/2017 12:56:54 PM	10/29/2017 12:56:56 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	27
Oxygen Exp	10/29/2017 1:07:34 PM	10/29/2017 1:07:38 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28
Oxygen Exp	10/29/2017 1:11:38 PM	10/29/2017 1:11:41 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28
Oxygen Exp	10/29/2017 1:01:59 PM	10/29/2017 1:02:00 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28
Oxygen Exp	10/29/2017 1:05:32 PM	10/29/2017 1:05:36 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28
Oxygen Exp	10/29/2017 1:00:58 PM	10/29/2017 1:00:59 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29
Oxygen Exp	10/29/2017 1:04:31 PM	10/29/2017 1:04:34 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	27
Oxygen Exp	10/29/2017 1:09:36 PM	10/29/2017 1:09:40 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28

Unmap

- The 'Unmap' feature allows you to unmap incorrectly mapped variables at any time. Simply select and highlight the variable in the MPOG side, and click 'Unmap'. The variable will then turn white.

ID	Org	Name	Times Used	Mapped As	Type	
FLO-4010000	OHSU	Airway Resp Rate	9,472	Respiratory Rate Actual from EtC	Physiolog	Map
FLO-4010000	OHSU	ETCO2	9,405	End Tidal CO2 (mmHg)	Physiolog	Unmap
FLO-4010000	OHSU	SpO2	9,335	SpO2 %	Physiolog	Exclude
FLO-4010000	OHSU	Pulse - Plethysmograph	9,333	Physical Exam - Pulse Rate	Preop	
FLO-4010000	OHSU	Pmean/PAW	9,262	Mean Inspiratory Pressure	Physiolog	
FLO-4010000	OHSU	max Pos Airway P	9,229	Unknown Concept	Meta	
FLO-4010000	OHSU	ETO2	9,216	Oxygen Exp %	Physiolog	
FLO-4010000	OHSU	FIO2	9,216	Oxygen Insp %	Physiolog	
FLO-4010000	OHSU	Heart Rate	9,047	Unknown Concept	Meta	
FLO-4010000	OHSU	PeeP	8,910	Unknown Concept	Meta	
FLO-1120016	OHSU	O2 FR Avance (Total Liters	8,263	Flows Oxygen (L/Min)	Physiolog	
FLO-4010000	OHSU	Circuit O2	8,048	Unknown Concept	Meta	
FLO-4010000	OHSU	Vent Mode	8,048	Ventilator Mode	Physiolog	
FLO-4010000	OHSU	RR freq/Min	7,541	Ventilator Respiratory Rate Actu	Physiolog	
FLO-4010001	OHSU	MV (L/min)	7,519	Minute ventilation	Physiolog	
FLO-4010000	OHSU	Vte	7,496	Tidal Volume actual	Physiolog	
FLO-4010000	OHSU	ST-II	7,357	ST Lead II	Physiolog	
FLO-4010000	OHSU	Vt	6,946	Tidal Volume Set	Physiolog	Examine
FLO-4010000	OHSU	ST-V	6,704	Unknown Concept	Meta	

Exclude

- The 'Exclude' function allows you to exclude selected variables from mapping.
- The Coordinating Center will advise you on which variables are appropriate for exclusion.
- Extreme caution must be applied when excluding variables from mapping, especially within the '**Administration Route**' mapping type, as ALL data associated with 'route' will be excluded

ID	Org	Name	Times Used	Mapped As	Type
FLO-4010000	OHSU	Airway Resp Rate	9,472	Respiratory Rate Actual from EtC	Physiolog
FLO-4010000	OHSU	ETCO2	9,405	End Tidal CO2 (mmHg)	Physiolog
FLO-4010000	OHSU	SpO2	9,335	SpO2 %	Physiolog
FLO-4010000	OHSU	Pulse - Plethysmograph	9,333	Physical Exam - Pulse Rate	Preop
FLO-4010000	OHSU	Pmean/PAW	9,262	Mean Inspiratory Pressure	Physiolog
FLO-4010000	OHSU	max Pos Airway P	9,229	Unknown Concept	Meta
FLO-4010000	OHSU	ETO2	9,216	Oxygen Exp %	Physiolog
FLO-4010000	OHSU	FIO2	9,216	Oxygen Insp %	Physiolog
FLO-4010000	OHSU	Heart Rate	9,047	Unknown Concept	Meta
FLO-4010000	OHSU	PeeP	8,910	Unknown Concept	Meta
FLO-1120016	OHSU	O2 FR Avance (Total Liters	8,263	Flows Oxygen (L/Min)	Physiolog
FLO-4010000	OHSU	Circuit O2	8,048	Unknown Concept	Meta
FLO-4010000	OHSU	Vent Mode	8,048	Ventilator Mode	Physiolog
FLO-4010000	OHSU	RR freq/Min	7,541	Ventilator Respiratory Rate Actu	Physiolog
FLO-4010000	OHSU	MV (L/min)	7,519	Minute ventilation	Physiolog
FLO-4010000	OHSU	Vte	7,496	Tidal Volume actual	Physiolog
FLO-4010000	OHSU	ST-II	7,357	ST Lead II	Physiolog
FLO-4010000	OHSU	Vt	6,946	Tidal Volume Set	Physiolog
FLO-4010000	OHSU	ST-V	6,704	Unknown Concept	Meta

Map

Unmap

Exclude

Examine

Exclude

- Highlight the variable(s) you wish to exclude from mapping and click “Exclude”
- Excluded variables will turn pink.

MPOG Configuration

Mapping Type:

Organization:

Display Mode:

Search Filter:

ID	Org	Name	Times Used	Mapped As	Type
29134	University of	Taped at @	134	Intubation Endotracheal Tube S	Intraop N
47910	University of	Blade/View	129	Intubation view note	Intraop N
38178	University of	Concerns	124	Airway - Laryngeal Mask Airway	Intraop N
7758	University of	Stopped indicator	124	Variable Excluded from Import	Meta
8559	University of	Paresthesia	120	Neuraxial insertion parasthesia y	Intraop N
8563	University of	Aspiration	118	Neuraxial insertion aspiration of	Intraop N
15814	University of	Skin Depth	116	Epidural catheter withdrawn to c	Intraop N
36891	University of	Position Confirmed by	110	Categorized note - Positioning	Intraop N
15905	University of	Sensory Level	108	Neuraxial technique - Bilateral S	Intraop N
8570	University of	Test Dose	108	Epidural test dose administered	Intraop N
8595	University of	Catheter status	106	Epidural anesthesia catheter pla	Intraop N
40011	University of	Type of Medication	92	Misc - Medication Free Text Enti	Intraop N
47914	University of	Cricoid Pressure	89	Intubation - cricoid pressure apj	Intraop N
36542	University of	Nurse's Name	86	Variable Excluded from Import	Meta
36543	University of	Pain Score	86	Pain Score (Generic)	Physiolog
36544	University of	Repositioned	86	Positioning - Patient position	Intraop N
44130	University of	Motor Blockade	82	Regional - Motor response to st	Intraop N
5976	University of	Attempts	82	Neuraxial technique number of .	Intraop N
36568	University of	Sensory Level	82	Neuraxial technique - Bilateral S	Intraop N

Category Exclusion Rules

Can Exclude	Do Not Exclude
Administration Type	Administration Route
Observation Type	Units of Administration
Observation Type Detail	Room Type
Lab Type	Procedure Type

Auto Search

- While auto search is ON, the variable name that is selected on the left hand side will auto populate in the search filter on the right side. Clicking the auto search button will turn this function OFF and will not auto populate the search filter.

The screenshot shows the MPOG Configuration window. On the left, the 'Mapping Type' is set to 'Observation Type', 'Organization' is 'University of Michigan Ann Arbor', and 'Display Mode' is 'Unmapped Variables Only'. The 'Search Filter' field is empty. Below this is a table of variables. The variable 'University of Discharges Score' (ID: 304011384) is selected and highlighted in blue. On the right, the 'Direction' is 'Normal'. The 'Options' section has two buttons: 'Auto Search On' (highlighted with a red box) and 'Auto Select On'. The 'Search Filter' field contains the text 'score'. Below the options is a table titled 'Discharges Score' with columns for Name, ID, and Type. The table lists various scores such as FLACC Score: Legs, FLACC Score: Activity, etc.

ID	Org	Name	Times Used	Mapped As	Type
304011390	University of	Total Score	5.585	Unknown Concept	Meta
304011388	University of	Risks Score	5.585	Unknown Concept	Meta
304011387	University of	Orders Score	5.585	Unknown Concept	Meta
304011385	University of	LDAs Score	5.585	Unknown Concept	Meta
304011389	University of	Wounds Score	5.585	Unknown Concept	Meta
304011383	University of	Assessments Score	5.585	Unknown Concept	Meta
304011382	University of	Admissions/Transfers Sco	5.585	Unknown Concept	Meta
304011381	University of	ADLs Score	5.585	Unknown Concept	Meta
304011386	University of	Medications Score	5.585	Unknown Concept	Meta
304011384	University of	Discharges Score	5.585	Unknown Concept	Meta
30411682634	University of	Cardiac WDL	5.571	Unknown Concept	Meta
30411683963	University of	Peripheral Neurovascular	5.543	Unknown Concept	Meta
40900	University of	Perfus J8000 Device Event	5.515	Unknown Concept	Meta
30400400555	University of	Probe Placed On (Pulse O	5.194	Unknown Concept	Meta
30411682586	University of	Breath Sounds	5.189	Unknown Concept	Meta
661176	University of	Speech	5.163	Unknown Concept	Meta
3040112059	University of	All anterior fields	5.139	Unknown Concept	Meta
661932	University of	Skin Integrity	4.896	Unknown Concept	Meta
660037	University of

Name	ID	Type
FLACC Score: Legs	3098	Physiologic
FLACC Score: Activity	3099	Physiologic
FLACC Score: Cry	3101	Physiologic
FLACC Score: Consolability	3104	Physiologic
Braden Score: Friction and Shear	3106	Physiologic
Braden Score: Sensory Perception	3107	Physiologic
Braden Score: Mobility	3108	Physiologic
Braden Score: Moisture	3109	Physiologic
Braden Score: Activity	3111	Physiologic
Braden Score: Nutrition	3112	Physiologic
RAMSAY Sedation Score	3126	Physiologic
Modified Early Warning Sign Scor	3127	Physiologic
Systemic Inflammatory Response	50092	Intraop Notes
National Early Warning Score (NE	50093	Intraop Notes
Fall Risk Score	50094	Intraop Notes
Phase II Discharge Score	50104	Intraop Notes
Patient Discharge Score	50111	Intraop Notes
Obstetrics - Apgar score checked	50359	Intraop Notes
Obstetrics - Apgar score checked	50360	Intraop Notes

Auto Select

- After mapping a variable on the left hand side, having auto select ON will automatically jump to the next variable. To turn this function OFF, click the “auto select” button.

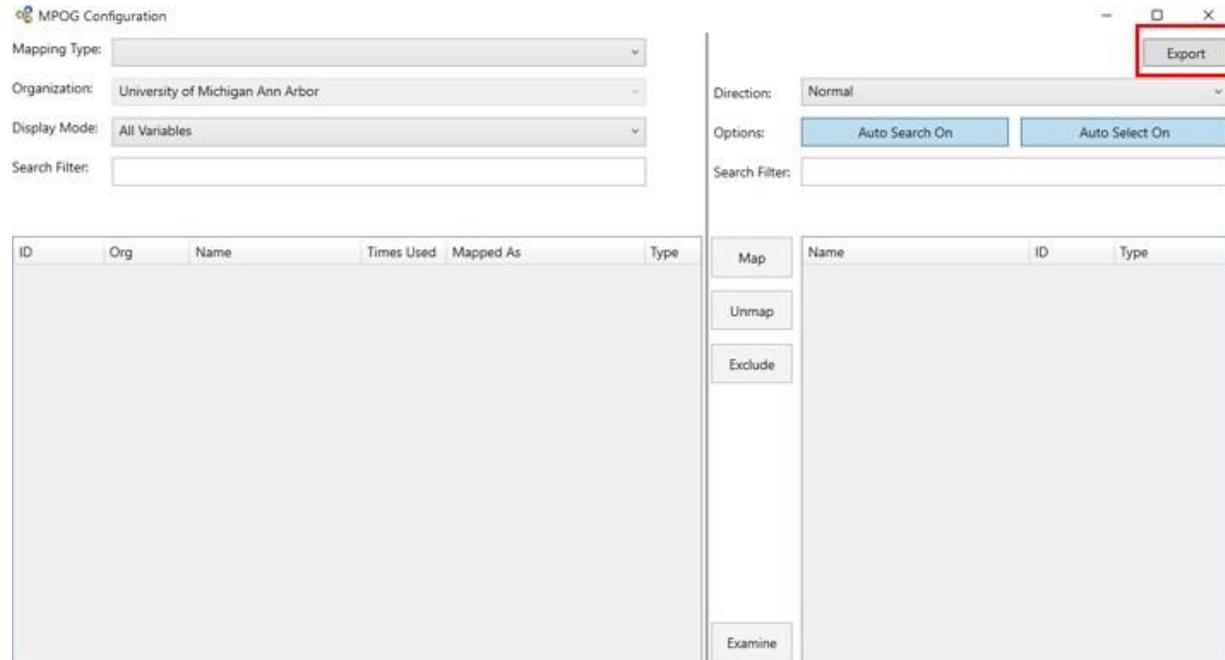
The screenshot displays the MPOG Configuration interface. On the left, the 'MPOG Configuration' window shows the following settings: Mapping Type: Observation Type; Organization: University of Michigan Ann Arbor; Display Mode: Unmapped Variables Only; Search Filter: discharge. Below these settings is a table of variables with columns for ID, Org, Name, Times Used, Mapped As, and Type. The first row is highlighted in green.

ID	Org	Name	Times Used	Mapped As	Type
304011384	University of Michigan	Discharges Score	5,585	Patient Discharge Score	Intr
1072004280	University of Michigan	Phase I Discharge Criteria Met	3,442	Unknown Concept	Me
1071705010	University of Michigan	Discharge Prescription Reviewed	1,648	Unknown Concept	Me
1072004281	University of Michigan	Phase II Discharge Criteria	484	Unknown Concept	Me
3040120038	University of Michigan	Team Anticipated Discharge Date	453	Unknown Concept	Me
30402266378	University of Michigan	CM Daily Plan and Discharge Plan	444	Unknown Concept	Me
30402266136	University of Michigan	CM Discharge Disposition	375	Unknown Concept	Me
30401300217	University of Michigan	Discharge Disposition of Belongin	256	Unknown Concept	Me
3040221043	University of Michigan	CM Barriers to Discharge	252	Unknown Concept	Me
30402266353	University of Michigan	Equipment Needed At Discharge	178	Unknown Concept	Me
30402266211	University of Michigan	CM Discharge Risks	113	Unknown Concept	Me
3040150387	University of Michigan	Anticipated Discharge Disposition	97	Unknown Concept	Me
5220	University of Michigan	Anticipated Equipment Needs at E	88	Unknown Concept	Me
3040150385	University of Michigan	Is this patient cleared for safe hom	71	Unknown Concept	Me
3040080031	University of Michigan	Functional Status/Discharge/Follo	66	Unknown Concept	Me
304022246	University of Michigan	Priority Discharge	36	Unknown Concept	Me
3040260113	University of Michigan	Priority Discharge (Read Only)	36	Unknown Concept	Me
3040031684	University of Michigan	Patient Exercise = Patient will be ir	34	Unknown Concept	Me

On the right, a secondary window shows mapping options. The 'Auto Select On' button is highlighted with a red box. Below the options, a search filter 'discharge phase' is entered, and a table titled 'Phase I Discharge Criteria Met' is displayed with columns for Name, ID, and Type. The first row in this table is 'Phase II Discharge Score' with ID 50104 and Type Intraop Notes.

Export

- You can export all variables and their mappings to an excel spreadsheet through the export button



Tips for Mapping Success

- Focus on mapping variables with high row counts ('Times Used').
- Once you have mapped the majority of high row count variables, you can begin to focus your attention to mapping the lower row count variables that may be relevant for anesthesia research or quality purposes.

ID	Org	Name	Times Used	Mapped As
1600000310	University of	Heart Rate Source	14,656	Unknown Concept
40877	University of	Perfus Stockert Air Needl	13,003	Unknown Concept
40876	University of	Perfus Stockert Air Needl	13,003	Unknown Concept
40886	University of	Perfus Stockert CP RPM	13,003	Unknown Concept
40890	University of	Perfus Stockert LV Vent(n	13,002	Unknown Concept
40895	University of	Perfus Stockert Pump Suc	13,002	Unknown Concept
40889	University of	Perfus Stockert LV Vent R	13,002	Unknown Concept
40894	University of	Perfus Stockert Pump Suc	13,002	Unknown Concept
16011780	University of	BP Method	10,304	Unknown Concept
3040103232	University of	Pulse Oximetry Type	9,689	Unknown Concept

- Utilizing the MPOG Concept Browser utility will facilitate efficient identification of corresponding MPOG concepts. Please reference *Module 2: Concept Browser* for more information

Concept Browser

Please select a concept type and query string

Concept type
 [All concept types] ▼

Query string
 propofol

Count Mode
 Concept occurrences ▼

Hide inactive concepts

Submit

ID	Concept Name	Concept Type	# of Occurrences
10377	PROPOFOL	Intraoperative Medications (Administered Mixtures)	16,421,110
10378	PROPOFOL W/ REMIFENTANIL 10 MG/ML + 5 MCG/ML	Intraoperative Medications (Administered Mixtures)	247
10453	PROPOFOL W/ KETAMINE 10 MG/ML + 1 MG/ML	Intraoperative Medications (Administered Mixtures)	6,602
10572	PROPOFOL W/ KETAMINE 10MG/ML + UNSPECIFIED KETAMINE	Intraoperative Medications (Administered Mixtures)	342
10577	PROPOFOL W/ KETAMINE 10 MG/ML + 0.5 MG/ML	Intraoperative Medications (Administered Mixtures)	1,148
10578	PROPOFOL W/ KETAMINE 10 MG/ML + 1.5 MG/ML	Intraoperative Medications (Administered Mixtures)	21
10579	PROPOFOL W/ KETAMINE 10 MG/ML + 2 MG/ML	Intraoperative Medications (Administered Mixtures)	711
10597	PROPOFOL W/ ALFENTANIL 10 MG/ML + 50 MCG/ML	Intraoperative Medications (Administered Mixtures)	863

Groups to Map First

- **DO NOT EXCLUDE IN ANY OF THESE CATEGORIES**
 - Race
 - Gender
 - Ethnicity
 - Procedure Service
 - Admission Type
 - Staff Type

Groups to Map Last

- *Lab Type*

- Map variables that are important to surgical/anesthesia care i.e. Hgb/Hct/Creatinine/Troponin/Glucose. Focus on mapping labs that MPOG has concepts for an exclude the rest

- *Administration Type*

- This category includes IN's and OUT's such as fluids, medications, blood products, EBL and urine output.
- Exclude “volume (mL)” medication variables.
- ****Exclude all physiologic and gas flow variables from this mapping group**

Groups to Map Last

- *Administration Route*
 - Do Not Exclude in this category – map unspecified concepts to “Other”
- *Units of Measurement Administration*
 - Do not exclude in this category – leave those variables without a corresponding MPOG concept unmapped
- *Observation Detail Type*
 - These are observation Details. Map Observation Type first.
- *Observation Type (procedure notes)*

Variable Type Mapping Guide- EPIC Sites Only

Variable Type	Description	Notes
LEV-* variables	Timed Event Notes	Most reliable when looking for timing of events (i.e. intubation/extubation)
EAP/HLX-* variables	Procedure Note Documentation	Provides the details associated with a procedure: size, number of attempts etc. Observed time is not always populated. If no time associated with EAP/HLX note, map related LEV note as well.

Variable Type Mapping Guide - EPIC Sites Only

Variable Type	Description	Notes
FLO-* variables	Data from flowsheet	Data from flowsheet. LDA documentation corresponding to placement, removal etc. Usually duplicate doc
CT-* variables	Case Tracking Variables	Exclude these if multiple variables show for event times. *If you do not have an LEV variable for a certain concept you will need to include the CT variable.
AT-* variables	Attestations	Exclude or leave unmapped

Airway Variable Mapping

- ETT/LMA/Intubation/Extubation, regional and neuraxial
- Map LEV/HLX/EAP variables
 - Exclude FLO variables associated with these concepts **if** both an HLX/EAP and LEV variable exists.
- If duplicate variables exist for critical times such as anesthesia start/end, surgery start/end, In room times, etc.- can exclude the CT variables as these come from nursing. If there are only nursing (CT) variables, keep them and map (Phase I, Phase II in/out times, etc.). Bottom line: Anesthesia documentation is preferred but adopt nursing documentation if anesthesia documentation is not available for critical times/events.

How Mapping Translates to MPOG Case Viewer

The **'type'** of MPOG concept you map to an AIMS variable will determine where the data within that variable will display in Case Viewer.

- Those mapped to *'Physiologic'* and *'Intraop Note'* type concepts will populate in the **Chart** section of case viewer
- Those mapped to *'Preop'* type concepts will populate in the **H&P** section of case viewer
- Those mapped to *'Outcomes'* type concepts will populate in the **Outcomes** section of case viewer

Name	ID	Type
BP Combined Invasive Unspecified Site 3	3706	Physiologic
BP Combined Aorta	3707	Physiologic
BP Combined Invasive Unspecified Site 5	3708	Physiologic
Unmapped Intraoperative Note Concept	50000	Intraop Notes
AACD Time Room Ready Date/Time	50001	Intraop Notes
AACD Anesthesia Start Date/Time	50002	Intraop Notes
Respiratory - Oral steroids required	71230	Preop
Respiratory - Prior intubation for pulmonary t	71235	Preop
Respiratory - Most recent exacerbation (Date	71240	Preop
Unmapped Outcome Concept	90000	Outcomes
Intraoperative observed quality assurance ev	90001	Outcomes
Postoperative visit patient pain score	90002	Outcomes



Module 4

Location Mapping



Location Mapping

- Provides sites the ability to establish a hierarchy of facilities and procedure room locations as they exist within the health system
- Allows providers to filter performance data by operating locations
- Provides the opportunity to filter and group locations that may have similar case types, though not physically located in the same building.

Location Mapping

- Example for use: a site may have several outpatient surgery centers and would want to “group” the data from these locations to examine performance at outpatient facilities.
- Mapping of locations is usually completed when a site initially joins MPOG but should be maintained as new rooms are added.

Filters

Age	>=	
Emergent	=	
BMI Classification	=	
Height (cm)	<=	
ASA Status	=	
Surgical Service	=	
Sex	=	
Date of Service	<=	
Date of Service	>=	
Quarter	=	
Case	=	
Location	=	
Month	=	
Aims Staffid	=	
Admission Type	=	
Year	=	
Age	<	

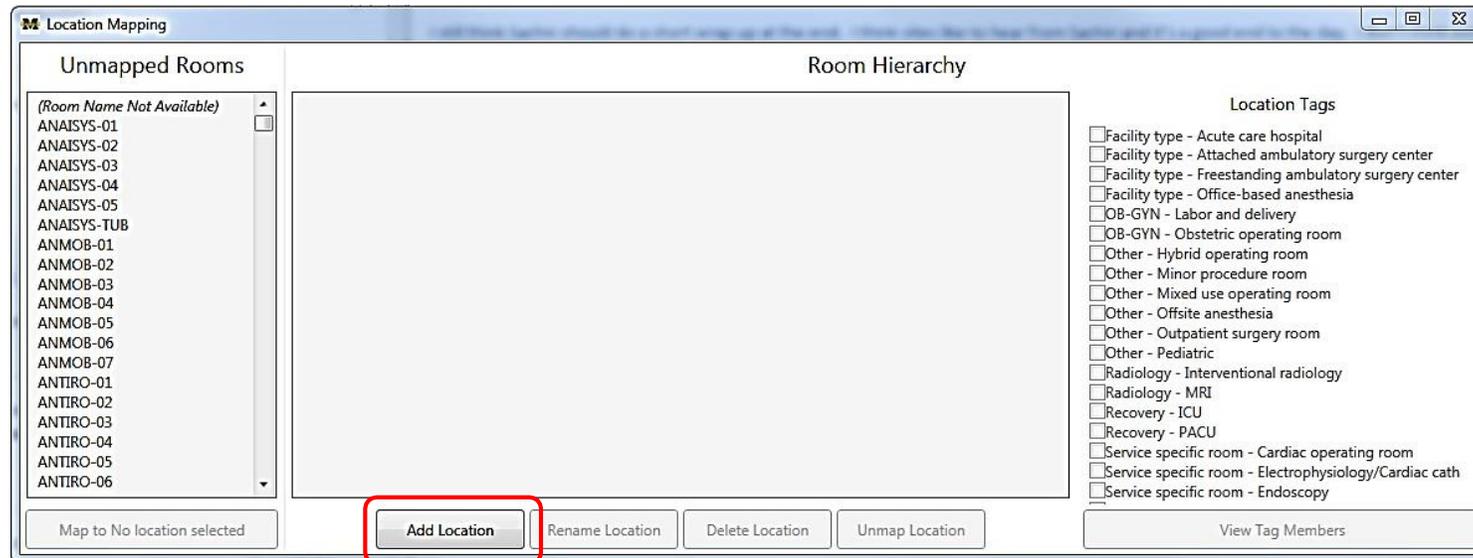
Location dropdown options:

- Not in a reporting group
- Royal Oak
- Royal Oak - Hospital Only
- West Bloomfield

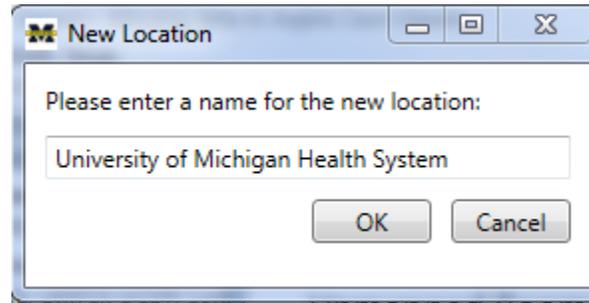
Access 'Location Mapping' on the MPOG Suite



Select 'Add Location' from the bottom of the display box.



A text box will appear. Type the name of the primary site at your organization. For example: University of Michigan Health System, all other sites will be categorized under the primary location. Click “Ok.”



The new location will populate the middle portion of the display box to begin the Room Hierarchy process



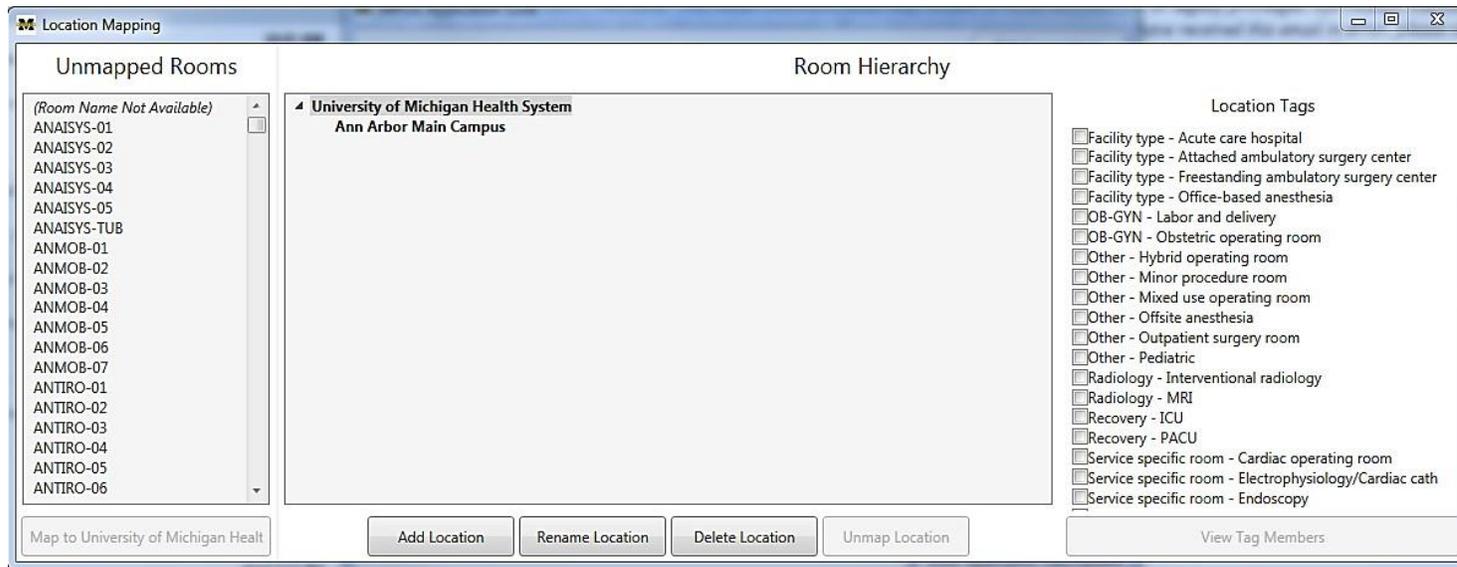
If your organization has multiple campuses or hospitals, continue to add those locations by selecting “Add Location.”

As new locations are added, you can ‘click and drag’ to list secondary sites under primary locations.

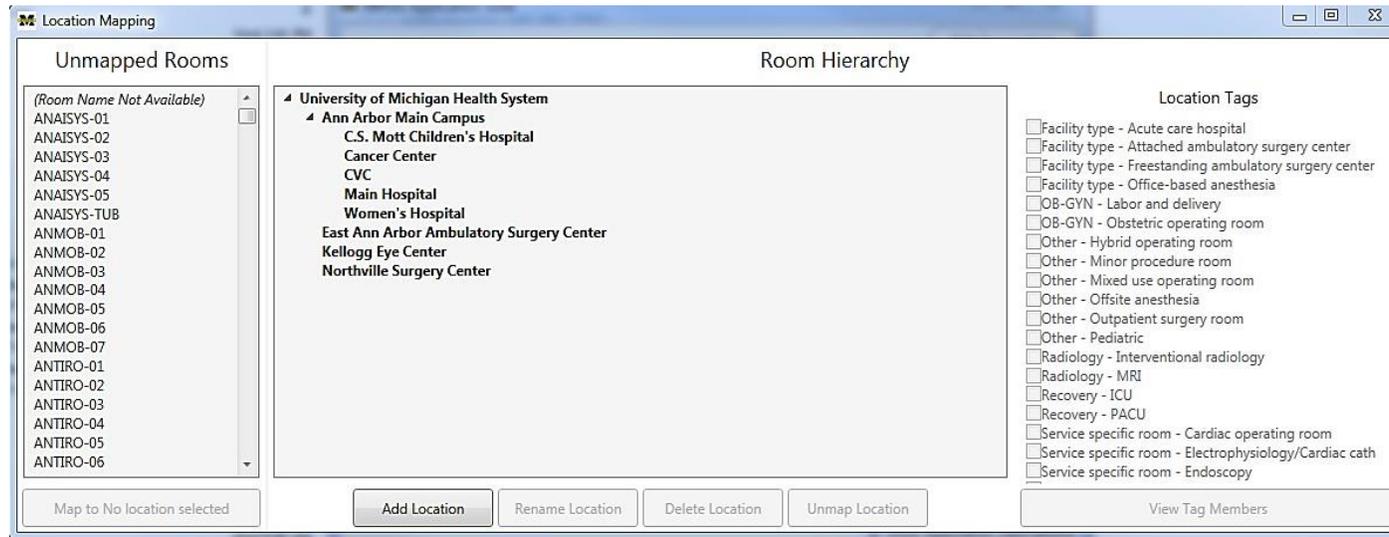
For example, ‘Ann Arbor Main Campus’ is currently listed as another primary location but belongs under the Health System title.



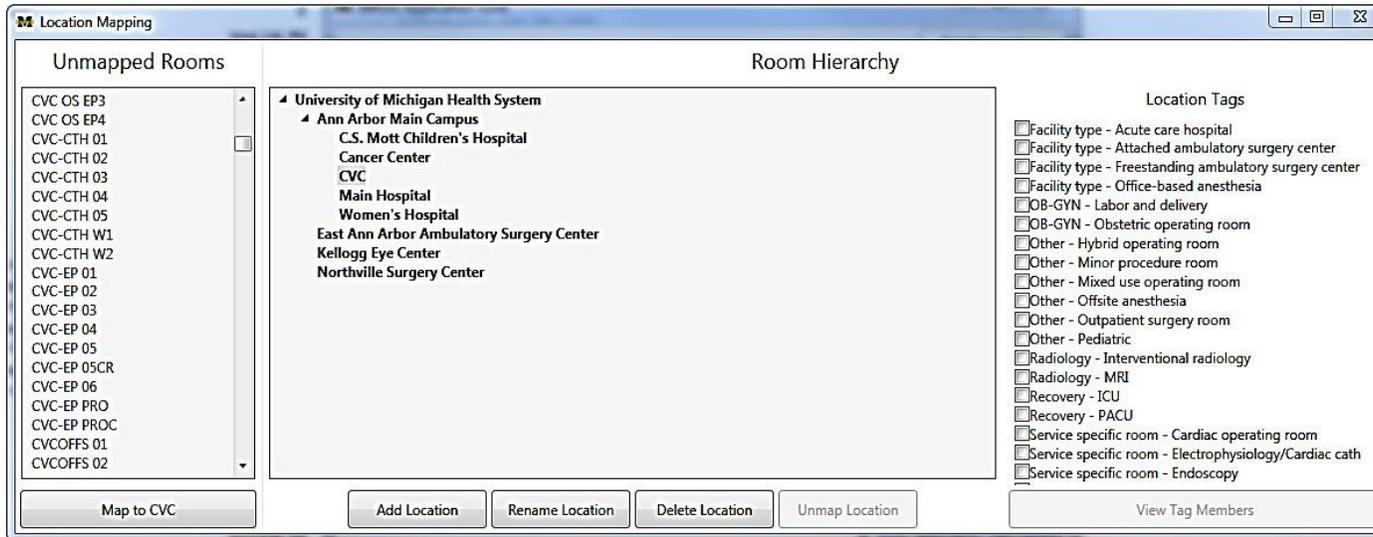
Clicking on 'Ann Arbor Main Campus' and dragging it over the 'University of Michigan Health System' title will indent the secondary site to be listed under the primary



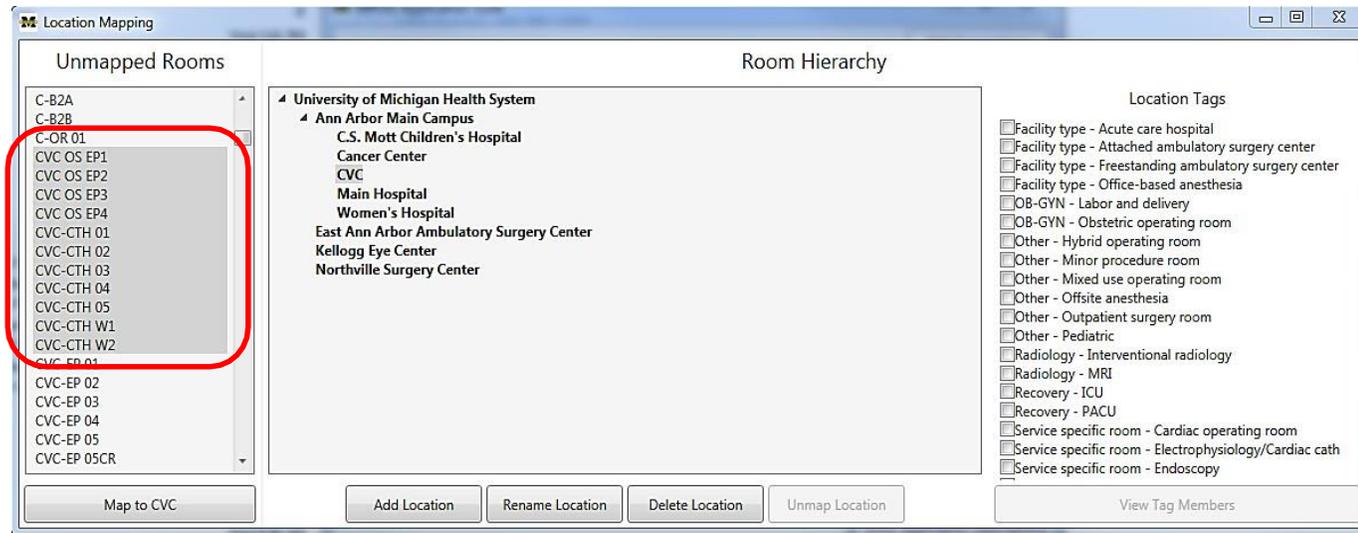
Continue to sort by clicking and dragging titles to properly reflect sites and locations at your facility. See example below.



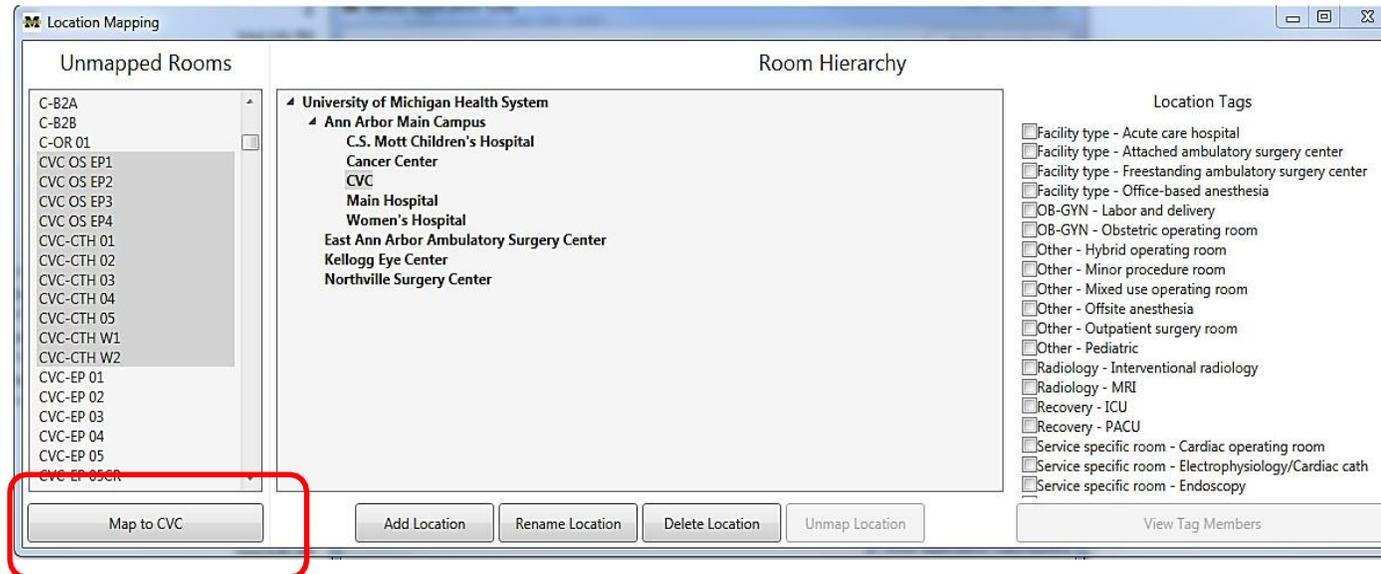
Click on the site in the middle of the screen that you would like to assign operating rooms. In the example below, 'CVC' is selected.



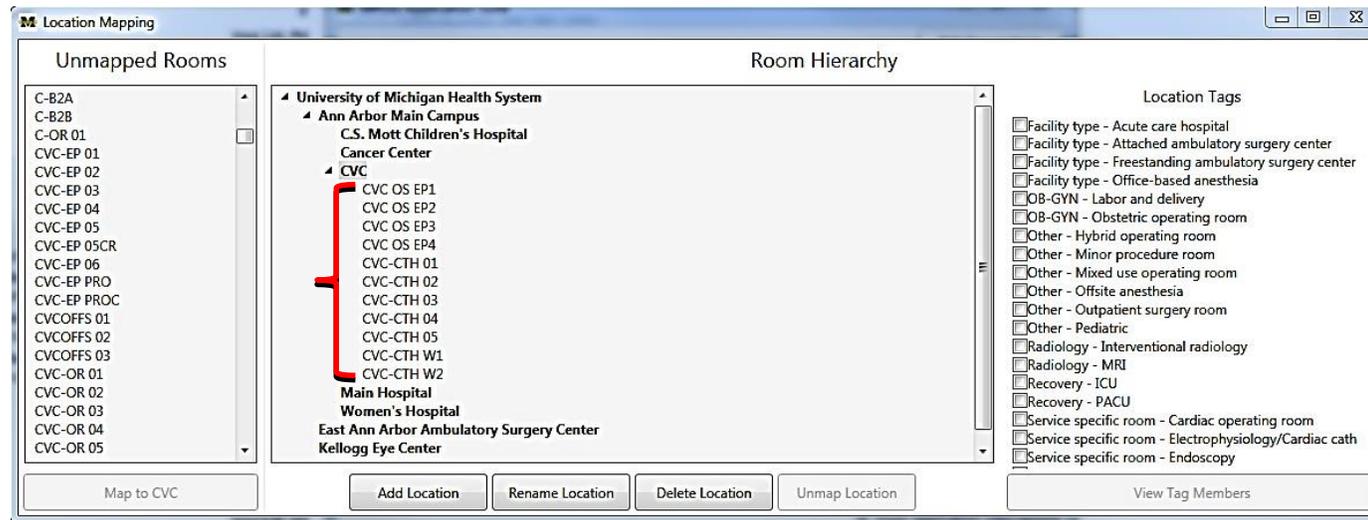
Select operating rooms from the left side of the screen. You can map one room at a time or select a group of rooms by holding the 'shift' key down and selecting all rooms applicable. It is also possible to click and drag rooms to sites within the hierarchy.



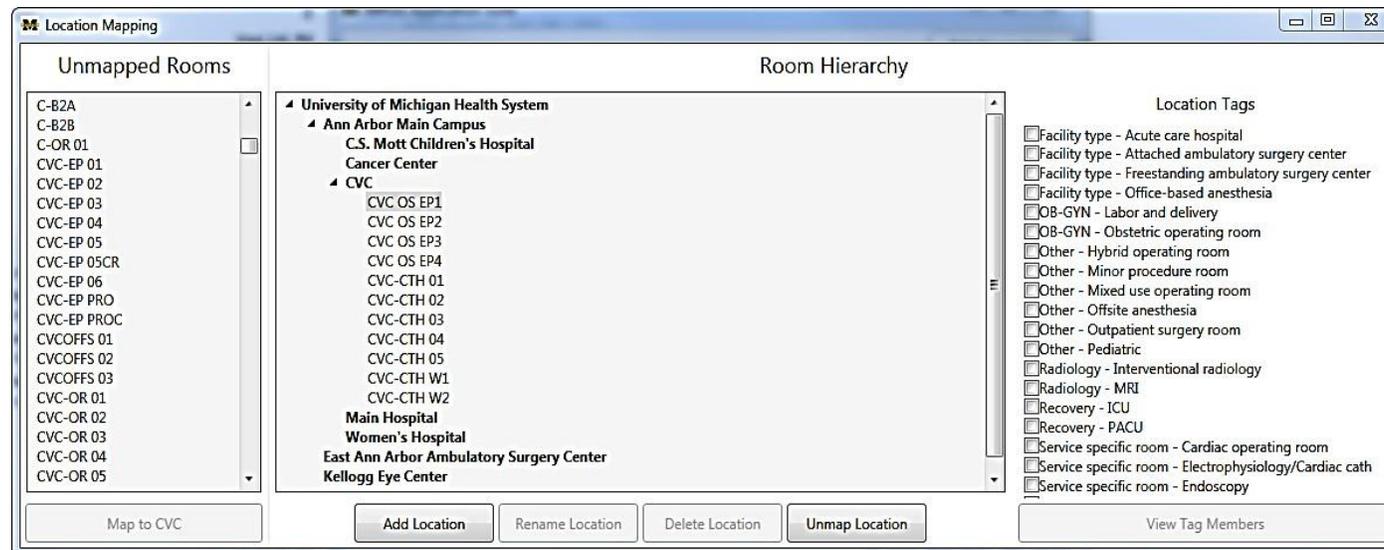
Now select the “Map to CVC” button in the bottom left corner. All of the selected anesthetizing locations will move under the CVC title in the middle portion of the display box.



Continue mapping all unmapped rooms from the left column to the appropriate locations in the middle 'Room Hierarchy' column. **Epic Sites:** 'Unspecified Room' will remain in the unmapped rooms category and should not be mapped to a location as the 'unspecified room' designation is typically used across a variety of sites within the organization.

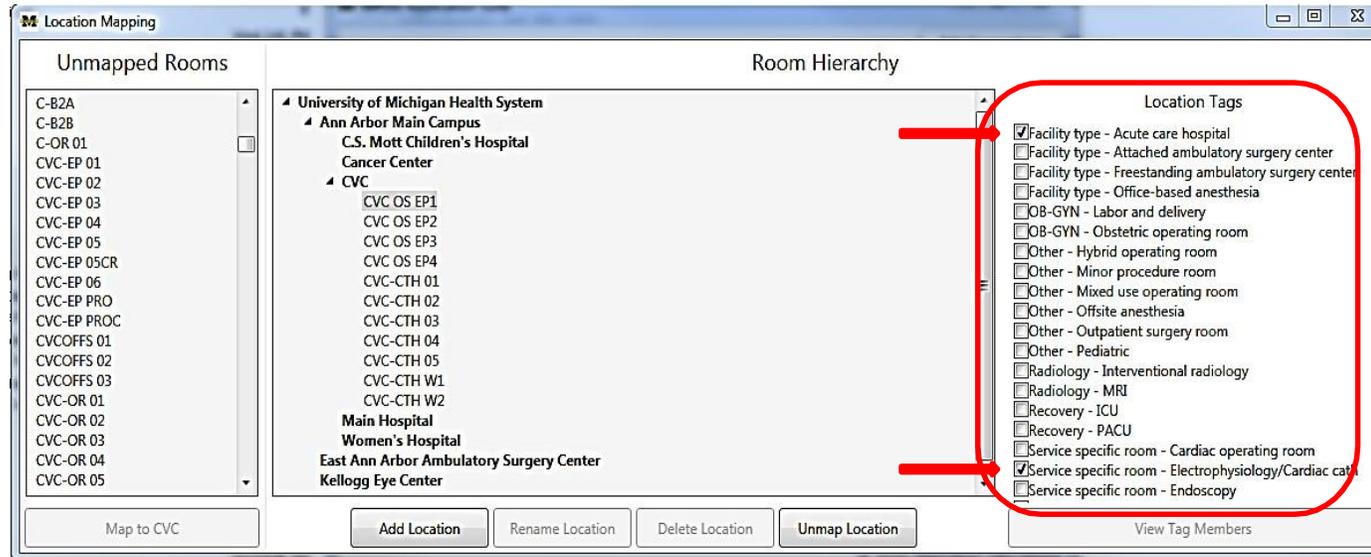


Each room can now be ‘tagged’ to indicate the type of room or type of procedures performed in each OR/procedure area. Select a room from the ‘Room Hierarchy’ list.



While the room is highlighted, click the appropriate 'location tags' from the right side of the display box to designate what procedures occur in the selected room.

In the example below, the tags of '*Facility type- Acute care hospital*' and '*Service specific room- Electrophysiology/Cardiac Cath*' are applied to the CVC OS EP1 room. Use Ctrl + Shift to select multiple rooms at a time



When assigning tags to 'Parent' Locations, all 'Children' listed under the 'Parent' inherit that tag(s). When the 'child' location is selected, tags attributed through the 'parent' will appear greyed out. This can only be changed by changing the 'parent' location tag

The image displays two screenshots of the 'Location Mapping' software interface. The top screenshot shows the 'Room Hierarchy' for the 'University of Michigan Health System' with 'Ann Arbor - Main' expanded to 'C.S. Mott Children's Hospital'. The 'Location Tags' list includes 'Other - Pediatric', which is checked. The bottom screenshot shows the same hierarchy with 'ANTIRO-01' selected. The 'Other - Pediatric' tag is checked but greyed out. A red box highlights this tag with the text: "Other-Pediatric" was inherited by "ANTIRO-01" through parent location "C.S. Mott Children's Hospital".

Location Mapping Tips

- Right click on any Location Tag to see rooms assigned to the tag.
- Continue assigning the proper location tags for all rooms in the room hierarchy. There is no need to save any changes to room locations or tags. **Any changes made are automatically saved.**
- To update the location mappings, the MPOG/ASPIRE programmer for your site will need to run the following script: EXEC Locations_UpdateCaseLocations. **It is recommended that this script be programmed to run automatically** on a schedule basis before diagnostics to capture any mapping changes that may occur in the future.
- Note: It is possible to rename, delete, or unmap locations as necessary using the buttons at the bottom of the display box. However, if an operating room or location is no longer in use, it is best to leave mapped as historical data will still rely upon this hierarchy.



Module 5

Case Viewer



Case Viewer Overview

The MPOG Case Viewer application displays individual case data just as an anesthesia information management system (AIMS) would display.



(No case loaded) X +

Fast Case Lookup

Find a Specific Case
 Enter patient ID / case ID / MRN

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Browse for Cases
 Find cases by using one or more of the filters below.

- Age
- CPT Code
- Institution
- MPOG Concept ID
- Opened Date Range
- Primary Surgical Service
- Procedure Text
- Registry Data
- Surgery Date Range

Filter Shortcuts

Case Type	Patient Age	Date of Surgery	Recently Opened
CABG	Pediatric	March 2020	Today
Knee Arthroplasty	Adult	February 2020	Yesterday
Labor Epidural		January 2020	This Week
		Year to Date	Last Week
			March 2020
			February 2020

Enter Case List
 Paste a list of MPOG Case IDs in the box below, each case on a separate line.

Import

To open a case, search by MPOG Patient ID, MPOG Case ID, or MRN in either location

Option to browse for cases by using one or more filters listed under “browse for cases”

Import or copy/paste a case list here if interested in viewing multiple specific cases from a list

View Multiple Cases from Case List

Enter a list of MPOG Case IDs in the box, one per line, and click “Import”. A case will open.

September 2019

Enter Case List
Paste a list of MPOG Case IDs in the box below, each case on a separate line.

Import

Using the Case List

- Arrows appear along the bottom of the left hand column to scroll between cases. If a case number is known (ex: you want to go to case 50 of 100), use the text field to type the desired case number.
- When scrolling through cases using this feature, any 'Sections' opened in the case view (see 'Sections' slide) will remain open
- User will remain in the same section of the chart when scrolling between cases



Search by Filter

Browse for Cases
Find cases by using one or more of the filters below.

- Age
- CPT Code
- MPOG Concept ID
- Opened Date Range
- Primary Surgical Service
- Procedure Text
- Registry Data
- Surgery Date Range

Filter Shortcuts

Case Type	Patient Age	Date of Surgery	Recently Opened
CABG	Pediatric	February 2020	Today
Knee Arthroplasty	Adult	January 2020	Yesterday
Labor Epidural		December 2019	This Week
		Year to Date	Last Week
			February 2020
			January 2020

- **Age-** Search for cases by specific age ranges
- **CPT code-** Search for cases that include a specific CPT code.
- **MPOG Concept ID** – Lists all cases that have a specific MPOG concept documented.
 - Without other filters, searching by MPOG Concept ID may take awhile. Consider adding a date range filter.
- **Opened Date Range-** This will generate a list of cases that the user previously opened during that time period.
- **Primary Surgical Service** - allows users to search by the primary surgical service associated with each case
- **Procedure Text-** Searches for matches in the Procedure Text field associated with a case (eg. CABG)
- **Registry Data-** Lists all cases that include data from MSQC, NSQIP, STS Adult Cardiac, STS Congenital Heart and STS General Thoracic
- **Surgery Date Range-** Find cases that occurred between specific dates.

Search By Filter

Browse for Cases

Find cases by using one or more of the filters below.

- Age
- CPT Code
- MPOG Concept ID
- Opened Date Range
- Primary Surgical Service
- Procedure Text
- Registry Data
- Surgery Date Range

Filter Shortcuts

Case Type	Patient Age	Date of Surgery	Recently Opened
CABG	Pediatric	February 2020	Today
Knee Arthroplasty	Adult	January 2020	Yesterday
Labor Epidural		December 2019	This Week
		Year to Date	Last Week
			February 2020
			January 2020

Multiple filters may be applied at a time to narrow down a case list. The “Search Results” pane will automatically update a list of cases as filters are added.

The screenshot shows the MPOG Case Viewer interface. On the left, there is a sidebar with navigation options: Find a Case (Fast Case Lookup), Chart, Record Search, Administrative, H&P, Outcomes, Labs, Table View, and Preferences. The main area is titled "Find a Specific Case" and includes a search input field for patient ID / case ID / MRN. Below this, there are sections for "Browse for Cases" (with filters like CPT Code, Institution, MPOG Concept ID, Closed Date Range, Primary Surgical Service, Procedure Text, Registry Data, and Surgery Date Range) and "Filter Shortcuts" (with categories like Case Type, Case Time, and Recently Opened). A dropdown menu is open for "Primary Surgical Service", showing a list of medical specialties with "General" selected. On the right, a "Search Results" table is shown with columns for Case Time, Service, Patient Age, Procedure, and Institution. The table is currently empty, displaying the message "No results found. Please try another search."

To search cases by filter, click the filter name and supply any necessary information.

For example, to find a General Surgery case from September, click “Primary Surgical Service” and choose General from the dropdown box.

MPOG Case Viewer (No case loaded) x +

Find a Case
Fast Case Lookup

Find a Specific Case
Enter patient ID / case ID / MRN

Browse for Cases
Find cases by using one or more of the filters below.

- CPT Code
- Institution
- MPOG Concept ID
- Opened Date Range
- Primary Surgical Service
- Procedure Text
- Registry Data
- Surgery Date Range

Filter Shortcuts

Case Type

- CABG
- Knee Arthroplasty
- Labor Epidural

Case Time

- October 2019
- September 2019
- August 2019
- Year to Date

Recently Opened

- Today
- Yesterday
- This Week
- Last Week
- October 2019
- September 2019

Table View
Preferences

Search Results

Case Time	Service	Patient Age	Procedure	Institution
09-23-2019 09:15	General			
09-26-2019 14:30	General			
09-25-2019 08:45	General			
09-26-2019 09:45	General			
09-24-2019 08:15	General			
09-24-2019 16:42	General			
09-25-2019 09:20	General			
09-25-2019 15:00	General			
09-25-2019 11:00	General			
09-25-2019 09:00	General			
09-26-2019 10:45	General			
09-26-2019 08:15	General			
09-26-2019 07:15	General			
09-27-2019 15:45	General			
09-27-2019 08:00	General			
09-23-2019 07:45	General			
09-18-2019 18:05	General			
09-19-2019 12:25	General			
09-26-2019 13:15	General			
09-25-2019 07:15	General			
09-26-2019 08:45	General			
09-23-2019 14:10	General			
09-24-2019 12:45	General			
09-28-2019 09:15	General			
09-26-2019 11:40	General			
09-23-2019 12:45	General			
09-24-2019 09:45	General			
09-23-2019 09:15	General			
09-26-2019 10:45	General			
09-19-2019 15:15	General			
09-25-2019 07:15	General			
09-26-2019 17:05	General			
09-26-2019 08:30	General			
09-26-2019 11:05	General			
09-27-2019 17:00	General			
09-26-2019 21:30	General			
09-24-2019 20:40	General			
09-24-2019 15:15	General			
09-25-2019 07:15	General			
09-25-2019 16:30	General			
09-22-2019 13:30	General			
09-27-2019 09:15	General			
09-27-2019 09:50	General			
09-25-2019 08:45	General			

Next, filter down to September cases by clicking “Surgery Date Range” and specifying 9/1/2019 to 9/30/2019.

Click ‘Enter’ to apply the filter

After these filters are applied, you can see General Surgery cases in September in the Search Results Pane to the Right

(No case loaded) x +

Fast Case Lookup

Find a Specific Case
 Enter patient ID / case ID / MRN

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Browse for Cases
 Find cases by using one or more of the filters below.

Age

CPT Code

MPOG Concept ID x

Warning: Without other filters, searching by MPOG Concept ID can be slow and may time out. Consider adding date range filter.

Opened Date Range

Primary Surgical Service

Procedure Text

Registry Data

Surgery Date Range

Filter Shortcuts

Case Type	Patient Age	Date of Surgery	Recently Opened
CABG	Pediatric	October 2020	Today
Knee Arthroplasty	Adult	September 2020	Yesterday
Labor Epidural		August 2020	This Week
		Year to Date	Last Week
			October 2020
			September 2020

Enter Case List
 Paste a list of MPOG Case IDs in the box below, each case on a separate line.

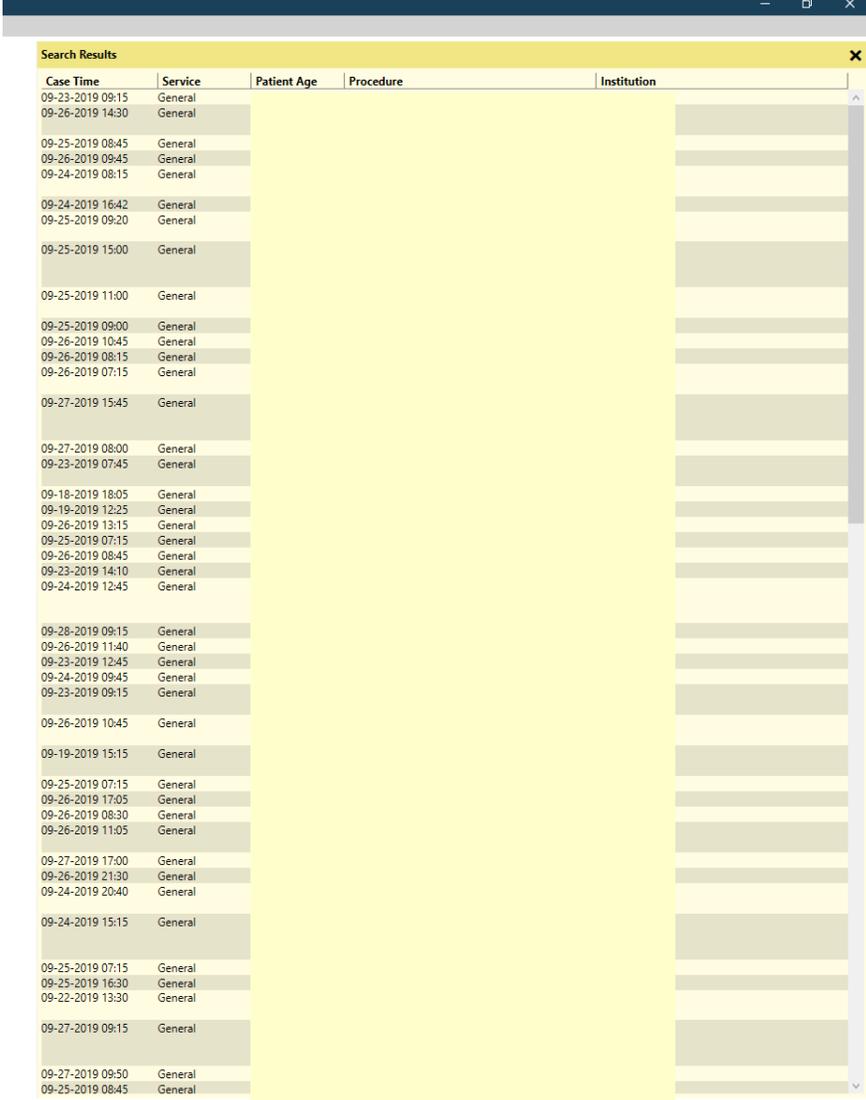
Import

“MPOG Concept ID” filter allows for finding cases based on one or multiple concepts being present on the case

To search by multiple concept IDs, use a comma between IDs

Opening a Case

- Double click on a case in the Search Results pane to open. Case viewer will open to the “Chart” Tab. PHI has been removed for the purposes of this guide.



The screenshot shows a window titled "Search Results" with a close button (X) in the top right corner. The window contains a table with the following columns: Case Time, Service, Patient Age, Procedure, and Institution. The table lists numerous rows of case data, including dates and times, and the word "General" in the Service column. The table is scrollable, with a vertical scrollbar on the right side.

Case Time	Service	Patient Age	Procedure	Institution
09-23-2019 09:15	General			
09-26-2019 14:30	General			
09-25-2019 08:45	General			
09-26-2019 09:45	General			
09-24-2019 08:15	General			
09-24-2019 16:42	General			
09-25-2019 09:20	General			
09-25-2019 15:00	General			
09-25-2019 11:00	General			
09-25-2019 09:00	General			
09-26-2019 10:45	General			
09-26-2019 08:15	General			
09-26-2019 07:15	General			
09-27-2019 15:45	General			
09-27-2019 08:00	General			
09-23-2019 07:45	General			
09-18-2019 18:05	General			
09-19-2019 12:25	General			
09-26-2019 13:15	General			
09-25-2019 07:15	General			
09-26-2019 08:45	General			
09-23-2019 14:10	General			
09-24-2019 12:45	General			
09-28-2019 09:15	General			
09-26-2019 11:40	General			
09-23-2019 12:45	General			
09-24-2019 09:45	General			
09-23-2019 09:15	General			
09-26-2019 10:45	General			
09-19-2019 15:15	General			
09-25-2019 07:15	General			
09-26-2019 17:05	General			
09-26-2019 08:30	General			
09-26-2019 11:05	General			
09-27-2019 17:00	General			
09-26-2019 21:30	General			
09-24-2019 20:40	General			
09-24-2019 15:15	General			
09-25-2019 07:15	General			
09-25-2019 16:30	General			
09-22-2019 13:30	General			
09-27-2019 09:15	General			
09-27-2019 09:50	General			
09-25-2019 08:45	General			

Chart View

MPOG Case Viewer

Fast Case Lookup

Case ID Copy

Institution

Time 01-01-2020 09:42 - 01-01-2020 11:58 (02 hours, 15 min)

Procedure

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Collapse All Expand All

Main Chart [-] Show Reference Line

- BP Sys Cuff
- BP Dias Cuff
- SpO2 Pulse Rate
- End Tidal CO2 (mmHg)

Times [-] Preop Anesthesia In Room Surgery

All Staff [-] Staff Level - Anesthesia Attending #1 Staff Level - Anesthesia CRNA #1

Bolus Meds [-] DIPHENHYDRAMINE FENTANYL ONDANSETRON PROPOFOL ROCURONIUM SUGAMMADEX

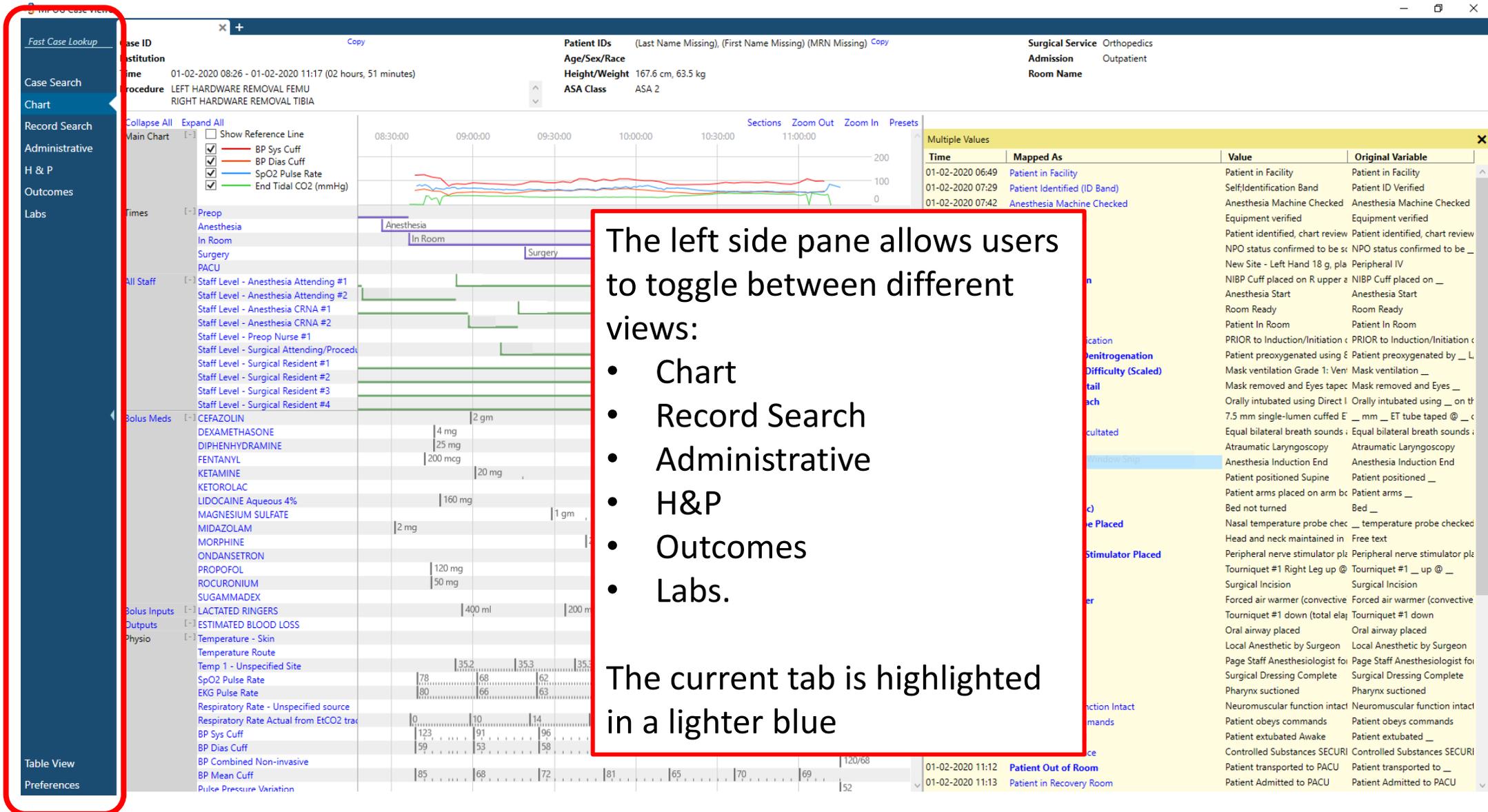
Bolus Inputs [-] LACTATED RINGERS

Physio [-] Temp 1 - Unspecified Site SpO2 Pulse Rate EKG Pulse Rate

To return to the case list generated in the previous step, click “Case Search” in the upper left hand corner at any time while the case is open

The white header at the top of the screen provides basic demographic information:

- MPOG Case ID
- Institution
- Procedure
- Patient Name and MRN
- Patient demographics (Age/Sex/Race)
- Height/Weight
- ASA Class
- Surgical Service
- Admission Status
- Room Name
- Date of Death (if known)



Record Search Collapse All Expa
Main Chart [-]
Administrative
H & P
Outcomes
Labs Times [-]
All Staff [-]
Bolus Meds [-]
Bolus Inputs [-]
Outputs [-]
Physio [-]

- For viewing on smaller laptop screens, the blue panel can be collapsed to save space by using the small arrow

MPOG Case Viewer

Fast Case Lookup

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Table View

Preferences

Case ID

Institution

Time 01-02-2020 08:26 - 01-02-2020 11:17 (02 hours, 51 minutes)

Procedure LEFT HARDWARE REMOVAL FEMU
RIGHT HARDWARE REMOVAL TIBIA

Patient IDs (Last Name Missing), (First Name Missing) (MRN Missing) Copy

Age/Sex/Race

Height/Weight 167.6 cm, 63.5 kg

ASA Class ASA 2

Surgical Service Orthopedics

Admission Outpatient

Room Name

Collapse All

Expand All

Show Reference Line

BP Sys Cuff

BP Dias Cuff

SpO2 Pulse Rate

End Tidal CO2 (mmHg)

08:30:00 09:00:00 09:30:00 10:00:00 10:30:00 11:00:00

Sections Zoom Out Zoom In Presets

Multiple Values

Time	Mapped As	Value	Original Variable
01-02-2020 06:49	Patient in Facility	Patient in Facility	Patient in Facility
01-02-2020 07:29	Patient Identified (ID Band)	Self-identification Band	Patient ID Verified
01-02-2020 07:42	Anesthesia Machine Checked	Anesthesia Machine Checked	Anesthesia Machine Checked
01-02-2020 07:42	Equipment Verified	Equipment verified	Equipment verified
01-02-2020 07:53	Patient Identified	Patient identified, chart review	Patient identified, chart review
01-02-2020 07:53	NPO Verification	NPO status confirmed to be s	NPO status confirmed to be _
01-02-2020 07:54	IV Access (Misc)	New Site - Left Hand 18 g, pla	Peripheral IV
01-02-2020 08:09	NIBP Cuff Location	NIBP Cuff placed on R upper a	NIBP Cuff placed on _
01-02-2020 08:26	Anesthesia Start	Anesthesia Start	Anesthesia Start
01-02-2020 08:31	Room Ready	Room Ready	Room Ready
01-02-2020 08:36	Patient in Room	Patient In Room	Patient In Room
01-02-2020 08:39	Pre-Induction Verification	PRIOR to Induction/Initiation c	PRIOR to Induction/Initiation c
01-02-2020 08:41	Preoxygenation/Denitrogenation	Patient preoxygenated using E	Patient preoxygenated by _ L
01-02-2020 08:44	Mask Ventilation Difficulty (Scaled)	Mask ventilation Grade 1: Ven	Mask ventilation _
01-02-2020 08:44	Eye Protection Detail	Mask removed and Eyes taped	Mask removed and Eyes _
01-02-2020 08:47	Intubation Approach	Orally intubated using Direct I	Orally intubated using _ on th
01-02-2020 08:47	Intubation Tube	7.5 mm single-lumen cuffed E	_ mm _ ET tube taped @ _ c
01-02-2020 08:47	Breath Sounds Auscultated	Equal bilateral breath sounds :	Equal bilateral breath sounds :
01-02-2020 08:47	Atraumatic	Atraumatic Laryngoscopy	Atraumatic Laryngoscopy
01-02-2020 08:47	Induction End	Anesthesia Induction End	Anesthesia Induction End
01-02-2020 08:52	Patient Position	Patient positioned Supine	Patient positioned _
01-02-2020 08:52	Arm Position	Patient arms placed on arm bc	Patient arms _
01-02-2020 08:52	Table Turned (Misc)	Bed not turned	Bed _
01-02-2020 08:52	Temperature Probe Placed	Nasal temperature probe chec	_ temperature probe checked
01-02-2020 08:53	Free Text Note	Head and neck maintained in	Free text
01-02-2020 08:55	Peripheral Nerve Stimulator Placed	Peripheral nerve stimulator pl	Peripheral nerve stimulator pl
01-02-2020 09:18	Tourniquet Up	Tourniquet #1 Right Leg up @	Tourniquet #1 _ up @ _
01-02-2020 09:18	Procedure Start	Surgical Incision	Surgical Incision
01-02-2020 09:28	Convective Warmer	Forced air warmer (convective	Forced air warmer (convective
01-02-2020 10:11	Tourniquet Down	Tourniquet #1 down (total elaj	Tourniquet #1 down
01-02-2020 10:30	Oral Airway Placed	Oral airway placed	Oral airway placed
01-02-2020 10:32	Local Infiltration	Local Anesthetic by Surgeon	Local Anesthetic by Surgeon
01-02-2020 11:00	Emergence (Misc)	Page Staff Anesthesiologist fo	Page Staff Anesthesiologist fo
01-02-2020 11:00	Procedure End	Surgical Dressing Complete	Surgical Dressing Complete
01-02-2020 11:06	Pharynx Suctioned	Pharynx suctioned	Pharynx suctioned
01-02-2020 11:10	Neuromuscular Function Intact	Neuromuscular function intact	Neuromuscular function intact
01-02-2020 11:10	Patient Obeys Commands	Patient obeys commands	Patient obeys commands
01-02-2020 11:10	Patient Extubated	Patient extubated Awake	Patient extubated _
01-02-2020 11:12	Controlled Substance	Controlled Substances SECURI	Controlled Substances SECURI
01-02-2020 11:12	Patient Out of Room	Patient transported to PACU	Patient transported to _
01-02-2020 11:13	Patient in Recovery Room	Patient Admitted to PACU	Patient Admitted to PACU

The tab across the top shows which case you have open. Users may open up to 4 cases at a time. The patient's age, gender, and institution appear in the tab. For the purposes of this training guide, PHI has been hidden, however

Fast Case Lookup Case ID Institution Time 01-02-2020 08:26 - 01-02-2020 11:17 (02 hours, 51 minutes) Procedure LEFT HARDWARE REMOVAL FEMU RIGHT HARDWARE REMOVAL TIBIA

Patient IDs (Last Name Missing), (First Name Missing) (MRN Missing) Copy Age/Sex/Race Height/Weight 167.6 cm, 63.5 kg ASA Class ASA 2 Surgical Service Orthopedics Admission Outpatient Room Name

Chart

Record Search Administrative H & P Outcomes Labs

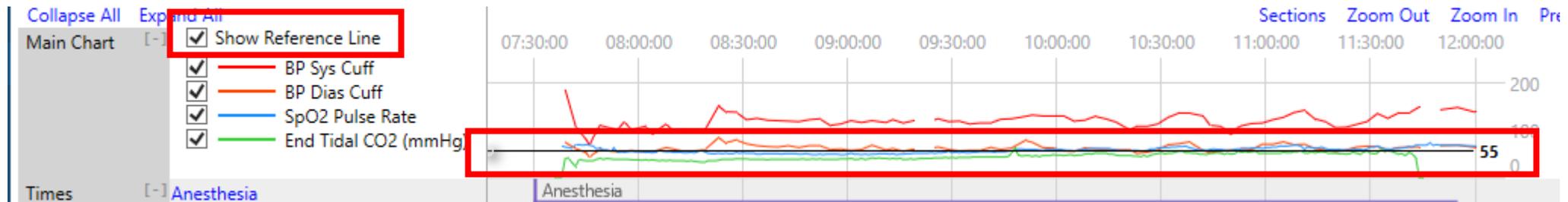
Multiple Values

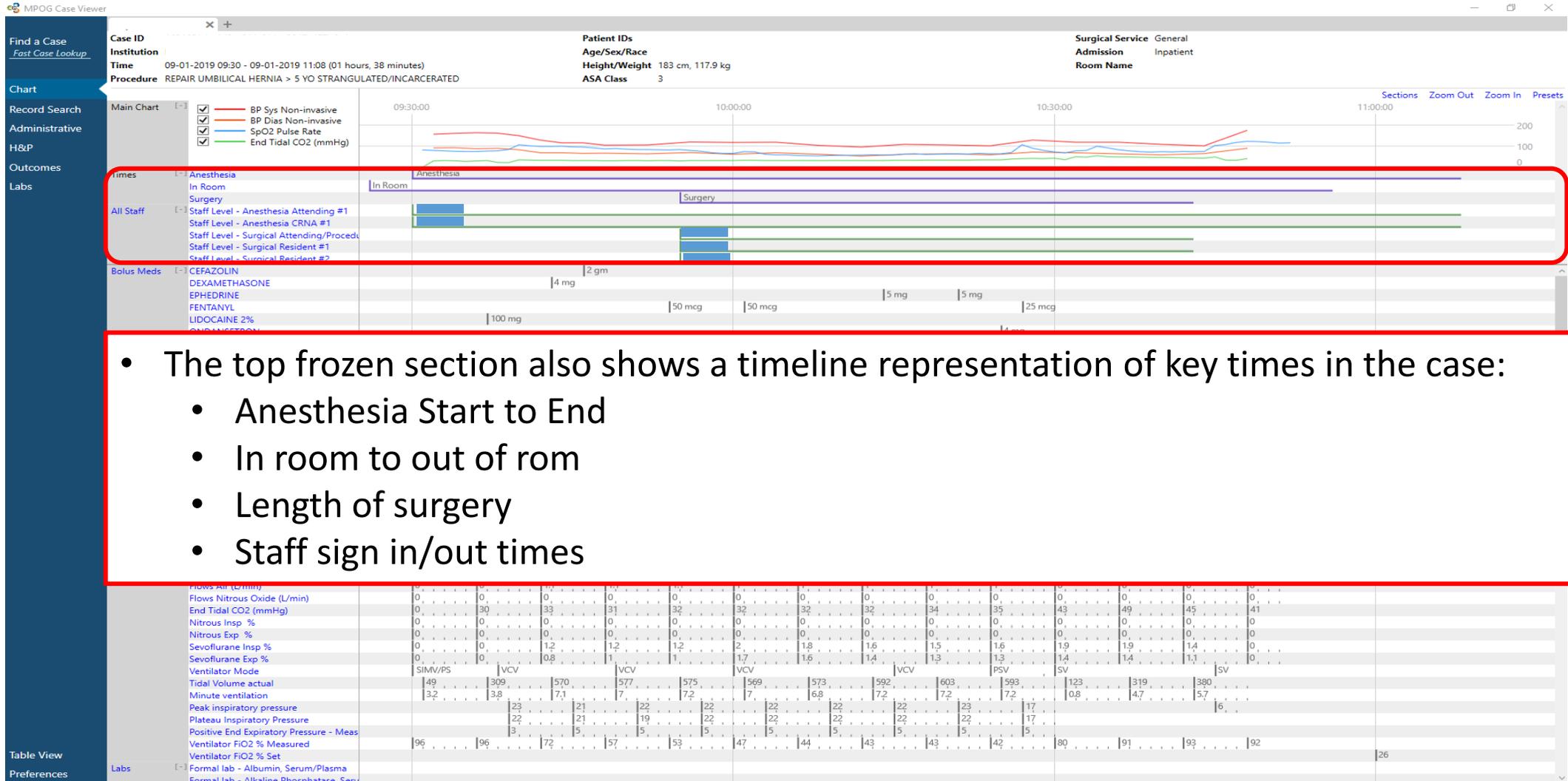
Time	Mapped As	Value	Original Variable
01-02-2020 06:49	Patient in Facility	Patient in Facility	Patient in Facility
01-02-2020 07:29	Patient Identified (ID Band)	Self-identification Band	Patient ID Verified
01-02-2020 07:42	Anesthesia Machine Checked	Anesthesia Machine Checked	Anesthesia Machine Checked
01-02-2020 07:42	Equipment Verified	Equipment verified	Equipment verified
01-02-2020 07:53	Patient Identified	Patient identified, chart review	Patient identified, chart review
01-02-2020 07:53	NPO Verification	NPO status confirmed to be s	NPO status confirmed to be s
01-02-2020 07:54	IV Access (Misc)	New Site - Left Hand 18 g, pla	Peripheral IV
01-02-2020 08:09	NIBP Cuff Location	NIBP Cuff placed on R upper a	NIBP Cuff placed on _
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01-02-2020 08:31	Room Ready	Room Ready	Room Ready
01-02-2020 08:36	Patient in Room	Patient In Room	Patient In Room
01-02-2020 08:39	Pre-Induction Verification	PRIOR to Induction/Initiation	PRIOR to Induction/Initiation
01-02-2020 08:41	Preoxygenation/Denitrogenation	Patient preoxygenated using E	Patient preoxygenated by _ L
01-02-2020 08:44	Mask Ventilation Difficulty (Scaled)	Mask ventilation Grade 1: Ven	Mask ventilation _
01-02-2020 09:28	Convective Warmer	Forced air warmer (convective	Forced air warmer (convective
01-02-2020 10:11	Tourniquet Down	Tourniquet #1 down (total elaj	Tourniquet #1 down
01-02-2020 10:30	Oral Airway Placed	Oral airway placed	Oral airway placed
01-02-2020 10:32	Local Infiltration	Local Anesthetic by Surgeon	Local Anesthetic by Surgeon
01-02-2020 11:00	Emergence (Misc)	Page Staff Anesthesiologist fo	Page Staff Anesthesiologist fo
01-02-2020 11:00	Procedure End	Surgical Dressing Complete	Surgical Dressing Complete
01-02-2020 11:06	Pharynx Suctioned	Pharynx suctioned	Pharynx suctioned
01-02-2020 11:10	Neuromuscular Function Intact	Neuromuscular function intact	Neuromuscular function intact
01-02-2020 11:10	Patient Obeys Commands	Patient obeys commands	Patient obeys commands
01-02-2020 11:10	Patient Extubated	Patient extubated Awake	Patient extubated _
01-02-2020 11:12	Controlled Substance	Controlled Substances SECURI	Controlled Substances SECURI
01-02-2020 11:12	Patient Out of Room	Patient transported to PACU	Patient transported to _
01-02-2020 11:13	Patient in Recovery Room	Patient Admitted to PACU	Patient Admitted to PACU

- The top of "Chart" view shows physiologic data in a graphical format
- A key is available to the left
- This section is "frozen" meaning that as you scroll to see more data, the graph will remain at the top
- Use the [-] buttons to expand and collapse sections as needed

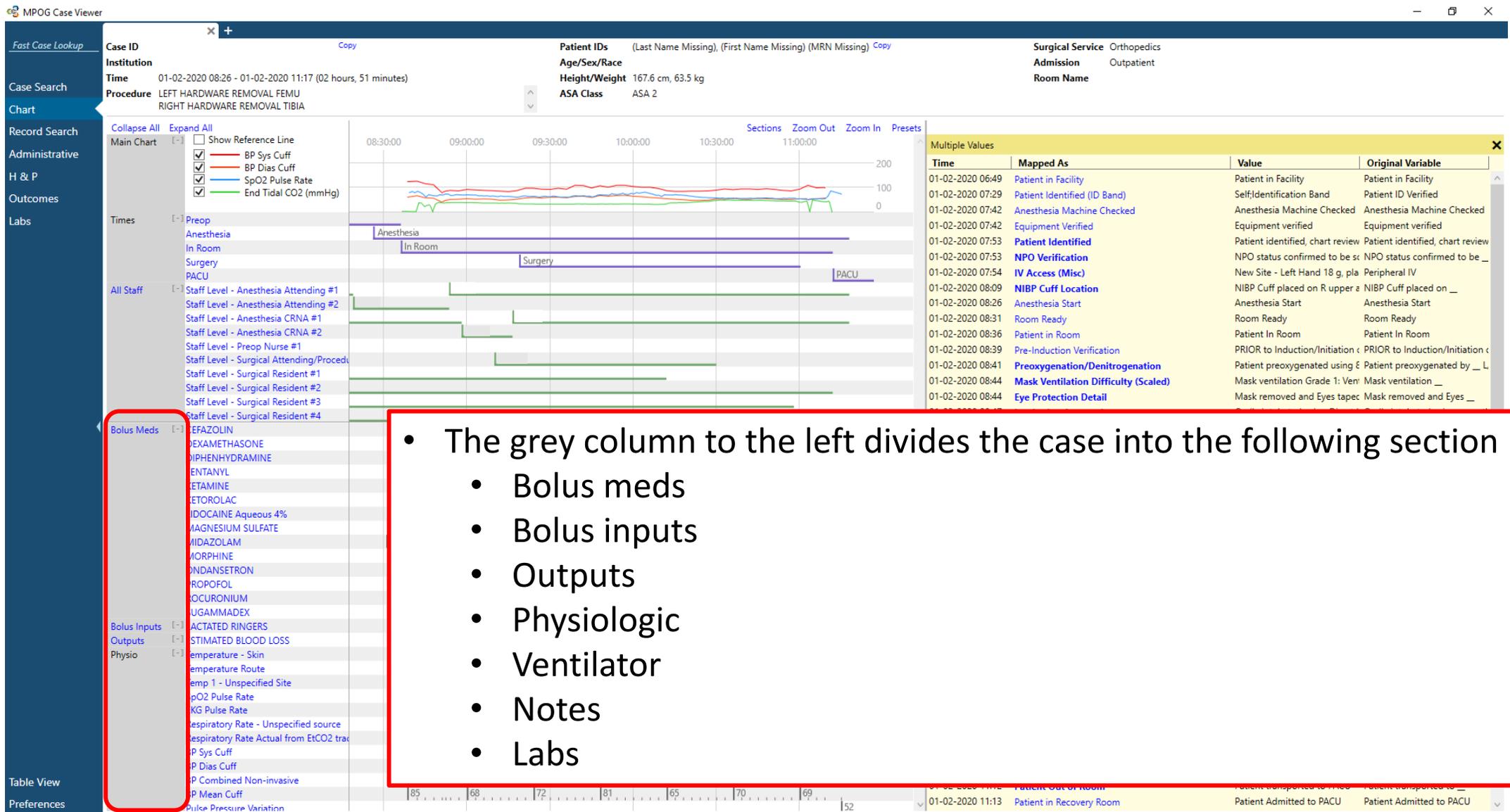


- Choosing “Show Reference Line” adds an adjustable horizontal line across the grid
- This can be adjusted by clicking moving up or down

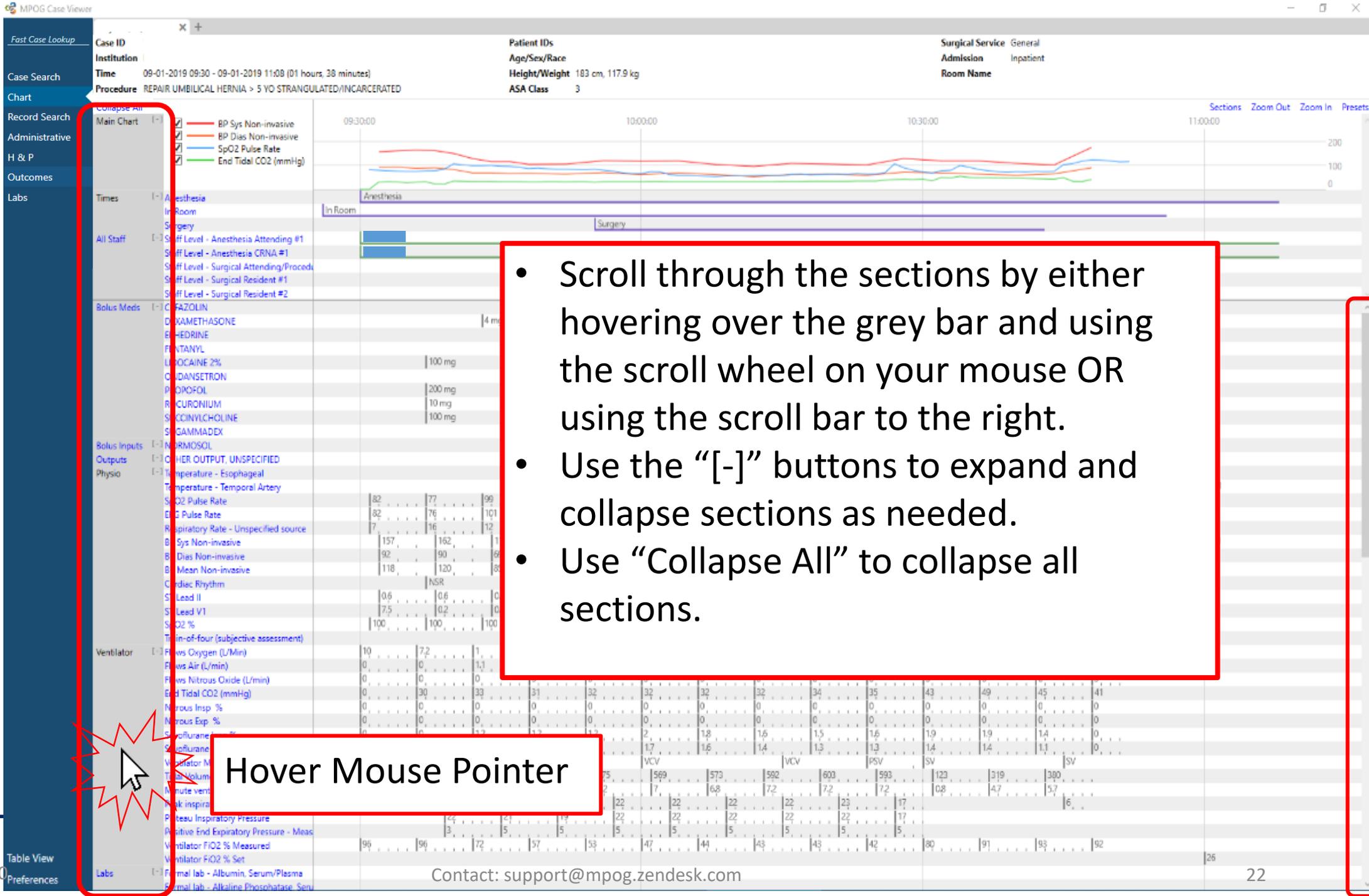




- The top frozen section also shows a timeline representation of key times in the case:
 - Anesthesia Start to End
 - In room to out of rom
 - Length of surgery
 - Staff sign in/out times



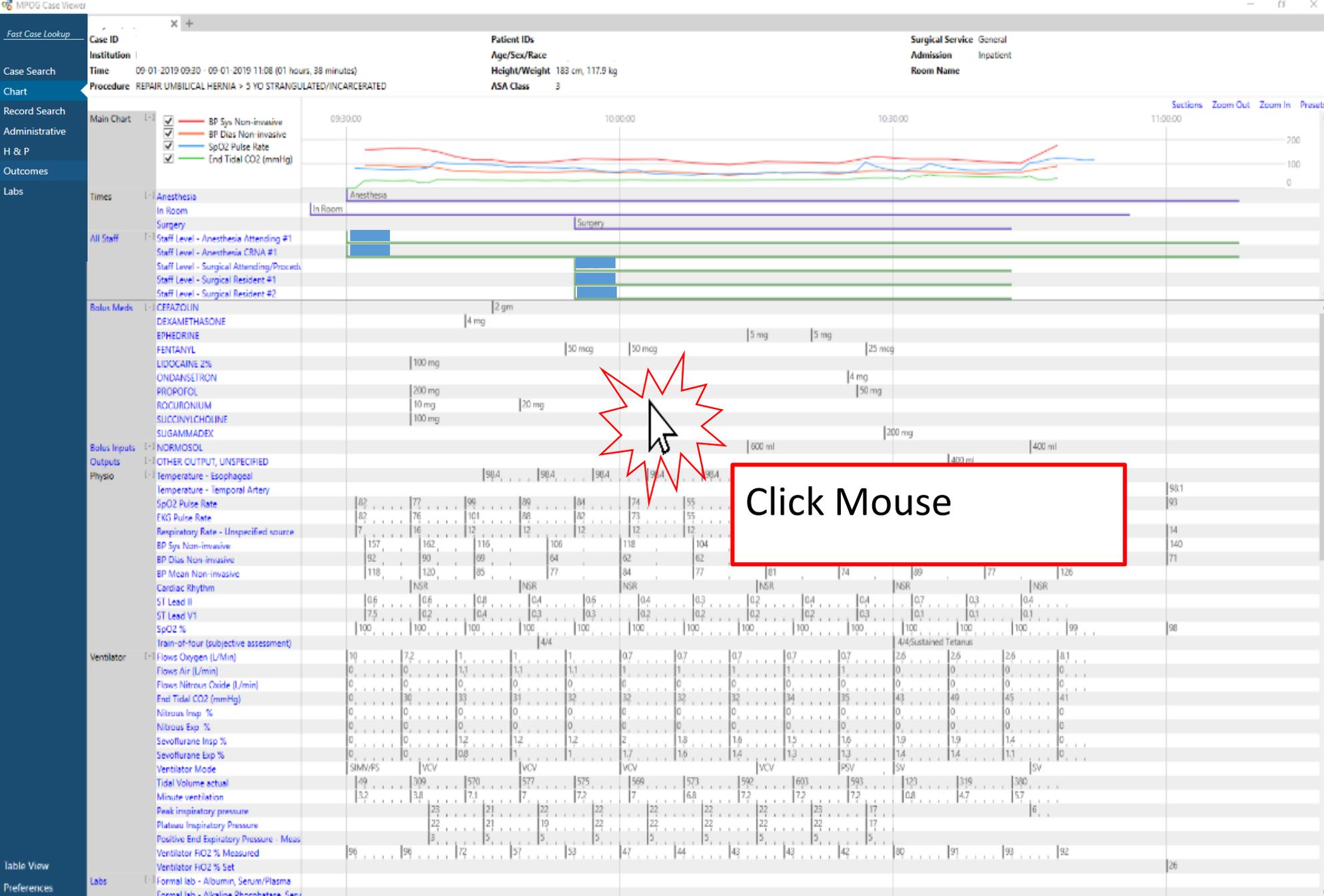
- The grey column to the left divides the case into the following section
 - Bolus meds
 - Bolus inputs
 - Outputs
 - Physiologic
 - Ventilator
 - Notes
 - Labs



- Scroll through the sections by either hovering over the grey bar and using the scroll wheel on your mouse OR using the scroll bar to the right.
- Use the “[-]” buttons to expand and collapse sections as needed.
- Use “Collapse All” to collapse all sections.



Hover Mouse Pointer

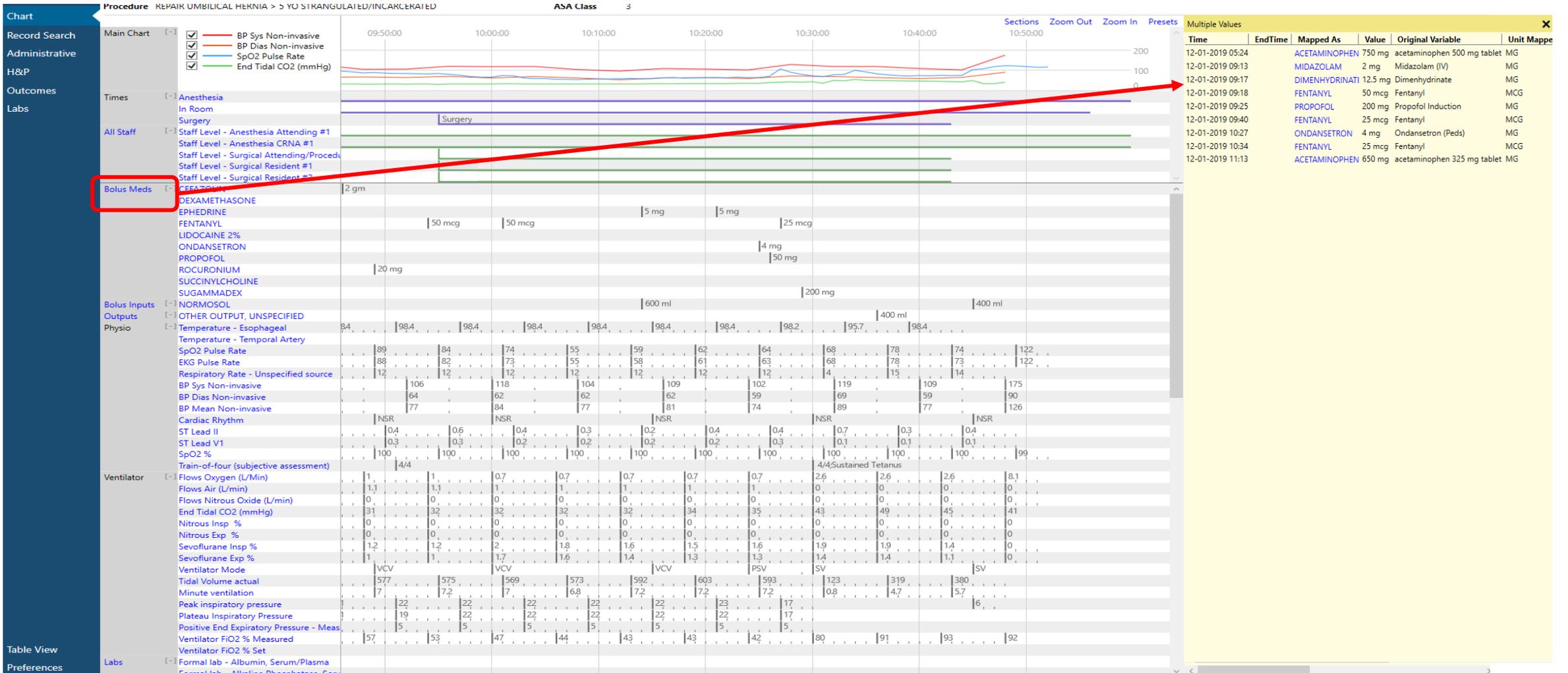


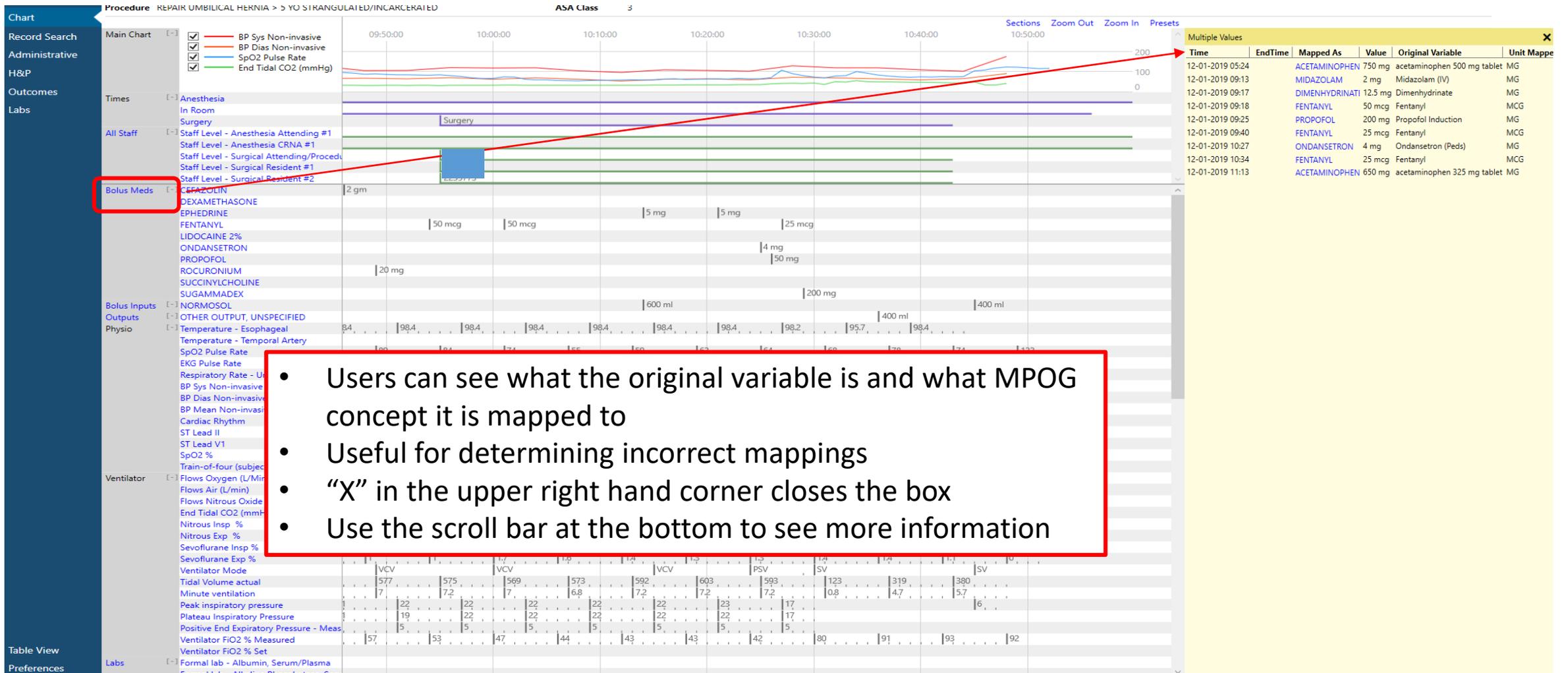
Click and drag mouse left or right



Tick marks on the flowsheet let users know that more information is available if you scroll in.







- Users can see what the original variable is and what MPOG concept it is mapped to
- Useful for determining incorrect mappings
- “X” in the upper right hand corner closes the box
- Use the scroll bar at the bottom to see more information

- Clicking a value brings up more information
- Allows for further drill down of the information

Medication

[Back](#)

Type LIDOCAINE 2%

Value 100 mg

Time 09-01-2019 09:37:00

End Time

Variable Mappings	Med Type	LIDOCAINE 2% 10250	Lidocaine 2% 20 mg/mL ERX-112130
	Unit	MG 1005	MG MG
	Route	IV 2001	INTRAVENOUS INTRAVENOUS

- Data in this view can also be sorted by clicking on the column header

Click header

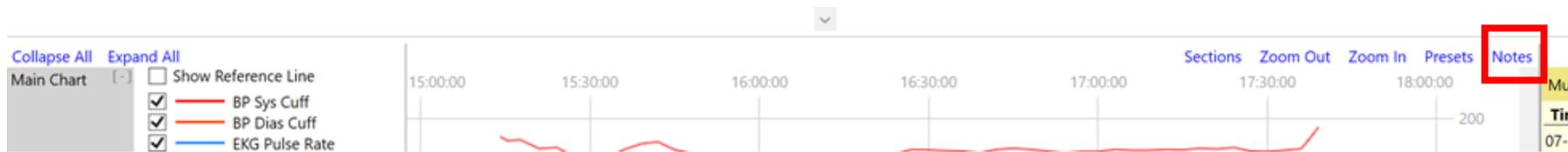
Time	Mapped As	Value	Original Variable
12-01-2019 06:10	BP Sys Non-invasive	114	2100310150
12-01-2019 08:08	BP Sys Non-invasive	109	7
12-01-2019 08:12	BP Sys Non-invasive	109	7
12-01-2019 08:15	BP Sys Non-invasive	118	7
12-01-2019 08:18	BP Sys Non-invasive	84	7
12-01-2019 08:21	BP Sys Non-invasive	88	7
12-01-2019 08:24	BP Sys Non-invasive	93	7
12-01-2019 08:27	BP Sys Non-invasive	93	7
12-01-2019 08:30	BP Sys Non-invasive	105	7
12-01-2019 08:33	BP Sys Non-invasive	107	7
12-01-2019 08:36	BP Sys Non-invasive	97	7
12-01-2019 08:39	BP Sys Non-invasive	106	7
12-01-2019 08:33	BP Sys Non-invasive	107	7
12-01-2019 08:08	BP Sys Non-invasive	109	7
12-01-2019 08:12	BP Sys Non-invasive	109	7
12-01-2019 06:10	BP Sys Non-invasive	114	2100310150
12-01-2019 08:48	BP Sys Non-invasive	115	7
12-01-2019 09:00	BP Sys Non-invasive	115	7

→

Time	Mapped As	Value	Original Variable
12-01-2019 08:18	BP Sys Non-invasive	84	7
12-01-2019 08:21	BP Sys Non-invasive	88	7
12-01-2019 08:24	BP Sys Non-invasive	93	7
12-01-2019 08:27	BP Sys Non-invasive	93	7
12-01-2019 08:36	BP Sys Non-invasive	97	7
12-01-2019 08:30	BP Sys Non-invasive	105	7
12-01-2019 08:39	BP Sys Non-invasive	106	7
12-01-2019 08:33	BP Sys Non-invasive	107	7
12-01-2019 08:08	BP Sys Non-invasive	109	7
12-01-2019 08:12	BP Sys Non-invasive	109	7
12-01-2019 06:10	BP Sys Non-invasive	114	2100310150
12-01-2019 08:48	BP Sys Non-invasive	115	7
12-01-2019 09:00	BP Sys Non-invasive	115	7

Values sorted in order

- The notes pane can be quickly re-opened via the “notes” shortcut in the upper right hand corner



- When applicable, the note entered time is available at the bottom of the yellow pane to compare differences between Observed Time and Entered Time
- Observed Time- The time the event/note happened
- Entered Time- The time the user entered in the information into the EHR

Intraop Note

[Back](#)

Concept	AACD Patient In Facility Date/Time						
Value	Patient in Facility						
Observed Time	11-29-2019 20:43						
Entered Time	12-01-2019 08:07						
Variable Mappings	<table border="1"> <thead> <tr> <th>Note Type</th> <th>Mapped As</th> <th>Original</th> </tr> </thead> <tbody> <tr> <td>AACD Patient In Facility Date/Time 50016</td> <td></td> <td>Patient in Facility 30594</td> </tr> </tbody> </table>	Note Type	Mapped As	Original	AACD Patient In Facility Date/Time 50016		Patient in Facility 30594
Note Type	Mapped As	Original					
AACD Patient In Facility Date/Time 50016		Patient in Facility 30594					

- Bolded “parent” notes have associated “child” detail notes. Clicking on a bolded note will give the additional details as well

05-06-2014 07:31	Mask Ventilation Difficulty (Scaled)	Mask ventilation Grade M
05-06-2014 07:31	Eye Protection Detail	Mask removed and Eye M
05-06-2014 07:32	Intubation Tube	8.0 mm Single-lumen c _
05-06-2014 07:32	Breath Sounds Auscultated	Equal bilateral breath s Eq
05-06-2014 07:32	Intubation View	Grade Grade 1 - Full vie G
05-06-2014 07:32	Intubation Device/Adjunct (Oral)	Orally intubated using Or
05-06-2014 07:32	Atraumatic	Atraumatic Laryngosco At
05-06-2014 07:45	Induction End	Anesthesia Induction Ei Ar
05-06-2014 07:46	Central Venous IV Access Placed	Adult Central Venous C Ac

Intraop Note

[Back](#)

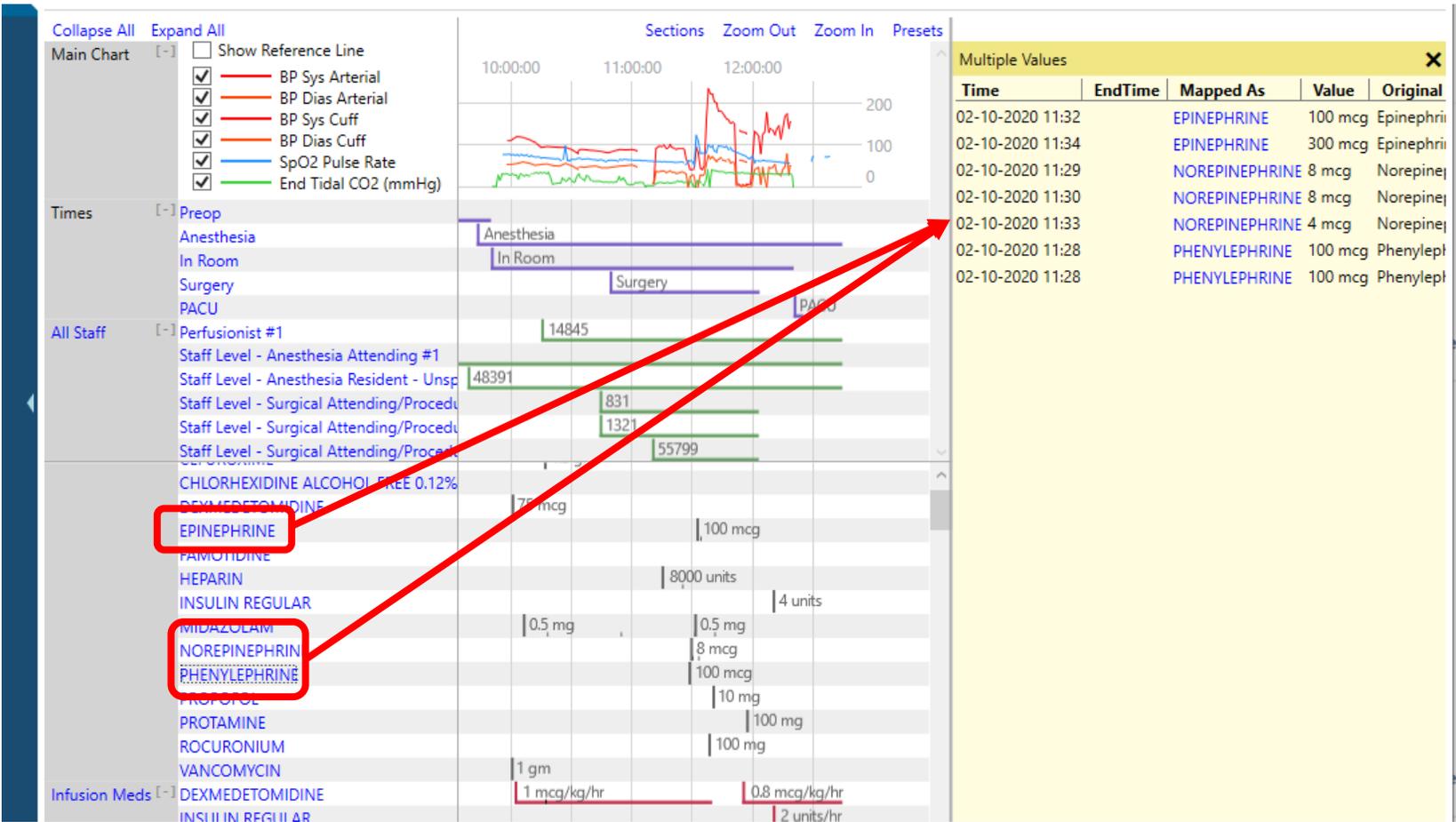
Concept Intubation Tube Note

Value 8.0 mm Single-lumen cuffed ET tube taped @ 22 cm

Observed Time 05-06-2014 07:32

Details

Concept	Value
Endotracheal Tube Size	8
Endotracheal Tube Size	8
Endotracheal Tube Type	Single-lumen cuffed
Endotracheal Tube Type	Single-lumen cuffed
Endotracheal Tube Secured Distance	22
Endotracheal Tube Secured Distance	21



- Holding down 'Shift' and selecting multiple headers will open those headers together in the notes pane

- Data can be copied out of the yellow pane and pasted into Excel for purposes of chart review
- Highlight desired rows
- Use Ctrl + C to copy
- Use Ctrl + V to paste in Excel

om In Presets

Multiple Values

Time	Mapped As	Value	Original Variable
02-01-2020 07:39	EKG Pulse Rate	63	FLO-892
02-01-2020 07:40	EKG Pulse Rate	62	FLO-892
02-01-2020 07:41	EKG Pulse Rate	59	FLO-892
02-01-2020 07:42	EKG Pulse Rate	69	FLO-892
02-01-2020 07:43	EKG Pulse Rate	71	FLO-892
02-01-2020 07:44	EKG Pulse Rate	68	FLO-892
02-01-2020 07:45	EKG Pulse Rate	68	FLO-892
02-01-2020 07:46	EKG Pulse Rate	67	FLO-892
02-01-2020 07:47	EKG Pulse Rate	65	FLO-892
02-01-2020 07:48	EKG Pulse Rate	61	FLO-892
02-01-2020 07:49	EKG Pulse Rate	58	FLO-892
02-01-2020 07:50	EKG Pulse Rate	56	FLO-892
02-01-2020 07:51	EKG Pulse Rate	62	FLO-892



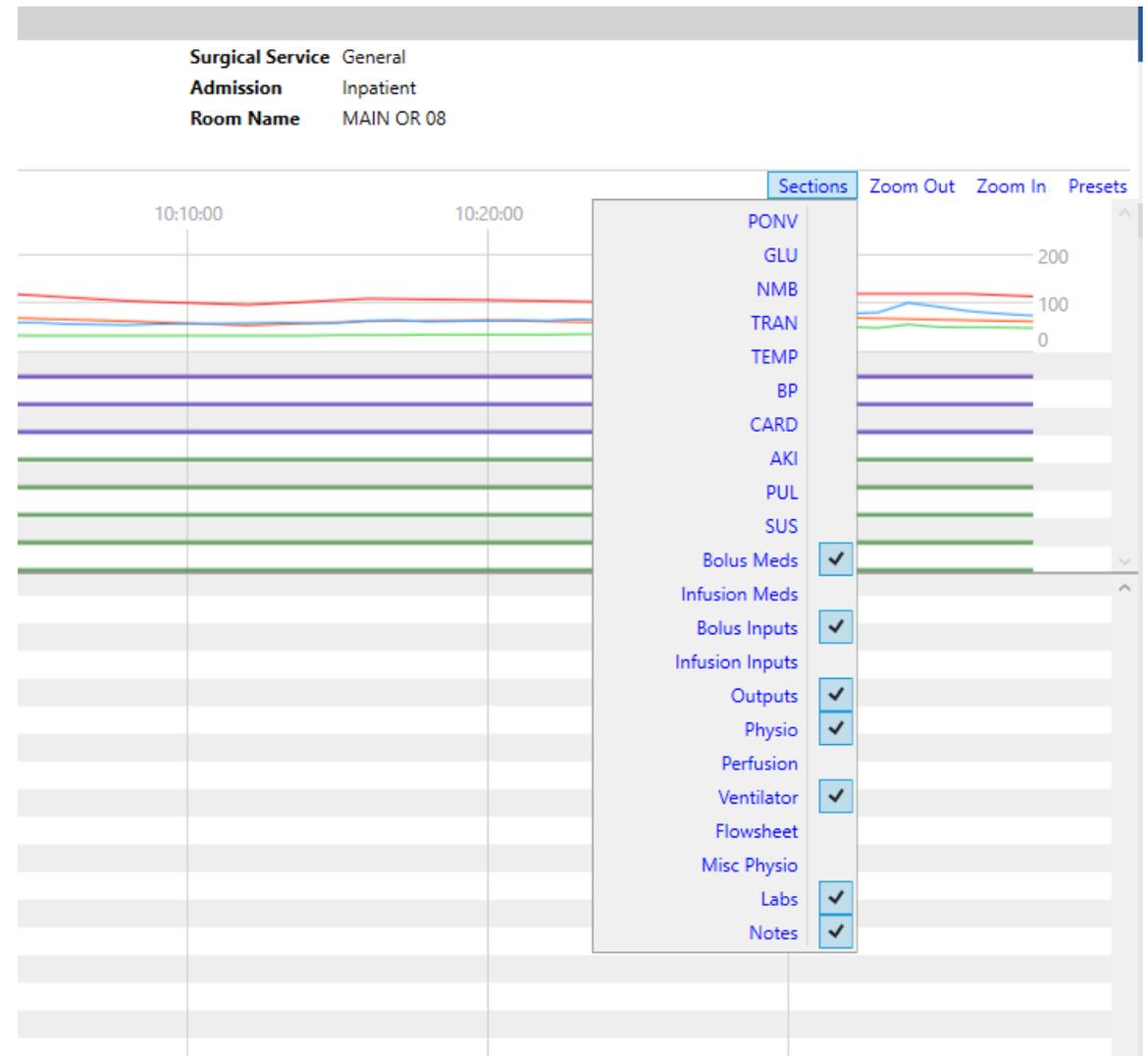
A1

2/1/2020 7:39:00 AM

	A	B	C	D	E	F
1	2/1/2020 7:39	EKG Pulse Rate	63	FLO-892		
2	2/1/2020 7:40	EKG Pulse Rate	62	FLO-892		
3	2/1/2020 7:41	EKG Pulse Rate	59	FLO-892		
4	2/1/2020 7:42	EKG Pulse Rate	69	FLO-892		
5	2/1/2020 7:43	EKG Pulse Rate	71	FLO-892		
6	2/1/2020 7:44	EKG Pulse Rate	68	FLO-892		
7	2/1/2020 7:45	EKG Pulse Rate	68	FLO-892		
8	2/1/2020 7:46	EKG Pulse Rate	67	FLO-892		
9	2/1/2020 7:47	EKG Pulse Rate	65	FLO-892		

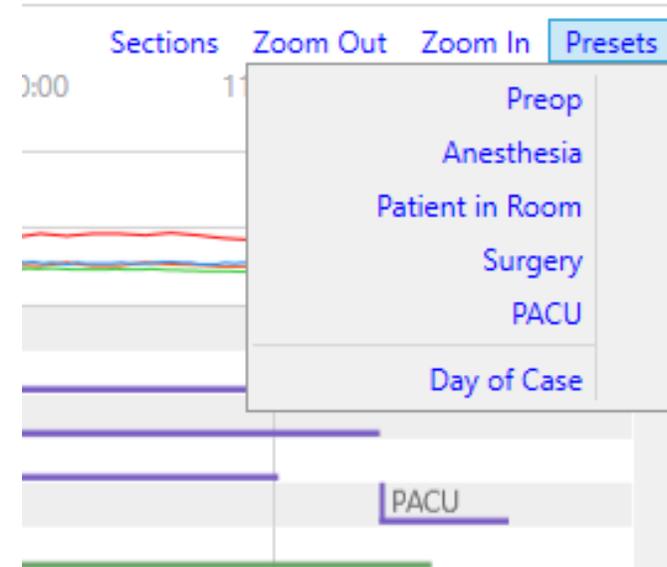
Sections Menu

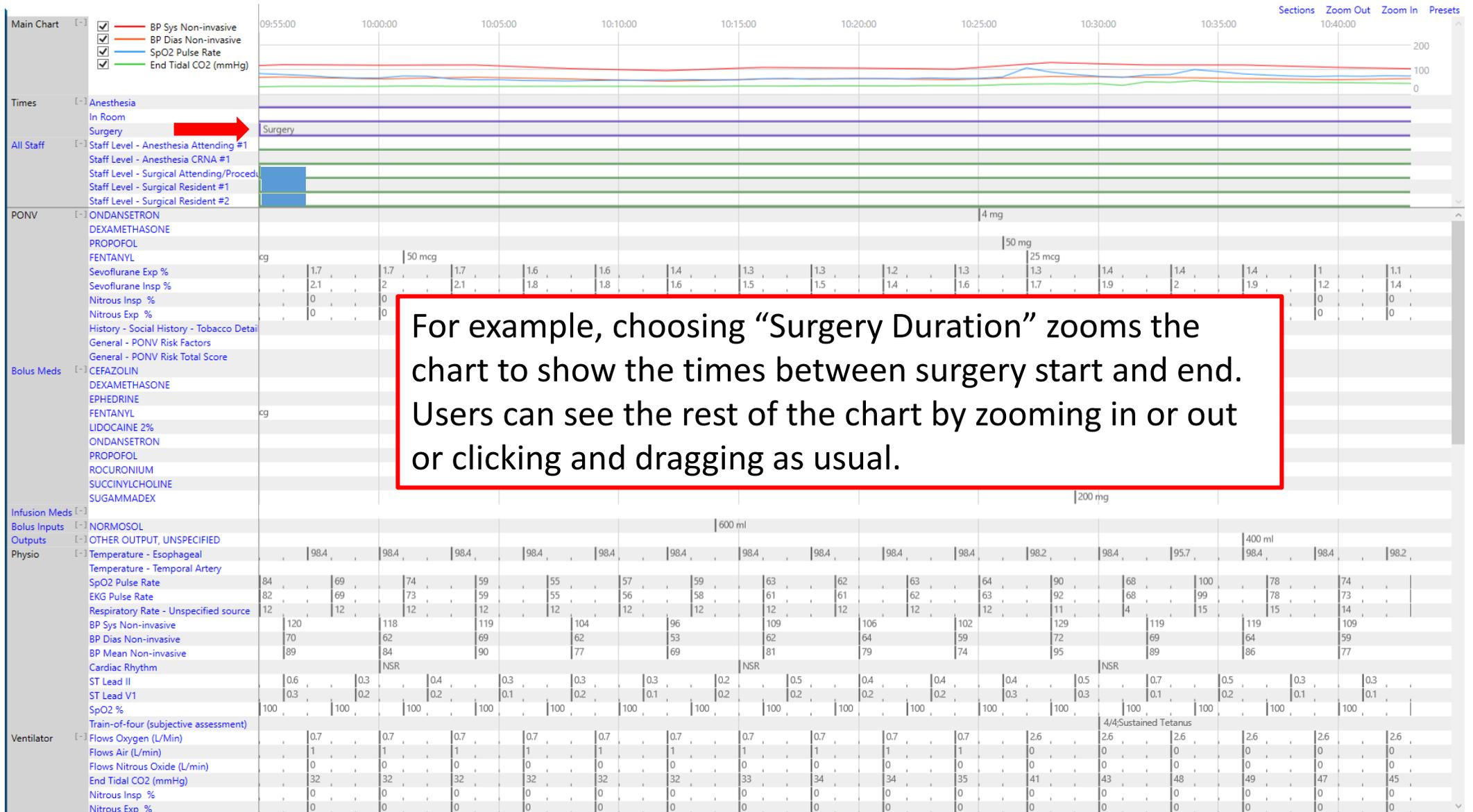
- Upper right hand corner
- Use to add and remove sections from the body of the chart as needed
- MPOG Measure related sections pull in a summary section of all relevant variables to complete chart review on those measures.



Preset Menu

- The “Preset” menu in the upper right corner shows users preset views of the chart based on their choice.





Record Search

- Next view available in the left pane
- Search relevant information, including by MPOG Concept ID (exact match required for Concept ID) and original variable ID/name
- Temporarily save that information together in the “Shopping cart” to the right using the “+”
- Remove information from the shopping cart using the “X”

The screenshot displays the 'Record Search' interface. On the left, a dark blue sidebar contains navigation options: Chart, Record Search (highlighted), Administrative, H&P, Outcomes, and Labs. The main area shows a search for 'propofol' on 'Sep 01, 2019 (day of surgery)'. Below the search results, two rows of medication data are shown, each with a red background and a '+' icon in a red box:

Time	Medication	Dose	Action
09:37	PROPOFOL	200 mg	+
10:26	PROPOFOL	50 mg	+

To the right, a 'Shopping cart' section shows a single entry: '09:37 PROPOFOL 200 mg' with an 'X' icon in a red box, indicating it can be removed.

Record Search

- Search for multiple terms/variables at the same time using the '|' symbol between variables
 - Hint: | is found on the same key as \, use 'Shift' to type |
- Ex: 50002 | 50003 | Propofol | lactated ringers
 - This will pull in everything mapped to those two concept IDs and everything including the words 'propofol' and 'lactated ringers'
- CTRL + Z will undo searches in record search

The screenshot displays a search interface with a left-hand navigation menu and a main results area. The search criteria entered are '50002 | 50003 | Propofol | lactated ringers'. The results are filtered for 'Feb 01, 2020 (day of surgery)'. The results table includes the following entries:

Time	Event	Quantity	Action
07:30	Anesthesia Start		Anesthesia Start +
07:30	Patient in Room		RN Documented In Room +
07:39	PROPOFOL	150 mg	+
08:45	LACTATED RINGERS	800 ml	+
10:00	LACTATED RINGERS	50 ml	+
11:31	PROPOFOL	50 mg	+

Record Search

- Ctrl + Click or Shift + Click allows for multi-select and the ability to add more than one row of information into the “Shopping Cart”

Fentanyl

Dec 01, 2019 (day of surgery)

09:18	FENTANYL	50 mcg	+
09:40	FENTANYL	25 mcg	+
10:34	FENTANYL	25 mcg	+

Dec 01, 2019 (day of surgery)

09:18	FENTANYL	50 mcg	✗
09:40	FENTANYL	25 mcg	✗
10:34	FENTANYL	25 mcg	✗

- Utilize Record Search to look at information relevant to a chart evaluation in one location

Chart

Record Search

Administrative

H&P

Outcomes

Labs

PROCEDURE REPAIR OMBILICAL HERNIA 2 TO STRANGULATED/INCARCERATED

anesthesia

Jan 01, 0001 No Valid Date Specified

00:00	Assessment and Plan - Anesthesia Technique	General	+
00:00	Misc Note	Placed by Anesthesia Team	+
00:00	Airway Manipulation	ANESTHESIA AIRWAY	+
00:00	Lines/Tubes/Drains (Misc)	ANESTHESIA PERIPHERAL IV	+

Sep 01, 2019 (day of surgery)

09:03	Assessment and Plan - Anesthesia Consent	Yes	+
09:03	Assessment and Plan - Anesthesia Consent	patient	+
09:29	Patient Identified	Immdt PreOp Assessment	+
09:30	Anesthesia Start	Anesthesia Start	+
09:30	Staff Level - Anesthesia Attending	10082	+
09:30	Staff Level - Anesthesia CRNA	2233144	+
09:37	Induction Start	Anesthesia Induction	+
09:41	Misc Note	Anesthesia Ready	+
10:43	Emergence (Misc)	Anesthesia Emergence	+
11:08	Anesthesia End	Anesthesia Stop	+
15:18	Administrative Note (Misc)	Post Anesthesia Note Sign	+

Sep 01, 2019 (day of surgery)

09:30	Anesthesia Start	Anesthesia Start	✘
09:37	PROPOFOL	200 mg	✘
10:26	PROPOFOL	50 mg	✘
11:08	Anesthesia End	Anesthesia Stop	✘

Record Search

- Users can copy and paste select information from the “Shopping Cart” into an Excel file if needed
- Select the desired rows and use Ctrl + C to copy information
- In an Excel spreadsheet, Paste the information

Dec 01, 2019 (day of surgery)

09:18	FENTANYL	50 mcg	X
09:40	FENTANYL	25 mcg	X
10:34	FENTANYL	25 mcg	X

	A	B	C	D
1	12/1/2019 9:18	FENTANYL	50 mcg	
2	12/1/2019 9:40	FENTANYL	25 mcg	
3	12/1/2019 10:34	FENTANYL	25 mcg	
4				
5				
6				

Administrative

Chart
 Record Search
Administrative
 H&P
 Outcomes
 Labs

 Table View
 Preferences

Demographics		Professional Fee Billing				
MPOG Patient ID		Procedure Codes (CPT) Required	Code	Type	Start Time	End Time
Diagnosis	Oth abdominal hernia with obstruction, without gangrene		38571	Surgery Professional Fee Data	08-27-2019 00:00	08-27-2019 00:00
AIMS Patient ID			55650	Surgery Professional Fee Data	08-27-2019 00:00	08-27-2019 00:00
AIMS Case ID			55866	Surgery Professional Fee Data	08-27-2019 00:00	08-27-2019 00:00
AIMS Encounter ID						
AIMS Admission Type	IP					
AIMS Surgical Service	Hepatopancreatobiliary					
Scheduled Time	9/1/2019 8:05:00 AM					
Date of Birth	Missing					

Location Hierarchy		Hospital Discharge Billing				
Locations	Level 1 - Tag: Facility type - Acute care hospital Level 2 - Tag: Facility type - Acute care hospital Tag: Other - Mixed use operating room Level 3 - A Tag: Facility type - Acute care hospital Tag: Other - Mixed use operating room	Diagnosis Codes (ICD-9/10) Required	Code	Type	Start Time	End Time
			C61	Surgery Professional Fee Data	08-27-2019 00:00	08-27-2019 00:00
			C79.89	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			E66.9	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			I10	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			I83.92	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			K42.0	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			Z68.35	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			Z82.3	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			Z82.49	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			Z83.3	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
			Z90.79	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00
Combined Tags	Facility type - Acute care hospital Other - Mixed use operating room	Procedure Codes (CPT/ICD9/ICD10)	Code	Type	Start Time	End Time
			0D9670Z	Hospital Discharge	08-29-2019 00:00	09-02-2019 00:00

The Administrative view has information regarding Demographics, Professional Fee Billing, Location Hierarchy, and Hospital Discharge Billing. PHI has been removed for the purposes of this guide.

History and Physical

Procedure: REPAIR UMBILICAL HERNIA > 3 TO 5 STRANGULATED/INCARCERATED ASA CLASS 3

Assessment		
Airway	Airway - Mallampati Score -- Unspecified Exam Position Airway - Hyoid to Mentum	II >3 FB
Anesthetic Plan	Assessment and Plan - Anesthesia Technique	General
History		
Past Medical History	General - PONV Risk Factors	1 Yes
	General - PONV Risk Total Score	2
	General - Past Medical History ICD-9 Code	ENDOCRINE HISTORY HYPERTENSION NOS MALIGN NEOPL PROSTATE UPPER GI SYSTEM HISTORY VASCULAR HISTORY
	General - Past Medical History ICD-10 Code	Oth abdominal hernia with obstruction, without gangrene
Past Surgical History	General - Past Surgical History	HEAD NECK SURGERY UROLOGIC SURGERY
Social History	History - Social History - Tobacco Details Current vs Past	1 Never Smoker
Medications		
Home	General - Medications - Home	ciprofloxacin 500 mg oral tablet docusate sodium 100 mg oral capsule Multiple Vitamins oral tablet
Preop	General - Medications Detail - Dose (numerical)	1 1 1
	General - Medications Detail - Dose (unit of measure)	cap(s) tab(s) tab(s)
	General - Medications Detail - Route of Administration	oral oral oral
	General - Medications Detail - Frequency	BID once a day
	General - Medications Detail - Scheduled vs PRN	TID N N Y
	General - Medications Detail - Name	ciprofloxacin 500 mg oral tablet docusate sodium 100 mg oral capsule Multiple Vitamins oral tablet
Physical Exam		
Preop Height	Physical Exam - Height (cm)	182.9
	Physical Exam - Height (in)	183 72 72.4
	Preop Weight	Physical Exam - Weight (kg) 117.9 110.3

The H&P View shows perioperative assessment data. Similar to in Chart view, any blue text can be clicked to show more information in the right yellow pane

Outcomes

The Outcomes view shows documented outcomes and mortality if available. The blue text in this view also remains clickable to reveal more information in the yellow right pane.

The screenshot shows a software interface with a dark blue sidebar on the left containing menu items: Chart, Record Search, Administrative, H&P, Outcomes (highlighted), and Labs. The main content area has a header with 'Procedure REPAIR UMBILICAL HERNIA > 5 YO STRANGULATED/INCARCERATED' and 'ASA Class 3'. Below this is a 'Documented Outcomes' section with a grey bar for 'Outcomes' containing the text 'Intraoperative observed quality assurance event' and 'No Intraoperative Events'. The 'Mortality' section below it shows 'Nothing documented'.

Labs

Procedure		REPAIR UMBILICAL HERNIA > 5 YO STRANGULATED/INCARCERATED									
ASA Class		3									
		06-03-2019	08-19-2019	08-28-2019	08-29-2019	08-30-2019	08-31-2019	09-01-2019	09-02-2019		
		15:43	17:19	01:43	10:10	12:27	05:43	03:42	07:03	09:07	05:01
Blood Bank	ABO/Rhesus (Rh) Factor										
	Antibody Screen										
Blood Gas	None documented										
Cardiac	Cholesterol	219									
	HDL	53									
	LDL	145									
	Triglycerides	107									
Chemistry	Alanine Aminotransferase (ALT)	41								51	
	Albumin	4.3								3.6	
	Alkaline Phosphatase	101								83	
	Aspartate Aminotransferase (AST)	23								28	
	Bilirubin, Total	0.6								1	
	Calcium	9.7	10.1	9	9.7		8.7	9.1		9.5	
	Chloride	108	107	106	104		109	108		107	
	Creatinine	1.1	1.1	1.1	1.1		1	1		1.3	
	Glucose	91	71	105	117		98	100		93	
	Lactate	208				1.3				1.2	
	LDH	208									
	Magnesium						2.2	2		2.1	
	Potassium	4.2	3.7	4.2	4.2		3.9	4.3		4	
	Protein	7.2								6.5	
	Sodium	144	142	139	140		141	141		141	
	Urea Nitrogen	13	13	13	10		9	7		9	
Coagulation	International Normalized Ratio (INR)		1		1.1					1.1	
	Partial Thromboplastin Time (PTT)		28.3		27.3						
	Prothrombin Time (PT)		13.1		13.2					13.2	
Complete Blood Count	Hemoglobin (HGB)	14.3	14.2	12.2	14.2		12.6	12.5		12.7	
	Hematocrit (HCT)	45.3	44.9	37.6	43.2		39.3	38.3		38.6	
	Platelets (PLT)	268	272	270	328		289	302		323	
	WBC Count	5.9	5.8	11.8	13.8		11.1	11.3		11.3	
Drug Monitoring	None documented										
Endocrine	Hemoglobin A1c	4.7									
Other	None documented										
Urine	None documented										

- Shows labs in clinical groupings and chronological order
- Info is also available in chart view
- Blue shading across the top shows the day of surgery

												Time	Value	Mapped As	
Blood Bank	ABO/Rhesus (Rh) Factor														
	Antibody Screen														
Blood Gas	None documented														
Cardiac	Cholesterol	219													
	HDL	53													
	LDL	145													
	Triglycerides	107													
Chemistry	Alanine Aminotransferase (ALT)	41													
	Albumin	4.3													
	Alkaline Phosphatase	101													
	Aspartate Aminotransferase (AST)	23													
	Bilirubin, Total	0.6													
	Calcium	9.7	10.1	9.7	9.7	8.7	9.1	9.5							
	Chloride	108	107	106	104	109	108	107							
	Creatinine	1.1	1.1	1.1	1.1	1	1	1.3							
	Glucose	91	71	105	117	98	100	93							
	Lactate	208							1.3						
	LDH	208								1.2					
	Magnesium									2.2					
	Potassium	4.2	3.7	4.2	4.2					3.9					
	Protein	7.2													
	Sodium	144	142	139	140					141					
	Urea Nitrogen	13	13	13	10					9					
Coagulation	International Normalized Ratio (INR)									1					
	Partial Thromboplastin Time (PTT)									28.3					
	Prothrombin Time (PT)									13.1					
Complete Blood Count	Hemoglobin (HGB)	14.3	14.2	12.2	14.2					12.6					
	Hematocrit (HCT)	45.3	44.9	37.6	43.2					39.3					
	Platelets (PLT)	268	272	270	328					289					
	WBC Count	5.9	5.8	11.8	13.8					11.1					
Drug Monitoring	None documented														
Endocrine	Hemoglobin A1c	4.7													
Other	None documented														
Urine	None documented														

Clicking on the lab name on the right will show all labs in that category in the right hand yellow pane. Clicking a lab value itself will give more information about that lab value.

- Clicking a value brings up more information

Procedure: REPAIR UMBILICAL HERNIA > TO STRANGULATED/INCARCERATED ASA Class: 3

	06-03-2019 15:43	08-19-2019 17:19	08-28-2019 01:43	08-29-2019 10:10	12:27	08-30-2019 05:43	08-31-2019 05:42	09-01-2019 07:03	09-07 09:07	09-02-2019 05:01
Blood Bank	ABO/Rhesus (Rh) Factor Antibody Screen									
Blood Gas	None documented									
Cardiac	Cholesterol: 219 HDL: 53 LDL: 145 Triglycerides: 107									
Chemistry	Alanine Aminotransferase (ALT): 41 Albumin: 4.3 Alkaline Phosphatase: 101 Aspartate Aminotransferase (AST): 23 Bilirubin, Total: 0.6 Calcium: 9.7 Chloride: 108 Creatinine: 1.1 Glucose: 91 Lactate: 208 LDH: 208 Magnesium: 2.2 Potassium: 4.2 Protein: 7.2 Sodium: 144 Urea Nitrogen: 13									
Coagulation	International Normalized Ratio (INR): 1 Partial Thromboplastin Time (PTT): 28.3 Prothrombin Time (PT): 13.1									
Complete Blood Count	Hemoglobin (HGB): 14.3 Hematocrit (HCT): 45.3 Platelets (PLT): 268 WBC Count: 5.9									
Drug Monitoring	None documented									
Endocrine	Hemoglobin A1c: 4.7									
Other	None documented									

Lab Value ✕

Concept: Formal lab - Glucose, Serum/Plasma

Value: 91

Time: 06-03-2019 15:43

User Comment: Fasting reference:
Pre-Diabetes 100-125
Diabetes >125
Non-Fasting:
Normal <140
Diabetes >/=200

AIMS_IntraopMedications

Find value

MPOGDose_ID	MPOGCase_ID	MPOGMed_Concept_ID	MPOGDose_Type_CD	MPOGUOM_Concept_ID	MPOGRoute_Concept_ID	AIMSDose_ID	AIMSMed_Concept_ID	AIMSDose_Start_DT	AIMSDose_End_DT	AIMSMed_Nar
adffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10702	1	1005	2008	2330975-27694-2020-09-15 09:13:00-1-465158003	27694	9/15/2020 9:13:00 AM		omeprazole 20
aefdd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10253	1	1014	2014	2330975-28203-2020-09-15 20:00:00-1-465321507	28203	9/15/2020 8:00:00 PM		lidocaine 5 % t
affdd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10186	1	1010	2001	2330975-3037-2020-09-15 17:18:00-1-465230852	3037	9/15/2020 5:18:00 PM		fentaNYL (PF) 5
b0ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10186	1	1010	2001	2330975-3037-2020-09-15 17:27:00-2-465230852	3037	9/15/2020 5:27:00 PM		fentaNYL (PF) 5
b1ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10186	1	1010	2001	2330975-3037-2020-09-15 17:47:00-3-465230852	3037	9/15/2020 5:47:00 PM		fentaNYL (PF) 5
b2ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10219	1	1005	2001	2330975-3757-2020-09-15 18:17:00-1-465230853	3757	9/15/2020 6:17:00 PM		HYDROMorphi
b3ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10070	1	1025	2007	2330975-40822484-2020-09-15 16:54:00-2-465230834	40822484	9/15/2020 4:54:00 PM		bupivacaine (P
b4ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10306	1	1005	2001	2330975-40823880-2020-09-15 22:16:00-1-465321534	40823880	9/15/2020 10:16:00 PM		morphine 2 mg
b5ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10374	1	1005	2001	2330975-40840565-2020-09-15 21:22:00-1-465321530	40840565	9/15/2020 9:22:00 PM		PROMETHAZIN
b6ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10374	1	1005	2001	2330975-40843105-2020-09-15 10:18:00-2-465158026	40843105	9/15/2020 10:18:00 AM		PROMETHAZIN
b7ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10301	1	1005	2001	35921702	3092	9/15/2020 12:17:00 PM		Midazolam (IV)
b8ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10131	1	1005	2001	35921960	5456	9/15/2020 12:31:00 PM		Clindamycin N
b9ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10216	1	1005	2001	35922076	21090	9/15/2020 12:47:46 PM		Hydrocortison
baffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10160	1	1005	2001	35922154	47653	9/15/2020 12:52:50 PM		Diphenhydram
bbffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10210	1	1005	2001	35922156	42297	9/15/2020 12:52:56 PM		Haloperidol (H
bcffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10377								Induc
bdffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10393								tum
beffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10186								
bfffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10186								
c0ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10202								cin M
c1ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10219								orphor
c2ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10219								orphor
c3ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10239								c
c4ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10070								ine O;
c5ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10206								trolate
c6ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10315								mine
c7ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10335								stron (I
c8ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10219								orphor

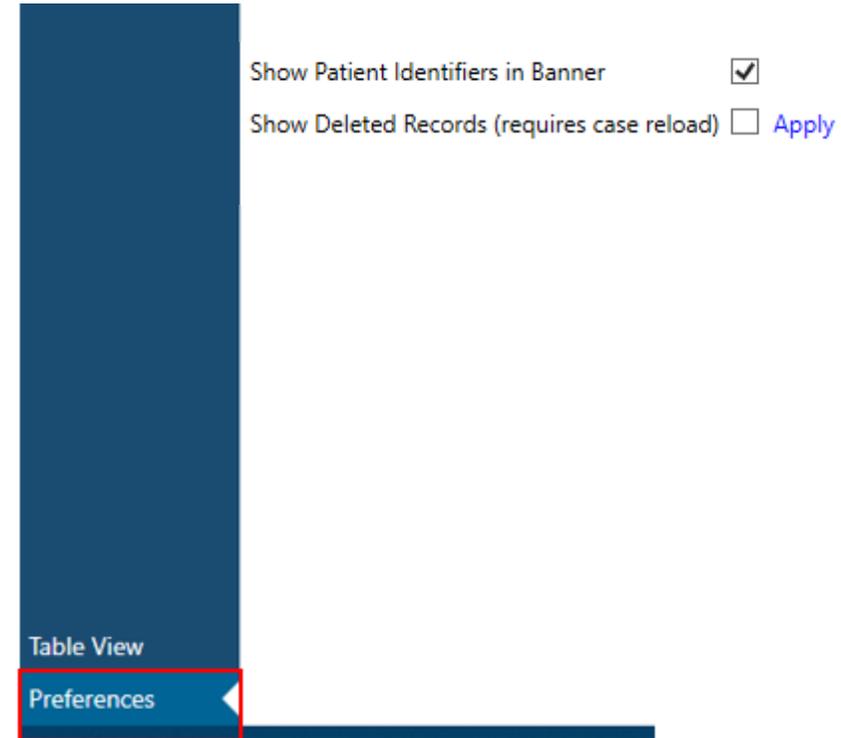
Table View

Table view displays all data submitted to MPOG central that was documented for a particular case regardless of if it was mapped to an MPOG concept or not. The dropdown menu allows to view data in specific storage tables.

The search bar below the drop down allows for text search of the information in table view

Preferences

- The preferences option on the bottom of the left pane lets users turn on/off PHI viewing and deleted record information
- Values marked as 'Artifact' are not shown when the option to not show Deleted data is selected



ACQR “Cheat Sheet”

- Example search strings for failed case review. Copy and paste into “Record Search”

- Glucose Measures:

glucose | insulin | anesthesia start | anesthesia End | dextrose | diabetes | 50012 | 50304
| 6008 | 50301 | 50443 | 50016 | 50002 | 50011 | 50069 | 50110 | 50211 | 50009

- Transfusion Measures:

anesthesia start | anesthesia end | HCT | hematocrit | hemoglobin | HGB | Red blood cells
| Estimated blood loss | Saline 0.9% | lactated ringers | albumin | platelets |
phenylephrine | ephedrine | epinephrine



Module 6

Data Diagnostics



Data Diagnostics Overview

- ASPIRE sites may contribute information from various sections of an EHR: preoperative, intraoperative, and postoperative notes and physiologic data, demographic information, laboratory values, and procedure codes.

Data Diagnostics Overview

- Two separate strategies are employed to improve data quality and ensure data accuracy.
 - First, data diagnostics are used by technical and clinical staff to detect systematic errors with data extraction, transformation, or mappings. Diagnostic visualizations represent specific pass/failure thresholds to determine compliance at a macro level.
 - Second, clinicians at each site are required to manually validate between 5 and 10 cases per month to ensure that the data that have been extracted into MPOG matches the original EHR information utilizing the Case Validator utility (see Module 7: Case by Case Validation)

Data Diagnostics Requirements

- Data Diagnostic review and attestation are **required** for **all sites before uploading** to the Central MPOG database.
- All **funded** sites are required to conduct this attestation process on a **monthly** basis.
- **Non-funded sites** are required to **complete before each upload** to MPOG Central. If submission is on a monthly basis, then attestation should also occur on a monthly basis.

Accessing Data Diagnostics



- Your institution/site should be defaulted in the top field.
- Select a module to filter the diagnostic list to accommodate the type of data to review. If planning to review all data diagnostics for the monthly attestation process, click “(All)” from the dropdown menu.

MPOG Data Diagnostics

Institution: University of Michigan Health System

Module: (All)

By Priority

High (6)

Medium (5)

Low (5)

Extraneous

Hospital Discharge Billing

Pro Fee Procedure Billing

Cases with Fluids

Billing

Cases

Fluids

Labs

Measures

Medications

Notes

Outcomes

Patients

Physiologic

Preop

Staff

Use these settings to filter the list of diagnostics

Click on a diagnostic to view its results

Diagnostic Search

- If searching for a specific diagnostic, a free text search is available on the left-hand side

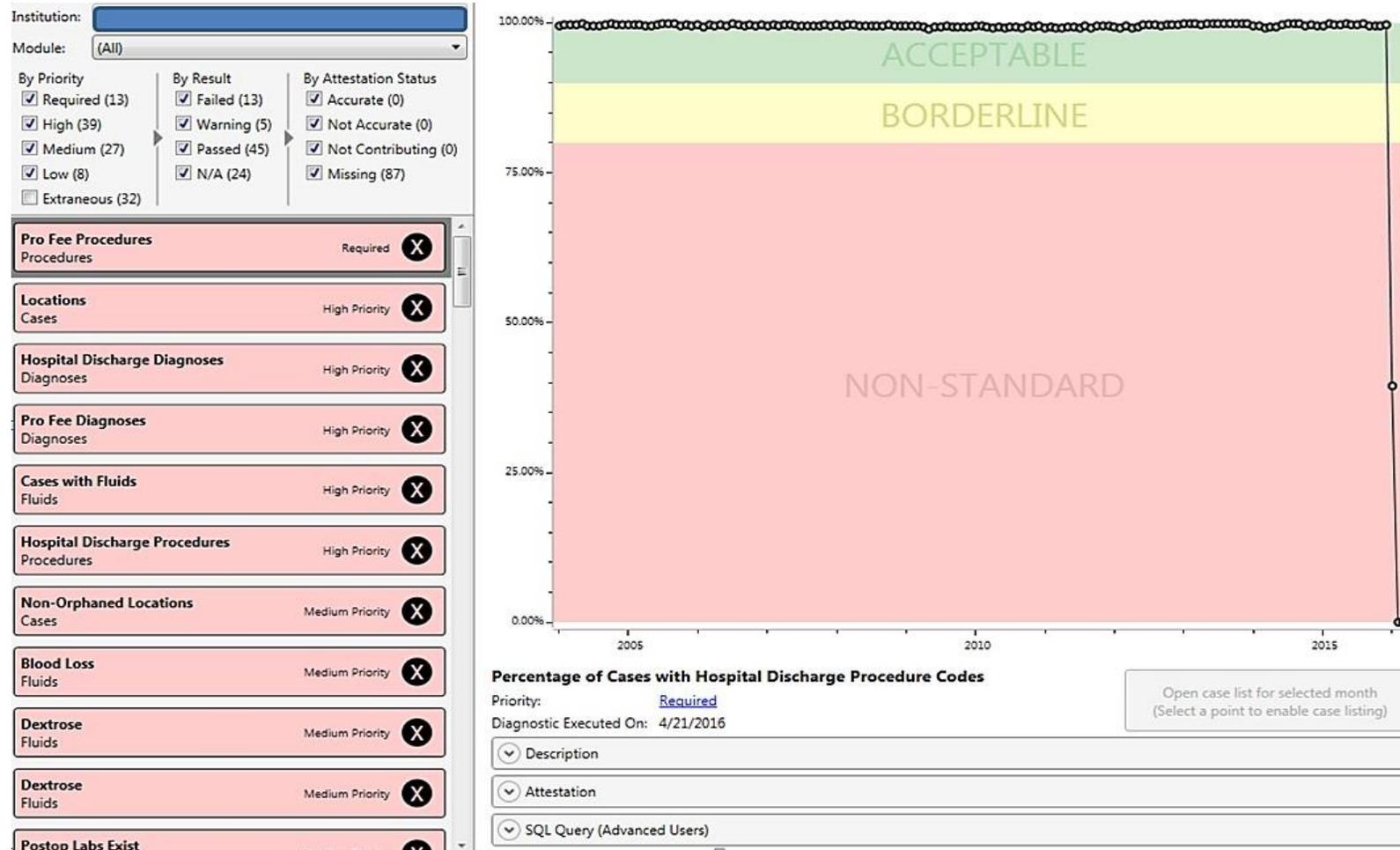
The screenshot shows a diagnostic search interface. At the top, there are two filter sections: 'By Priority' and 'By Result'. The 'By Priority' section has four options: 'High (60)' (checked), 'Medium (18)' (checked), 'Low (5)' (checked), and 'Extraneous (30)' (unchecked). The 'By Result' section has four options: 'Failed (3)' (checked), 'Warning (1)' (checked), 'Passed (51)' (checked), and 'N/A (28)' (checked). Below the filters is a search input field with the placeholder text 'Search for diagnostics...'. Below the search field are two search results, each in a pink box with a black 'X' icon in the top right corner. The first result is 'Pro Fee Procedures Anesthesia Billing' with 'High Priority' and the second is 'Pro Fee Procedures Surgical Billing' with 'Medium Priority'.

Filter Category	Filter Option	Count
By Priority	High	60
	Medium	18
	Low	5
	Extraneous	30
By Result	Failed	3
	Warning	1
	Passed	51
	N/A	28

Search for diagnostics...

Search Result	Priority
Pro Fee Procedures Anesthesia Billing	High Priority
Pro Fee Procedures Surgical Billing	Medium Priority

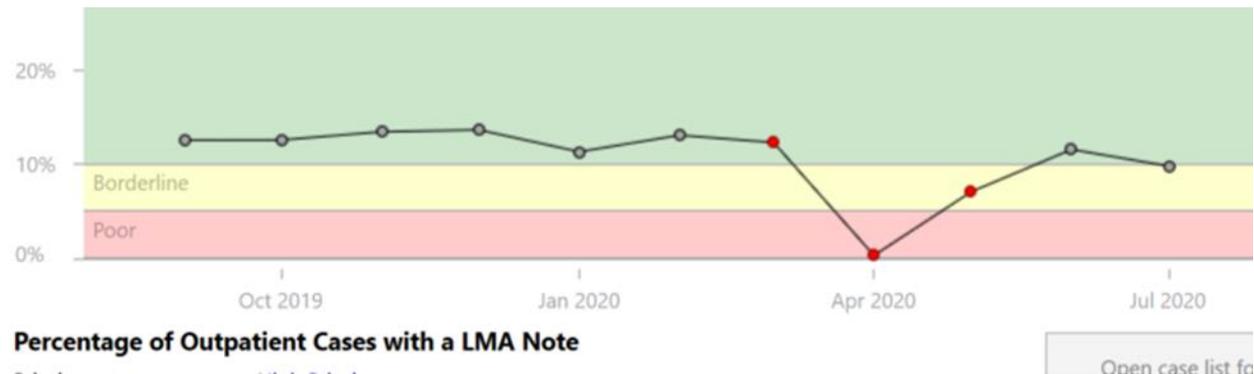
Click on the name of the Data Diagnostic in the left column to display the graphical results on the right.



- For the example on the previous slide, Pro Fee Procedures are highlighted in the left column, and the diagnostic displays the percentage of cases with hospital discharge procedure codes by month.
- If your site does not submit billing data, the graph will display 0% of cases have Pro Fee Procedure codes.

COVID-19 Adjustments

- For some diagnostics, the months of March/April/May 2020 are now excluded from diagnostic pass/fail consideration due to COVID-19's impact on case volume
- These months will appear as red data points on the graph



Institution:

Module: (All)

By Priority

- Required (13)
- High (39)
- Medium (27)
- Low (8)
- Extraneous (32)

By Result

- Failed (13)
- Warning (5)
- Passed (45)
- N/A (24)

By Attestation Status

- Accurate (0)
- Not Accurate (0)
- Not Contributing (0)
- Missing (87)

Pro Fee Procedures Procedures Required

Locations Cases High Priority

Hospital Discharge Diagnoses Diagnoses High Priority

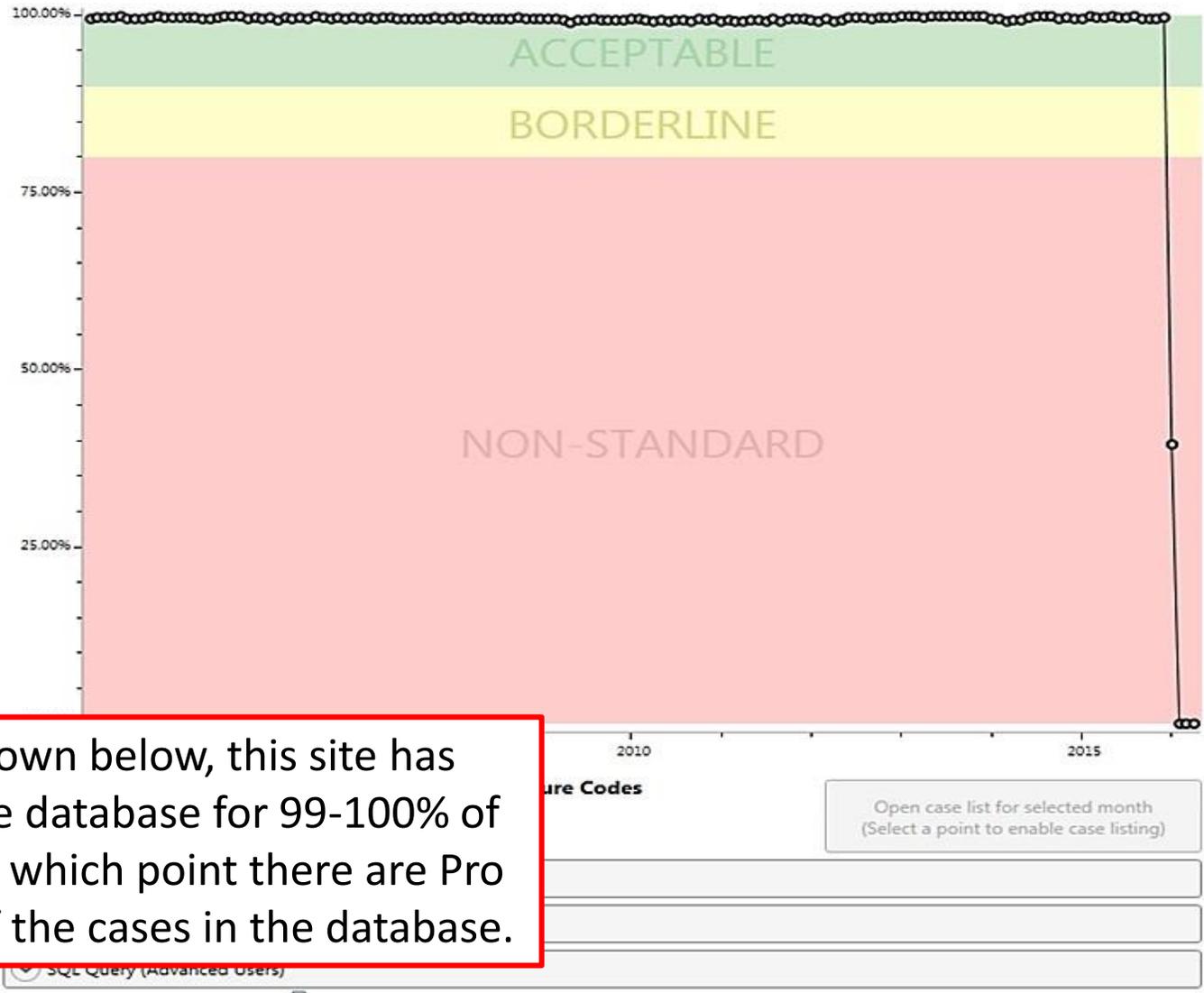
Pro Fee Diagnoses Diagnoses High Priority

Cases with Fluids Fluids High Priority

Hospital Discharge Procedures Procedures High Priority

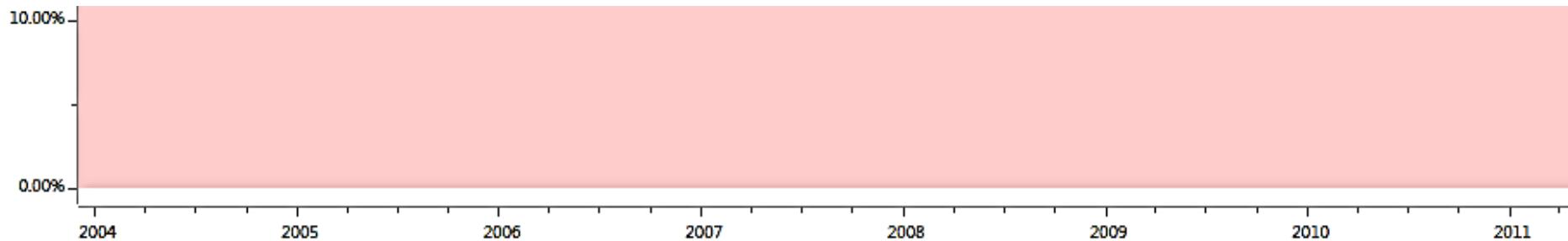
Non-Orphaned Locations Medium Priority

Postop Labs Exist



According to the diagnostic shown below, this site has Pro Fee Procedure codes in the database for 99-100% of cases through January 2016 at which point there are Pro Fee Procedure codes for 0% of the cases in the database.

To understand when the Diagnostic was last updated, view the 'Diagnostic Executed On: XX/XX/XXXX' date listed beneath the graph.



Percentage of Cases with Hospital Discharge Procedure Codes

Priority: [Required](#)

Diagnostic Executed On: 4/14/2016

- Description
- Attestation
- SQL Query (Advanced Users)

- To seek further clarification for the diagnostic selected, click on the “Description” header beneath the graph.
- Clicking on the Description will expand the box to display the definition of the Data Diagnostic shown as well as the MPOG concept IDs that impact that diagnostic.

Percentage of Outpatient Cases with a LMA Note

Priority: [High Priority](#)

Diagnostic Executed On: 10/30/2019

Open case list for selected month
(Select a point to enable case listing)

^ Description

Percentage of outpatient cases with an LMA (laryngeal mask airway) note between anesthesia start and anesthesia end. Excludes inpatient cases. Check extract or mapping if inconsistent with your institution's practices.

Concepts Used:

- ▲ **LMA Notes**
- 50141 Airway - Laryngeal Mask airway type
- 50142 Airway - Laryngeal Mask airway size
- 50143 Airway - Laryngeal mask airway placement difficulty
- 50144 Airway - Laryngeal mask airway placement technique

Attestation

- Beneath the description is an Attestation section. Click on the dropdown arrow next to 'Attestation' to open.

^ Description

Use this chart to verify that professional fee procedure codes have been successfully imported. If this percentage is low, check your extract.

^ Attestation

Current Attestation	Comment	Previous Attestations
<input type="checkbox"/> Data Accurately Represented The results of this diagnostic accurately represents the data from our documentation systems.		04/11/16 Data Accurately Represented 03/02/16 Data Accurately Represented 02/19/16 Data Not Accurately Represented 01/18/16 Data Not Accurately Represented 12/14/15 Data Not Accurately Represented 10/21/15 Data Accurately Represented 09/23/15 Data Not Accurately Represented
<input type="checkbox"/> Data Not Accurately Represented The results of this diagnostic are not representative of data from our documentation and needs to be		
<input type="checkbox"/> Not Contributing Data We are unable to contribute data for this content area.		

Attestation

- In the Attestation section, the site Anesthesia Clinical Quality Reviewer (ACQR) or Quality Champion has the opportunity to review the diagnostic and determine if the data accurately represents the documentation present at the site (either in the EHR or billing software).

Attestation

- If the site is not submitting data for the content area measured in the diagnostic (i.e. billing data), the option of “Not Contributing Data” should be selected.
- Click the box next to the attestation selection that most represents the analysis conducted on the Data Diagnostic under review. When the Data Diagnostic application is updated the following weekend, the current attestation will move to the Previous Attestation box on right side of the screen with an associated date

Attestation

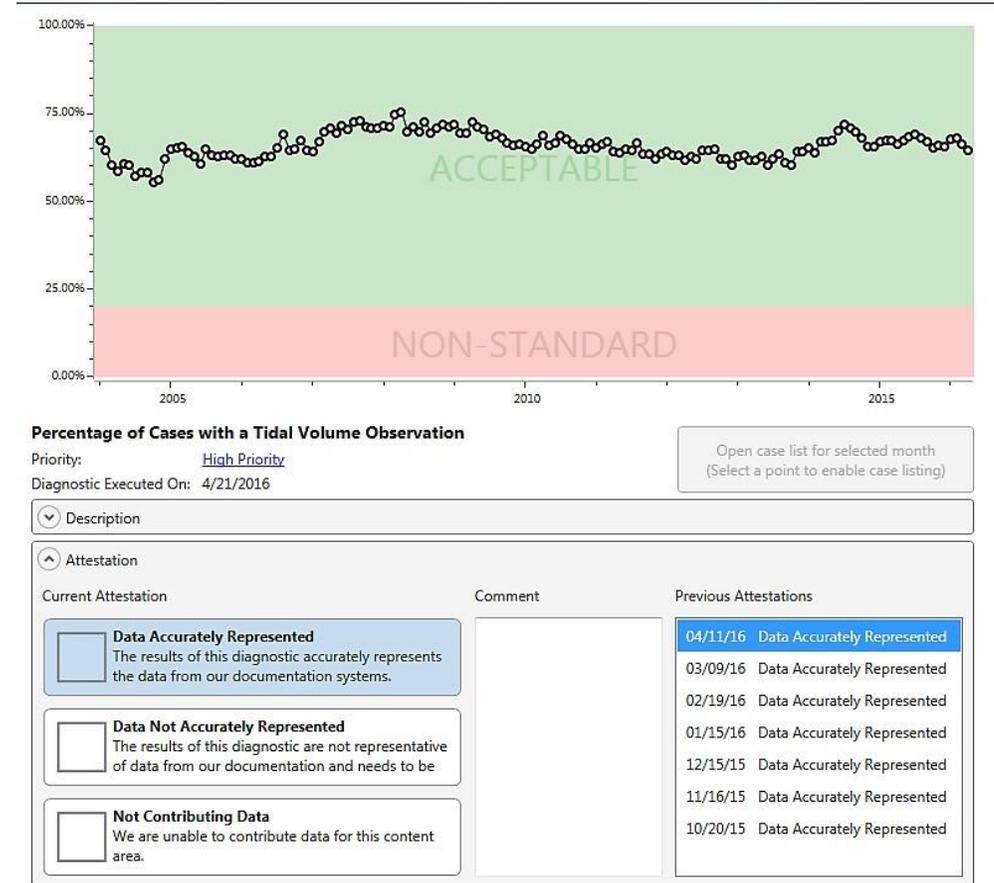
- For the purpose of this example (slide 9), “Data Accurately Represented” would be chosen since the data reflects the documentation for the cases that have been loaded to date.
- Comments can be added to the middle column as needed

^ Attestation

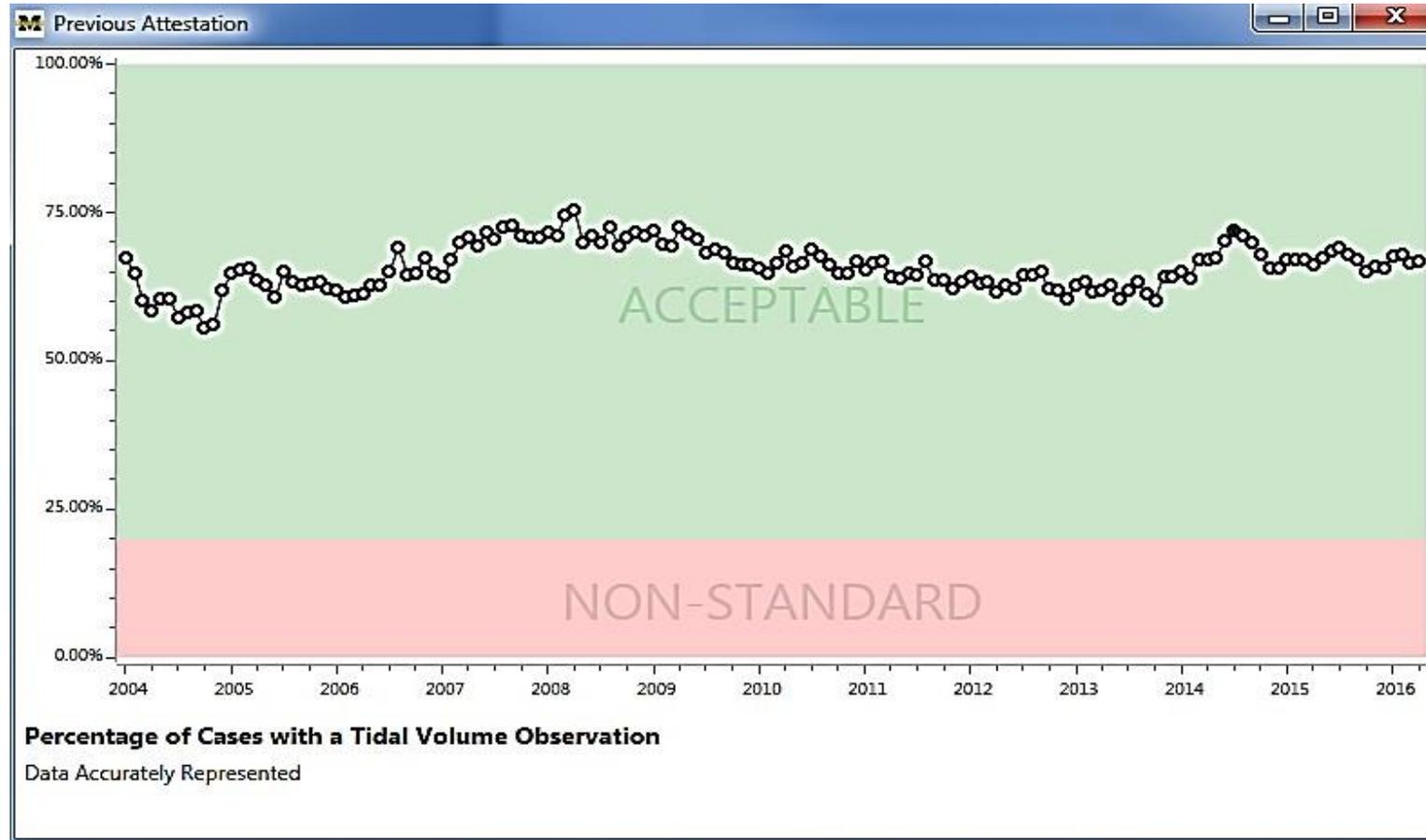
Current Attestation	Comment	Previous Attestations
<input checked="" type="checkbox"/> Data Accurately Represented The results of this diagnostic accurately represents the data from our documentation systems.		04/11/16 Data Accurately Represented 03/02/16 Data Accurately Represented 02/19/16 Data Not Accurately Represented 01/18/16 Data Not Accurately Represented 12/14/15 Data Not Accurately Represented 10/21/15 Data Accurately Represented 09/23/15 Data Not Accurately Represented
<input type="checkbox"/> Data Not Accurately Represented The results of this diagnostic are not representative of data from our documentation and needs to be		
<input type="checkbox"/> Not Contributing Data We are unable to contribute data for this content area.		

Viewing Previous Diagnostics

- To view diagnostic graphs from a previous attestation, double-click on the row of the attestation to review and a new screen will display with the previous graph

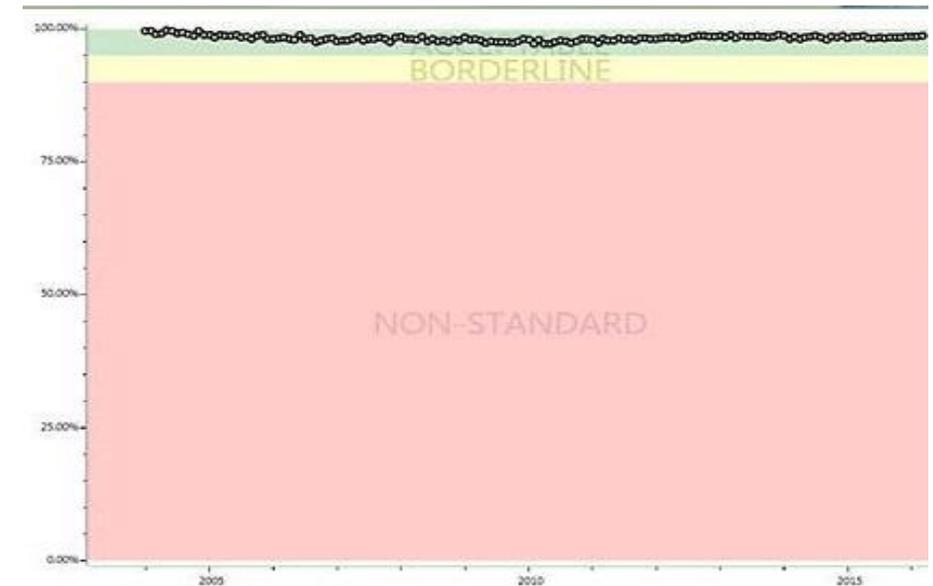


- Previous attestation graph will display in a new window



Investigating Diagnostics

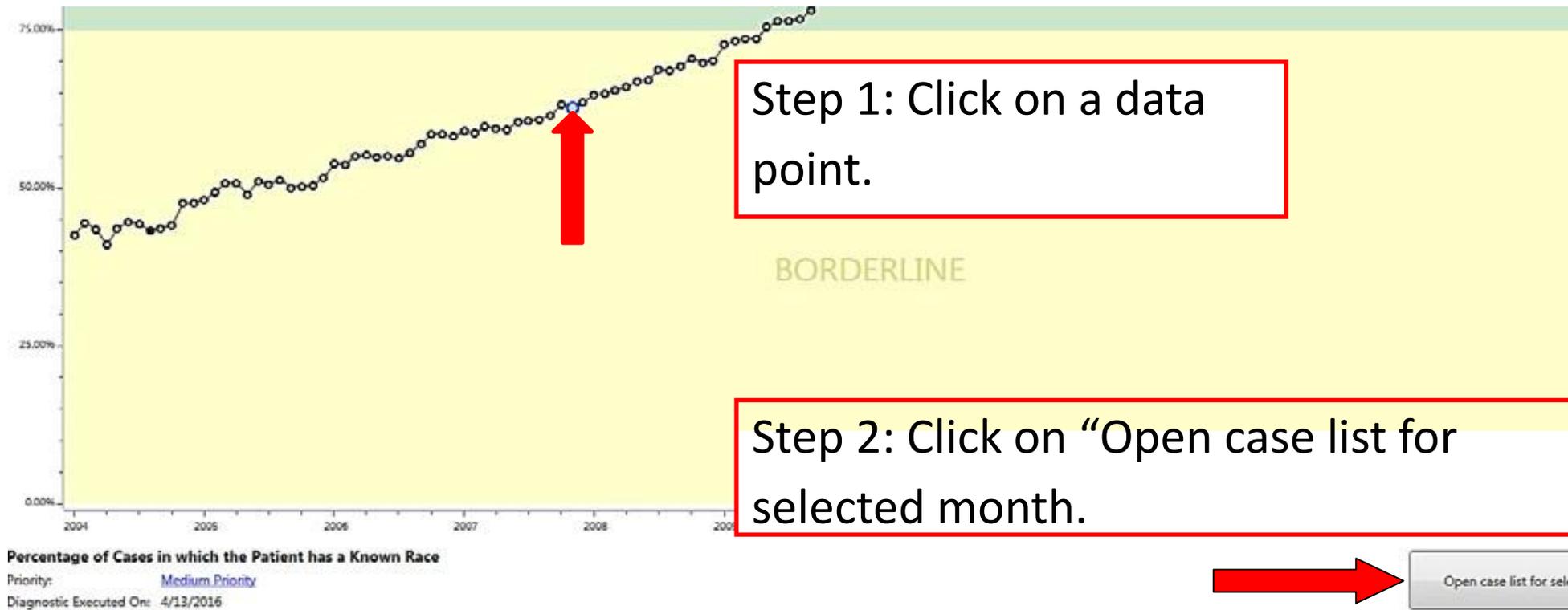
- If data is not accurately represented (gaps in the data or values are higher or lower than expected)
- Thresholds for many of the diagnostics are reflective of common practice across man sites
 - Acceptable (green)
 - Borderline (yellow)
 - Non-standard (red)



Diagnostics Investigation

- If you are below the threshold, with data in the 'Borderline' or 'Non-standard' areas of the graph, please verify the accuracy of the data.
- If not accurate, investigate further with the site technical team to identify if extract or mapping issues exist.

Click on the data point associated with the time period in question and select 'Open case list for selected month' to display a list of cases for that time period.



- A date column also allows users to quickly see any trends to missing data by date on which the cases occurred
- By drilling down in to cases, it may be possible to determine if a mapping issue exists.
- Contact the QI Coordinators to identify next steps to improving the data quality.

Percentage of Cases with a PEEP Observation

The selection has 226 cases available

Procedure	Date	Has PEEP?	
THYROIDECTOMY, TOTAL THYROIDECTOMY POSSIBLE PARTIAL STERNOTOMY WITH RLN MONITORING	05-01-2014 08:30	Yes	
THYROIDECTOMY, TOTAL THYROIDECTOMY POSSIBLE PARTIAL STERNOTOMY WITH RLN MONITORING	05-01-2014 08:30	Yes	
THYROIDECTOMY, TOTAL THYROIDECTOMY POSSIBLE PARTIAL STERNOTOMY WITH RLN MONITORING	05-01-2014 08:30	Yes	
LAPAROSCOPIC PROSTATECTOMY WITH DAVINCI, POSSIBLE RADICAL RETROPUBIC PROSTATECTOMY	05-01-2014 08:30	Yes	
RADICAL RETROPUBIC PROSTATECTOMY, POSSIBLE RADICAL RETROPUBIC PROSTATECTOMY	05-01-2014 08:30	Yes	
IR NEUROLOGICAL EMBOLIZATION, IR NEURO Left ICA aneurysm Endovascular occlusion	05-01-2014 08:30	Yes	
AAA ENDO, EVAR	05-01-2014 08:30	Yes	
COLONOSCOPY, POSSIBLE BIOPSY, COLONOSCOPY, POSSIBLE BIOPSY	05-01-2014 09:30	No	
CYSTOSCOPY - RETROGRADE, CYSTOSCOPY - RETROGRADE PG URETERAL STENT PLACEMENT, CYSTOSCOPY - RETROGRADE PG	05-01-2014 10:30	No	
ECCE IOL, RIGHT POSSIBLE PARS PLANA CAPSULOTOMY- HAVE OCUTOME LEAVE UNOPENED	05-01-2014 10:30	Yes	
POSTERIOR CAPSULOTOMY, RIGHT POSSIBLE PARS PLANA CAPSULOTOMY- HAVE OCUTOME LEAVE UNOPENED	05-01-2014 10:30	Yes	

Diagnostics Priorities

- Diagnostics are labeled by priority type. A definition for each priority type is listed below. These definitions are also available when clicking on the priority type

Percentage of Cases with Hemoglobin or Potassium Labs - 30 Days Post

Priority: [Medium Priority](#)

Diagnostic Executed On: 4/20/2016

Step 1: Click on the Priority type for definition.

Percentage of Cases with Hemoglobin or Potassium Labs - 30 Days Post

Priority: [Medium Priority](#)

Diagnostic Executed On:

▼ Description

▲ Attestation

Medium priority diagnostics must be attested to and generally should pass. Failure to pass these diagnostics is acceptable but usually not recommended if otherwise possible.

Step 2: A definition window will present with the priority definition.

Diagnostics Pories

- * **Required**: A required diagnostic MUST be passed before submission to MPOG.
- * **High Priority**: High priority diagnostics must be attested to and it is strongly recommended that any detected issues are fixed prior to submission. Failure to pass these diagnostics can severely impact the quality assessment and research capabilities of your institution.
- * **Medium Priority**: Medium priority diagnostics must be attested to and generally should pass. Failure to pass these diagnostics is acceptable but usually not recommended if otherwise possible.

The screenshot displays the 'MPOG Data Diagnostics' interface. At the top, there are fields for 'Institution' and 'Module' (set to '(All)'). Below these are three columns of filters: 'By Priority' (Required (13), High (39), Medium (24), Low (8), Extraneous (32)), 'By Result' (Failed (18), Warning (7), Passed (40), N/A (51)), and 'By Attestation Status' (Accurate (0), Not Accurate (0), Not Contributing (0), Missing (116)). The main area shows a list of diagnostics with their status and priority:

Diagnostic Name	Priority	Status
Medication Route Mapping Medications	High Priority	! (Warning)
Known Patient Race Patients	Medium Priority	! (Warning)
Diagnosis Text Fill Rate Cases	Low Priority	! (Warning)
Fluid Route Mapping Fluids	Low Priority	! (Warning)
Cases with Bolus Meds Medications	Required	✓ (Pass)
Cases with Notes Notes	Required	✓ (Pass)

Diagnostics Priorities

Low Priority: Low priority diagnostics are for low impact areas of the MPOG database.

Extraneous Priority: Extraneous diagnostics are meant purely as supplemental information. Reviewing them is not required and they are hidden by default.

Priority type for each diagnostic is easily viewed on the right side in each diagnostic.

The screenshot shows the 'MPOG Data Diagnostics' interface. At the top, there are filters for 'Institution' and 'Module' (set to '(All)'). Below these are three columns of filters: 'By Priority' (Required (13), High (39), Medium (24), Low (8), Extraneous (32)), 'By Result' (Failed (18), Warning (7), Passed (40), N/A (51)), and 'By Attestation Status' (Accurate (0), Not Accurate (0), Not Contributing (0), Missing (116)). The main area displays a list of diagnostics with their names, categories, and priority levels:

- Medication Route Mapping (Medications) - High Priority (Warning icon)
- Known Patient Race (Patients) - Medium Priority (Warning icon)
- Diagnosis Text Fill Rate (Cases) - Low Priority (Warning icon)
- Fluid Route Mapping (Fluids) - Low Priority (Warning icon)
- Cases with Bolus Meds (Medications) - Required (Checkmark icon)
- Cases with Notes (Notes) - Required (Checkmark icon)

Filtering Diagnostics

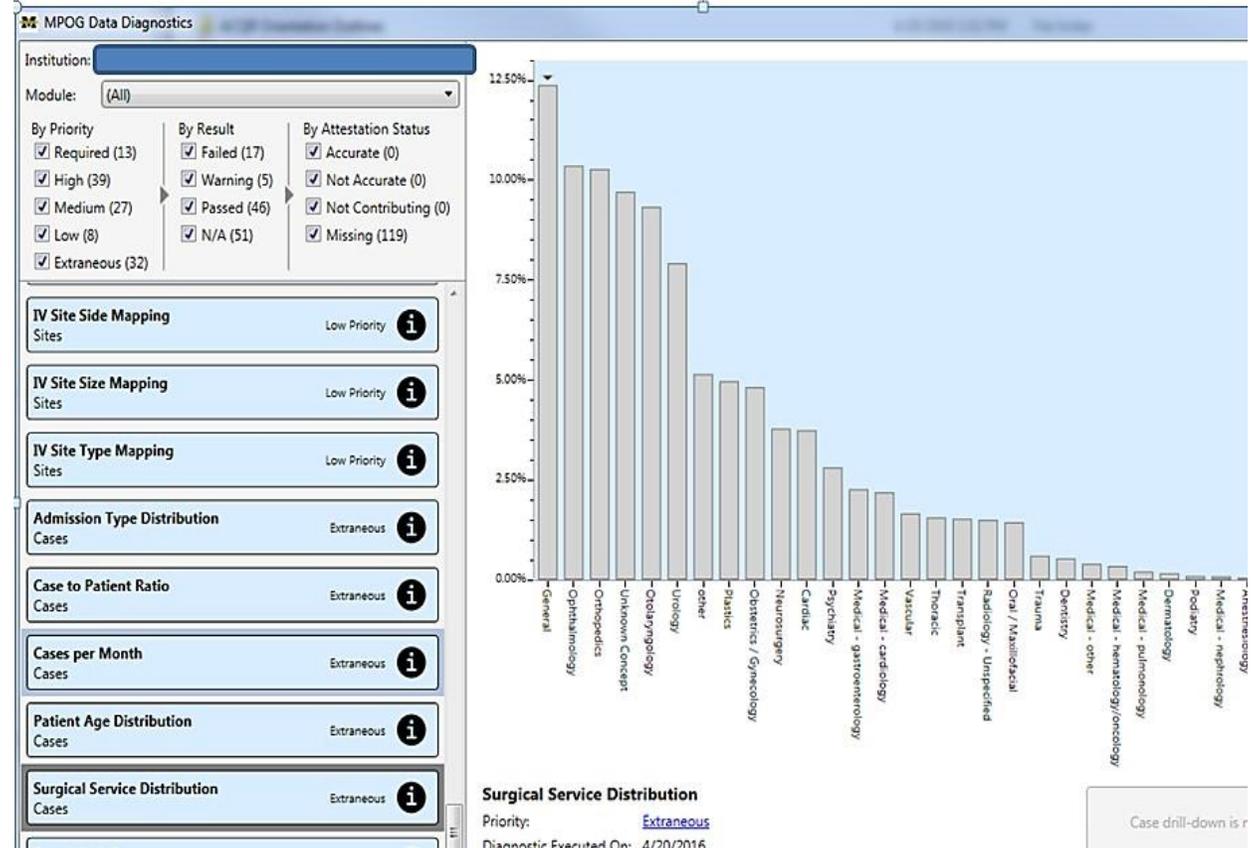
- Filters can be applied by Priority, Result, or Attestation Type. Filtering allows the user to limit the number of diagnostics listed and improve the selection process for tailored and purposeful review of the data.

Module: (All) ▾

By Priority	By Result	By Attestation Status
<input checked="" type="checkbox"/> Required (13)	<input checked="" type="checkbox"/> Failed (6)	<input checked="" type="checkbox"/> Accurate (0)
<input checked="" type="checkbox"/> High (39)	<input checked="" type="checkbox"/> Warning (2)	<input checked="" type="checkbox"/> Not Accurate (0)
<input type="checkbox"/> Medium (27)	<input checked="" type="checkbox"/> Passed (34)	<input checked="" type="checkbox"/> Not Contributing (0)
<input type="checkbox"/> Low (8)	<input checked="" type="checkbox"/> N/A (10)	<input checked="" type="checkbox"/> Missing (52)
<input type="checkbox"/> Extraneous (32)		

Extraneous

- Extraneous diagnostics are blue diagnostics and indicate that thresholds do not exist because every site differs in terms of case mix and patient population.
- It is important to verify that the diagnostic reflects your site case mix, population, practice, and distribution.



Exporting Diagnostics

- Click on the “Export Results” button at the bottom of the Diagnostic listings
- Will export ALL diagnostics at once
- Save file to a location you can easily retrieve from
- If the Coordinating Center requests a copy of recent Diagnostics, simply attach the file to an email and send to one of the QI Coordinators. This report does not contain PHI, and can be sent through email.

Institution: [Redacted]
Module: (All)

By Priority
 High (56)
 Medium (22)
 Low (4)
 Extraneous (25)

By Result
 Failed (8)
 Warning (4)
 Passed (49)
 N/A (21)

- Hospital Discharge Diagnoses** Billing High Priority X
- Hospital Discharge Multi-Day** Billing High Priority X
- Pro Fee Diagnoses** Billing High Priority X
- Cases with Fluids** Fluids High Priority X
- PEEP** Measures High Priority X
- Blood Loss** Fluids Medium Priority X
- Postoperative Troponin** Labs Medium Priority X
- Hospital Discharge Procedures** Billing Low Priority X
- Surgical Service Mapping** Cases High Priority !
- Known Patient Race** Patients Medium Priority !

Export Results

Exporting Diagnostics

- Helpful when comparing local diagnostics to MPOG Central Diagnostics
- Local Diagnostics refresh each night
- MPOG Central Diagnostics refresh each Sunday



Module 7

Case Validation



Case Validation Overview

- Case validation is used along with Data Diagnostics (Module 6) to ensure data accuracy
- Ensures that the data extracted into MPOG matches the original EHR documentation utilizing the MPOG Case Validation application
- Allows for detection of data issues at an individual case level that may not be visible using data diagnostics
- Series of standard questions are used to validate case information

Case Validation Overview

- A variety of cases should be sampled
 - For example, if your institution has cardiac surgery, orthopedic surgery, obstetrics/gynecologic surgery, vascular surgery, and transplant surgery, then you should review a case for every service
- Emergent cases should be validated as the data for an emergent case may not always extract in the same way a scheduled case does.
- After a few months, you may see trends in issues with mapping.

Case Validation Overview

- Based upon initial review and with help from an MPOG QI Coordinator, you will decide how to select future cases for review.
- For example, you may find that there is a trend in issues with mapping for cardiac procedures. In this case, you will want to place emphasis on reviewing cardiac cases for a few months until the data issue is resolved.

Requirements

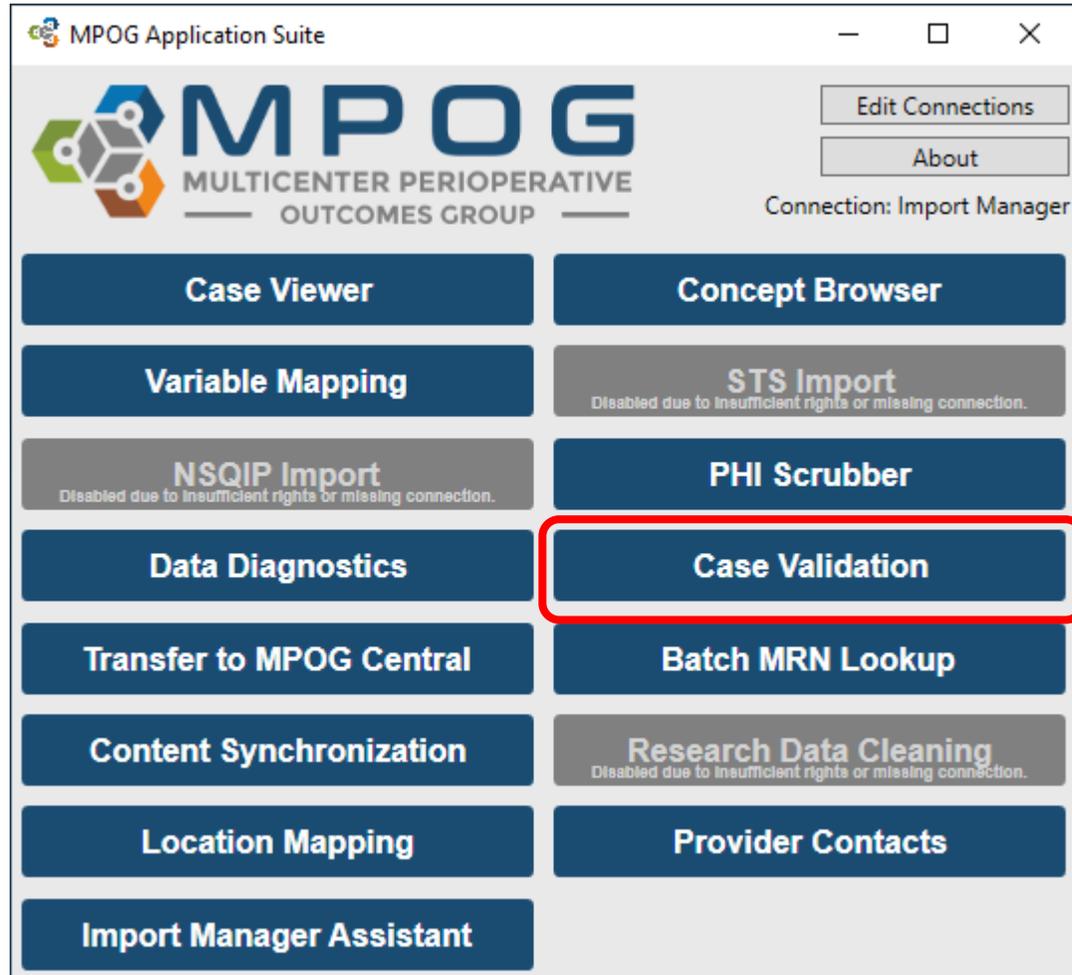
BCBS Funded sites

- MPOG requires review of 10 cases per month for at least 6 months prior to initial MPOG Central upload
- All historical data should be validated with a minimum of 5 case validations completed per month.
- Required to validate 10 cases per month prior to uploading to MPOG central each month

Non-funded sites

- MPOG requires review of 5 cases per month for 6 months before initial upload.
- All historical data should be validated with a minimum of 5 case validations completed per month but can be completed after initial upload if Data Diagnostics are accurate throughout.
- Required to validate 5 cases per month prior to each upload to MPOG Central

Accessing Case Validation



Case Validation App

- The left side of window displays 4 options for how you can select and open a case.
- The right side of the window displays the number of cases that have been reviewed historically for each month.
- Green indicates that the required number of cases per month have been reviewed.

Month	Cases Reviewed
2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

Pick a Case for Review

- 4 Options
 - Pick case by MRN and date
 - Pick case by case ID
 - Pick random unreviewed case
 - Pick already reviewed case

Pick a Case for Review: Select by MRN and Date

- Click the dial next to “Pick case by MRN and date.” Both MRN and Date of Operation are required for this type of case selection method. Click “Validate Case”
- The Case Validation screen should display. You would typically verify that the patient MRN & Date of Operation are the same as the case you were initially trying to select and then begin case validation.

Month	Cases
2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

Pick a Case for Review: Select by Case ID

- Click the dial next to “Pick case by case ID.” Enter MPOG Case ID. Click “Verify Case”
- The Case Validation screen should display. Typically, you would verify that the MPOG Case ID is the same as the case you were initially trying to select and then begin case validation.

Case Validation

Pick case by MRN and date

Patient MRN

Date of Operation

Pick case by case ID

MPOG Case ID

Pick random unreviewed case

Time Period 0 / 10

Service Type

Pick already reviewed case

Reviewed Cases

Validate Case

Review Saved Validation

2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

Pick random unreviewed case

- Click the dial next to “Pick random unreviewed case.”

Case Validation

Pick case by MRN and date

Patient MRN

Date of Operation

Pick case by case ID

MPOG Case ID

Pick random unreviewed case

Time Period 0 / 10

Service Type

Pick already reviewed case

Reviewed Cases

Validate Case

Review Saved Validation

2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

Pick random unreviewed case

- Choose the date range

Case Validation

Pick case by MRN and date

Patient MRN

Date of Operation

Pick case by case ID

MPOG Case ID

Pick random unreviewed case

Time Period 0 / 10

Service Type 0 / 10

Pick already reviewed

Reviewed Cases

09/01/2019	20 / 10
08/01/2019	20 / 10
07/01/2019	20 / 10
06/01/2019	24 / 10
05/01/2019	4 / 10
04/01/2019	10 / 10
03/01/2019	5 / 10
02/01/2019	5 / 10
01/01/2019	5 / 10
12/01/2018	5 / 10
11/01/2018	5 / 10
10/01/2018	7 / 10
09/01/2018	5 / 10
08/01/2018	5 / 10
07/01/2018	5 / 10
06/01/2018	5 / 10

Validate Case

2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

Review Saved Validation

Pick random un-reviewed case

- Select a surgical service from the dropdown menu (optional)
- Select “Validate Case” at the bottom of the screen

The screenshot displays the 'Case Validation' window. It features three main selection methods: 'Pick case by MRN and date', 'Pick case by case ID', and 'Pick random un-reviewed case'. The 'Pick random un-reviewed case' method is active, showing a 'Time Period' of 10/01/2019 (0 / 10) and a 'Service Type' dropdown menu. The dropdown menu lists various medical specialties, each with a 'Reviewed' and 'Total' count. A 'Validate Case' button is located at the bottom left of the interface.

Month	Reviewed	Total
2019-10	0	10
2019-09	20	10
2019-08	20	10
2019-07	20	10
2019-06	24	10
2019-05	4	10
2019-04	10	10
2019-03	5	10
2019-02	5	10

Service Type	Reviewed	Total
(Any)	0	3134
Cardiac	0	86
Dentistry	0	15
General	0	222
Medical - cardiology	0	127
Medical - gastroenterology	0	34
Medical - hematology/oncology	0	21
Medical - nephrology	0	6
Medical - other	0	9
Medical - pulmonology	0	9
Neurosurgery	0	90
Obstetrics / Gynecology	0	151
Ophthalmology	0	335
Oral / Maxillofacial	0	46
Orthopedics	0	233
Otolaryngology	0	288
Plastics	0	109
Podiatry	0	2
Psychiatry	0	68
Radiology - Unspecified	0	100

Pick a Case for Review: Picking an Already Reviewed Case

- Click the dial next to “Pick an already reviewed case.”
- Select a case from the dropdown menu. The date of operation and procedure type will display.
- Select “Validate Case” at the bottom of the screen.
- The Case Validation screen should display. At this point, you would verify that the case selected matches the case type that displays in the validator and begin case validation.

The screenshot shows the 'Case Validation' window with the following sections:

- Pick case by MRN and date:** Patient MRN (empty), Date of Operation (10/15/2019).
- Pick case by case ID:** MPOG Case ID (00000000-0000-0000-0000-000000000000).
- Pick random unreviewed case:** Time Period (10/01/2019, 0 / 10), Service Type (Medical - pulmonology).
- Pick already reviewed case:** Reviewed Cases dropdown menu.
- Validate Case:** A button at the bottom of the screen.

The dropdown menu for 'Reviewed Cases' displays the following data:

Year	Count
2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

The dropdown menu also lists specific cases:

- 12/05/2017 MIDLINE CARDIAC PUMP AGE 0-3M
MIDLINE ATRIAL SEPTAL DEFECT REPAI
MIDLINE VENTRICULAR SEPTAL DEFECT REPAI
MIDLINE PERFUSION CARDIAC
- 01/04/2018 BILATERAL BLEPHAROPLASTY
- 01/09/2018 UMBILICAL HERNIA REPAIR

Case Validation

- Select a case using one of the previously described options
- The Case Validation questionnaire will display. For the purpose of this training exercise, the PHI was removed.

Case Lookup Information

Patient MRN: _____
Date of Operation: _____
MPOG Case ID: _____

Open Case in MPOG Case Viewer

Questions for Validation

Case Information *No Time Restriction* Add comments here

Was the patient's name Yes No

Was the patient's age at the time of operation Yes No

Is the admission type correctly mapped as 'Outpatient'? Yes No

Was the ASA physical status of the patient 'ASA 2'? Yes No

Is the following procedure description correct?
UNKNOWN MUSCLE BIOPSY Yes No

Was this procedure performed in procedure room 'M-OR 07'? Yes No

Are the following tags correct for procedure room 'M-OR 07'?
Facility type - Acute care hospital Yes No
Other - Mixed use operating room
Other - Pediatric

Is the primary procedure service correctly mapped as 'General'? Yes No

Preop *From 4 Hours Before Anesthesia Start to Anesthesia Start* Add comments here

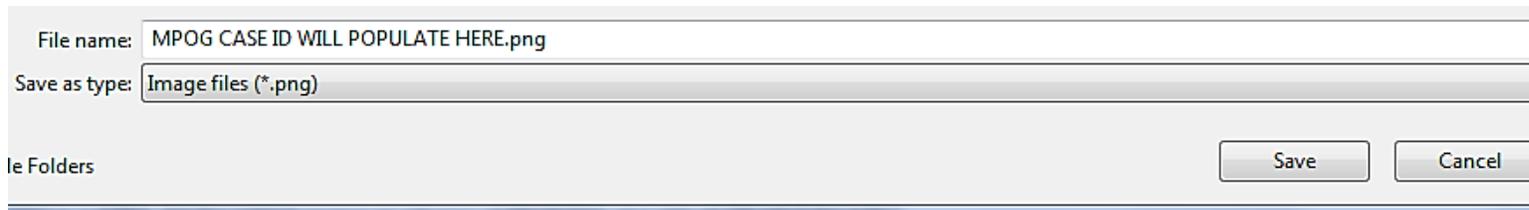
Was AACD Patient In Facility Date/Time at 12:50? Yes No

Perioperative Times *From 4 Hours Before Anesthesia Start to Anesthesia End + 6 Hours* Add comments here

Was anesthesia start at '2020-03-05 14:19'? Yes No

Case Validation

- You must answer every question with ‘yes’ or ‘no’ unless there is no data in which case the row for the question is highlighted in red.
- Compare questions against EHR. Please add comments as needed to explain any discrepancies.
- For issues that need follow-up from the site technical team or coordinating center, the “Save As Image” button is available to save a screenshot of the case. **PHI will automatically be eliminated from the screenshot.**
- A window will display asking you to save the image. The MPOG Case ID will automatically populate the File Name. Choose a file location where you will be able to access again. Click ‘Save



Case Validation

- Tooltips are available by hovering over the “(i)”. Tooltips provide more information regarding which concepts the question uses

Intraop Staff <i>No Time Restriction</i>		Add comments here
Was there 1 anesthesiology attending(s) that signed into this case?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was there 1 anesthesiology CRNA(s) that signed into this case?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	Scans provider sign-ins for: 6000:Staff Level - Anesthesia Attending
Was there 0 anesthesiology residents that signed into this case?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	

Preop Physiologic <i>From 4 Hours Before Anesthesia Start to Anesthesia Start</i>		Add comments here
---	--	-------------------

Intraop Medications and Fluids <i>From Anesthesia Start to Patient Out of Room</i>		Add comments here
Did the patient receive 300 ml of LACTATED RINGERS at 09:33?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Did the patient receive a bolus total of 50 mg of PROPOFOL?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Did the patient receive a bolus total of 50 mg of PROPOFOL?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Did the patient receive a bolus total of 50 mg of PROPOFOL?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	Alphabetically Last medication with a bolus dose. Note that this question may appear duplicated if there are few medications given on this case.
Did the patient receive a bolus total of 50 mg of PROPOFOL?	<i>(i)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	

Case Validation

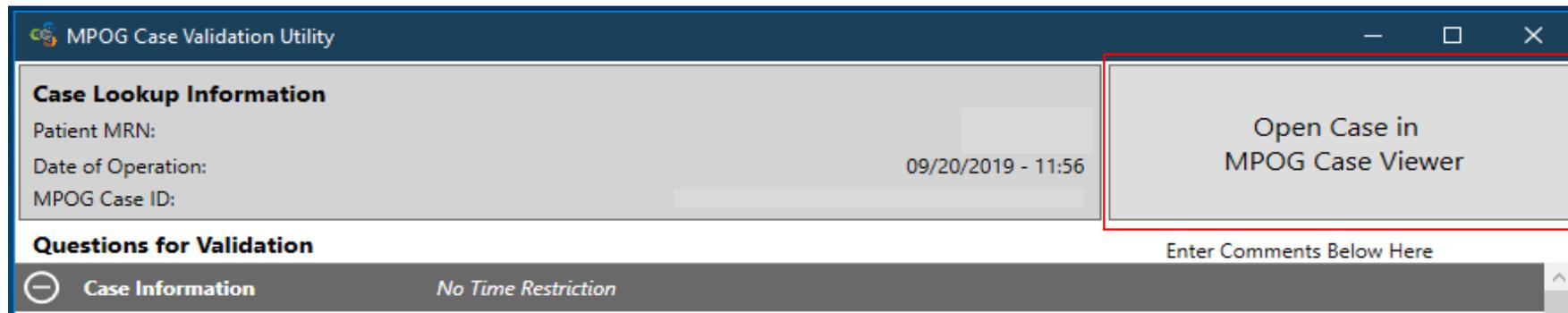
- May need 3-4 programs open at a time to verify the data in the MPOG case validator “matches” the information present in the hospital Anesthesia Information Management System (AIMS)
- It is recommended reviewers have 2 monitors/screens available for use
- Most likely will need intra-op record open on one screen and the MPOG case validator on the other
- The source of truth varies per institution depending on the electronic documenting system

Case Validation

- For example: At the University of Michigan Health System, multiple systems are used for case validation:
 - Centricity contains the Intra-op record, Anesthesia H&P, Case details.
 - Epic: Inpatient record, used for validation preop medications and admission status
 - Carelink: Previous EHR used for validating cases pre-dating Epic implementation.

Case Validation

- It may be useful to open the Case Viewer within the MPOG Suite to assist in the case review.
- To access from the Case Validation Utility screen, click on the 'Open Case in MPOG Case Viewer' tab at the top right hand of the screen. For further details on the Case Viewer, refer to Module 5



Case Validation

- If a case is missing information in the MPOG database for any reason, the case validator will highlight the row for that question in red and will not gray out the yes/no checkboxes.
- If multiple cases seem to be missing the same type of data, note the MPOG case IDs. This can indicate an extract issue or a documentation issue- discuss with the MPOG QI Coordinator to identify next steps. See example below.

Is the admission type correctly mapped as 'Inpatient'?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was the ASA physical status of the patient 'NOT FOUND'?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the following procedure description correct? ESOPHAGOGASTRODUODENOSCOPY WITH FOREIGN BODY REMOVAL	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was this procedure performed in procedure room 'M-PR 01'?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the following tags correct for procedure room 'M-PR 01'?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Facility type - Acute care hospital	
Other - Mixed use operating room	
Other - Pediatric	
Service specific room - Endoscopy	
Is the primary procedure service correctly mapped as 'Medical - gastroenterology'?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Preop <i>No Time Restriction</i> Add comments here	
<i>Nothing found</i>	
Perioperative Times <i>No Time Restriction</i> Add comments here	
Was anesthesia start at 'NOT FOUND'?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Was surgical incision at 'NOT FOUND'?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Was the patient transferred somewhere other than the recovery room?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was anesthesia end at 'NOT FOUND'?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Intraop Staff <i>No Time Restriction</i> Add comments here	



Case Validation

- After all questions are answered for the selected case, click the “Save Answers” button in the bottom right corner of the screen.
- Once the case has been submitted, there is no way to go back and make change to the form.
- Once the case is open, you must complete it as the information will not be saved if the case is closed before submitting.



The screenshot shows a validation form with the following elements:

- Question: "Is the primary procedure service correctly mapped as 'Ophthalmology'?" with "Yes" and "No" radio buttons.
- Section: "Preop" with a minus sign icon, time range "From 4 Hours Before Anesthesia Start to Anesthesia Start", and "Add comments here" text.
- Question: "Was AACD Patient In Facility Date/Time at 07:58?" with "Yes" and "No" radio buttons.
- Section: "Perioperative Times" with a minus sign icon, time range "From 4 Hours Before Anesthesia Start to Anesthesia End + 6 Hours", and "Add comments here" text.
- Question: "Was anesthesia start at '2020-03-10 09:11'?" with "Yes" and "No" radio buttons.
- Question: "Was surgical incision at '2020-03-10 09:22'?" with "Yes" and "No" radio buttons.
- Buttons: "Save As Image", "Save Answers" (highlighted with a red box), and "Cancel".

Case Validation

This will automatically save and update the monthly count for cases reviewed in the 'Overall Progress' section as seen below.

Month	Count
2016-03	0 / 20
2016-02	20 / 20
2016-01	21 / 20
2015-12	20 / 20
2015-11	20 / 20
2015-10	20 / 20
2015-09	20 / 20
2015-08	20 / 20

Case Validation

- To review a summary of past case validations, use the “Review Saved Validation” button. First, click the month that you want to see. Then, click “Review Saved Validation

Month	Count
2019-10	0 / 10
2019-09	20 / 10
2019-08	20 / 10
2019-07	20 / 10
2019-06	24 / 10
2019-05	4 / 10
2019-04	10 / 10
2019-03	5 / 10
2019-02	5 / 10
2019-01	5 / 10
2018-12	5 / 10
2018-11	5 / 10

- This screen will appear with a summary of the case validation questions and counts of the number of cases that month that had the question answered “No” and the number of cases with comments

Question	No / Missing	Comment
Admission Type Mapping		
Anesthesia Technique: General		
Anesthesia Technique: Neuraxial		
Arterial Line		
ASA Status	1	1
BP Baseline		
BP Systolic (Highest)	1	1
BP Systolic (Lowest)	1	1
Inhalational Agents		
Med Total		
Med Total: Bolus 1	2	2
Med Total: Bolus 2		
Med Total: Largest Bolus		

Date Reviewed	Question	Response	Comment	MPOG Case ID

Validation for the month of 09-2019

Hide passing questions

Question	No / Missing	Comment	Date Reviewed	Question	Response	Comment	MPOG Case ID
Admission Type Mapping			10-01-2019 08:16	Was the ASA physical status of the patient 'ASA 2'?	Yes		0c2a355f-66d3-e1
Anesthesia Technique: General			10-01-2019 08:20	Was the ASA physical status of the patient 'ASA 1'?	Yes		8d4bf143-5bd2-e
Anesthesia Technique: Neuraxial			10-01-2019 08:31	Was the ASA physical status of the patient 'ASA 3'?	Yes		d14bf143-5bd2-e
Arterial Line			10-01-2019 08:47	Was the ASA physical status of the patient 'ASA 3'?	Yes		064ef143-5bd2-e
ASA Status	1	1	10-01-2019 11:13	Was the ASA physical status of the patient 'ASA 4'?	Yes		ab4df143-5bd2-e
BP Baseline			10-01-2019 11:20	Was the ASA physical status of the patient 'ASA 2'?	Yes		964bf143-5bd2-e
BP Systolic (Highest)	1	1	10-01-2019 11:25	Was the ASA physical status of the patient 'ASA 1'?	Yes		cb29355f-66d3-e1
BP Systolic (Lowest)	1	1	10-01-2019 11:28	Was the ASA physical status of the patient 'ASA 3'?	Yes		c34bf143-5bd2-e
Inhalational Agents			10-01-2019 11:31	Was the ASA physical status of the patient 'ASA 3'?	Yes		c64bf143-5bd2-e
Med Total			10-01-2019 11:42	Was the ASA physical status of the patient 'ASA 4'?	Yes		814bf143-5bd2-e
Med Total: Bolus 1	2	2	10-01-2019 11:44	Was the ASA physical status of the patient 'ASA 3'?	Yes		b34df143-5bd2-e
Med Total: Bolus 2			10-01-2019 11:53	Was the ASA physical status of the patient 'ASA 2E'?	Yes		344bf143-5bd2-e
Med Total: Largest Bolus			10-01-2019 12:01	Was the ASA physical status of the patient 'ASA 3'?	Yes		6829355f-66d3-e1
			10-01-2019 12:12	Was the ASA physical status of the patient 'NOT FOUND'?	Missing	ASA 2	0aac178f-2fd4-e9
			10-01-2019 12:22	Was the ASA physical status of the patient 'ASA 2'?	Yes		424bf143-5bd2-e
			10-01-2019 12:55	Was the ASA physical status of the patient 'ASA 3E'?	Yes		5d7dd3b9-f8d4-e
			10-01-2019 01:01	Was the ASA physical status of the patient 'ASA 2'?	Yes		1a2a355f-66d3-e1
			10-01-2019 01:10	Was the ASA physical status of the patient 'ASA 2'?	Yes		122a355f-66d3-e1
			10-01-2019 01:15	Was the ASA physical status of the patient 'ASA 2'?	Yes		3d4df143-5bd2-e
			10-01-2019 01:20	Was the ASA physical status of the patient 'ASA 3'?	Yes		b04bf143-5bd2-e

- Clicking on a question will bring up more information on the case validation answers for each case.
- You can use his screen to find cases with “No” answers for further review. To hide the “Yes” answers, click “Hide passing questions”.
- Double click on any MPOG Case ID to open the case in Case Viewer
- Look for trends in issues, such as date of the case. This can be helpful when identifying issues with the data.



Module 8

PHI Scrubber



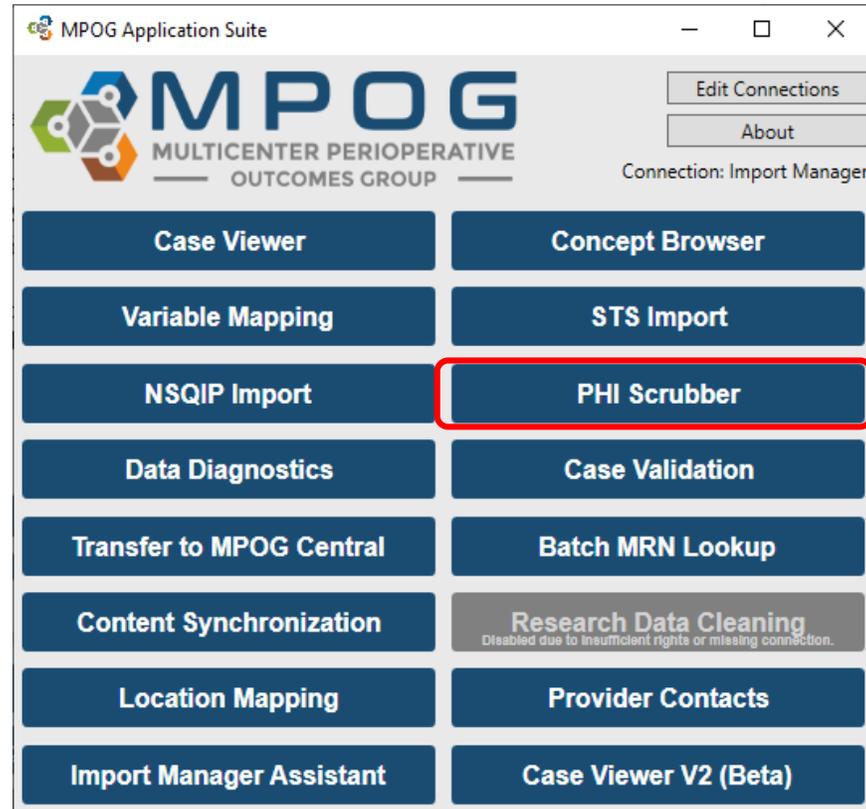
PHI Scrubber Overview

- Allows sites to remove staff and patient identifiers before transferring data to the MPOG Central database
- Must be executed before each transfer

PHI Scrubber Dictionary

- Several dictionaries have been preloaded into the application including a list of the most common first and last names from the US Census Bureau and the Snomed dictionary to identify healthcare terminology that should remain with the transfer.
- The site technical team must load the local institution-specific provider names and identifier dictionary to allow scrubbing of staff identifiers.
- It is important to note that though the PHI Scrubber will remove as many identifiers as it detects, there will always be a minimal (non-zero) risk of identifiers transferring via free text notes.

Accessing the PHI Scrubber



PHI Scrubbing Options

- Three options for selecting a 'Case Set' to be scrubbed
 - **PHI scrub all cases (Including previous cases already PHI scrubbed):** Allows users to scrub all cases including those that have been scrubbed in the past.
 - **Cases Waiting for PHI scrub:** Allows users to scrub only those cases marked as needing to be scrubbed.
 - **Specific Case:** Allows users to scrub a single case using the MPOG Case ID. A date range should not be selected for scrubbing a single case.
- **Date Range:** Selecting a date range is optional but is often used to assist with limiting the scrubbing procedure to only those cases the user wishes to transfer. Again, a 'Case Set' must be selected in addition to a date range in order to proceed with the scrubbing process.

Initiating PHI Scrubber

- Once the case set is selected, click ‘Start PHI Scrubbing’ to start the process.
- There are options to ‘Pause’ or ‘Stop’ PHI Scrubbing.
 - If pausing the PHI Scrubber, the application must remain open in order to ‘un-pause’ and restart the scrubbing process.
 - If for some reason, the user exits out of the application while ‘paused,’ the Case Set and Date Range (if applicable) will need to be selected again to continue scrubbing.

PHI Scrubber Configuration PHI Scrubber Sample Testing

Case Set:

- PHI scrub all cases (Including previous cases already PHI scrubbed)
- Cases Waiting for PHI scrub
- Specific Case: Enter MPOG_Case_ID here

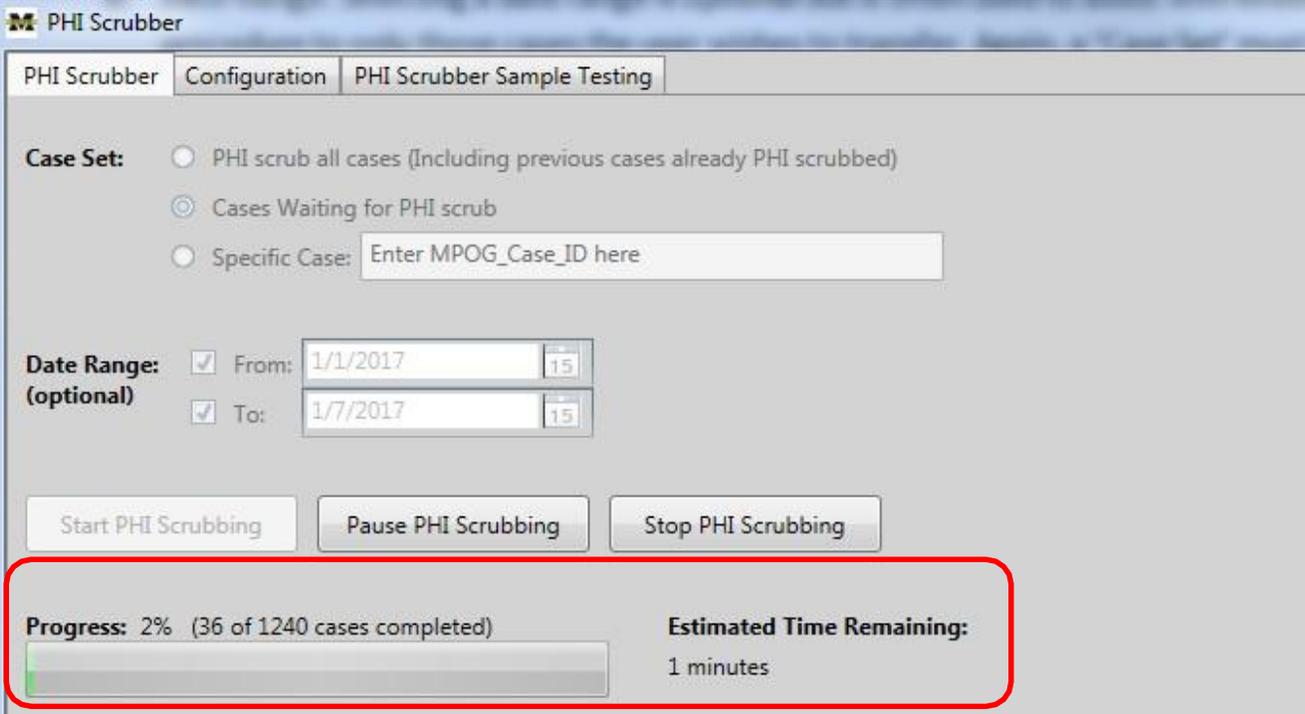
Date Range: (optional)

- From: 1/1/2017
- To: 1/7/2017

Start PHI Scrubbing Pause PHI Scrubber Proce Stop PHI Scrubbing

PHI Scrubbing

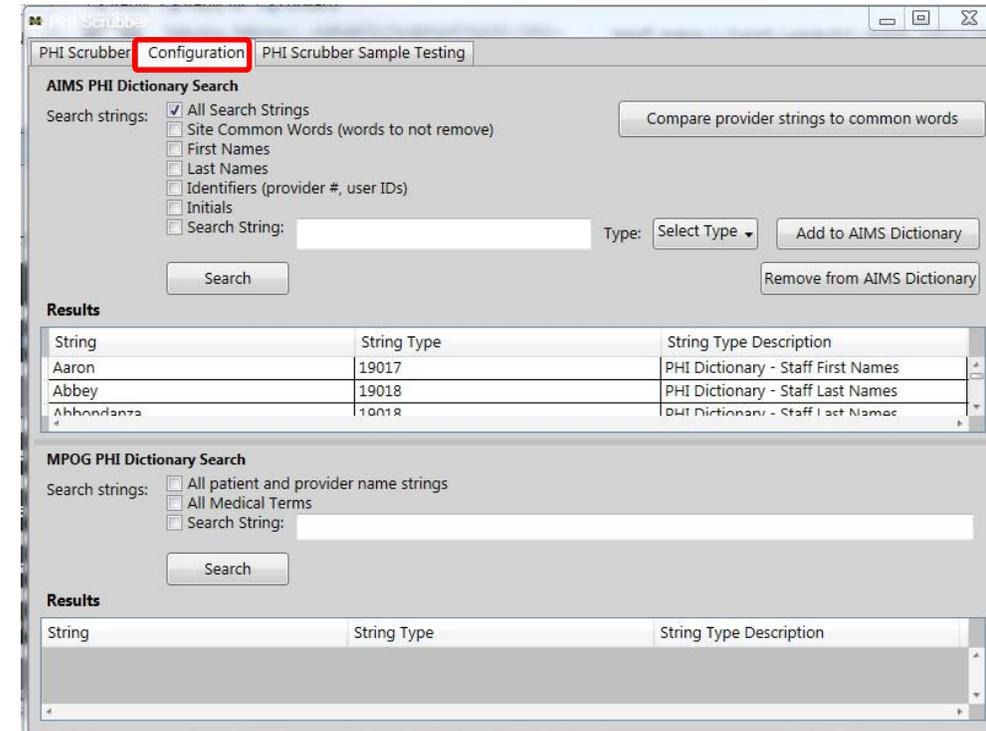
- The Progress Bar displays the percent complete and number of cases completed. The tool also assigns an Estimated Time Remaining to the job.



The screenshot shows the 'PHI Scrubber' application window with three tabs: 'PHI Scrubber', 'Configuration', and 'PHI Scrubber Sample Testing'. The 'PHI Scrubber' tab is active. Under 'Case Set', there are three radio button options: 'PHI scrub all cases (including previous cases already PHI scrubbed)', 'Cases Waiting for PHI scrub' (which is selected), and 'Specific Case: Enter MPOG_Case_ID here'. Below this is a text input field. Under 'Date Range: (optional)', there are two checked checkboxes: 'From: 1/1/2017' and 'To: 1/7/2017', each with a calendar icon. At the bottom, there are three buttons: 'Start PHI Scrubbing', 'Pause PHI Scrubbing', and 'Stop PHI Scrubbing'. A red box highlights the progress bar area, which shows 'Progress: 2% (36 of 1240 cases completed)' and 'Estimated Time Remaining: 1 minutes'.

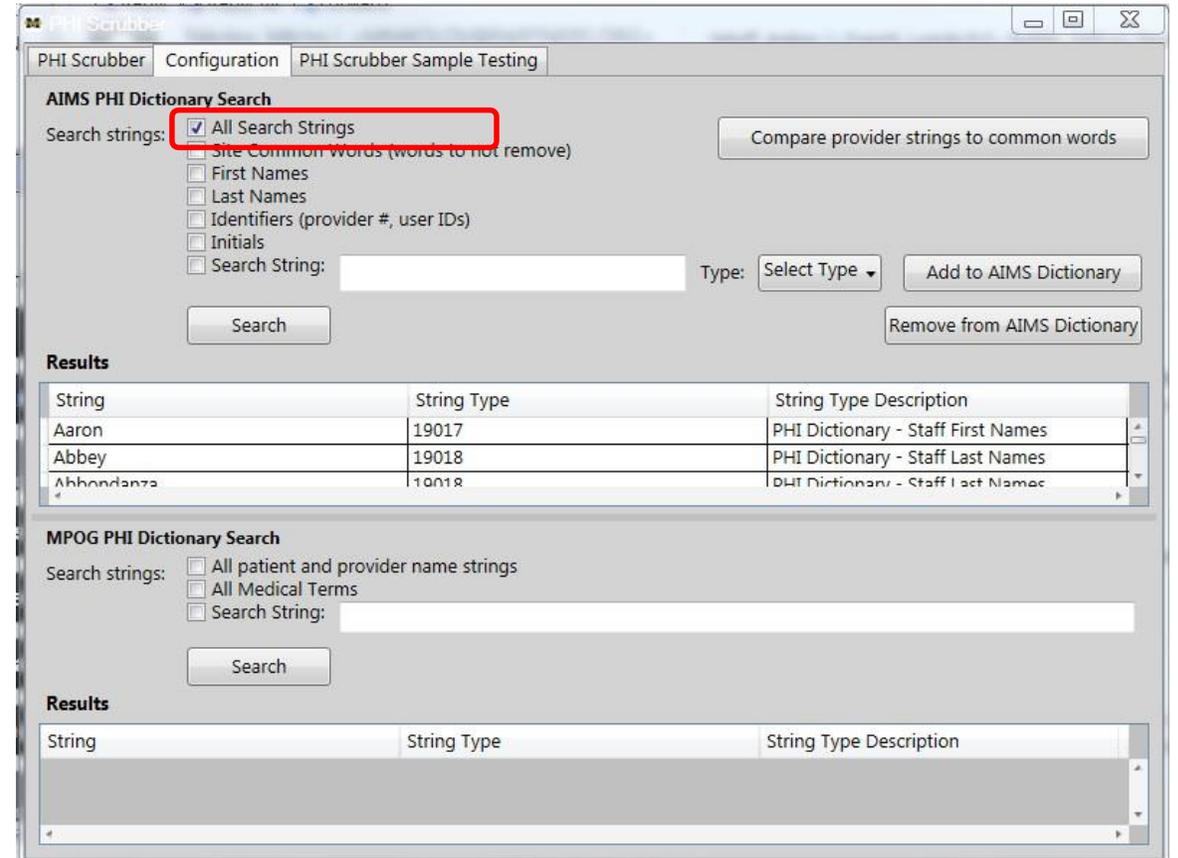
AIMS Dictionary Configuration

- The **Configuration tab** provides access to the AIMS PHI Dictionary and allows you to search through several dictionaries to establish what words/strings should be considered PHI and removed, and which should remain.
- The AIMS PHI Dictionary should be previously loaded by your designated technical team and consists of all institution-specific provider names and identifiers.
- The purpose of the institution specific provider PHI dictionary is to allow the PHI scrubbing process to remove provider names or identifiers that you do not want included in your MPOG contribution.
- Although the scrubbing algorithm can use MPOG dictionaries to remove nationally known common names (e.g. Kevin), local dictionaries are needed for uncommon names (e.g. Sachin).



Configuration

- To search specific strings, select 'All Search Strings' and then click 'Search' to display the list of strings in your local database. Each institution must determine what provider information they are comfortable leaving in their database (i.e. provider numbers, initials, clinical terms, etc.)
- **Note:** If the custom search string checkbox is not selected, the program will display all the words found in the dictionary for the selected categories.

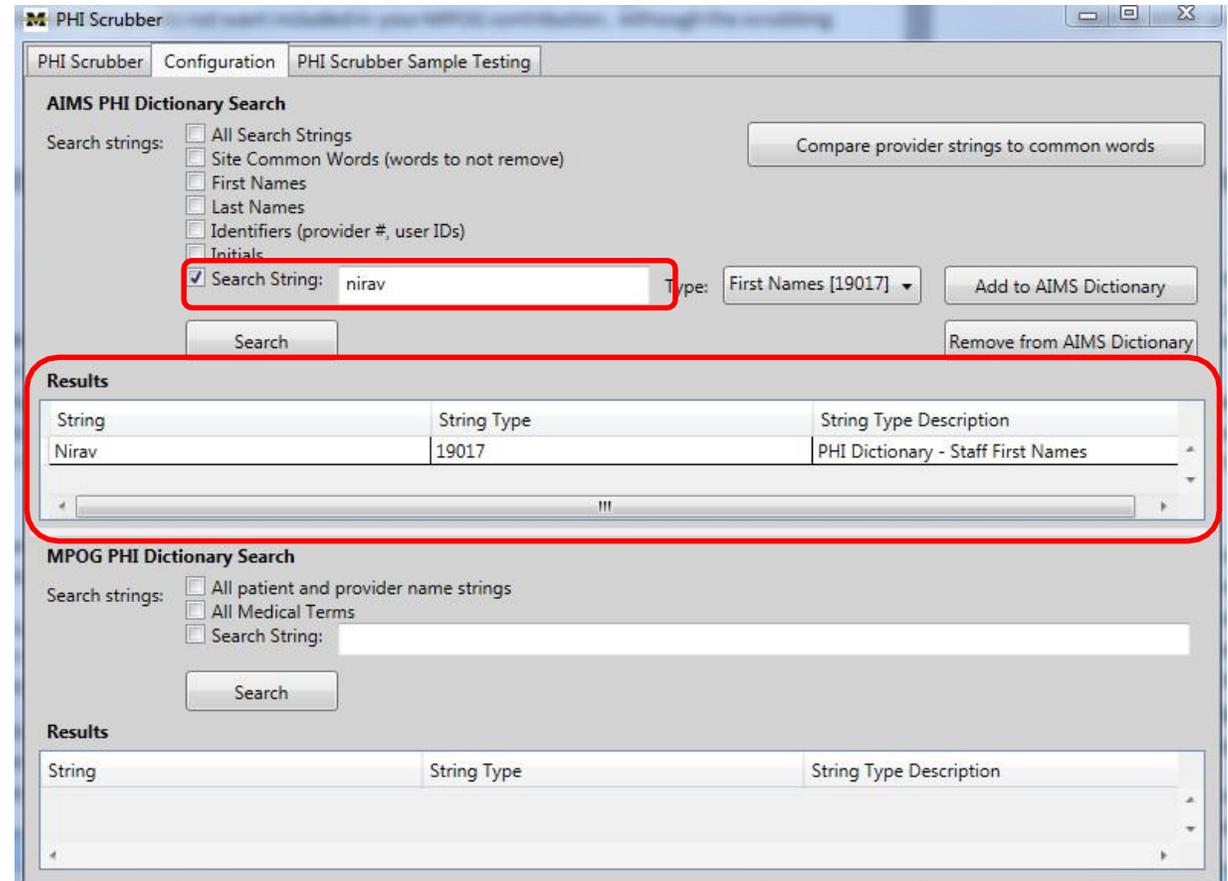


Configuration

- If 'Search String' is selected, the program will search the selected categories for the specified search string indicated.
- To remove a string from the AIMS PHI Dictionary, simply highlight the desired string and click 'Remove from AIMS Dictionary.'
- Assess the list to determine which terms are common words that you want to keep.
- For example, you may have a provider name of "Pain," you must determine the research value vs. privacy risk

Configuration

- Clinical terms will need to be removed from the local dictionary. All instances of clinical terms such as Miller and Macintosh will not be scrubbed unless it is the patient's name.



Configuration

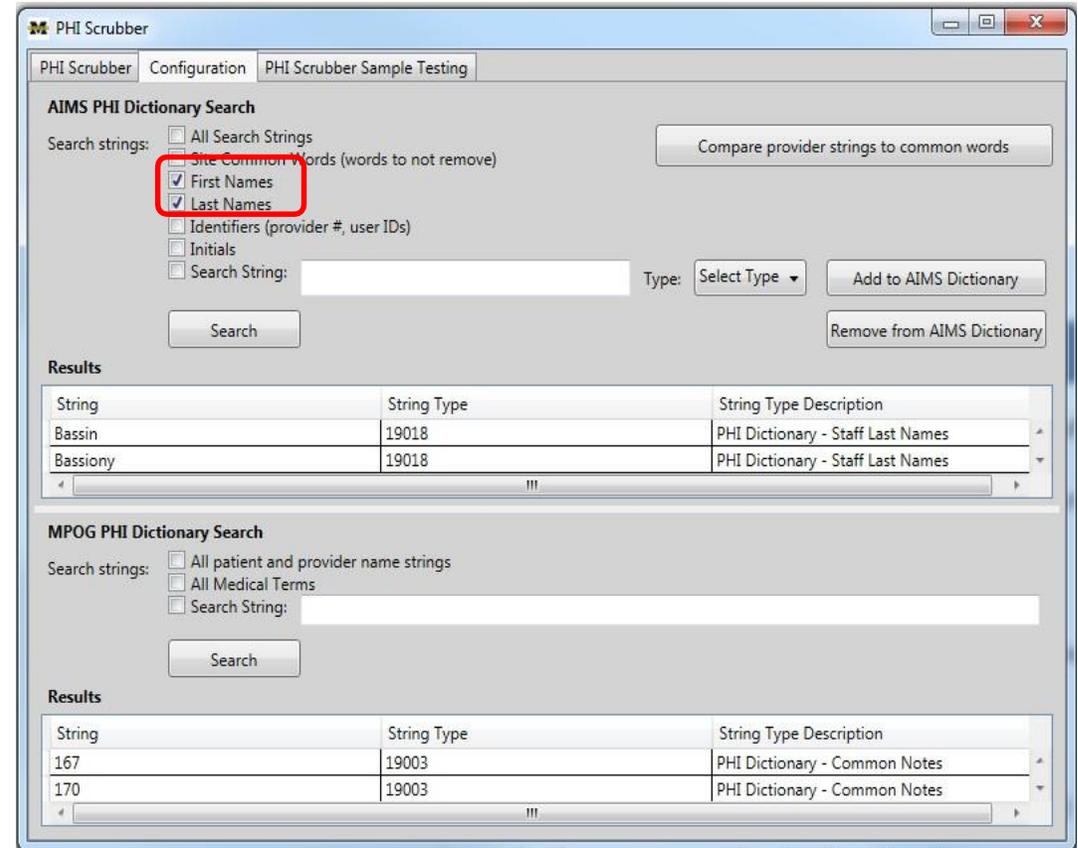
- The 'Compare provider strings to common words' function searches through the preloaded dictionaries to identify PHI, which strings should be removed, and which strings should be kept.
- Once you have removed all terms in your local dictionary, click on 'Compare provider strings to common words.'
- This will compare the provider names in your local dictionary to clinical terms which are listed in Snomed (such as CRNA, attending, and Miller).

Configuration

- The MPOG PHI Dictionary can also be tested to identify medical terminology and provider names already existing in the default dictionary.
- The MPOG Dictionary includes:
 - US Census: Includes all common first and last names (strings to remove)
 - Snomed: Includes comprehensive list of medical terms (strings to keep)
 - Common Perioperative Terms and Acronyms (strings to keep)

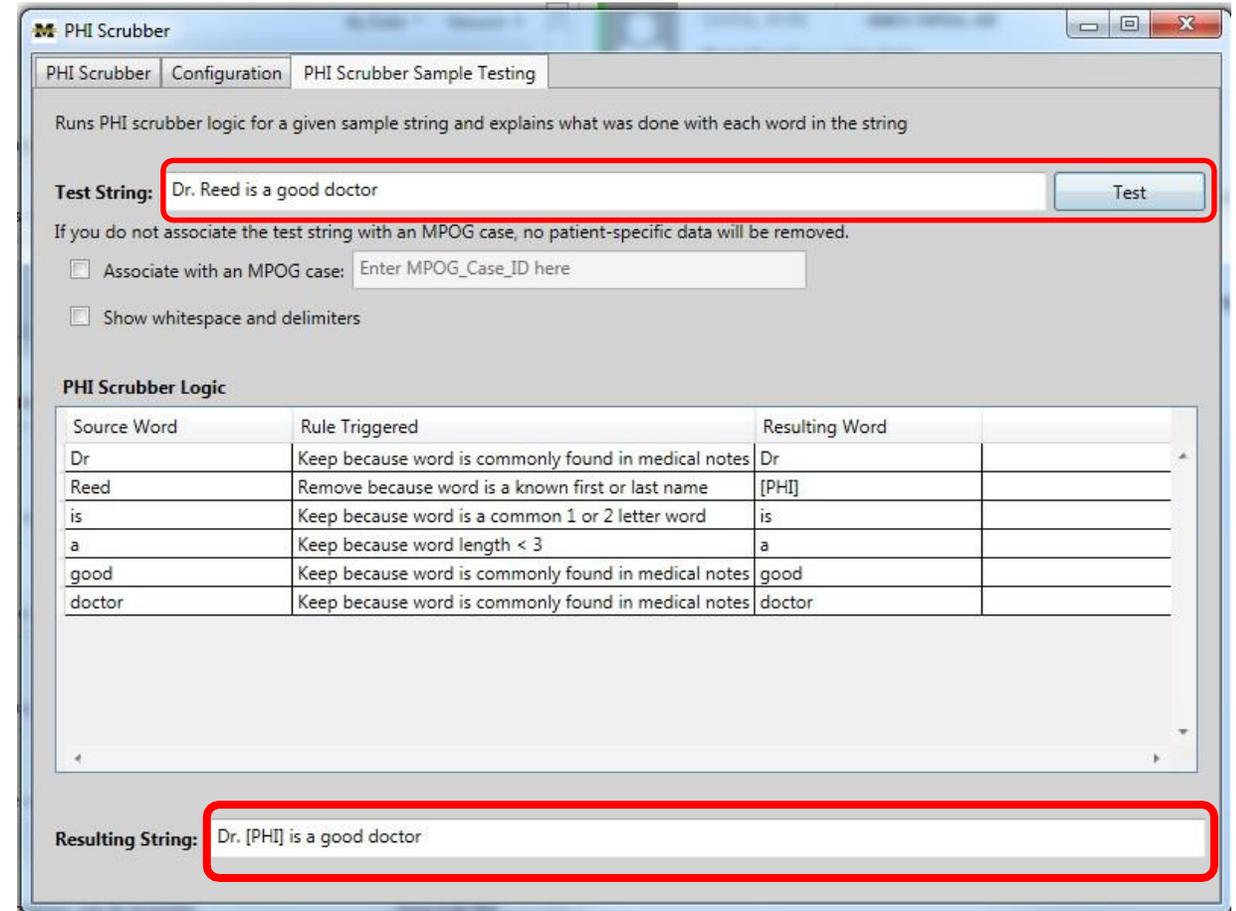
Configuration

- To test the 'Configuration' function, select the 'Configuration' tab at the top.
- Select 'First Names' and 'Last Names,' then click 'Search.'
- Provider names from the PHI dictionary should display in the Results section as shown below.
- If the Results display is empty, contact your technical team to load your local PHI dictionary data.



PHI Scrubber Sampling Test

- The 'PHI Scrubber Sample Testing' runs scrubbing logic for a given sample string and categorizes each word.
- This function is used to run a test string to determine if identified PHI information (in this case, staff names) will be properly excluded.



The screenshot shows the 'PHI Scrubber' application window with the 'PHI Scrubber Sample Testing' tab selected. The 'Test String' field contains 'Dr. Reed is a good doctor' and the 'Test' button is highlighted. Below the test string, there are checkboxes for 'Associate with an MPOG case' and 'Show whitespace and delimiters'. The 'PHI Scrubber Logic' table shows the following results:

Source Word	Rule Triggered	Resulting Word
Dr	Keep because word is commonly found in medical notes	Dr
Reed	Remove because word is a known first or last name	[PHI]
is	Keep because word is a common 1 or 2 letter word	is
a	Keep because word length < 3	a
good	Keep because word is commonly found in medical notes	good
doctor	Keep because word is commonly found in medical notes	doctor

The 'Resulting String' field at the bottom shows 'Dr. [PHI] is a good doctor'.

PHI Scrubber Logic will display included and excluded variables within your test string phrase, indicating PHI has been removed as displayed in the 'Resulting String.' A grid will display the following elements:

- **Source Word:** Original word(s) entered into the 'Test String' prior to PHI removal
- **Rule Triggered:** The reason why the word was or was not removed
- **Resulting Word:** The word(s) after 'PHI Scrubber Logic' has been applied and PHI has been removed
- **Note:** Clinical terms will need to be removed from the local dictionary. All instances of clinical terms such as Miller, Macintosh, and Brown will not be scrubbed unless it is the patient name.

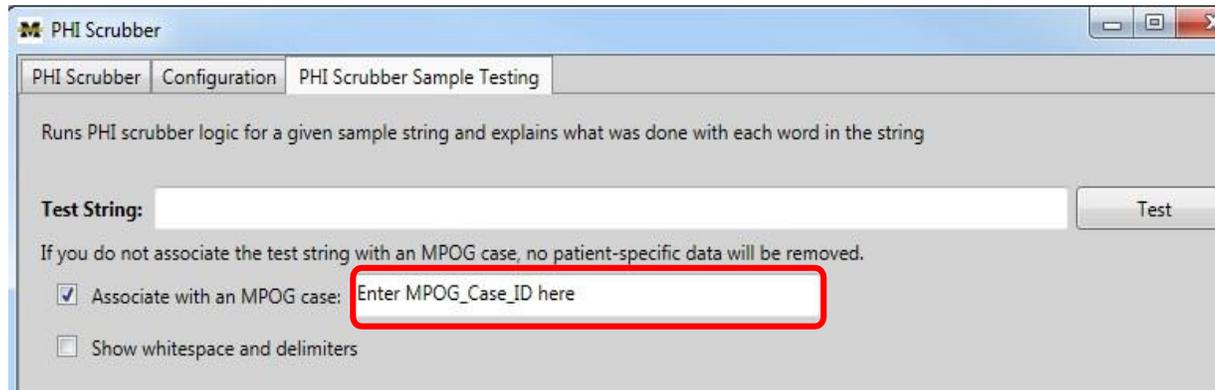
Source Word	Rule Triggered	Resulting Word
Dr	Keep because word is commonly found in medical notes	Dr
Reed	Remove because word is a known first or last name	[PHI]
is	Keep because word is a common 1 or 2 letter word	is
a	Keep because word length < 3	a
good	Keep because word is commonly found in medical notes	good
doctor	Keep because word is commonly found in medical notes	doctor

Associate with an MPOG Case

- You can also run a 'Test String' against a specific case to ensure PHI is being scrubbed from cases.
- This allows users to enter a valid case ID, which will run the results of the 'PHI Scrubber' process.
- Without associating with an MPOG case, no patient specific data scrubbing can be tested. Only name strings in the US Census Bureau and MPOG staff identifier list would be removed. If there is patient PHI in the test string that is not a common name or institution-specific staff name, association with an MPOG case will show the patient name and will not be scrubbed.

Associate with an MPOG Case

- Select 'Associate with an MPOG case' then click 'Test.'
- The MPOG case ID can be obtained from the MPOG case viewer application.
- 'Show whitespace and delimiters' displays the whitespace and the delimiter characters that were present in the test string as words in the Results data grid.



The screenshot shows the 'PHI Scrubber' application window with the 'PHI Scrubber Sample Testing' tab selected. The window contains a 'Test String' input field and a 'Test' button. Below the input field, there is a checkbox labeled 'Associate with an MPOG case:' which is checked. A red box highlights the text 'Enter MPOG_Case_ID here' next to the checked checkbox. Below this, there is another checkbox labeled 'Show whitespace and delimiters' which is unchecked. The window title bar reads 'PHI Scrubber' and the tabs are 'PHI Scrubber', 'Configuration', and 'PHI Scrubber Sample Testing'.

Associate with an MPOG Case

PHI Scrubber

PHI Scrubber Configuration PHI Scrubber Sample Testing

Runs PHI scrubber logic for a given sample string and explains what was done with each word in the string

Test String: Dr. miller used propofol for sedation. Test

If you do not associate the test string with an MPOG case, no patient-specific data will be removed.

Associate with an MPOG case: Enter MPOG_Case_ID here

Show whitespace and delimiters

PHI Scrubber Logic

Source Word	Rule Triggered	Resulting Word
Dr	Keep because word is commonly found in medical notes	Dr
.	Whitespace/Delimiter	.
	Whitespace/Delimiter	
miller	Keep because word is commonly found in medical notes	miller
	Whitespace/Delimiter	
used	Keep because word is commonly found in medical notes	used
	Whitespace/Delimiter	
propofol	Keep because word is commonly found in medical notes	propofol
	Whitespace/Delimiter	
for	Keep because word is commonly found in medical notes	for
	Whitespace/Delimiter	

Resulting String: Dr. miller used propofol for sedation.



Module 9

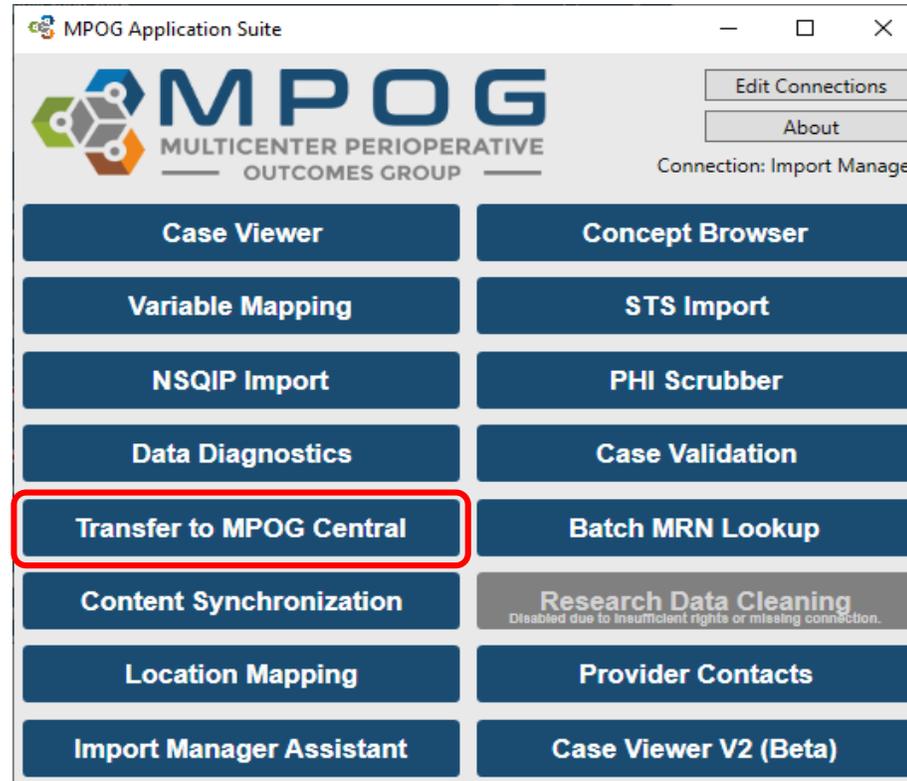
Transfer to MPOG Central



Transfer to MPOG Overview

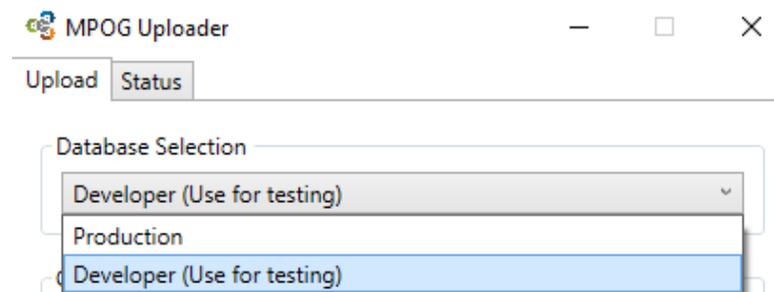
- Exports cases from your Local MPOG database and sends them to the MPOG Central Repository
- **A ‘Test Transfer’ of your local data to ‘MPOG Central’ is required prior to the initial ‘Production Transfer.’**
- MPOG QI Coordinators will assist you with initial upload to the MPOG Central TEST and Production environments.
- Prior to transferring data to MPOG Central, PHI Scrubbing must occur. Refer to ‘Module 8: PHI Scrubber’ for more details on how to complete the scrubbing process.

Accessing Transfer to MPOG Central



Transferring to MPOG Central – TEST Environment

- Test environment allows sites to transfer data to the Coordinating Center without impacting the larger production data set used for research and quality improvement activities.
- A QI Coordinator will direct the transfer process for initial upload.
- Open the 'Database Selection' dropdown window and select the 'Developer (Use for testing)' option.



- Ensure the following selections have been made prior to beginning the transfer process (The QI Coordinator will advise on the date range to transfer for initial upload)
- Once cases have processed in Central, a QI Coordinator will review your data and contact you with how to proceed.

The screenshot shows the 'MPOG Uploader' application window with the 'Status' tab selected. The interface includes the following sections:

- Database Selection:** A dropdown menu set to 'Developer (Use for testing)'.
- Case Selection:** A section stating 'There are 484966 cases that need to be PHI scrubbed.' with four radio button options:
 - Cases awaiting upload (0)
 - Cases awaiting initial upload (0)
 - Cases awaiting re-upload (0)
 - All cases (including those already uploaded) (0)
- Specify Date Range:** A checked checkbox with date pickers set to 'From 10/1/2019 15 To 10/31/2019 15'.
- Blinded Record Index:** A note stating 'Note: You must be running a BRI service in order to use this.' with two unchecked checkboxes:
 - Create/update the blinded record index for this patient
 - Update BRI only (Do not upload case data)
- Table Selection (applicable to cases being re-uploaded only):** A checked checkbox for 'Select All' followed by a grid of checked checkboxes for various data tables:

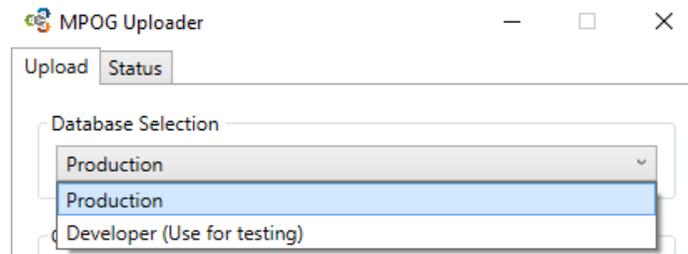
<input checked="" type="checkbox"/> Billing	<input checked="" type="checkbox"/> Lab Values	<input checked="" type="checkbox"/> Physiologic
<input checked="" type="checkbox"/> Case Info	<input checked="" type="checkbox"/> Medications	<input checked="" type="checkbox"/> Preop
<input checked="" type="checkbox"/> Input Outputs	<input checked="" type="checkbox"/> Mortality	<input checked="" type="checkbox"/> Registry Data
<input checked="" type="checkbox"/> Intraop Notes	<input checked="" type="checkbox"/> Outcomes	<input checked="" type="checkbox"/> Sites
<input checked="" type="checkbox"/> Intraop Staff	<input checked="" type="checkbox"/> Patients	

 Below this grid is an unchecked checkbox for 'Use Stored Modularity Only'.

A 'Start Transfer' button is located at the bottom of the window.

Transferring to MPOG Central – **PRODUCTION** Environment

- **Note: An MPOG QI Coordinator or MPOG Director must approve first upload to the MPOG Central Production Environment.** Please contact the Coordinating Center for directions on how to execute your first transfer to production.
- Open ‘Transfer to MPOG Central’ in the MPOG Suite.
- In the Database Selection window, check that the default selection for ‘Production’ is highlighted in the dropdown menu.



Next, ensure the following selections have been made prior to beginning the production transfer process and select 'Start Transfer:'

The screenshot shows the 'MPOG Uploader' application window with the 'Upload' tab selected. The interface includes the following sections:

- Database Selection:** A dropdown menu set to 'Production'.
- Case Selection:** A section with a note: 'There are 484966 cases that need to be PHI scrubbed.' It contains four radio button options:
 - Cases awaiting upload (2004)
 - Cases awaiting initial upload (0)
 - Cases awaiting re-upload (2004)
 - All cases (including those already uploaded) (2143)
- Specify Date Range:** An unchecked checkbox with two date pickers set to '15'.
- Blinded Record Index:** A note: 'Note: You must be running a BRI service in order to use this.' It contains two unchecked checkboxes:
 - Create/update the blinded record index for this patient
 - Update BRI only (Do not upload case data)
- Table Selection (applicable to cases being re-uploaded only):** A group of checkboxes including:
 - Select All**
 - Billing
 - Lab Values
 - Physiologic
 - Case Info
 - Medications
 - Preop
 - Input Outputs
 - Mortality
 - Registry Data
 - Intraop Notes
 - Outcomes
 - Sites
 - Intraop Staff
 - Patients
- Use Stored Modularity Only**

A 'Start Transfer' button is located at the bottom of the window.

After clicking 'Start Transfer' a window will display the date range and case count that you have selected for upload. Review the attestation on the left – If all four items have been completed, select 'Submit Data' to begin transfer.

 Upload Agreement ✕

By clicking "Submit Data", you attest the following:

- 1) That you have PHI scrubbed your data to comply with the Multicenter Perioperative Outcomes Groups guidelines and that your data constitute a limited dataset.

- 2) That you have Institutional Review Board approval from your institution to submit this data and that this approval has not lapsed or otherwise expired.

- 3) That you are submitting these data to the Multicenter Perioperative Outcomes Group of your own volition. These data may be removed from the central database at any time, upon request.

- 4) That you have followed all guidelines detailed elsewhere, including but not limited to the Data Use Agreement(s) between your institution and the University of Michigan.

Month	Case Count	Date Range
2/1/2019	7,633	2/1/2019 to 2/28/2019

Resubmitting Data for Transfer to MPOG Central

- Occasionally, specific data type and/or date range may require re-submission to MPOG Central due to changes that were made in your site's MPOG local database after the previously scheduled monthly data upload (i.e. 'Billing' or 'Intraop Notes')

To resubmit data, such as 'Billing' to MPOG Central, ensure the following selections have been made in the MPOG Uploader window prior to beginning the production transfer process:

The screenshot shows the MPOG Uploader application window. It features several sections for configuration:

- Database Selection:** A dropdown menu set to "Production".
- Case Selection:** A section stating "There are 21506 cases that need to be PHI scrubbed." with a list of radio buttons:
 - Cases awaiting upload: 649
 - Cases awaiting initial upload: 0
 - Cases awaiting re-upload: 649
 - All cases (including those already uploaded): 808 (selected)
- Specify Date Range:** A checked checkbox with date pickers for "From" (3/1/2018) and "To" (3/31/2018).
- Blinded Record Index:** A note "Note: You must be running a BRI service in order to use this." followed by two unchecked checkboxes: "Create/update the blinded record index for this patient" and "Update BRI only (Do not upload case data)".
- Table Selection (applicable to cases being re-uploaded only):** A group of checkboxes including:
 - Select All**
 - Billing
 - Case Info
 - Input Outputs
 - Intraop Notes
 - Intraop Staff
 - Lab Values
 - Medications
 - Mortality
 - Outcomes
 - Patients
 - Physiologic
 - Preop
 - Registry Data
 - Sites
- Use Stored Modularity Only**

A "Start Transfer" button is located at the bottom of the window.

Blinded Record Index (BRI)

- Approved by the federal government registries manual as non-PHI
- BRI is a method of using a secure hashing algorithm to match PHI data sets without actually sharing any PHI
- This can allow data systems to match patients without the risk of sharing protected patient information
- For more information on how BRI works, visit our [website](#).

BRI Uploading

- Use the MPOG Uploader to BRI your data
- In the Blinded Record Index section, make selections based on whether you are blinding historical or new data (see next slide)
- Uploading all case data will take longer than updating BRI only
- If there are no changes to the data the require re-upload, we recommend that you be sure to select the “Update BRI only” box

Historical Upload

MPOG Uploader

Database Selection
Production

Case Selection
There are 10564 cases that need to be PHI scrubbed.

- Cases awaiting upload 57749
- Cases awaiting initial upload 2
- Cases awaiting re-upload 57747
- All cases (including those already uploaded) 66431

Specify Date Range
From 1/1/2019 To 8/31/2019

Blinded Record Index
Note: You must be running a BRI service in order to use this.

- Create/update the blinded record index for this patient
- Update BRI only (Do not upload case data)

Table Selection (applicable to cases being re-uploaded only)

- Select All**
- Billing Lab Values Physiologic
- Case Info Medications Preop
- Input Outputs Mortality Registry Data
- Intraop Notes Outcomes Sites
- Intraop Staff Patients

Use Stored Modularity Only

Start Transfer

Monthly Upload

MPOG Uploader

Database Selection
Production

Case Selection
There are 8517 cases that need to be PHI scrubbed.

- Cases awaiting upload 137709
- Cases awaiting initial upload 79962
- Cases awaiting re-upload 57747
- All cases (including those already uploaded) 238351

Specify Date Range
From 1/1/2019 To 8/31/2019

Blinded Record Index
Note: You must be running a BRI service in order to use this.

- Create/update the blinded record index for this patient
- Update BRI only (Do not upload case data)

Table Selection (applicable to cases being re-uploaded only)

- Select All**
- Billing Lab Values Physiologic
- Case Info Medications Preop
- Input Outputs Mortality Registry Data
- Intraop Notes Outcomes Sites
- Intraop Staff Patients

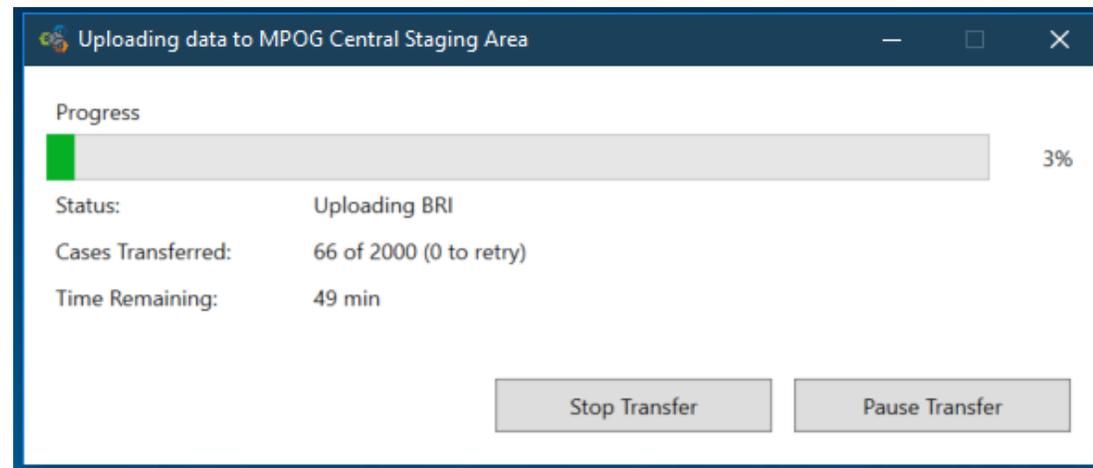
Use Stored Modularity Only

Start Transfer



BRI Upload Tracking

- Once you select 'start transfer', a status bar will appear with an estimated processing time.



A status tab located in the MPOG uploader which displays which cases have been uploaded versus what cases have a blinded record index.

The screenshot shows the 'MPOG Uploader' application window with the 'Status' tab selected. It contains two data tables. The first table, titled 'Cases', shows monthly data from September 2018 to September 2019 with columns for Total, To Scrub, Never Sent, and To Resend. The second table, titled 'BRI', shows monthly data for the same period with columns for Total, Sent, and Not Sent.

Month	Total	To Scrub	Never Sent	To Resend
September 2019	1,578	1,578	1,578	0
August 2019	8,682	0	1	228
July 2019	8,603	0	0	960
June 2019	8,070	0	36	903
May 2019	8,397	0	0	1,647
April 2019	8,764	0	0	1,074
March 2019	7,851	0	0	1,789
February 2019	7,633	0	0	1,173
January 2019	8,431	0	0	847
December 2018	7,161	0	0	1,757
November 2018	8,133	0	0	211
October 2018	8,617	0	0	1,525
September 2018	7,307	0	0	1,078

Month	Total	Sent	Not Sent
September 2019	1,578	0	1,578
August 2019	8,682	7,446	1,236
July 2019	8,603	8,603	0
June 2019	8,070	1,992	6,078
May 2019	8,397	2,134	6,263
April 2019	8,764	7,406	1,358
March 2019	7,851	7,850	1
February 2019	7,633	1,908	5,725
January 2019	8,431	2,026	6,405
December 2018	7,161	7,121	40
November 2018	8,133	7,158	975
October 2018	8,617	1,922	6,695
September 2018	7,307	1,500	5,807



Module 10

Content Synchronization



Content Synchronization Overview

- Allows you to synchronize or apply changes to content such as new concepts and PHI terminology within your local database.
- MPOG recommends performing ‘Content Synchronization’ on a monthly basis.
- You may also be advised by the Coordinating Center to perform ‘Content Synchronization’ to pull over specific content to continue mapping new variables or update diagnostics.
- The MPOG Quality Improvement Coordinators will notify you when ‘Content Synchronization’ is required outside of the monthly recommendation.

Accessing Content Synchronization



Content Synchronization

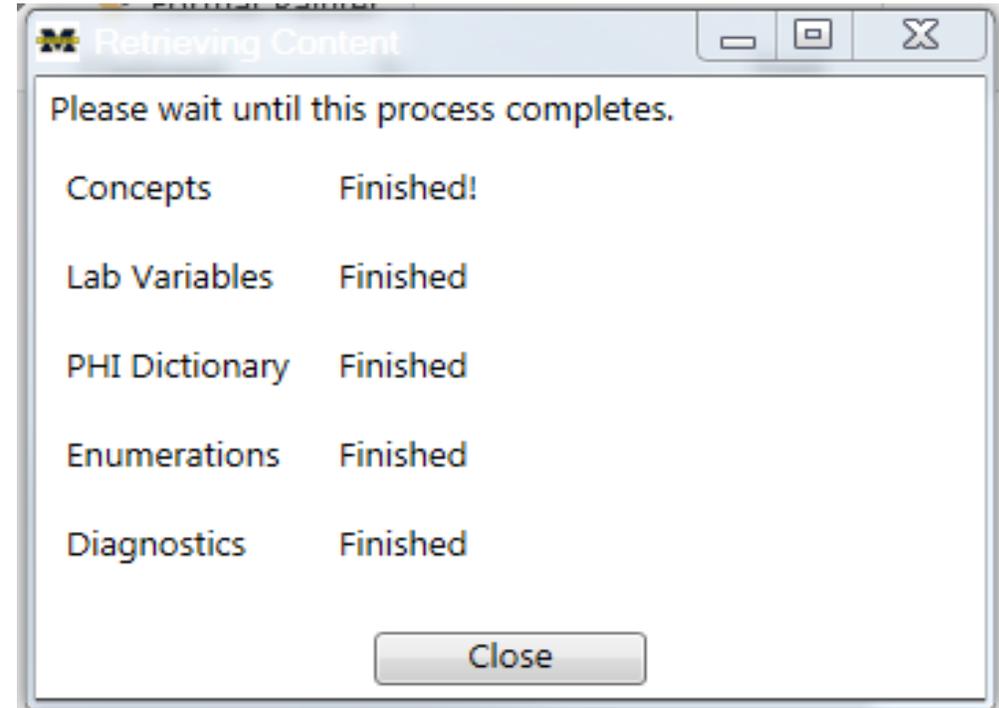
- A notification ball will appear on the “Content Synchronization” button if any new content is available



- This window will open in ‘Content Synchronization.’ Using the default settings seen below, select ‘Synchronize Content.’



- Once you have selected ‘Synchronize Content,’ retrieving content will begin and systematic downloading of new content will occur.
- Once the content retrieval process has completed, you will notice a ‘finished’ comment in the ‘Retrieving Content’ window, indicating ‘Content Synchronization’ was successful.





Module 11

Provider Contacts Tool



Provider Contacts Overview

- Allows ASPIRE sites to update provider information for the purpose of sending feedback emails.
- If opting out of ASPIRE and the feedback emails, the Provider Contacts tool does not need to be populated.
- The Provider Contacts tool cannot be populated until data has been submitted to MPOG Central. There will be no case information available until a site has successfully transferred to the Coordinating Center.

Accessing Provider Contacts



- Can access via the MPOG Suite or this link
<https://www.aspirecqi.org/AppSuite//UserManagement/index/>



Login to MPOG

Log in with your username and password below.

[Forgot your password?](#)

Powered By  careevolution
HEALTHCARE TECHNOLOGY

An audit trail of all user activity is maintained for this system as it provides access to protected health information. Authorized access is limited only to those with a need to know for the purposes of patient care, billing, medical records review, or quality assurance.

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- Clicking on the link will open the login screen.
- An additional level of access is needed to populate the User Management Tool.
- If your ASPIRE username and password does not work at this point, please contact the coordinating center (support@mpog.zendesk.com) to obtain access.



- The *AIMs Staff ID*, *First Case Date*, *Last Case Date*, *Case Count*, *Mapped Staff Role*, and *Staff Role* columns of the User Management Tool (Provider Contacts) will be auto-populated based upon case information in the MPOG database.
- The technical team lead at your site should be able to assist with pulling the corresponding names for the AIMS Staff IDs listed.



Provider Contact Information User Management Tool

Institution:

Excel / CSV Import Batch Activation

Show 10 entries at a time Export

Search: Send Feedback?: All Role: Attending/Resident/Fellow/CRNA Show all AIMS_Staff_IDs

<input type="checkbox"/> Send Feedback?	AIMS Staff ID	First Case Date	Last Case Date	Case Count	Mapped Staff Role	Staff Role	First Name	Last Name	Email Address	NPI	TIN (Opt.)	Specialty Dashboards	MOCA4	Account Status
<input type="checkbox"/> Yes		5/4/2018	10/31/2020	885	Anesthesia Resident	Anesthesia_Resident					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		3/19/2018	10/31/2020	1752	CRNA	CRNA					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		5/7/2018	10/31/2020	912	Anesthesia Resident	Anesthesia_Resident					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		7/26/2017	10/31/2020	1935	Anesthesia Attending	Anesthesia_Attending					Click to Edit	Pediatric, Obstetric, Cardiac	Yes	Activated
<input type="checkbox"/> Yes		7/1/2016	10/31/2020	3823	Anesthesia Attending	Anesthesia_Attending					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		1/6/2004	10/31/2020	8859	Anesthesia Attending	Anesthesia_Attending					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		12/13/2004	10/31/2020	5244	CRNA	CRNA					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		7/2/2014	10/31/2020	3938	Anesthesia Attending	Anesthesia_Attending					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		6/15/2016	10/31/2020	5502	Anesthesia Attending	Anesthesia_Attending					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		5/3/2017	10/31/2020	1252	Anesthesia Resident	Anesthesia_Resident					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated

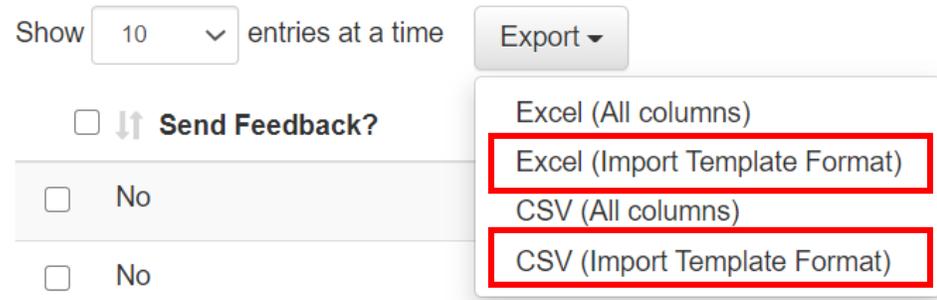
Showing 21 to 30 of 1,385 entries (filtered from 1,413 total entries)

Previous 1 2 3 4 5 ... 139 Next



Mass Import

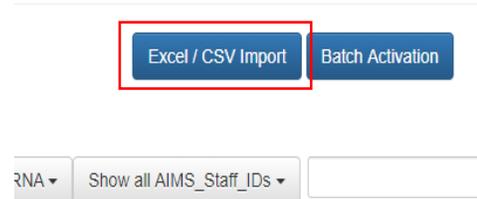
- To send the technical lead a list of the AIMS Staff IDs to obtain the corresponding first and last names, it may be useful to **export** the current list from the Provider Contacts tool. To do so, click on 'Export,' and then 'Import Template Format' (CSV or Excel).



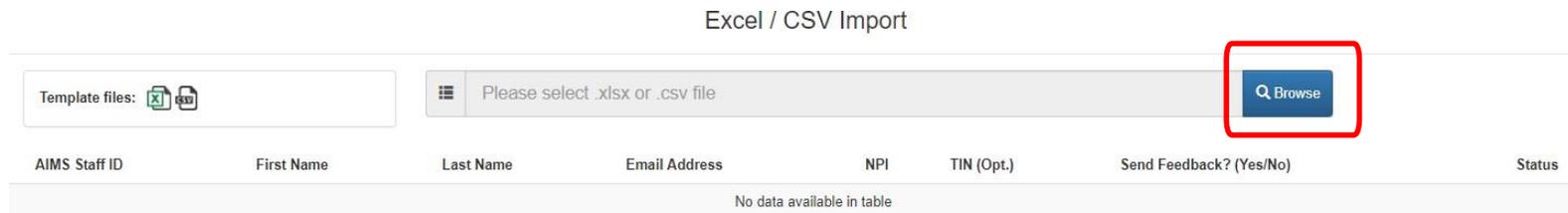
*The “All Columns” options will export all columns in the provider contact tool and should be used to obtain information only. The ‘all columns’ format will not work when trying to import first/last names and NPI numbers into the provider contacts tool.

Mass Import

- Update the template with the provider information and save to your computer.
- Open the saved document using the “Excel/CSV Import” button. Select the format you wish to use for import. The import tool will only accept files using one of these two templates. **Errors will result from using a modified version of either of these templates**



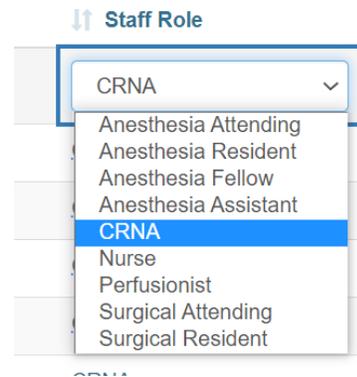
- Return to the Excel/CSV Import page, select ‘Browse’ and locate the file on your computer and click ‘Open.’



- The Provider Contacts tool will begin to update information from the selected file and will notify of any errors. Correct any errors as needed and then click ‘Submit.’

- Some sites have a single AIMS variable for anesthesia providers that is then mapped to the MPOG staff role concept: **Staff Level – Unable to Determine Anesthesia Provider.**
- In these instances, MPOG will display ‘Unknown’ in the ‘Mapped Staff Role’ column and rely on the site to populate the actual staff role in the seventh column.
- This column allows for provider feedback to include comparisons by role.

- If the ‘Staff Role’ and the ‘Mapped Staff Role’ columns match and are indicative of the providers’ actual roles in the clinical setting, no additional entry is required for the ‘Staff Role’ column.
- If the ‘Mapped Staff Role’ column is displaying incorrectly for a provider, you can update the ‘Staff Role’ directly within the user management tool (i.e. if the mapped staff role displaying for a CRNA is “Attending”) you can update it to read “CRNA” under the staff role column.



Managing Feedback Email Recipients

- An 'Active' provider is defined as one who receives feedback emails.
- To update a provider's status to Active or Inactive, click the selection box on left hand side.
- A prompt will then show in the bottom left corner where you can click Yes or No to update provider status

Change the selected providers' [Send Feedback?] status to /

- You can change the status for multiple providers by selecting multiple rows or select all rows by clicking the top box next to “Send Feedback”

Show 10 entries at a time Export

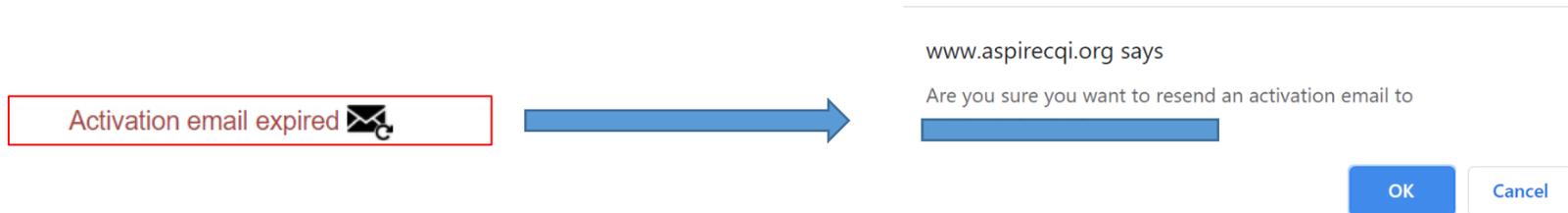
Search: Send Feedback?: All Role: Attending/Resident/Fellow/CRNA Show all AIMS_Staff_IDs

<input type="checkbox"/> Send Feedback?	AIMS Staff ID	First Case Date	Last Case Date	Case Count	Mapped Staff Role	Staff Role	First Name	Last Name	Email Address	NPI	TIN (Opt.)	Specialty Dashboards	MOCA4	Account Status
<input type="checkbox"/> Yes		5/4/2018	10/31/2020	885	Anesthesia Resident	Anesthesia Resident					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		3/19/2018	10/31/2020	1752	CRNA	CRNA					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		5/7/2018	10/31/2020	912	Anesthesia Resident	Anesthesia Resident					Click to Edit	Pediatric, Obstetric, Cardiac	No	Activated
<input type="checkbox"/> Yes		7/26/2017	10/31/2020	1935	Anesthesia Attending	Anesthesia Attending					Click to Edit	Pediatric, Obstetric, Cardiac	Yes ⓘ	Activated

Further details regarding Account Status are shown for each provider in the last column:

- **Activated**: Activation email has been sent and provider has successfully set up their account.
- *Not Activated*: Activation email has not been sent
- *Activation Email Sent*: Activation email send successfully. Provider has yet to click on the activation link to set up his or her account.
- **Activation Email Expired**: To resend an activation email, click ‘Activation Email Expired’ in the last column and follow the prompt

Account Status
Activated
Account does not exist 
Account does not exist 
Activated
Activated
Activation email expired 



- Information regarding a provider's MOCA 4 Status is also available through the user management tool by clicking the information icon within the MOCA column

↓ MOCA4
Yes ⓘ
Yes ⓘ
Yes ⓘ

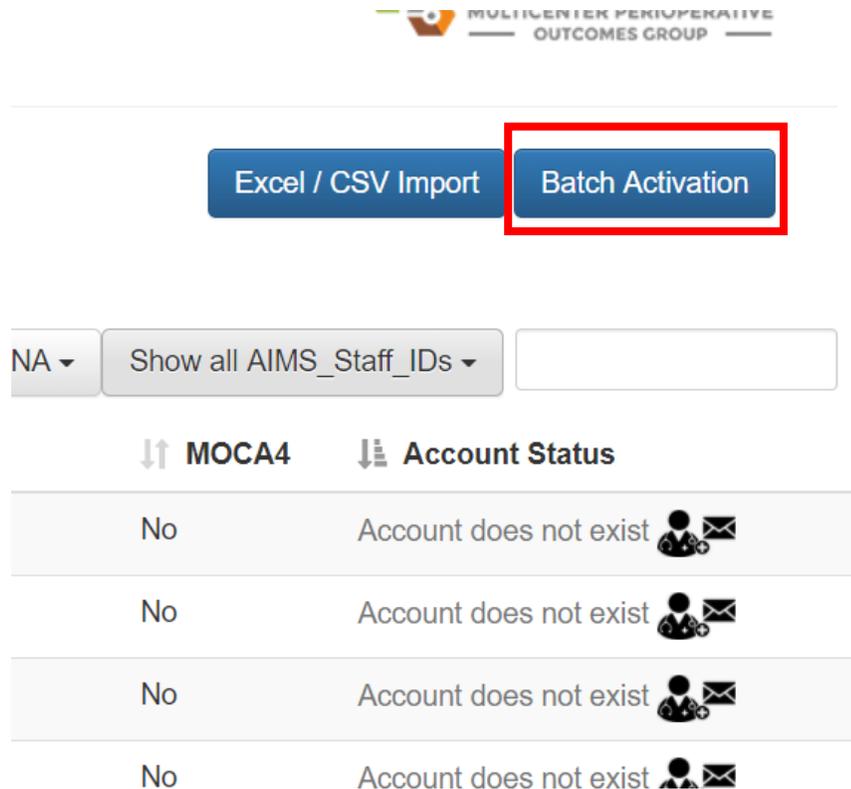
ASPIRE MOCA 4 Status

[Redacted]

- Date of Enrollment: 4/10/2019 1:04:07 PM
- Measures: NMB01,NMB02,TEMP03,BP01,BP02
- Start Month: 05/2019
- Email Received: 19
- Attastation Count: 0
- Attested Months:

OK

Batch Activation



MULTICENTER PERIOPERATIVE
OUTCOMES GROUP

Excel / CSV Import **Batch Activation**

NA ▾ Show all AIMS_Staff_IDs ▾

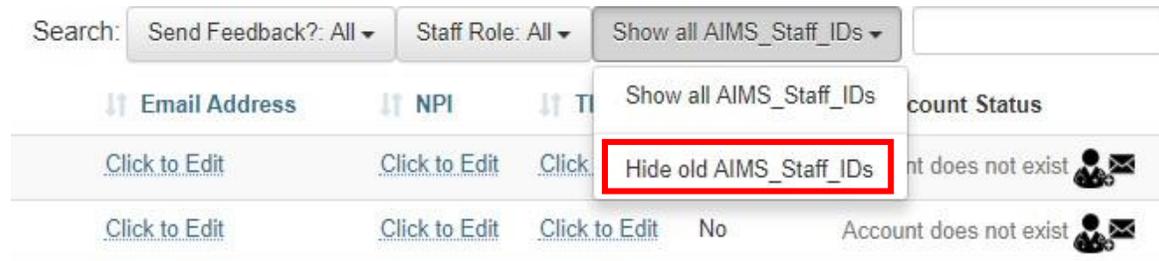
↑↓ MOCA4 ↓ Account Status

No	Account does not exist	
No	Account does not exist	
No	Account does not exist	
No	Account does not exist	

- To send an activation email to all providers who have yet to receive one and to those who have let their activation email expire, you can use the Batch Activation button in the top right corner
- Click 'Send' when prompted

Multiple AIMS Staff IDs

- Sites who convert from MPOG's Legacy Production method to Import Manager may see 2 AIMS Staff IDs listed for each provider in the provider contacts tool.
- To manage the AIMS Staff IDs affiliated with Import Manager only, select 'Hide old AIMS_Staff_IDs' in the dropdown menu seen below.





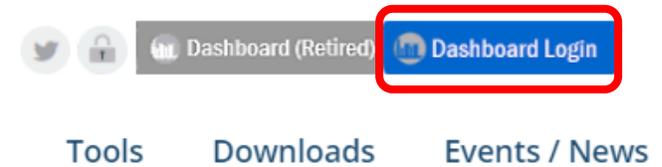
Module 12

ASPIRE Dashboard



Accessing Your Dashboard

- Access your institution's ASPIRE dashboard through the MPOG website <https://mpog.org/>
- Click “Dashboard Login” in the upper right corner





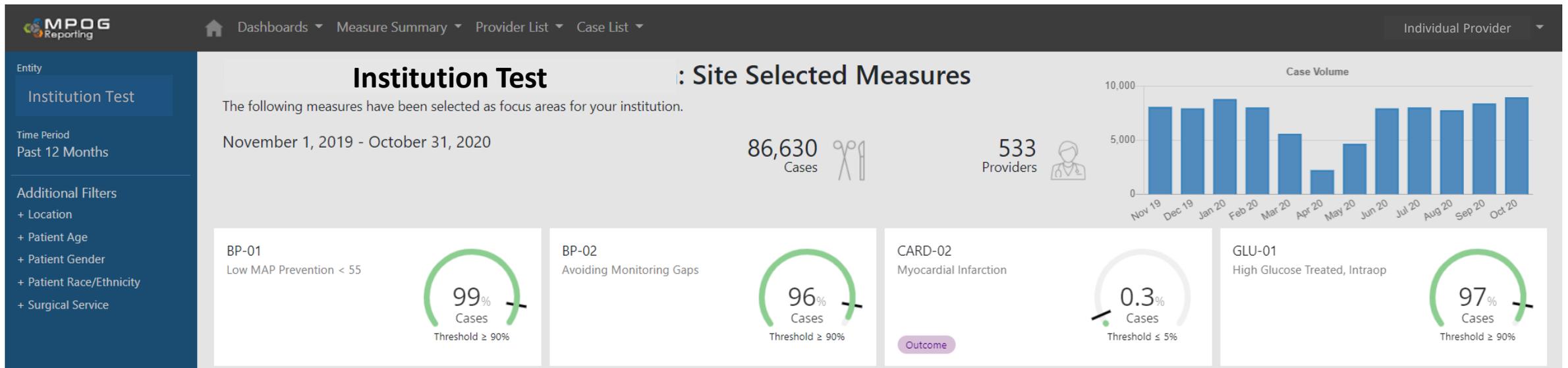
Login to MPOG

Log in with your username and password below.

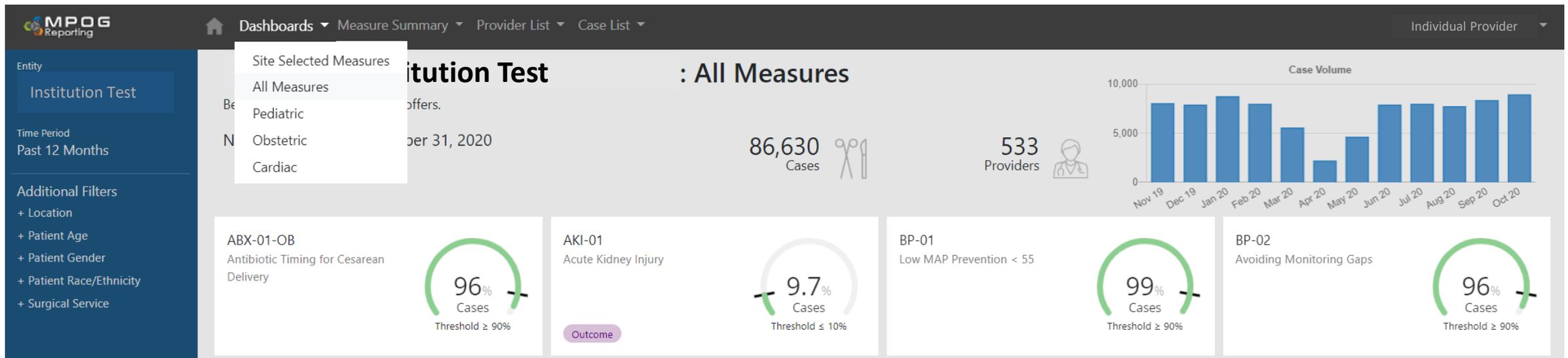
[Forgot your password?](#)

- You will be directed to the login screen below.
- Type in your user name and password.
- If you forgot your username or password, click on 'Forgot your password?' located below the login button near the bottom of the screen and follow the prompts.

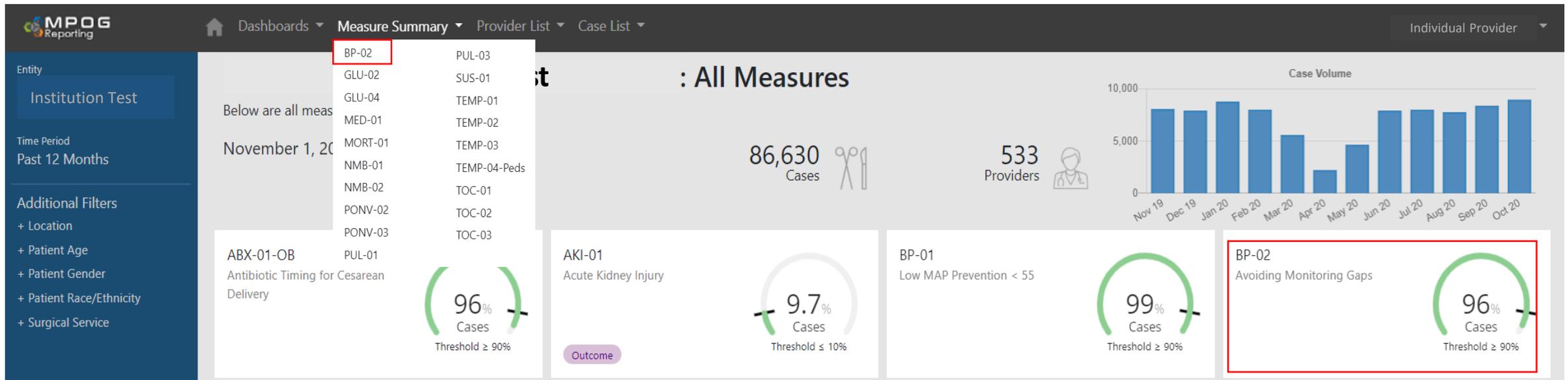
- Once you have logged into your account, you will be directed to your Site Selected Dashboard. Measures displayed here are those that are included in your institution's monthly provider feedback emails.



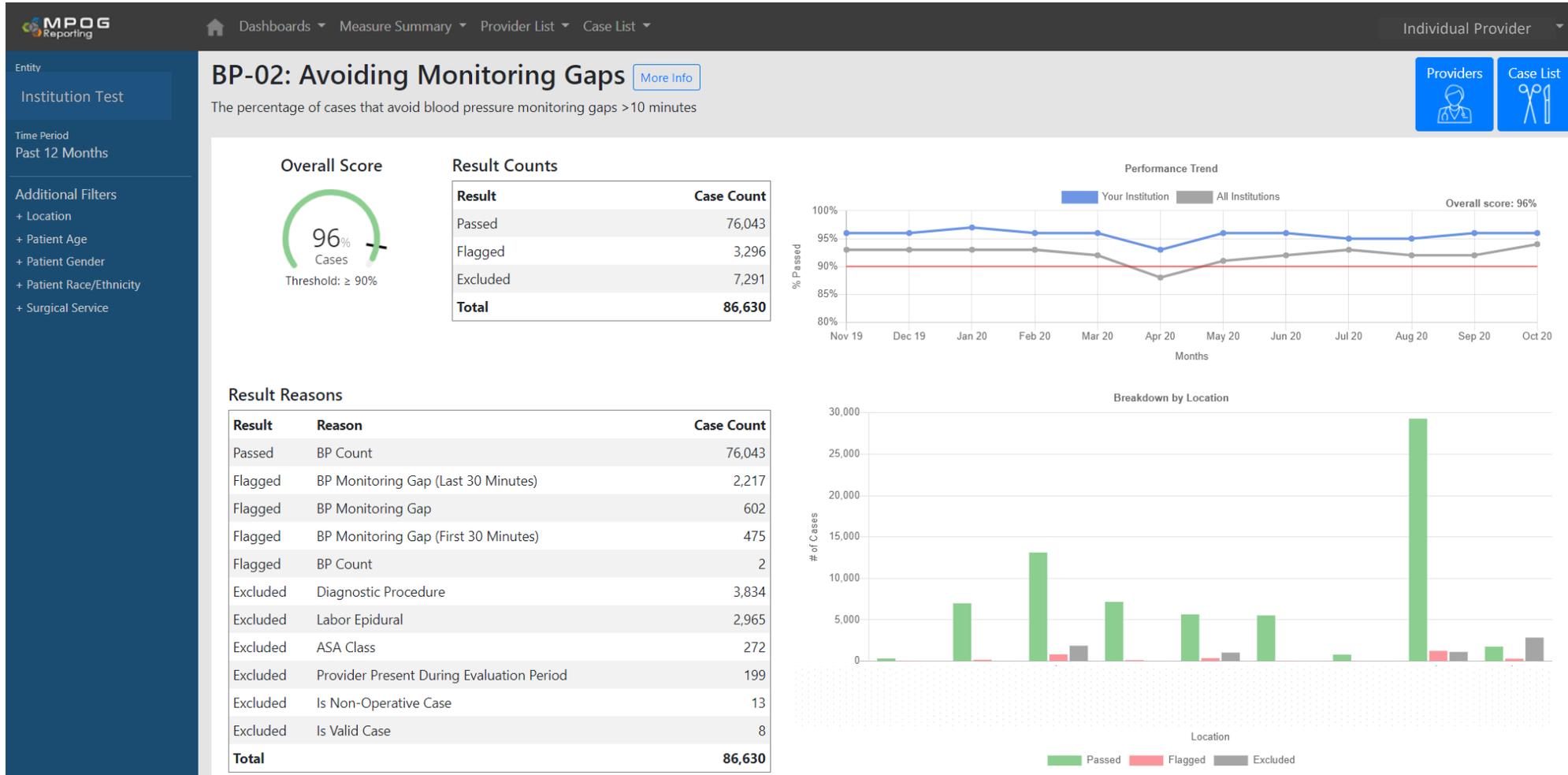
- To view performance on all measures MPOG offers, select the 'Dashboards' drop down and select 'All Measures'. Other selections include Pediatric, Obstetric and Cardiac specific measure dashboards



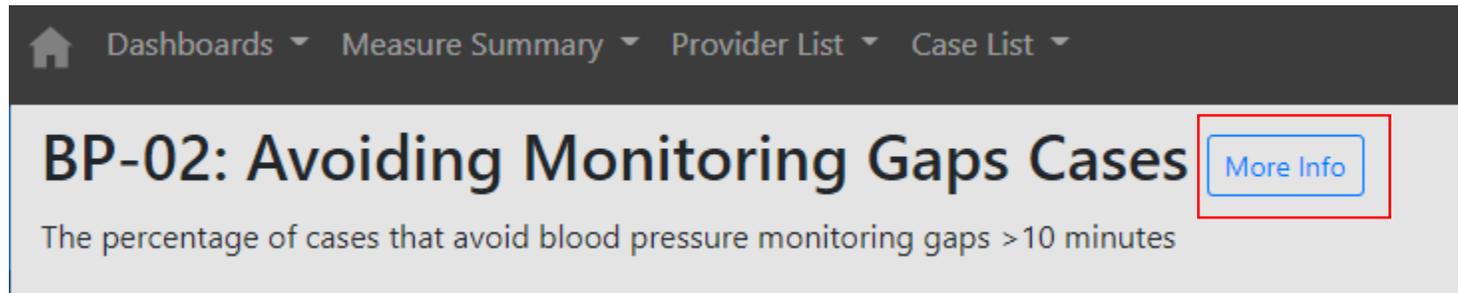
- To review a performance summary for any measure, select the measure of interest via the measure summary drop down or by simply clicking any measure 'card'.
- Each measure displays the institutional performance (or individual performance depending on login permissions) and the targeted performance threshold.



Measure Summary: includes overall performance, case counts, trend over time, breakdown of primary case attribution and breakdown by location.

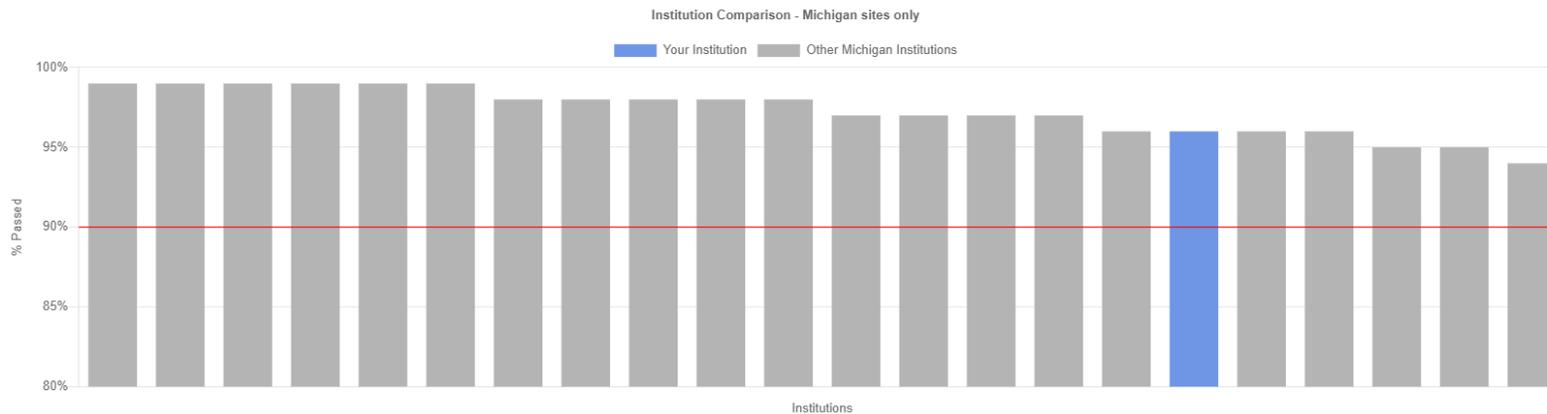
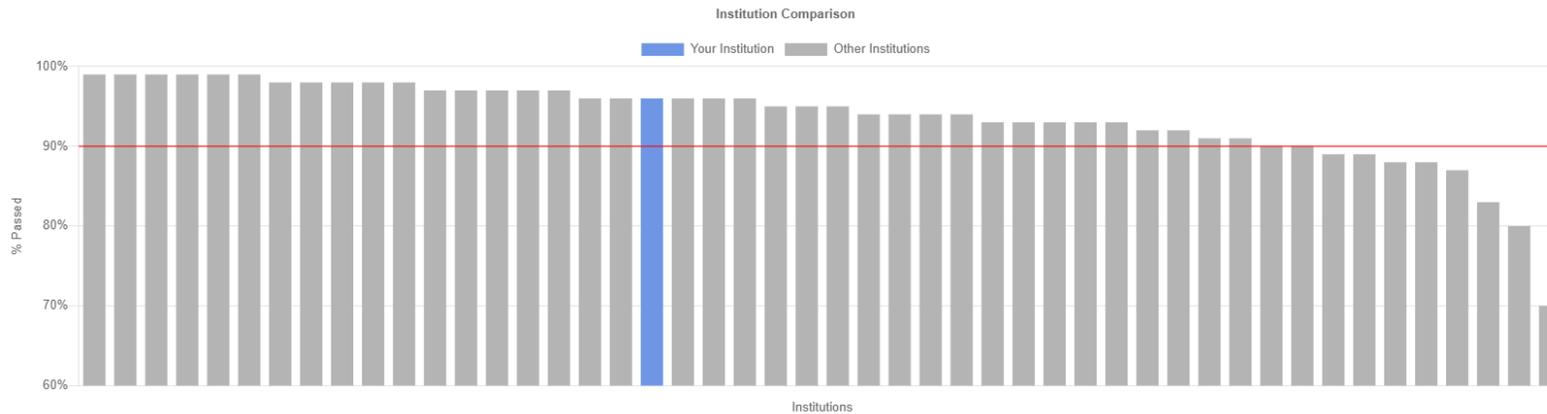


To review the full measure specification, click on the “More Details” located after the measure description



The screenshot shows a navigation bar with a home icon and menu items: Dashboards, Measure Summary, Provider List, and Case List. Below the navigation bar is a card for the measure 'BP-02: Avoiding Monitoring Gaps Cases'. The card includes a description: 'The percentage of cases that avoid blood pressure monitoring gaps > 10 minutes'. A blue button labeled 'More Info' is located to the right of the title and is highlighted with a red rectangular box.

Each measure summary has an anonymized institution comparison graph for benchmarking purposes across all MPOG sites. If your institution is in Michigan, there will be an additional graph comparing sites across the state.



By selecting the 'Providers List' drop down, you can see individual performance for all anesthesia providers within your institution for a particular measure.

[Dashboards](#) ▾ [Measure Summary](#) ▾ [Provider List](#) ▾ [Case List](#) ▾ Individual Provider ▾

BP-02: Avoiding Monitoring Gaps Providers [More Info](#)

[Summary](#) [Case List](#)

The percentage of cases that avoid blood pressure monitoring gaps >10 minutes

Search:

Provider	Role	Score	Cases Passed	Cases Flagged	Cases Included	% of Institution Flags
	CRNA	83%	5	1	6	0%
	CRNA	90%	432	48	480	1%
	CRNA	97%	383	12	395	0%
	Attending	96%	408	16	424	0%
	CRNA	99%	328	4	332	0%
	CRNA	99%	545	3	548	0%
	Resident	97%	119	4	123	0%
	CRNA	97%	653	21	674	1%
	Resident	92%	132	12	144	0%
	Resident	97%	119	4	123	0%
	Attending	97%	932	31	963	1%
	Attending	97%	263	7	270	0%
	CRNA	97%	437	15	452	0%
	CRNA	99%	624	4	628	0%
	Resident	90%	175	20	195	1%

- You can sort by Provider, Role, Score, Cases Passed, Cases Flagged, Cases Included, and % Institutional Fails by clicking the column header
- To quickly search for an individual provider, enter their name or AIMS staff ID in the search filter on the right.

Search:

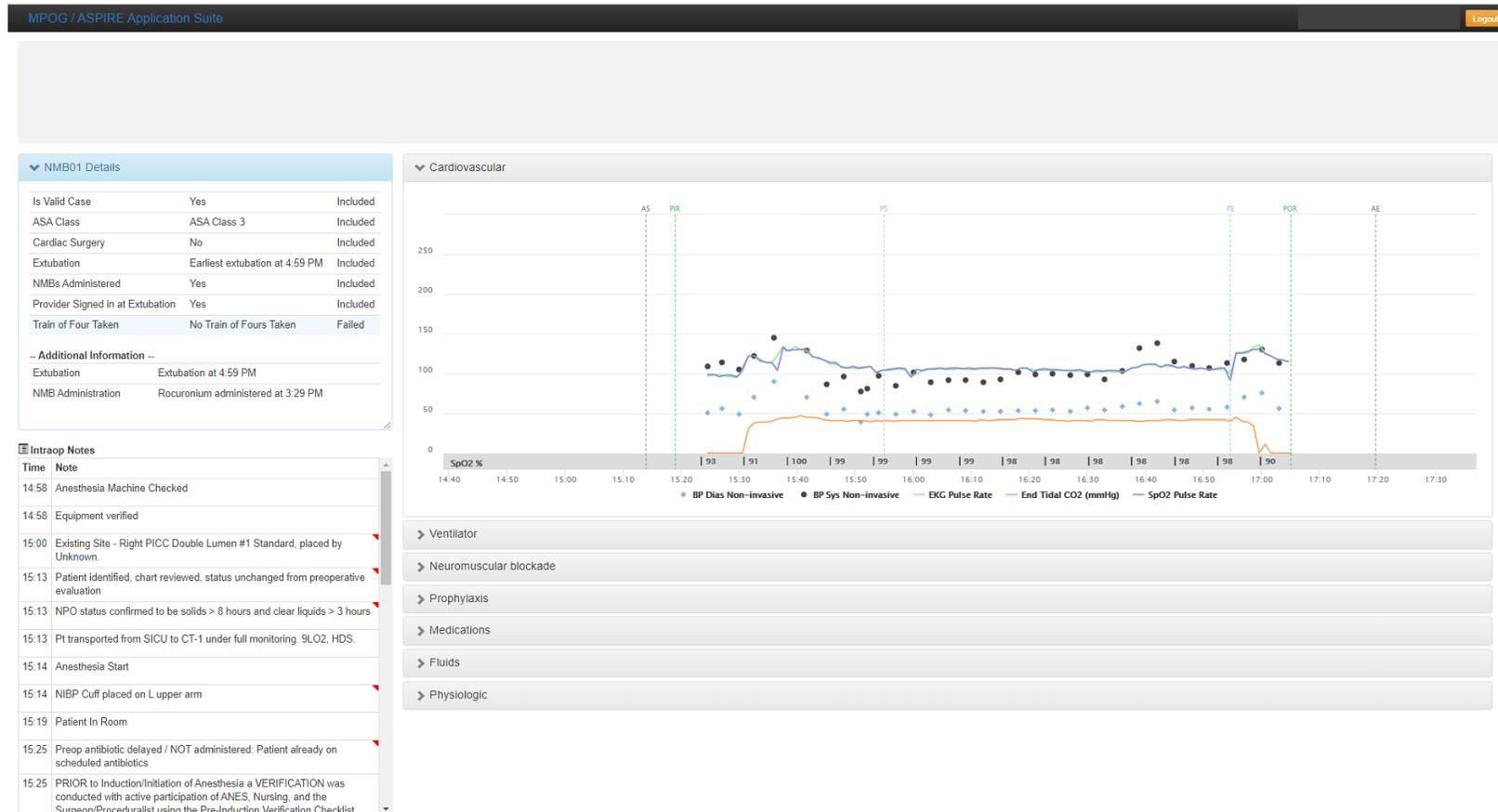
Provider	Role	Score	Cases Passed	Cases Flagged	Cases Included	% of Institution Flags
27020	CRNA	83%	5	1	6	0%
59351	CRNA	90%	432	48	480	1%

- By selecting the 'Case Lists' tab, all failed, passed, and excluded will appear for the specific measure. You can sort the column headers by clicking the arrows next to the title of each column.

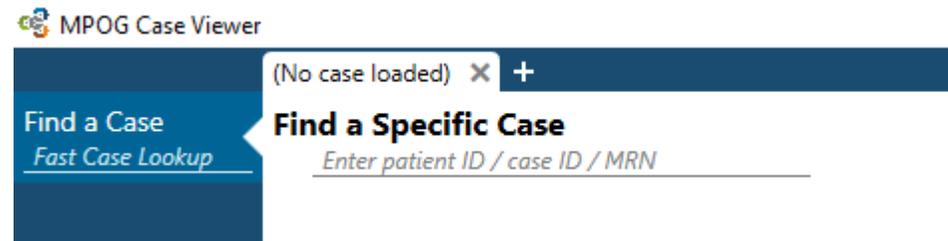
The screenshot displays the MPOG Reporting interface. The top navigation bar shows the 'Case List' tab selected. The main content area is titled 'BP-02: Avoiding Monitoring Gaps Cases' and includes a 'Case Report Download' button. A table lists individual cases with columns for 'View Case', 'Measure Result', 'Date of Service', 'Operating Room', 'Surgical Service', 'Procedure', 'Primary Anesthesia CPT', 'Measure Result Reason', 'Attributable Attendings', 'Attributable CRNA/Resident', and 'MPOG Case ID'. The table contains five rows of data, with results ranging from 'Excluded' to 'Passed'.

View Case	Measure Result	Date of Service	Operating Room	Surgical Service	Procedure	Primary Anesthesia CPT	Measure Result Reason	Attributable Attendings	Attributable CRNA/Resident	MPOG Case ID
View Case	Excluded			Surgical Service - Not specified	(Actual)Delivery		Labor Epidural: Yes			
View Case	Passed			Obstetrics / Gynecology	(Actual)BILATERAL DIAGNOSTIC LAPAROSCOPY	00840	BP Count: 33			
View Case	Excluded			Surgical Service - Not specified	(Actual)vaginal delivery	01967	Labor Epidural: Yes			
View Case	Passed			Trauma	(Actual)EXPLORATORY LAPAROTOMY	00790	BP Count: 46			
View Case	Passed			Transplant	(Actual)LEFT KIDNEY TRANSPLANT - CADAVERIC DONOR		BP Count: 111			

Click on 'View Case' from the grid above to display intraoperative case information and details in 'Case Viewer'



- If preferred, you may copy the MPOG Case ID from the web Case Viewer (see below) and paste into Case Viewer accessible through the MPOG application suite. This will allow you to review cases in greater detail
- Once you have opened MPOG Case Viewer and searched by ‘Patient or Case ID,’ you may retrieve the MRN from Case Viewer to insert into the institution electronic health record to facilitate case review.



- For ACQRs and QI Champions: You may need to view the dashboard from the perspective of a specific provider in order to better answer questions
- To navigate to a specific provider's view, use 'Find a Provider' at the bottom of the entity dropdown box

The screenshot shows the MPOG Reporting dashboard. The top navigation bar includes 'MPOG Reporting', a home icon, and dropdown menus for 'Dashboards', 'Measure Summary', and 'Provider List'. The left sidebar contains filters for 'Entity' (Hospital A), 'Time Period' (Past 12 Months), and 'Additional Filters' (Location, Patient Age, Patient Gender, Patient Race/Ethnicity, Surgical Service). The main content area displays a list of 'Your Groups' from Hospital A to Hospital T, plus 'Other' and 'John Doe'. A search box labeled 'Find a Provider' contains 'John Doe'. A dropdown menu is open over the search box, listing 'Hospital A', 'JOHN DOE' (highlighted in green), 'Hospital B', 'JOHN DOE', 'Hospital C', and 'John Doe'.



Module 13

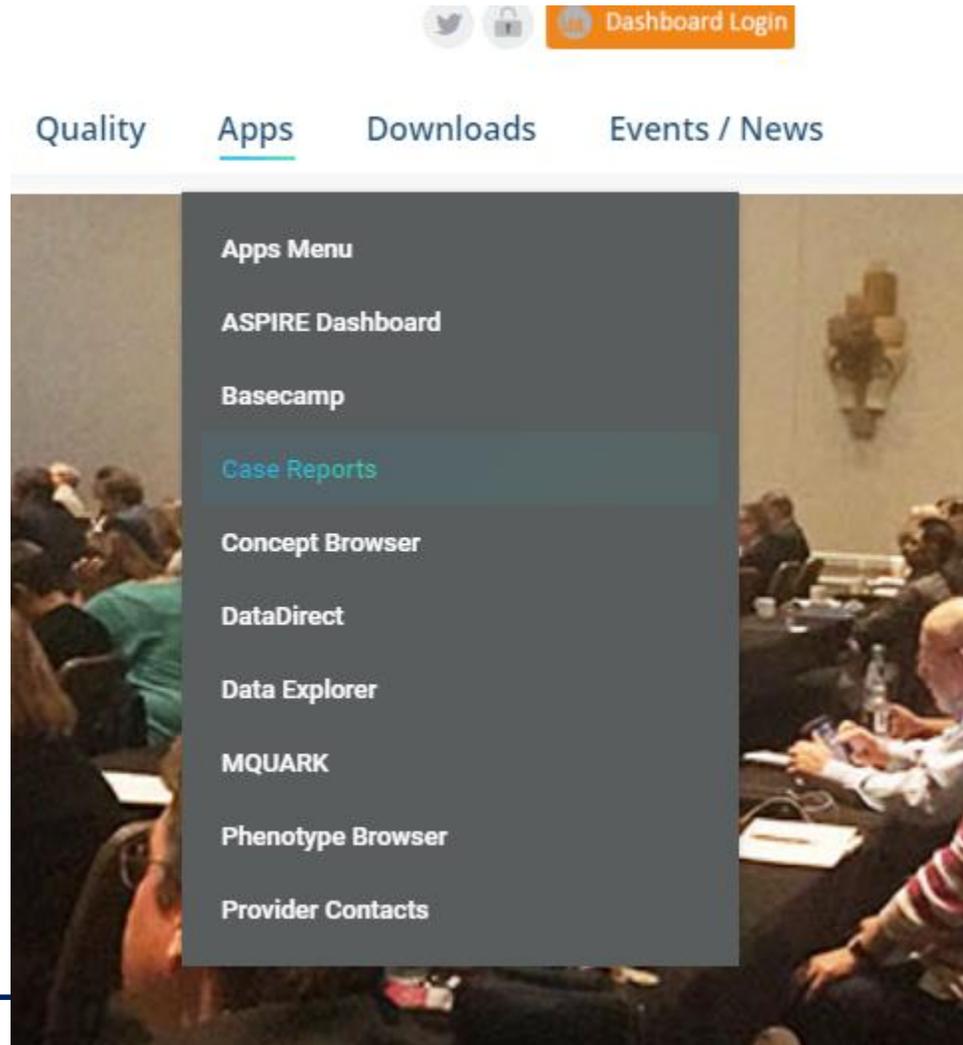
Measure Case Report



Measure Case Report Overview

- Allows users to create a passed/failed/excluded case report for a specific date range and/or specific measures.
- Each report contains case information pertinent to each measure selected.
- The purpose of this tool is to provide an organized document with all information necessary for case reviewers to use when investigating why a provider failed, passed or was excluded from a particular measure/case.

Accessing Measure Case Report



- This application can be accessed through the following link: [Measure Case Report](#) or on the MPOG website under Apps > Case Report

Login using your ASPIRE account information



The screenshot shows the MPOG logo at the top, which consists of a stylized hexagonal icon with green, blue, and orange segments, followed by the text "MPOG" in large blue letters and "MULTICENTER PERIOPERATIVE OUTCOMES GROUP" in smaller blue letters below it. Below the logo is a light green box with the heading "Login to ASPIRE". Inside this box, there is a welcome message: "Hello Welcome to ASPIRE. Log in with your username and password below." Below the message are two input fields: "User Name" and "Password". Below the "Password" field is a "Login" button with a lock icon. At the bottom of the box is a link that says "Forgot your password?".

1. Select your institution from the dropdown menu

Measure Case Report

• Institution:

University of Michigan Health System ▾

1. Select the date range you are interested in reviewing

• Date Range:

From	03/01/2018	To	03/31/2018
------	------------	----	------------

• Measure:

<input type="checkbox"/> Check All Measures	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> AKI01: Acute Kidney Injury	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input checked="" type="checkbox"/> BP01: Low MAP Prevention	<input checked="" type="checkbox"/> Passed	<input checked="" type="checkbox"/> Failed	<input checked="" type="checkbox"/> Excluded
<input type="checkbox"/> BP02: Avoiding Monitoring Gaps	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> CARD01: Avoiding Myocardial Infarction	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> CARD01QCDR: Avoiding Myocardial Infarction	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> CARD02: Avoiding Myocardial Infarction (Trop. ≤ 0.6)	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> FLUID01C: Minimizing Colloid Use (Cardiac)	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> FLUID01NC: Minimizing Colloid Use (Non-Cardiac)	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> GLU01: High Glucose Treated	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input checked="" type="checkbox"/> GLU02: Low Glucose Treated	<input checked="" type="checkbox"/> Passed	<input checked="" type="checkbox"/> Failed	<input checked="" type="checkbox"/> Excluded
<input type="checkbox"/> MED01: Avoiding Medication Overdose	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> NMB01: Train of Four Taken	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> NMB02: Reversal Administered	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> PONV01: Avoiding PONV	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> PONV02: Avoiding PONV (Peds)	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> PUL01: Tidal Volume Under 10 mL/kg	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> PUL02: Tidal Volume Under 8 mL/kg	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TEMP01: Thermoregulation Vigilance - Active Warming	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TEMP02: Thermoregulation Monitoring - Core Temperature	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TEMP03: Perioperative Temperature Management	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TOC02: Postoperative Transfer of Care to PACU	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TOC03: Postoperative Transfer of Care to ICU	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TRAN01: Transfusion Management Vigilance	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded
<input type="checkbox"/> TRAN02: Post Transfusion Monitoring	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	<input type="checkbox"/> Excluded

- Select the box next to each measure you wish to include in your report.
- For each measure of interest, select the boxes next to “passed”, “failed” and/or “excluded” to determine what types of results you would like included.
- *To include all passed, failed and excluded cases and/or to include all measures in your report, select the top box over each column (i.e. “Check all measures”)

- Once you have selected the measures of interest, click “Generate Report” located at the bottom:

Generate Report

- An approximate processing time will then display. Choosing multiple measures for the report will increase processing time. Once report is ready, click “download report”

Report is ready!

Measure Case Report is ready to download. Please click the download button below.

Download Report

MPOG_Case_ID	Date of Service	Operating Room	Surgical Service
aa69545c-8b35-e811-8ef3-00215a9b0a8c		Room 17-L	Unknown Concept
c169545c-8b35-e811-8ef3-00215a9b0a8c		M-OR 19	Cardiac
b469545c-8b35-e811-8ef3-00215a9b0a8c		ANAISYS-02	Trauma
5fd07631-c234-e811-8ef3-00215a9b0a8c		ANAISYS-02	Radiology - Unspecified
f7cf7631-c234-e811-8ef3-00215a9b0a8c		U-OR 34	Orthopedics
c5cf7631-c234-e811-8ef3-00215a9b0a8c		IRMT01	Radiology - Unspecified
dacf7631-c234-e811-8ef3-00215a9b0a8c		M-OR 12	Otolaryngology
b269545c-8b35-e811-8ef3-00215a9b0a8c		Room 26-L	Unknown Concept
a869545c-8b35-e811-8ef3-00215a9b0a8c		Room 15-L	Unknown Concept
59d07631-c234-e811-8ef3-00215a9b0a8c		K-OR 03	Ophthalmology
d0d07631-c234-e811-8ef3-00215a9b0a8c		U-OR 28	Trauma
4fd07631-c234-e811-8ef3-00215a9b0a8c		U-OR 34	Orthopedics
d0cf7631-c234-e811-8ef3-00215a9b0a8c		U-MPU F	Unknown Concept
bfd07631-c234-e811-8ef3-00215a9b0a8c		IRUHN1	Radiology - Unspecified
4ed07631-c234-e811-8ef3-00215a9b0a8c		M-OR 09	Ophthalmology
41d07631-c234-e811-8ef3-00215a9b0a8c		U-MPU I	Unknown Concept

BP01 GLU02 +

- Measure case reports are exported in an excel spreadsheet. Each measure included in the report is separated by tabs in the bottom right hand corner.
- Once saved on your computer, the report is ready to import into the Batch MRN lookup tool which matches MRNs to MPOG Case IDs allowing the case reviewer to quickly compare data to the source system.
- *Step by step instructions for this process are located in **Module 14: Batch MRN Lookup Tool**



Module 14

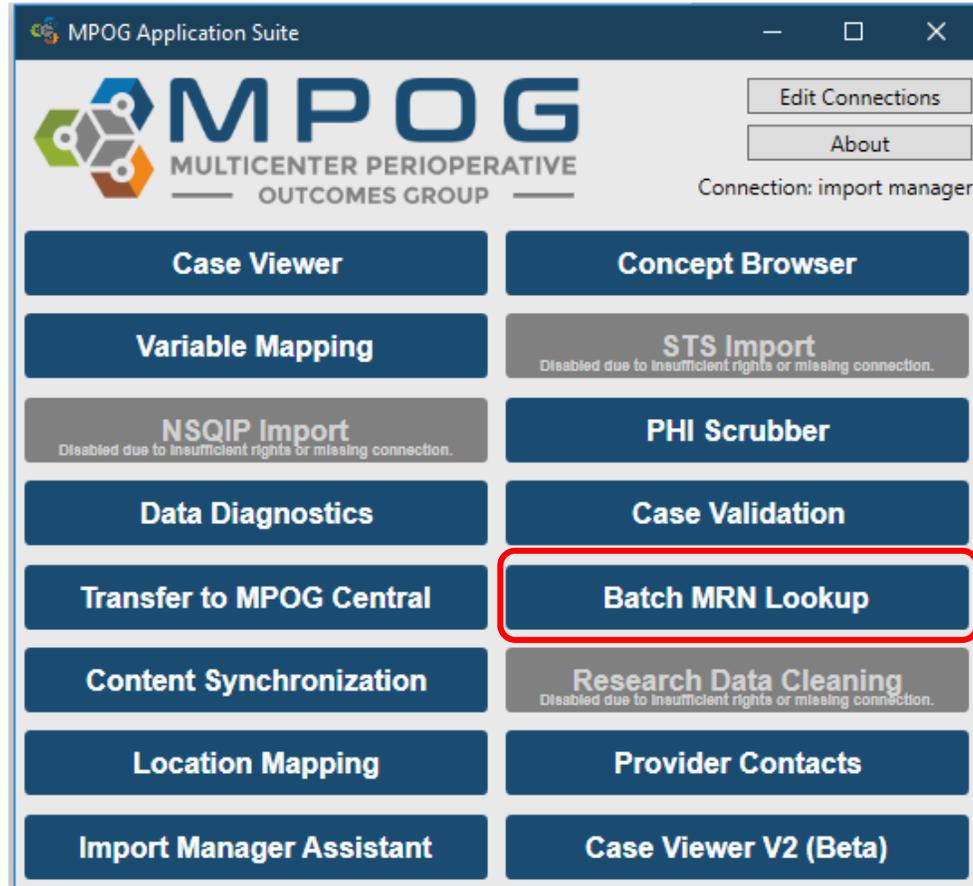
Batch MRN Lookup



Batch MRN Lookup Overview

- Used to retrieve the MRN associated with an MPOG Case ID for multiple cases at a time. There are two methods for adding a column of MRNs to an existing measure case report:
 1. **Spreadsheet method:** Upload a saved Excel document that has an MPOG Case ID column the saved Case Grids into the Batch MRN Lookup Tool. For more information about how to export cases from the [Measure Case Report](#), see Module 13 of the MPOG Training Manual.
 2. **List Method:** Copy MPOG IDs and paste them into the designated field in the Batch MRN Lookup Tool.

Accessing Batch MRN Lookup



Spreadsheet Method

Batch MRN Lookup

Use MPOG provided spreadsheet

Spreadsheet location

Browse

Provide list of MPOG case IDs

MPOG case IDs

Save to location

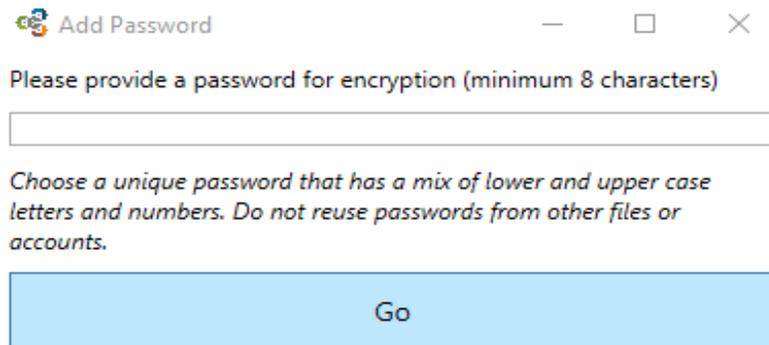
Browse

Start

- First, locate the file that was exported from the measure case report tool (and saved to your computer) by selecting ‘Browse’
- Next, simply double click on the file to load it into the ‘Spreadsheet location’. Click ‘Start.’

*Note the spreadsheet you are uploading cannot be opened on your computer at the same time as upload

Follow the prompt and enter a password with at least 8 characters for encryption purposes. Click 'Go' to continue.



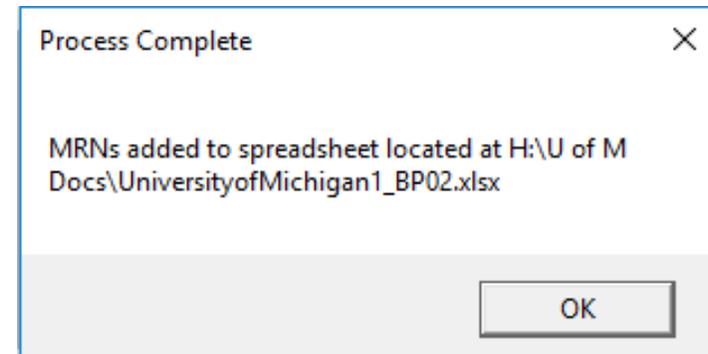
Add Password

Please provide a password for encryption (minimum 8 characters)

Choose a unique password that has a mix of lower and upper case letters and numbers. Do not reuse passwords from other files or accounts.

Go

Once a password is set and the MRN column has been successfully added to that file, you will receive a notification. Click 'OK'

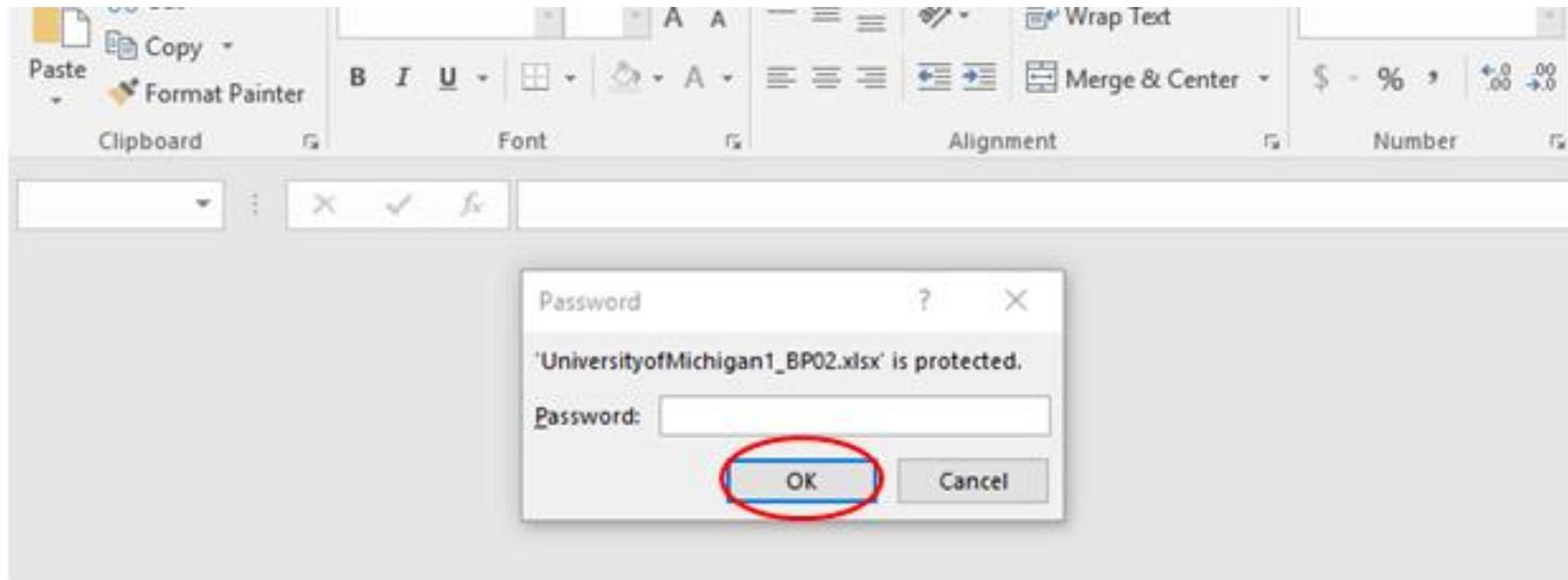


Process Complete

MRNs added to spreadsheet located at H:\U of M Docs\UniversityofMichigan1_BP02.xlsx

OK

- Go to the folder where the spreadsheet is saved and open in Excel.
- Upon opening, you will be prompted to enter the password you previously entered to view the modified Case Grid. Enter your password and click 'OK.'
- A new column titled MRN will appear to the left of the MPOG Case ID column in your existing spreadsheet. The encrypted file will automatically save



Case ID List Method

Batch MRN Lookup

Use MPOG provided spreadsheet

Spreadsheet location

Browse

Provide list of MPOG case IDs

MPOG case IDs

Save to location

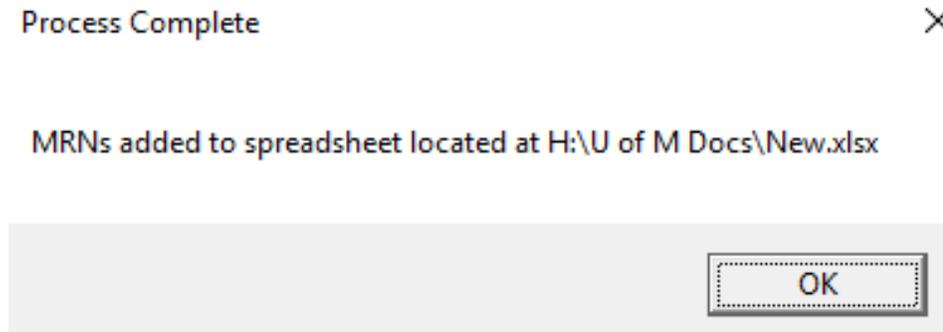
Browse

Start

- Select the second radio dial: 'Provide list of MPOG case IDs'
- Copy and Paste all MPOG Case IDs into the text box and click 'Browse' to select a location for the new spreadsheet to be saved. Click 'Start'

*You will be prompted to set a password similar to spreadsheet mode.

- After clicking 'Go' you will receive a message saying the process is complete. Go to the saved file and open
- Enter your password when prompted and the MPOG Case IDs you submitted with their associated MRNs will be visible. Again, the encrypted file will automatically save.





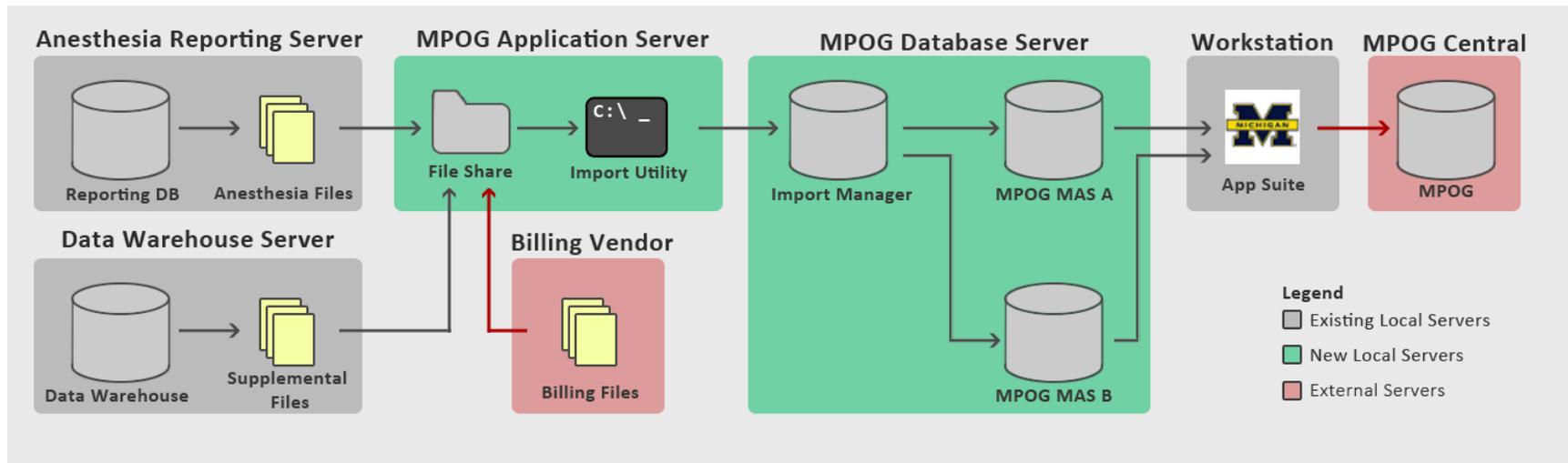
Module 15

Import Manager Assistant



Import Manager Assistant Overview

IM Assistant provides organized information file processing errors and their current location within the import manager file pipeline.



- Note: Site technical teams supporting the MPOG project will want to download the application suite to access IM Assistant.



Import Manager Assistant



- **Log Viewer:** This tab displays the various import manager logs and the handoff queue.
- **Overview:** This tab contains a color-coded grid representing the current status of import manager.
- **Check File Columns:** This tab enables the user to see which rows in an imported file have the incorrect number of columns.
- **Parse File Data:** This tab enables the user to view the contents of an imported file.
- **Handoff Settings:** This tab contains the current settings for handoff for this instance.

Import Manager Assistant

Log Viewer Module: All Target Date Range: Select a date [15] to Select a date [15] Had Error Yes No Execution Date Range: Select a date [15] to Select a date [15]

Overview Import Log Consume Log Handoff Log Handoff Queue

Log Entry ID	Instance	File Name	Start	End	Error	File Size (Bytes)	Is MultiDate
5347	MPOG_MAS	StaffTracking_V1_Centricity_20190330_20190628.csv	6/28/2019 8:12:23 AM	6/28/2019 8:12:23 AM	(none)	15,931	False
5346	MPOG_MAS	StaffTracking_V1_Centricity_20180628_20190628.csv	6/28/2019 8:12:23 AM	6/28/2019 8:12:23 AM	(none)	148,295	False
5345	MPOG_MAS	Procedures_V1_Centricity_20190330_20190628.csv	6/28/2019 8:12:22 AM	6/28/2019 8:12:23 AM	(none)	2,133,918	False
5344	MPOG_MAS	Procedures_V1_Centricity_20180628_20190628.csv	6/28/2019 8:12:22 AM	6/28/2019 8:12:22 AM	(none)	20,408,486	False
5343	MPOG_MAS	PeriopObservations_V1_Centricity_20190330_20190628.csv	6/28/2019 8:12:20 AM	6/28/2019 8:12:22 AM	(none)	15,468,414	False
5342	MPOG_MAS	Diagnoses_V1_Centricity_20180628_20190628.csv	6/28/2019 8:12:18 AM	6/28/2019 8:12:20 AM	(none)	13,184,377	False
5341	MPOG_MAS	CaseCrosswalk_V1_Centricity_20180628_20190628.csv	6/28/2019 8:12:18 AM	6/28/2019 8:12:18 AM	(none)	23,574	True
5340	MPOG_MAS	StaffTracking_V1_Centricity_20190624_20190628.csv	6/28/2019 7:43:02 AM	6/28/2019 7:43:02 AM	(none)	164,651	False
5339	MPOG_MAS	StaffTracking_V1_Centricity_20190529_20190628.csv	6/28/2019 7:43:02 AM	6/28/2019 7:43:02 AM	(none)	167,896	False
5338	MPOG_MAS	Procedures_V1_Centricity_20190529_20190628.csv	6/28/2019 7:43:01 AM	6/28/2019 7:43:02 AM	(none)	6,229,000	False
5337	MPOG_MAS	PeriopObservations_V1_Centricity_20190624_20190628.csv	6/28/2019 7:42:48 AM	6/28/2019 7:43:01 AM	(none)	152,546,702	False
5336	MPOG_MAS	PeriopObservations_V1_Centricity_20190529_20190628.csv	6/28/2019 7:42:36 AM	6/28/2019 7:42:48 AM	(none)	156,707,580	False
5335	MPOG_MAS	PeriopObservations_V1_Centricity_20180628_20190628.csv	6/28/2019 7:42:36 AM	6/28/2019 7:42:36 AM	(none)	0	False
5334	MPOG_MAS	PeriopObservationDetails_V1_Centricity_20190529_20190628.csv	6/28/2019 7:42:36 AM	6/28/2019 7:42:36 AM	(none)	1,254,687	False
5333	MPOG_MAS	PeriopObservationDetails_V1_Centricity_20190330_20190628.csv	6/28/2019 7:42:36 AM	6/28/2019 7:42:36 AM	(none)	145,258	False
5332	MPOG_MAS	PeriopObservationDetails_V1_Centricity_20180628_20190628.csv	6/28/2019 7:42:36 AM	6/28/2019 7:42:36 AM	(none)	1,131,646	False
5331	MPOG_MAS	PeriopAdministrations_V1_Centricity_20190529_20190628.csv					
5330	MPOG_MAS	PeriopAdministrations_V1_Centricity_20190330_20190628.csv					
5329	MPOG_MAS	PeriopAdministrations_V1_Centricity_20180628_20190628.csv					
5328	MPOG_MAS	Patients_V1_Centricity_20190529_20190628.csv					
5327	MPOG_MAS	Patients_V1_Centricity_20190330_20190628.csv					
5326	MPOG_MAS	Patients_V1_Centricity_20180628_20190628.csv					
5325	MPOG_MAS	Labs_V1_Centricity_20190529_20190628.csv					
5324	MPOG_MAS	Labs_V1_Centricity_20190330_20190628.csv					
5322	MPOG_MAS	HospitalMortality_V1_Centricity_20190529_20190628.csv					
5323	MPOG_MAS	Labs_V1_Centricity_20180628_20190628.csv					
5321	MPOG_MAS	HospitalMortality_V1_Centricity_20190330_20190628.csv					
5320	MPOG_MAS	HospitalMortality_V1_Centricity_20180628_20190628.csv					
5319	MPOG_MAS	Diagnoses_V1_Centricity_20190529_20190628.csv					
5318	MPOG_MAS	Diagnoses_V1_Centricity_20190330_20190628.csv					
5317	MPOG_MAS	Cases_V1_Centricity_20190529_20190628.csv					
5316	MPOG_MAS	Cases_V1_Centricity_20190330_20190628.csv	6/28/2019 7:42:18 AM	6/28/2019 7:42:18 AM	(none)	7,955	False
5315	MPOG_MAS	Cases_V1_Centricity_20180628_20190628.csv	6/28/2019 7:42:18 AM	6/28/2019 7:42:18 AM	(none)	89,575	False
5314	MPOG_MAS	CaseCrosswalk_V1_Centricity_20190624_20190628.csv	6/28/2019 7:42:18 AM	6/28/2019 7:42:18 AM	(none)	29,332	True
5313	MPOG_MAS	CaseCrosswalk_V1_Centricity_20190529_20190628.csv	6/28/2019 7:42:18 AM	6/28/2019 7:42:18 AM	(none)	28,802	True

Export as a spreadsheet

Log Viewer
 Displays the import, consume, and handoff logs as well as the handoff queue.

Log Viewer

- Import Log

- Displays the list of files that have been imported, including those with errors.
- Files with recent errors are likely still present in the folder designated for the Import Utility and will continue to be retried until they are removed or corrected.

- Consume Log

- Displays the list of Modules and Target Dates that have been consumed, including those with errors.
- Errors that have been resolved will still show in the log, but any recent errors may indicate missing data and require attention.

Log Entry ID	Instance	File Name	Start	End	Module	Target Date	Pull Date	Error
94342	MPOG_MAS	PeriopAdministrations_V1_EpicClarity_11232020_20210210.csv	5/24/2021 9:49:43 AM	5/24/2021 9:49:43 AM	PeriopAdministrations	Unknown	2/10/2021	The conversion of a varchar data type to a datetime data type resulted in an ou ^
94343	MPOG_MAS	PeriopAdministrations_V1_EpicClarity_11232020_20210414.csv	5/24/2021 9:49:43 AM	5/24/2021 9:49:43 AM	PeriopAdministrations	Unknown	4/14/2021	The conversion of a varchar data type to a datetime data type resulted in an ou ^
94305	MPOG_MAS	Cases_V1_Centricity_20141018_20191215.csv	5/24/2021 9:43:05 AM	5/24/2021 9:43:05 AM	Cases	10/18/2014	12/15/2019	File contains invalid number of columns

Log Viewer

- Handoff Log

- Displays the modules (and corresponding Target Dates) that have been exported to the MPOG_MAS database(s).
- Errors that have been resolved will still show in the log, but any recent errors may indicate missing data and require attention.

- Handoff Queue

- Displays any modules (and corresponding Target Dates) currently queued to be exported to the MPOG_MAS database(s).
- The assigned Priority helps indicate why the item was queued:
 - Priority 10 = New Data
 - Priority 20 = Re-Imported Data
 - Priority 30 = New Mappings
 - Priority 50 = Missing from MPOG_MAS, Reason Unknown
 - Priority 60 = Missing from MPOG_MAS, Reason Unknown (Patient Level Data)

Log Viewer

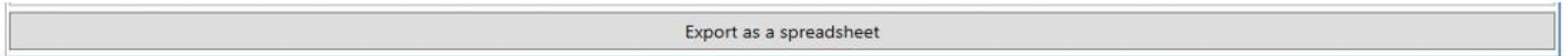
- The filters at the top of the window allow the user to filter by a variety of criteria.

A screenshot of the filter bar in the Log Viewer interface. It contains four main sections: 1. A dropdown menu labeled 'Module' with 'All' selected. 2. A 'Target Date Range' section with two date pickers, both showing '15'. 3. A 'Had Error' section with a checked checkbox, followed by 'Yes' (checked) and 'No' (unchecked). 4. An 'Execution Date Range' section with two date pickers, both showing '15'.

- *Module*: refers to the type of data.
- *Target date range*: filters the data based on case date of service.
- *Error filtering*: allows the user to view log records with or without errors. Please keep in mind that an error that has occurred may have since been resolved.
- *Execution date range*: filters the data based on date file processing occurred

Log Viewer

- The Log Viewer is limited to the most recent 10,000 rows from each log; however, exporting the logs as a spreadsheet has no row limit and will display all rows.
- To export the logs, click the “Export as a spreadsheet” button at the bottom of the Import Manager Assistant window.



- Please include this log when contacting MPOG support about any errors encountered during the Import/Consume/Handoff processes.

Overview

- Provides a color-coded grid representing the current status of files that were imported. The main grid shows the status broken down by module or “data type” (viewed in rows) and date of service month/year (viewed in columns). Each box represents one month of data.

Module	12-16	01-17	02-17	03-17	04-17	05-17	06-17	07-17	08-17	09-17	10-17	11-17	12-17	01-18	02-18	03-18	04-18	05-18	06-18	07-18	08-18	09-18	10-18	11-18	12-18	01-19	02-19	03-19	04-19	05-19	06-19	07-19	08-19	09-19	10-19	11-19			
Cases																																							
Diagnoses																																							
HospitalMortality																																							
Labs																																							
Patients																																							
Payers																																							
PeriopAdministrations																																							
PeriopObservationDetails																																							
PeriopObservations																																							
Procedures																																							
StaffTracking																																							

Module	Data Included
Cases	Date of Service Operating Room Admission Type Surgical Service Procedure Text Diagnosis Text Organizations (used to determine which MPOG_MAS database to use)
Diagnoses	Hospital Discharge Diagnosis and Professional Fee Diagnosis Codes
HospitalMortality	Date of Death (in hospital only)
Labs	Formal Labs and Point-of-care Labs
Patients	Patient Name MRN Gender Ethnicity Race
	(continued on next slide)

Module	Data Included
Payers	Insurance and other payer data
PeriopAdministrations	Fluids and Medications
PeriopObservations	Preoperative Notes Intraoperative Notes Monitor Data
Procedures	Professional Fee Procedure Codes Hospital Discharge Procedure Codes
StaffTracking	Staff sign ins/outs and role (eg attending)

The color of each box indicates the data status within each month:

- **Green**- indicates data that has successfully completed all Import Manager steps. If every day of the month has successfully completed processing, display green
- **Yellow**- indicates data that has successfully completed some steps, but still has further steps to complete. If there are not any errors but data is still being processed for one or more days, display yellow.
- **Red**- indicates one or more errors. If there are any errors for any day that month, display the month as red.
- **Grey**- indicates missing data. If there are not any errors, no data is being processed, but there are one or more days without any data, display grey.
- **Green/Grey**- indicates that there is partial missing data. Some days may be green and some may be grey.

- Select any day of the month to reveal the breakdown by source system.
- The source system information will tell you from where the data was extracted from (electronic health record, billing software, etc.).
- You can also see more details about where/what errors may have occurred.
- The status column will show where the data currently is in the transfer process.

Cases, Centricity, May 2017

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Details for 5/11/2017

Instance	Destination Database	Status	Last Import	Last Consume	Last Handoff	Queued for Handoff	Import Error	Consume Error	Handoff Error
MPOG_MAS	MPOG_MAS	Complete	8/30/2019 8:12:18 PM	9/1/2019 1:04:45 PM	9/5/2019 7:32:47 AM	Not queued	(none)	(none)	(none)

Import Manager Assistant

Instance: AIMS (ID: 0) File Name: PeriopAdministrations_V1_Epic_20180101_20180101.csv

Check Columns

Line	Actual Columns	Expected Columns
1,1,,5185,Propofol Bolus ,MG,MG,IV,IV,2018-07-27 09:33:07.000,,0,50,,2018-07-27 09:33:11.677,,	17	18
1,1,,,4062,Rocuronium ,MG,MG,IV,IV,2018-07-27 08:49:31.000,,0,10,,2018-07-27 08:49:34.223,,	19	18

Log Viewer

Overview

Check File Columns

Parse File Data

Handoff Settings

Check File Columns

can be useful for checking which rows in a particular file contain too many or too few columns.

Import Manager Assistant

Log Viewer Module: All Target Date Range: Select a date [15] to Select a date [15] Had Error: Yes No Execution Date Range: Select a date [15] to Select a date [15]

Overview Import Log Consume Log Handoff Log Handoff Queue

Log Entry ID	Instance	File Name	Start	End	Error	File Size (Bytes)	Is MultiDate
37766	MPOG_MAS	StaffTracking_V1_EpicClarity_09102018_20190910.csv	9/10/2019 8:12:23 AM	9/10/2019 8:12:23 AM	(none)	118,462	True
37765	MPOG_MAS	StaffTracking_V1_EpicClarity_06122019_20190910.csv	9/10/2019 8:12:23 AM	9/10/2019 8:12:23 AM	(none)	130,097	True
37764	MPOG_MAS	Procedures_V1_EpicClarity_20190612_20190910.csv	9/10/2019 8:12:23 AM	9/10/2019 8:12:23 AM	(none)	7,588,584	False
37763	MPOG_MAS	Procedures_V1_EpicClarity_20180910_20190910.csv	9/10/2019 8:12:23 AM	9/10/2019 8:12:23 AM	(none)	8,202,235	False
37762	MPOG_MAS	PeriopObservations_V1_EpicClarity_09102018_20190910.csv	9/10/2019 8:12:22 AM	9/10/2019 8:12:23 AM	(none)	22,821,590	True
37761	MPOG_MAS	PeriopObservationDetails_V1_EpicClarity_09102018_20190910.csv	9/10/2019 8:12:22 AM	9/10/2019 8:12:22 AM	(none)	5,978	True
37760	MPOG_MAS	PeriopObservationDetails_V1_EpicClarity_06122019_20190910.csv	9/10/2019 8:12:22 AM	9/10/2019 8:12:22 AM	(none)	14,986	True
37759	MPOG_MAS	PeriopAdministrations_V1_EpicClarity_09102018_20190910.csv	9/10/2019 8:12:22 AM	9/10/2019 8:12:22 AM	(none)	698,103	True
37758	MPOG_MAS	Diagnoses_V1_EpicClarity_20190612_20190910.csv	9/10/2019 8:12:20 AM	9/10/2019 8:12:22 AM	(none)	12,734,287	False
37757	MPOG_MAS	Diagnoses_V1_EpicClarity_20180910_20190910.csv	9/10/2019 8:12:18 AM	9/10/2019 8:12:20 AM	(none)	13,831,066	False
37756	MPOG_MAS	StaffTracking_V1_EpicClarity_09062019_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	119,527	True
37755	MPOG_MAS	StaffTracking_V1_EpicClarity_08112019_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37754	MPOG_MAS	StaffTracking_V1_Centricity_20190906_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37753	MPOG_MAS	StaffTracking_V1_Centricity_20190811_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37752	MPOG_MAS	StaffTracking_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37751	MPOG_MAS	StaffTracking_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37750	MPOG_MAS	Procedures_V1_EpicClarity_20190906_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37749	MPOG_MAS	Procedures_V1_EpicClarity_20190811_20190910.csv	9/10/2019 7:42:55 AM	9/10/2019 7:42:55 AM	(none)	11,119	True
37748	MPOG_MAS	PeriopObservations_V1_EpicClarity_09062019_20190910.csv	9/10/2019 7:42:53 AM	9/10/2019 7:42:53 AM	(none)	3,725,850	True
37747	MPOG_MAS	PeriopObservations_V1_EpicClarity_08112019_20190910.csv	9/10/2019 7:42:53 AM	9/10/2019 7:42:53 AM	(none)	27,391,751	True
37746	MPOG_MAS	PeriopObservations_V1_EpicClarity_06122019_20190910.csv	9/10/2019 7:42:52 AM	9/10/2019 7:42:53 AM	(none)	157,523,220	False
37745	MPOG_MAS	PeriopObservations_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:44 AM	9/10/2019 7:42:52 AM	(none)	155,380,714	False
37744	MPOG_MAS	PeriopObservations_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:44 AM	(none)	8,425	True
37743	MPOG_MAS	PeriopObservationDetails_V1_EpicClarity_09062019_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	440	True
37742	MPOG_MAS	PeriopObservationDetails_V1_EpicClarity_08112019_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	1,350,688	False
37741	MPOG_MAS	PeriopObservationDetails_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	1,236,711	False
37740	MPOG_MAS	PeriopObservationDetails_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	302,807	True
37739	MPOG_MAS	PeriopAdministrations_V1_EpicClarity_08112019_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	867,432	True
37738	MPOG_MAS	PeriopAdministrations_V1_EpicClarity_06122019_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	914,193	False
37737	MPOG_MAS	PeriopAdministrations_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	855,117	False
37736	MPOG_MAS	PeriopAdministrations_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:35 AM	9/10/2019 7:42:35 AM	(none)	75,769	False
37735	MPOG_MAS	Patients_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:25 AM	9/10/2019 7:42:35 AM	(none)	213,032,638	False
37734	MPOG_MAS	Labs_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:19 AM	9/10/2019 7:42:25 AM	(none)	189,299,189	False
37733	MPOG_MAS	Labs_V1_Centricity_20180910_20190910.csv	9/10/2019 7:42:19 AM	9/10/2019 7:42:25 AM	(none)	680	False
37732	MPOG_MAS	HospitalMortality_V1_Centricity_20190612_20190910.csv	9/10/2019 7:42:19 AM	9/10/2019 7:42:19 AM	(none)		

Export as a spreadsheet

File names can be obtained by copying and pasting them from the **Log Viewer** tab. To do so, right click on any file name and click "Copy".

Import Manager Assistant

Instance: MPOG_MAS (ID: 0) File Name: PeriopAdministrations_V1_Centricity_20190617_20190709.csv Parse File Data

AdminID	CaseID	Phaseof_Care_ID	Phaseof_Care_Name	AdminType_ID	AdminType_Name	UnitID	UnitName	RouteID	RouteName	DoseStart_Time	DoseEnd_Time
				6730	Milrinone Load	MG	MG	IV	IV	2019-06-17 12:20:22.000	
				6741	Milrinone Infusion	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 12:20:35.000	2019-06-17 12:25:37.0
				39462	Norepinephrine (Levophed) (bolus)	MCG	MCG	IV	IV	2019-06-17 12:19:00.000	
				39462	Norepinephrine (Levophed) (bolus)	MCG	MCG	IV	IV	2019-06-17 12:21:17.000	
				21064	Diphenhydramine 50 mg	MG	MG	IVP	IVP	2019-06-17 12:23:01.000	
				39449	Famotidine (Pepcid)	MG	MG	IV	IV	2019-06-17 12:23:08.000	
				3416	Epinephrine	MCG	MCG	IV	IV	2019-06-17 12:24:51.000	
				21090	Hydrocortisone 100 mg	MG	MG	IVP	IVP	2019-06-17 12:23:16.000	
				5858	Calcium Chloride MG IV	MG	MG	IV	IV	2019-06-17 12:25:24.000	
				6741	Milrinone Infusion	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 12:25:37.000	2019-06-17 13:00:47.0
				7370	Sodium Bicarbonate	MEQ	MEQ	IV	IV	2019-06-17 12:25:44.000	
				3416	Epinephrine	MCG	MCG	IV	IV	2019-06-17 12:32:23.000	
				6045	Epinephrine	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 12:34:08.000	2019-06-17 13:00:44.0
				3416	Epinephrine	MCG	MCG	IV	IV	2019-06-17 12:33:00.000	
				3416	Epinephrine	MCG	MCG	IV	IV	2019-06-17 12:35:00.000	
				6934	Protamine	MG	MG	IV	IV	2019-06-17 12:39:19.000	
				6752	Norepinephrine	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 12:41:31.000	2019-06-17 13:17:54.0
				5858	Calcium Chloride MG IV	MG	MG	IV	IV	2019-06-17 12:50:41.000	
				6934	Protamine	MG	MG	IV	IV	2019-06-17 12:54:52.000	
				5858	Calcium Chloride MG IV	MG	MG	IV	IV	2019-06-17 12:57:29.000	
				6135	Insulin, Regular Bolus	UNITS	UNITS	IV	IV	2019-06-17 12:57:34.000	
				6045	Epinephrine	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 13:00:44.000	2019-06-17 15:47:27.0
				6741	Milrinone Infusion	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 13:00:47.000	2019-06-17 15:47:27.0
				6752	Norepinephrine	MCG/KG/MIN	MCG/KG/MIN			2019-06-17 13:17:54.000	2019-06-17 13:31:11.0
										7 14:02:35.0	
										7 14:48:40.0	
										7 14:11:33.0	
										7 14:56:46.0	
										7 15:47:27.0	
										7 15:47:27.0	
				46681	Sugammadex	MG	MG	IV	IV	2019-06-17 15:46:33.000	
				3207	Fentanyl	MCG	MCG	IVP	IVP	2019-06-17 12:19:16.000	
				5590	Lidocaine MG IV	MG	MG	IV	IV	2019-06-17 12:23:37.000	
				5185	Propofol Bolus	MG	MG	IV	IV	2019-06-17 12:24:25.000	

Parse File Data

Allows the user to see the contents of an imported file. To find a file name, use the Log Viewer to look at either the import log or the consume log. To copy a file name, right click on it and select "Copy".

Import Manager Assistant

Destination Database: MPOG_MAS | Lab Linking: CaseLinked | Billing Tolerance in Minutes: []

Log Viewer

Overview

Check File Columns

Parse File Data

Handoff Settings

Handoff Settings

- Lab linking refers to which labs are included in a given target date.
 - CaseLinked should be used if all labs for the patients that had a case that day were pulled.
 - DateLinked should be used if all labs taken that day are included in the file.
- Billing tolerance in minutes adjusts how close timing of a billing code and a case start time can be to be considered a match.

Do **NOT** change these values without consulting MPOG staff



Module 16

MOCA[®] Part IV Attestation Guide



MOCA Part IV Provider Feedback Program

- Eligible providers enrolled in the MOCA® Part IV MPOG Provider Feedback program can attest to reviewing their failed cases in order to earn MOCA® Part IV credit.
- Through the MPOG Quality emails, providers can click on a MOCA® link that will direct them to the attestation page.
- Each month, providers must attest to reviewing the auto-populated failed cases for each of their selected MOCA® measures

MOCA Part IV Provider Feedback Program

- To earn the full five (5) points per measure, providers review and attest to 12 feedback emails and show improvement or maintain performance above threshold for each measure.
- A maximum of 25 points can be earned upon completion of one 12-month period.

MOCA Part IV Provider Feedback Program

- MPOG will communicate the number of points received as well as final scores to the individual before attesting to the American Board of Anesthesiology (ABA) on the provider's behalf.
- For more information on MOCA[®] Part IV, please visit the MOCA page on the MPOG website <https://mpog.org/quality/moca/>

MOCA Part IV Enrollment



Dashboard Login Dashboard

About Join Research Quality Tools Downloads Events

Providers must already participate in MPOG's provider email feedback program through their institution.

FEES

Enrollment fee of \$250 must be paid upon enrollment. This fee is **non-refundable** and is used to cover administrative costs to maintain the MPOG MOCA program.

CHOOSE 5 MEASURES

Providers can select a maximum of five measures and will receive five points per measure. To receive the full credit for each measure, providers must complete the measure and attest to the results within the 18-months to

Enroll at <https://mpog.org/moca/>

ATTESTATION

The provider attestation will begin the month following enrollment*

CERTIFICATION

Once the provider has completed 12 attestations, MPOG will calculate the total number of points to be awarded and send the information to the ABA. The certification will be added to the provider's report in their ABA portal.

*The attestation window has been expanded due to COVID-19 for any provider that had an attestation period ending between May 2020 through December 2020. Impacted providers will receive an automatic 4 month extension to complete the 12 attestations in 22 months rather than 18 months.



Enroll

Providers from an MPOG participating institution who would like to enroll in MPOG's MOCA program

ENROLL



Check MOCA Status

Providers enrolled with MPOG MOCA program who would like to check their current MOCA status

STATUS

ABA ID#:

****-****

[Click here to login into ABA website to find your ID #](#)

Start Date:

(Must receive 12 emails to be eligible for credit. Once completed, MPOG will send your data to the ABA.)

Select the ASPIRE Measures you plan to focus on to obtain MOCA credit
(Select up to 5 measures for a maximum of 25 points: 5 points/measure):

- NMB 01: Train of Four Taken [\[view description\]](#) (Previous 12-months Cumulative Score: 93%)
- NMB 02: Reversal Administered [\[view description\]](#) (Previous 12-months Cumulative Score: 85%)
- SUS 01: Low Fresh Gas Flow [\[view description\]](#) (Previous 12-months Cumulative Score: 78%)
- TEMP 01: Active Warming [\[view description\]](#) (Previous 12-months Cumulative Score: 92%)
- TEMP 02: Core Temperature Measurement [\[view description\]](#) (Previous 12-months Cumulative Score: 98%)
- TEMP 03: Perioperative Temperature Management [\[view description\]](#) (Previous 12-months Cumulative Score: 75%)
- TEMP 04: Pediatric Temperature Management [\[view description\]](#) (Previous 12-months Cumulative Score: 50%)
- TOC 02: Post-Anesthetic Transfer of Care [\[view description\]](#) (Previous 12-months Cumulative Score: N/A)
- AKI 01: Acute Kidney Injury [\[view description\]](#) (Previous 12-months Cumulative Score: N/A)
- BP 01: Low MAP Prevention [\[view description\]](#) (Previous 12-months Cumulative Score: 99%)
- BP 02: Avoiding Monitoring Gaps [\[view description\]](#) (Previous 12-months Cumulative Score: 96%)
- BP 03: Low Map Prevention <65 [\[view description\]](#) (Previous 12-months Cumulative Score: 75%)
- CARD 02: Avoiding MI [\[view description\]](#) (Previous 12-months Cumulative Score: 100%)
- PONV 01: Post Operative Nausea and Vomiting prophylaxis [\[view description\]](#) (Previous 12-months Cumulative Score: 76%)
- PONV 02: Post Operative Nausea and Vomiting prophylaxis, Pediatrics [\[view description\]](#) (Previous 12-months Cumulative Score: 100%)
- PONV 03: Post Operative Nausea or Vomiting [\[view description\]](#) (Previous 12-months Cumulative Score: 79%)
- PUL 01: Low Tidal Volume - Less than 10 ml/kg [\[view description\]](#) (Previous 12-months Cumulative Score: 100%)
- PUL 02: Low Tidal Volume - Less than or equal to 8 ml/kg [\[view description\]](#) (Previous 12-months Cumulative Score: 76%)

Submit



MPOG
MULTICENTER PERIOPERATIVE
OUTCOMES GROUP

Getting Started

- Begin the MOCA® Attestation process by clicking the link in the upper right hand corner your MPOG Provider Feedback Email:



Claim MOCA® Credit

Hello John Doe,

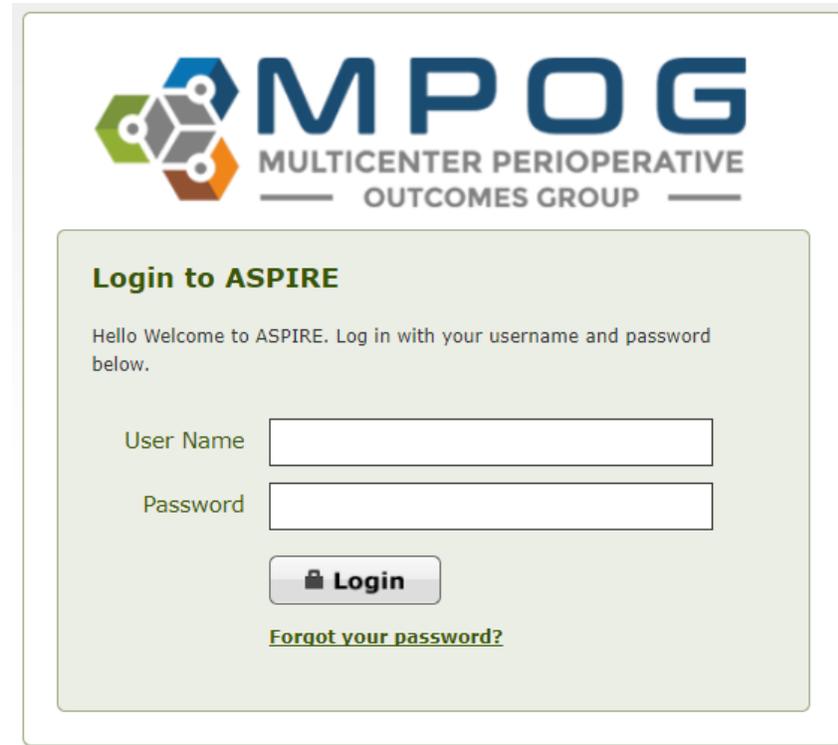
Below is your new MPOG Quality performance report. For a case-by-case breakdown of each measure's result, click on the graph's label and you will be taken to our reporting website (login required).

If you have any questions, please read our [FAQ](#) or send them to QIChampion@mpog.org. Thank you for your participation in MPOG Quality.

Sincerely,
The MPOG Team

Your Performance vs All Other Attendings
12/1/2017 to 12/31/2017

- After being directed to the MPOG/ASPIRE Login page, enter your User Name and Password



MPOG
MULTICENTER PERIOPERATIVE
OUTCOMES GROUP

Login to ASPIRE

Hello Welcome to ASPIRE. Log in with your username and password below.

User Name

Password

 Login

[Forgot your password?](#)

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HEALTHCARE TECHNOLOGY



- Once you have logged into MPOG, you will be directed to your personal Attestation MOCA[®] Part IV ASPIRE Provider Feedback Activity.
- From here, you can review the auto-populated failed cases for each selected measure for a specific month.
- The MPOG Quality Measures you selected for MOCA[®] credit will display (see next slide for example)



January 2018 Attestation MOCA Part 4 ASPIRE Provider Feedback Activity

* Your initial score is from January 2018

Measure #1: Avoiding Monitoring Gaps (BP02)						Your Initial Score: 95.53%	Your Current Score: 95.53%
Last Month's Failed Cases:							
Case Viewer	MPOG Case ID	Date of Service	Procedure	Attending(s)	CRNA/Resident(s)	View measure specification	
Open	[Redacted]		(Actual)UNKNOWN BONE MARROW BIOPS UNKNOWN SPINAL TAP	[Redacted]			
Measure #2: Train of Four Taken (NMB01)						Your Initial Score: 94.34%	Your Current Score: 94.34%
Last Month's Failed Cases:							
Case Viewer	MPOG Case ID	Date of Service	Procedure	Attending(s)	CRNA/Resident(s)	View measure specification	
Open	[Redacted]		(Actual)RIGHT LAPAROSCOPIC APPENDECTOMY	[Redacted]			
Measure #3: Reversal Administered (NMB02)						Your Initial Score: 100.00%	Your Current Score: 100.00%
Last Month's Failed Cases: N/A							
Measure #4: Thermoregulation Vigilance - Active Warming (TEMP01)						Your Initial Score: 98.26%	Your Current Score: 98.26%
Last Month's Failed Cases: N/A							
Measure #5: Thermoregulation Monitoring - Core Temperature (TEMP02)						Your Initial Score: 94.14%	Your Current Score: 94.14%
Last Month's Failed Cases:							
Case Viewer	MPOG Case ID	Date of Service	Procedure	Attending(s)	CRNA/Resident(s)	View measure specification	
Open	[Redacted]		(Actual)BILATERAL BOTOX INJECTION	[Redacted]			
Open	[Redacted]		(Actual)BILATERAL BOTOX INJECTIO BILATERAL PHENOL INJECTION	[Redacted]			

Attention: To earn 5 points per measure, the provider must review failed cases and complete the attestation form once per month for 12 months. In addition to reviewing cases, providers must maintain quality measure performance above threshold or show improvement between the 1st and 12th performance feedback email. Providers can earn 5 points per measures for 5 measures, for a total of 25 points.

By clicking the acknowledgment button below, I attest that I have reviewed this month's failed cases.

[Yes, I've reviewed my failed cases.](#)



- To open the case(s) listed under each measure, click the **Open** button to view case details. You will also notice your performance measurement for the selected measure in the top right corner for each measure.

▼ Measure #2: Train of Four Taken (NMB01) Your Initial Score: 94.34% Your Current Score: 94.34%

Last Month's Failed Cases: View measure specification

Case Viewer	MPOG Case ID	Date of Service	Procedure	Attending(s)	CRNA/Resident(s)
Open	1de377e4-c7dc-e711-84e7-00215a9b0a8c		(Actual)RIGHT LAPAROSCOPIC APPECTOMY		

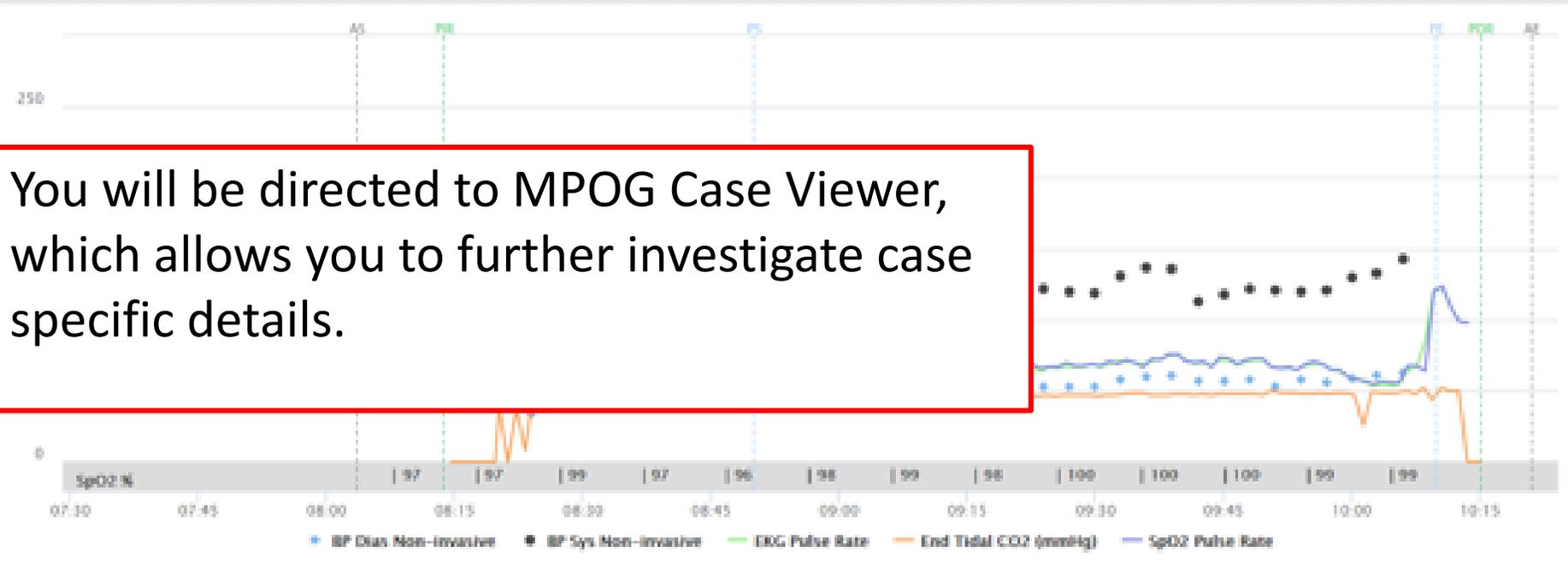
ASA Status: III
82.3 kg, 172.7 cm (BMI: 68.47)
Admission Type: Inpatient
Operating Room: [REDACTED]

University of Michigan Health System
Anes Duration: [REDACTED]
Procedure: RIGHT LAPAROSCOPIC APPENDECTOMY
Diagnosis: appendicitis

[view all lab values](#)

Time	Note
10:02	Patient in Facility
08:47	Assigned PreOp
07:16	Equipment verified
07:54	Room Ready
08:03	Anesthesia Start
08:13	Patient identified, chart reviewed, status unchanged from preoperative evaluation
08:13	Pre-Anesthesia evaluation completed and discussed with Attending
08:13	NPO status confirmed to be solids > 8 hours and clear liquids > 3 hours
08:13	Patient in Room
08:18	PRIOR to induction/initiation of Anesthesia a VERIFICATION was conducted with active participation of ANES, OR Nursing, and the Surgeon/Proceduralist using the Pre-Induction Verification Checklist
08:19	Standard monitors placed, vitals checked
08:19	Existing Site - Left Antecubital 22 g. placed by Unknown in ED.
08:21	Mask ventilation Grade 1: Ventilated by mask
08:24	Eyes taped shut
08:28	Anesthesia Induction End
08:30	Orally intubated using Direct laryngoscopy: Macintosh #3: Grade 1 - Full view of Vocal Cords.

Cardiovascular



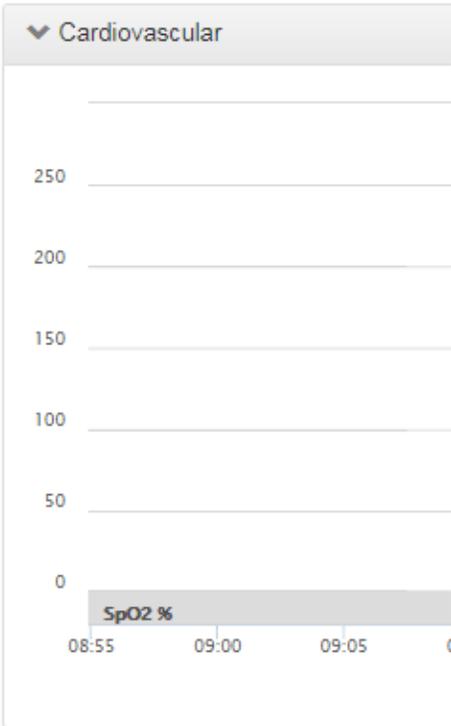
- > Ventilator
- > Neuromuscular blockade
- > Prophylaxis
- > Medications
- > Fluids
- > Physiologic

- By clicking on the arrow to the left of the following terms (**Cardiovascular, Ventilator, Neuromuscular blockade, Prophylaxis, Medications, and Fluids**), you can view additional timed details associated with each term, such as dosages, settings, measurements, vital signs, etc. for each variable.

▼ Physiologic

	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00			
Peak inspiratory pressure			AS	PIR										
Positive End Expiratory...						PS								
Respiratory Rate Actual...			0	2	20	13	13	18	19	20	20	13	17	14
Sevoflurane Exp %				0	2.7	1.1								
Sevoflurane Insp %				0	4.6	1.2								
SpO2 %			97	97	99	97	96	98	99	98	100	100	100	99
SpO2 Pulse Rate			89	87	110	83	71	75	69	75	70	67	73	71
Temp 1-Unspecified Site					38	37.9	37.8	37.9	38	37.9	37.9	37.8	37.8	
Oxygen Insp %			21	21	93	25	21	22	21	22	32	33	32	32
Tidal Volume actual			107	107	331	512	487	491	493	502	490	339	514	502
TOF (subjective assessm...						0 / 4			4 / 4		4 / 4			
TOF ratio (acceleromyog...														

Time	Note
13:31	Patient in Facility
08:23	Assigned PreOp
08:45	Anesthesia Machine Checked
08:45	Equipment verified
09:14	Room Ready
09:14	Pre-Anesthesia evaluation completed and discussed with Attending
09:14	NPO status confirmed to be > 6 hours for solids; > 4 hours for breast milk; and > 2 hours for clear liquids
09:14	Patient identified, chart reviewed, status unchanged from preoperative evaluation
09:14	Anesthesia Start
09:14	Existing Site - Right Single Lumen Standard.
09:19	Patient In Room
09:22	PRIOR to Induction/Initiation of Anesthesia a VERIFICATION was conducted with active participation of ANES, OR Nursing, and the Surgeon/Proceduralist using the Pre-Induction Verification Checklist
09:24	Anesthesia Induction End
09:26	2 L/Min O2 administered via nasal cannula
09:26	EtCO2 sampling catheter applied
09:26	Skin temperature probe checked and value noted
09:27	Preop antibiotic delayed / NOT administered: Not indicated by surgeon
09:28	Patient positioned Left lateral decubitus



- > Ventilator
- > Neuromuscular blockade
- > Medications
- > Fluids

Note Detail

Physiologic

- Monitoring - Temperature probe location / type: Skin

- If you notice a red triangle in the intraoperative notes section of MPOG Case Viewer, you can hover over the area to display specific note details.

- To the right of each measure you will find a link to the MPOG Measure Specification. Simply click 'View measure specification' as shown below to view complete measure specification details.

Measure #2: Train of Four Taken (NMB01) Your Initial Score: 94.34% Your Current Score: 94.34%

Last Month's Failed Cases:

Case Viewer	MPOG Case ID	Date of Service	Procedure	Attending(s)	CRNA/Resident(s)
Open	1de377e4-c7dc-e711-84e7-00215a9b0a9c		(Actual)RIGHT LAPAROSCOPIC APPENDECTOMY		

[View measure specification](#)

- After you have reviewed failed cases for the month, you will click the acknowledgment button below, attesting that you have reviewed the month's failed cases

Yes, I've reviewed my failed cases.

- To earn the full five (5) points per measure, providers must review and attest to 12 feedback emails.
- A maximum of 25 points can be earned upon completion of 12 feedback attestations in a 18 month period.
- MPOG will communicate the number of points received as well as final scores to the individual before attesting to the American Board of Anesthesiology (ABA) on the provider's behalf.



Module 17

NSQIP Import Tool



NSQIP Import Tool

- Allows the site to merge the surgical data abstracted for NSQIP with the MPOG anesthesia data.
- Log into the NSQIP website at <https://www.acsdataplatfrom.com/login>

ACS Data Quality Platform

ACS NSQIP Adult Registry

Welcome,

Currently Viewing
ACS NSQIP Adult Registry

DASHBOARD

- Home Page

PLATFORM

- Patients
- Upload
- Form Management
- Notifications

ANALYTICS

- Operational Reports**

RESOURCES

- Library
- Resource Portal
- Risk Calculator

ACCOUNT

- My Account

Home Page

Cases By Cycle

Cycles	Case Form				ISCR Form		
	Total	Incomplete	Follow-Up < 30 days	Targeted	Non-targeted	Total	Incomplete
9: 03/06 - 03/13/19	40	0	0	25	15	0	0
10: 03/14 - 03/21/19	40	0	0	22	18	0	0
11: 03/22 - 03/29/19	40	0	0	25	15	0	0
12: 03/30 - 04/06/19	40	0	0	25	15	0	0
13: 04/07 - 04/14/19	40	0	0	28	12	0	0
14: 04/15 - 04/22/19	40	0	4	23	17	0	0
15: 04/23 - 04/30/19	40	0	2	22			
16: 05/01 - 05/08/19	40	0	2	25			
17: 05/09 - 05/16/19	41	28	0	21			
18: 05/17 - 05/24/19	43	43	0	24			
19: 05/25 - 06/01/19	38	38	0	16			
20: 06/02 - 06/09/19	43	43	0	24			
21: 06/10 - 06/17/19	0	0	0	0			
22: 06/18 - 06/25/19	0	0	0	0			

Complete Cases

- >> CY 2018 (1685 cases)
- >> CY 2019 (653 cases)

Incomplete Cases

- >> Last 7 Days (0 cases)
- >> Last 30 Days (0 cases)
- >> [31-60 Days Ago](#) (143 cases)
- >> [61-90 Days Ago](#) (9 cases)

Log into the NSQIP website, then click on “Operational Reports” under Analytics in the left hand side bar

https://www.acsdatapatform.com/platform/nsqipadult/facility [redacted] reports

Report List

File Edit View Favorites Tools Help

Suggested Sites Web Slice Gallery

ACS NSQIP

ACS NSQIP Adult Registry

Welcome,

Operational Reports

NSQIP Reports

[Benchmarking Reports](#)
Compare site level case information against aggregated programmatic data.

[Workflow Report](#)
Review case completion and follow up status for selected timeframes.

[Patient Follow Up Report](#)
Track patient follow up and generate call lists, patient letters, and requests for medical records.

[Data Download Report](#)
Download all case data for selected parameters.

Click on "Data Downloads Report"

Currently Viewing

DASHBOARD

Home Page

PLATFORM

Patients

Upload

Form Management

Notifications

ANALYTICS

Operational Reports

RESOURCES

Library

Resource Portal

Risk Calculator

ACCOUNT

My Account

Complete the options as follows:

Fill in the date range with desired dates

Choose "Field Name" under "Variable Name"

Choose "Codes" under "Coded Field Format"

Choose "Single Field" under "Multiselect Fields"

Check "Select All" next to "Select Variable"

Click "Apply Parameters"

The screenshot shows the 'Operational Reports' section of the ACS NSQIP Adult Registry. The 'Parameters' section is expanded, showing the following configuration options:

- Date Range:** 12/01/2018 to 12/08/2018
- Form Type:** Case Form (checked), ISCR Form (unchecked)
- Form Status:** All Forms
- Variable Name:** Field Name
- Coded Field Format:** Codes
- Multiselect Fields:** Single Field
- Merge Forms:** Demo (checked)
- Select Variable:** Select All (checked)

Red arrows point to the date range, the 'Field Name' dropdown, the 'Codes' dropdown, and the 'Single Field' dropdown. A red box highlights the 'Apply Parameters' button. The 'Select All' checkbox is also checked.

The screenshot shows a web browser window displaying the ACS NSQIP Adult Registry report interface. The browser address bar shows the URL: [https://www.acsdatapatform.com/platform/nsqipadult/facility/\[redacted\]/reports/r?report=ddr](https://www.acsdatapatform.com/platform/nsqipadult/facility/[redacted]/reports/r?report=ddr). The page title is "Report List". The main content area is titled "Operational Reports" and "Data Download Report". There are tabs for "Configurable Report" and "Predefined Report". The "Data Download" tab is active, showing a table of data. The table has columns: CASE_ID, PATIENT_DIS..., SCHEDULED..., FACILITY_DI..., FACILITY_NA..., CREATED_DT, FORM_STATUS, Access Case, cpt, inout, same_day_et..., trans, payor_stat, admit_date. The table status is "Main Tab Status: Download Complete" and "Repeat Group Status: Download Complete". On the right side of the table, there is a menu icon (three horizontal lines) which is highlighted with a red box. A dropdown menu is open, showing options: "Go to page", "Undo", "Redo", "Analysis information", "Export", "Share", "Other tools", "To PDF...", "To Microsoft PowerPoint...", "Microsoft Excel Export...", "Visualization to PDF...", "Visualization to image...", "Table", and "Table (without value formatting)". The "Export" option is highlighted with a red box, and the "Microsoft Excel Export..." option is also highlighted with a red box. A red text box in the upper right of the screenshot contains the instruction: "Click on the button with three lines in the top right of the results, then select 'Export' -> 'Microsoft Excel Export...'"

NSQIP-Pediatrics Export

The screenshot displays the ACS NSQIP Operational Reports interface. On the left, a vertical navigation bar contains icons for home, reports, filters, and other functions. The main content area is titled "Operational Reports" and includes a "Data Download Report" section with tabs for "Configurable Report" and "Predefined Report". A red-bordered text box with the instruction "Click on 'File' in the left hand corner → 'Export' → 'Microsoft Excel Export...'" is overlaid on the interface. Below this, a window shows the "File" menu open, with the "Export" option selected. The "Export" submenu is visible, listing options such as "Visualization to image...", "Visualization to PDF...", "Table", "Table (without value formatting)", "To PDF...", "To Microsoft PowerPoint...", and "Microsoft® Excel® Export...". The "Microsoft® Excel® Export..." option is highlighted with a mouse cursor. At the bottom of the window, a status bar indicates "Main Tab Status: Download Complete" and "Repeat Group Status: Download Complete". The bottom of the interface shows a series of tabs for different report categories: "Data Download", "Concurrent Procedures Repeat Group", "Other Procedures Repeat Group", "Patient Contact Management Repeat Group", "Readmission Repeat Group", and "Intraoperative Occurrence repei".

https://www.acsdataplatform.com/platform/nsqipadult/facility/ reports/r?report=ddr

Report List

File Edit View Favorites Tools Help

Suggested Sites Web Slice Gallery

ACS NSQIP Adult Registry

Operational Reports

Data Download Report

Configurable Report Predefined Report

Main Tab Status: Download Complete
Repeat Group Status: Download Complete

Export to Excel

Export All pages

Select all

Export markings
Export coloring
Export title

Export charts as image
Merge cross table header rows

Include tables
Export tables first

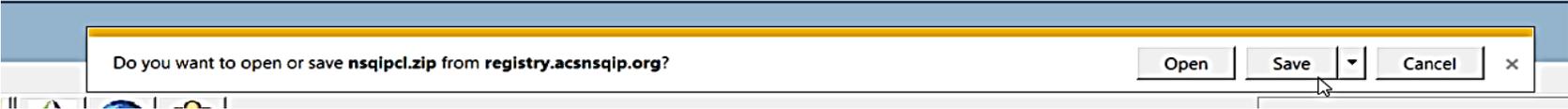
Export created date
Exclude text area

Filter settings
None Row TextBox
Export property control

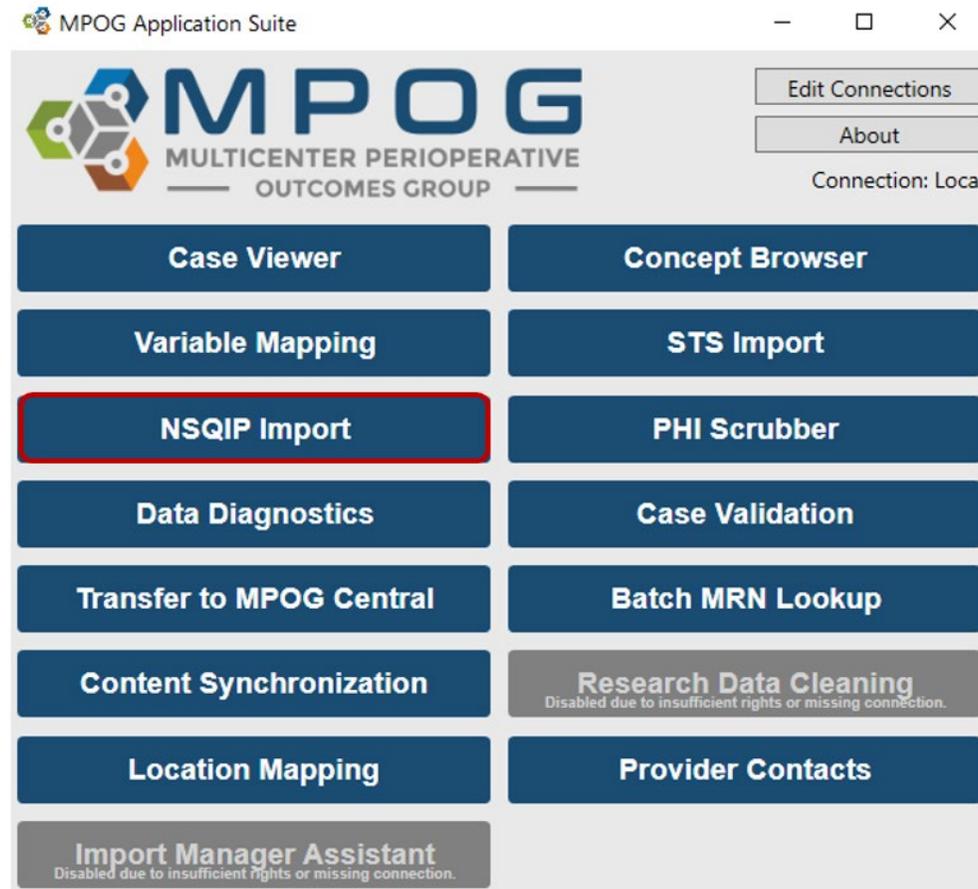
Export Cancel

Select "All pages" in the Export dropdown, then click Export

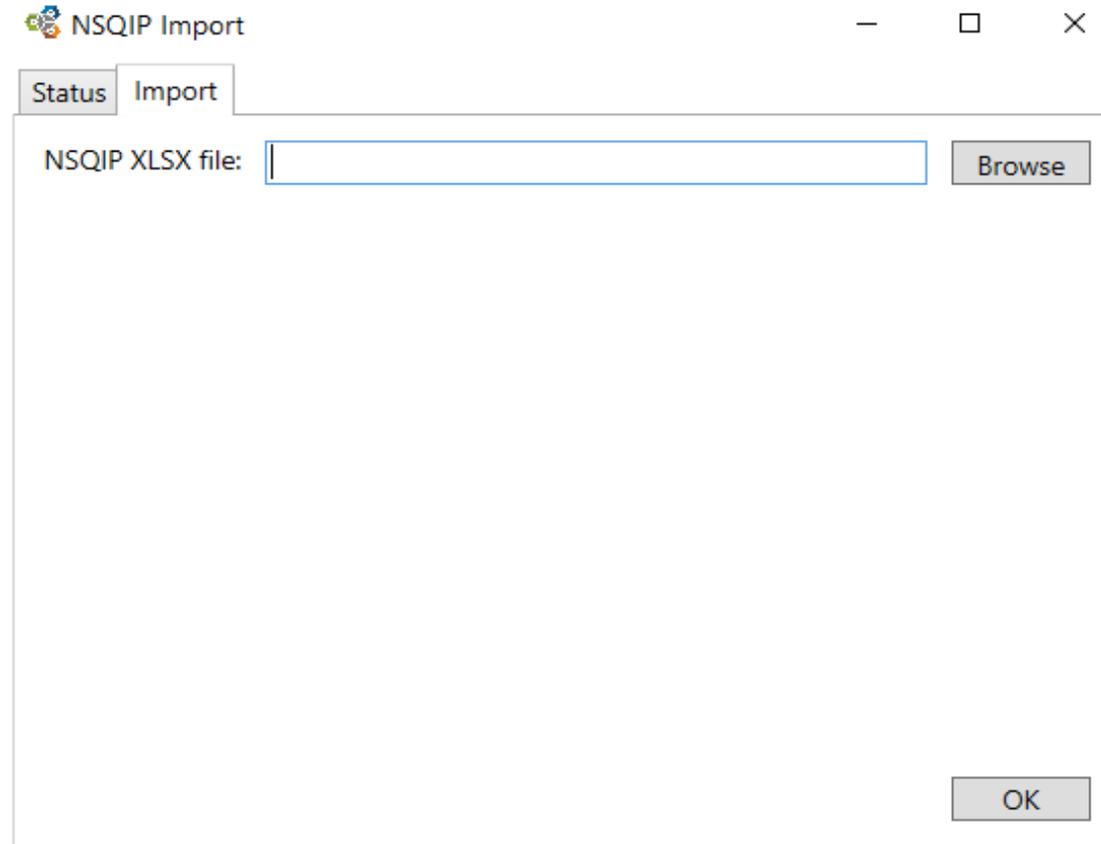
After clicking on the link shown in Step 5, the following prompt will display at the bottom of the screen. Click on 'Save.' Save the file in a secure location that you can access again.



- Open the MPOG Application Suite and run the NSQIP Import Tool.



Under the Import tab, click the 'Browse' button. Select the .xlsx file downloaded previously. Click 'OK.'



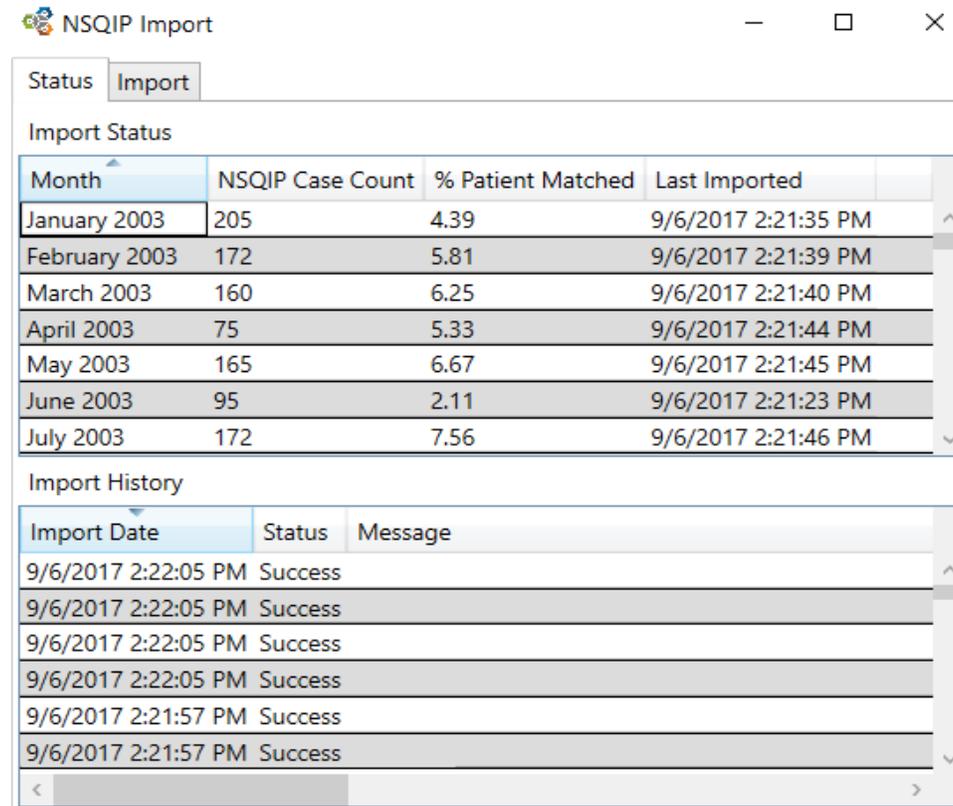
NSQIP Import

Status Import

NSQIP XLSX file: Browse

OK

The application will now insert the NSQIP data into the local database and automatically perform patient matching to existing MPOG patients. Matched data will be sent to the central repository when the patient data is next uploaded.

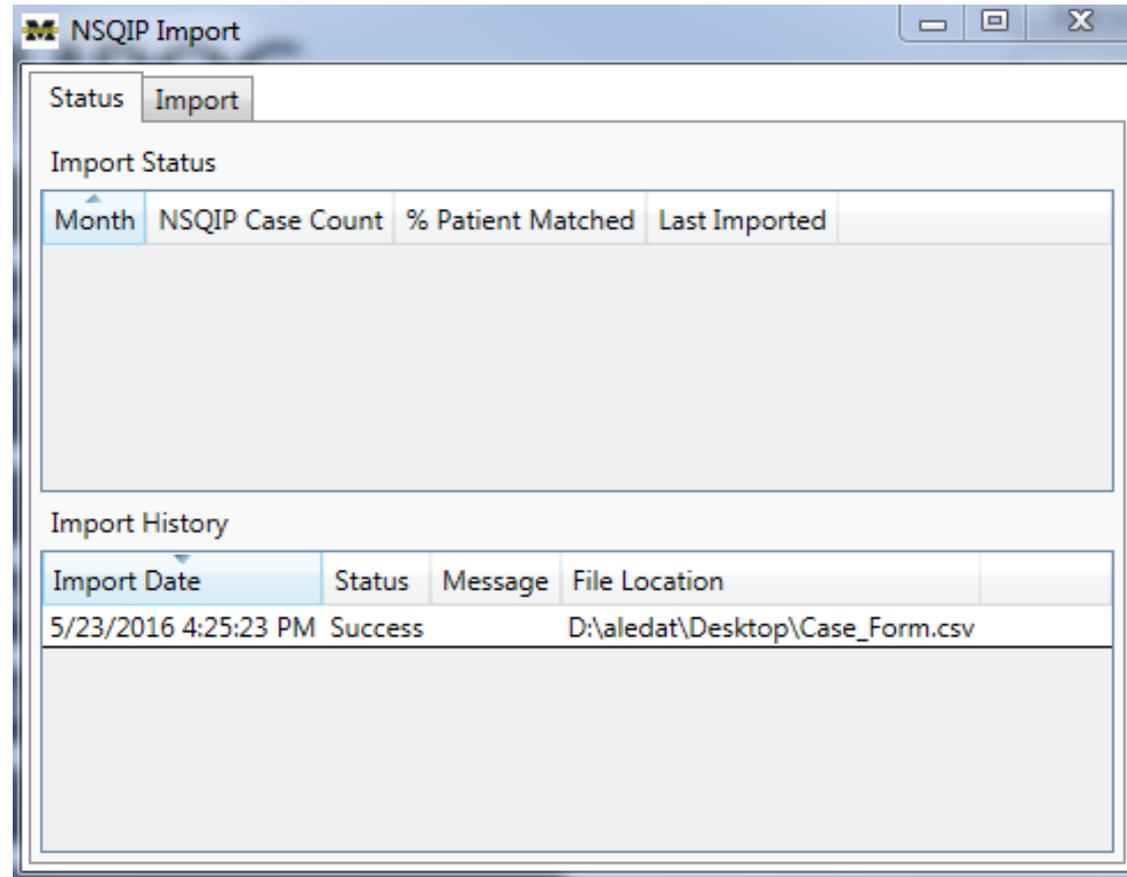


The screenshot shows a window titled "NSQIP Import" with two tabs: "Status" and "Import". The "Import" tab is active, displaying two tables. The first table, "Import Status", shows data for months from January 2003 to July 2003. The second table, "Import History", shows a list of successful import operations on 9/6/2017.

Month	NSQIP Case Count	% Patient Matched	Last Imported
January 2003	205	4.39	9/6/2017 2:21:35 PM
February 2003	172	5.81	9/6/2017 2:21:39 PM
March 2003	160	6.25	9/6/2017 2:21:40 PM
April 2003	75	5.33	9/6/2017 2:21:44 PM
May 2003	165	6.67	9/6/2017 2:21:45 PM
June 2003	95	2.11	9/6/2017 2:21:23 PM
July 2003	172	7.56	9/6/2017 2:21:46 PM

Import Date	Status	Message
9/6/2017 2:22:05 PM	Success	
9/6/2017 2:21:57 PM	Success	
9/6/2017 2:21:57 PM	Success	

To check historical import status, click on the 'Status' tab within the NSQIP Import application.



Recommended Import Schedule Options

- There are 46 cycles of 8 days each during which NSQIP data is entered.
- However, changes can be made to a NSQIP record up to 90 days after the date of service.
- After 90 days, the record is “locked” from modification.
- For this reason, MPOG recommends importing on either a monthly or quarterly basis using the schedule on the next slide

Monthly Import Schedule

Month	Extract Date Ranges
January	September of the previous year
February	October of the previous year
March	November of the previous year
April	December of the previous year
May	January of the previous year
June	February of the previous year
July	March of the same year
August	April of the same year
September	May of the same year
October	June of the same year
November	July of the same year
December	August of the same year

Quarterly Import Schedule

Month	Extract Date Ranges
January	Q3 of previous year (Jul 1 – Sep 30)
April	Q4 of previous year (Oct 1- Dec 31)
July	Q1 of same year (Jan 1- Mar 31)
October	Q2 of same year (Apr 1-Jun 30)



Module 18: MQUARK Audit Tool



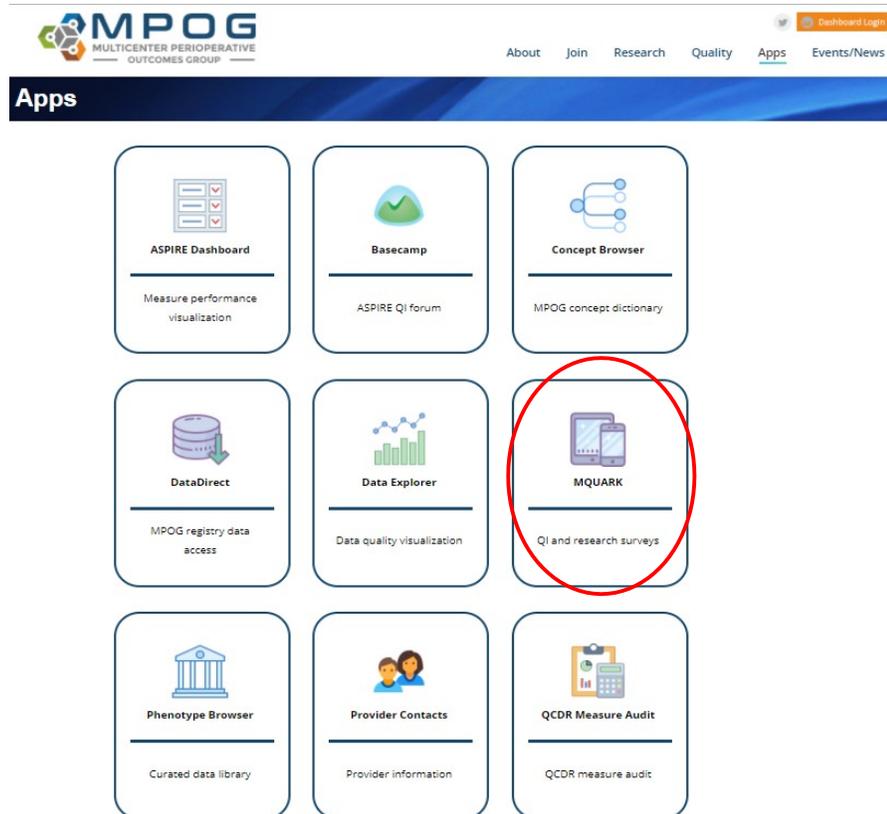
MQUARK Audit Tool

- Allows sites to collect additional data for research or quality purposes
- In the phase one release of the application, the Coordinating Center will be responsible for building forms used for all quality audits.
- If you are interested in conducting an audit for a particular ASPIRE measure or research project, please contact the Coordinating Center (mpog-quality@med.umich.edu).

Considerations Prior to Conducting an Audit

- Notify administration of the unit you plan to conduct the audit on and complete any necessary paperwork for compliance.
- Obtain a tablet or electronic device to conduct the audits with. The audit tool is compatible with both Apple and Android products.

How to Conduct an Audit



- To receive MQARK login permissions, email the Coordinating Center: support@mpog.zendesk.com
- Once access has been granted, the MQARK audit tool can be found in the 'Apps' tab on the website or via the following link: <https://mquark.mpog.org>

- Upon login to MQUARK, ensure your institution name is listed in the top left hand corner. To begin a new audit, click '*+ New Patient*' for the audit you are interested in.

The screenshot displays the MQUARK interface for the University of Michigan. At the top left, the institution name 'UNIVERSITY OF MICHIGAN' is shown. Below this, there are two main sections: 'ICU HANDOFF' and 'PACU HANDOFF'. Each section contains a 'Preview' button and a '+ New Patient' button. The '+ New Patient' button in the 'PACU HANDOFF' section is circled in red. To the right of each section, there are three buttons: 'In Progress', 'Complete', and 'Link to MPOG'. The 'In Progress' button for ICU has a count of 8, and for PACU it has a count of 2. The 'Complete' button for ICU has a count of 5, and for PACU it has a count of 5. The 'Link to MPOG' button for ICU has a count of 0, and for PACU it has a count of 3.

- The selected audit form is then displayed and an anonymized patient ID will be assigned.

The screenshot displays the MQUARK MPOG Quality & Research Kit interface. At the top left is the MQUARK logo with the text 'MPOG QUALITY & RESEARCH KIT'. Below the logo is a dropdown menu showing 'University of Michigan Health System'. Underneath is a 'PACU HANDOFF' button, followed by a 'Select Form' button. A list of forms is shown, with 'PACU Handoff Form' selected. Below this, the 'Patient ID' field is highlighted with a red circle and contains the value '177'. At the bottom of the form selection area, the text 'PACU HANDOFF FORM' is displayed.

- While observing the handoff, select 'YES' as the listed topics are addressed.
- Once the handoff is complete, select 'NO' for items that were not discussed and select 'NA' if an item does not apply to that particular patient.
- As each line item is completed it will turn green to outline which items were completed.

7. Medications			
	Yes	No	NA
Preoperative Meds	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sedations medications. Reversal administered? (if applicable)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Muscle relaxants: Time Given. Reversal administered? (if applicable)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Pain Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PONV Hx & Meds Administered	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

- A comments section is available at the end of the audit and is optional if you wish to note any other pertinent information regarding the audit. Do NOT include any PHI in the comment section.

4. COMMENTS: ***DO NOT INCLUDE ANY PHI ***

PACU HANDOFF FORM

1. Date of Procedure **[Required]**

2. Patient Age **[Required]**

3. Patient Gender **[Required]**

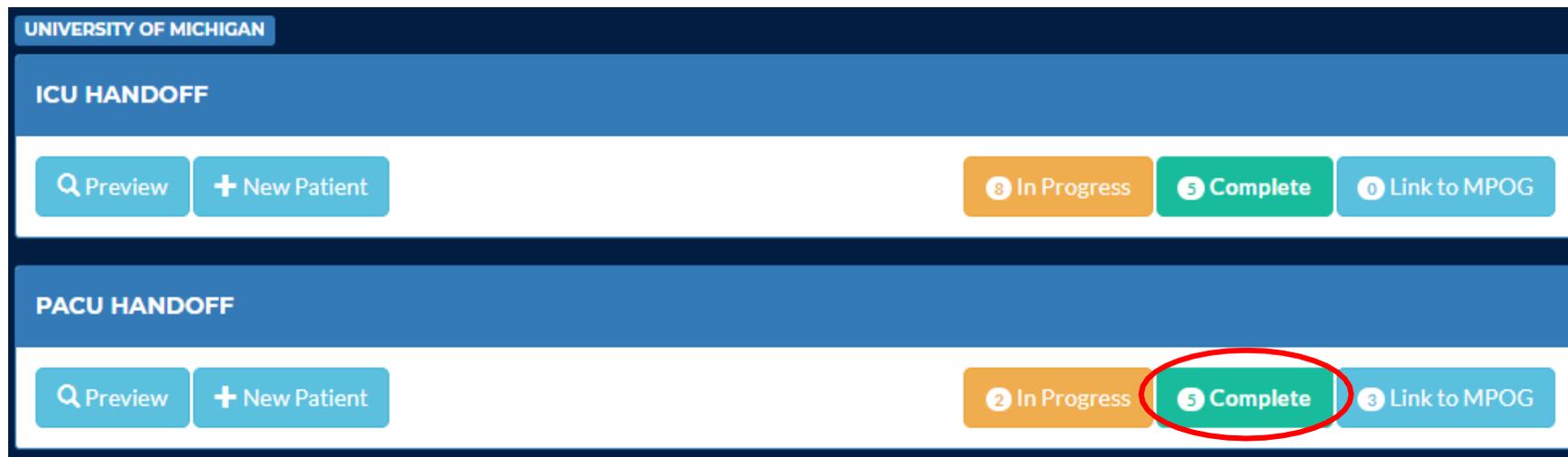
-- Select --

4. Procedure Type

Save **Cancel**

- Once the handoff is complete, enter the required patient specific information: date of procedure, patient age and patient gender.
- In order to link an audit to an MPOG Case ID you must complete these fields.
- Procedure type is an optional field and is helpful when returning to review the audit.
- Click 'save' to finish the audit

- This will bring you back to the home page where you will see a running tally of 'Complete' or 'In Progress' tab increase.
- The 'Complete' tab tally will have increased if all items in the audit were addressed (minus procedure type). If any items are missing, your audit is sent to the 'In Progress' tab. By clicking this tab, you may edit the additional information necessary to complete.



- Clicking on the 'Complete' tab will bring up a comprehensive list of audits organized by date that have had all questions completed. The 'Progress' tab will show a list of audits that do not have all fields completed. Both tabs have the option to edit the audit form answers if necessary.

UNIVERSITY OF MICHIGAN
ICU HANDOFF

TOTAL RECORDS FOUND: 5 ← Back

2018-02-07 [2]									
ID	Gender	Age	Date of Procedure	Created By	Created Date				
22	Male	65	02/07/2018	KJBUCREK	02/07/2018	Edit	Delete	Link	
23	Male	56	02/07/2018	MERIDITH	02/07/2018	Edit	Delete	Link	

Showing 1 to 2 of 2 entries

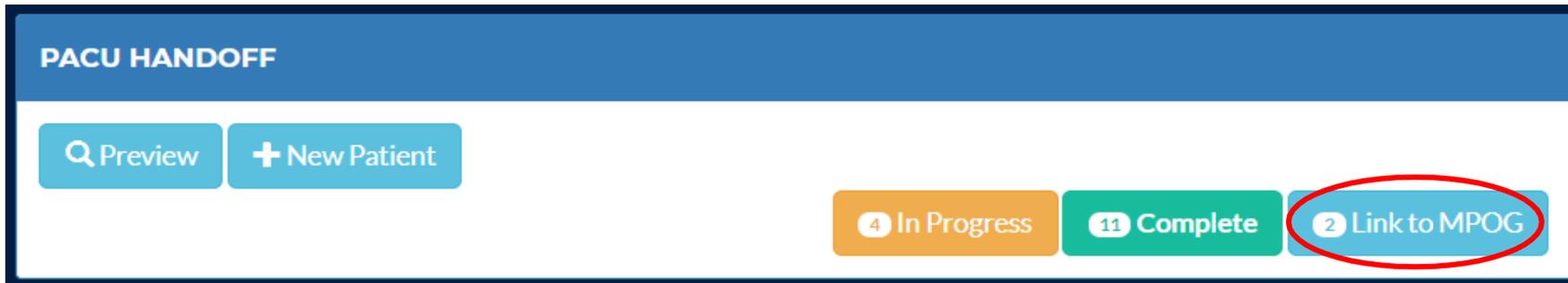
+	2018-02-06 [2]
+	2018-01-31 [1]

Auditing Tips

- Review the audit form and how to grade providers prior to observation day to familiarize yourself with the items you are listening for.
- If you know the patient specific information for cases you plan to audit ahead of time (age, gender, procedure type), it may be helpful to start a form for each patient. This will save the forms in the 'In Progress' tab where you can quickly access at the time of audit.
- While conducting an audit, wear similar scrubs/clothing to blend in with the clinical team. Follow the team into the patient room, discretely listen to the handoff that takes place and exit the room once the handoff is complete.
- When entering any patient room or bay, follow hand washing protocols of washing in and washing out.

Linking Audits to MPOG Case IDs

- After uploading data to the MPOG Central Database, you can link the completed audits to an MPOG Case ID. Based on the minimal case data that is provided at the end of each audit form (date of procedure, patient age and patient gender), MPOG is able to provide potential cases for linking.
- To link a handoff audit click “Link to MPOG



- Locate the case that you audited by patient information and click “Link”

ICU HANDOFF

TOTAL RECORDS FOUND:15

← Back

× 2018-02-19 [2]

ID	Gender	Age	Date of Procedure	Created By	Created Date	
63	Male	5		MERIDITH	02/19/2018	Edit Delete Link
68	Male	66		MERIDITH	02/19/2018	Edit Delete Link

Showing 1 to 2 of 2 entries

+ 2018-02-18 [1]

+ 2018-02-08 [1]

+ 2018-02-07 [6]

+ 2018-02-06 [3]

+ 2018-02-01 [1]

+ 2018-01-31 [1]

- A list of cases that were audited on that date with the same case data (age and gender) will populate. Find the correct Procedure and click “Link”

ICU HANDOFF

TOTAL RECORDS FOUND : 1

[← Back](#)

Patient ID
68

Date of Procedure
[REDACTED]

Age
66

Gender
Male

Date of Procedure	Age	Gender	MPOG Case ID	Procedure Text	
12/22/2017 9:30:00 AM	66	M	9045a443-c8e7-e711-bece-00215a9b0a8c	EP ICD IMPLANTATION	Link

- The Procedure will then turn green, confirming that your audit has been successfully linked to the MPOG Case ID. Click “Back” to return to the linking page

UNIVERSITY OF MICHIGAN HEALTH SYSTEM

ICU HANDOFF

TOTAL RECORDS FOUND : 1

[← Back](#)

Patient ID
68

Date of Procedure
[Redacted]

Age
66

Gender
Male

Date of Procedure	Age	Gender	MPOG Case ID	Procedure Text
[Redacted]	66	M	9045a443-c8e7-e711-bece-00215a9b0a8c	EP ICD IMPLANTATION

- Once the audit is successfully linked to an MPOG Case ID, the link button will turn green. Click 'Back' to return to the home page

UNIVERSITY OF MICHIGAN HEALTH SYSTEM
ICU HANDOFF

TOTAL RECORDS FOUND: 18

[← Back](#)

ID	Gender	Age	Date of Procedure	Created By	Created Date	
+ 2018-02-20 [2]						
x 2018-02-19 [3]						
63	Male	5		MERIDITH	02/19/2018	Edit Delete Link
68	Male	66		MERIDITH	02/19/2018	Edit Delete Link
75	Male	24		ANIKS	02/19/2018	Edit Delete Link
Showing 1 to 3 of 3 entries						
+ 2018-02-18 [1]						
+ 2018-02-08 [1]						
+ 2018-02-07 [6]						
+ 2018-02-06 [3]						
+ 2018-02-01 [1]						
+ 2018-01-31 [1]						

- As more audits are linked to MPOG Case IDs you will see the “Link to MPOG” tally increase on the home page.



- MPOG is currently working on creating an analytics page within MQUARK that will transfer directly to the ASPIRE dashboard allowing each site to see a visual representation of the quality of their handoff process

PACU Audit: Handoff Assessment

- When conducting a PACU handoff audit, please use the following slides as a guide when determining if an element of handoff was discussed.
- It is expected that monitors are placed and patient is stabilized prior to starting the handoff process.
- MPOG recommends auditors focus on more extensive cases first as more audit elements may apply to those cases

All Stop

- Identify which providers should be present for the PACU handover (i.e. PACU nurse, anesthesia provider, surgical representative...). Once all have arrived, acknowledge that everyone stops and directs attention to the provider leading the handoff.

Background

- Introductions: Following pt. stabilization, Anesthesia/Surgical/PACU team introduces themselves
 - Anesthesia provider must give name and contact info
 - Identify contact info for primary service.
- Identification of Patient: Check patient ID band. Verify Name and DOB.
- Discussion of Procedure Performed: What procedure(s) did the patient undergo?
 - Surgical course may be discussed by surgical resident or attending.
- Pertinent PMH/PSH: Discuss past medical/surgical history
- Allergies: Discuss allergies. Verbalize “no allergies” if there are none.
- Contact Precautions: Discuss if applicable

Anesthetic Management

- Type of Anesthetic: General, MAC, Regional, Sedation.
 - If sedation case, do not need to discuss airway management.
 - Do not need to mention specific medication
- Airway Management: State airway type if applicable (ETT vs LMA). If airway was difficult provide details.
- Anesthetic Complications or primary concerns
 - If no complications verbalize “No other complications”
- Discuss variations from baseline vital signs if applicable

Medications

- Preoperative Meds: Discuss medications that were given to patient in pre-op area and relevant home meds that should be given postoperatively.
- Sedation Medications: Discuss if applicable OR verbalize “None given”
 - State which medications were administered.
 - Administering reversal medications (flumazenil or narcan) is rare. If given, the provider must communicate time of last dose and patient response.

Medications

- Antibiotics Administered: Discuss antibiotics given
- Muscle Relaxants: Discuss if applicable OR verbalize “None given”
 - Medication administered and time last dose was given
 - If muscle relaxant given, provider must verbalize if the patient was reversed and the reversal agent administered.
- Pain Management: Discuss pain medications given intra-op and pain management plan.
 - Must include specific medication and last dose administered.
- PONV Hx and Meds Administered: Discuss anti-emetics given and any history of PONV if applicable.

Fluids

- Vascular Access: Discuss line access (Type, location, gauge, status)
 - Marking “NA” is acceptable if the patient’s only line access is peripheral IV
- Fluids/Blood Administered: Discuss amount of fluids and intraop blood products (if applicable)
- Intraoperative Labs: Discuss if applicable.
- If no intra-op labs were drawn, provider should verbalize “No intraop labs drawn intraop”

Expectations/Plans

- Post-operative plans: identify patient disposition (discharge to home, floor, etc).
- Allow Opportunity for Questions: Anesthesia provider asks if PACU team has any questions.



Module 19

STS Import Tool



STS Import Tool

- To use the STS import tool:
 - First use your STS vendor application to extract a harvest file containing MRNs (or SSNs if MRNs are not available).
 - The instructions for different vendors in subsequent slides.
 - Once you have a harvest file, use the MPOG Application Suite to input this data into your local MPOG database.
 - The data can then be PHI scrubbed and transferred to the central repository.

STS Harvest Schedule

Adult Cardiac Surgery Database - 2020					
	Harvest Submission Window Start	Harvest Window End	Includes procedures performed through this date:	Report Posting	Comments
Harvest 1	Week of January 20	2/28/2020 Opt Out: 3/2/2020	1/1/2017 -12/31/2019	TBD	MIPS Star Rating
Harvest 2 and 3	Continuous	9/4/2020 Opt Out: 9/8/2020	6/30/2020	End of October 2020	Star Rating
Harvest 4	Continuous	11/20/2020 Opt Out: 11/24/2020	9/30/2020	End of January 2021	

General Thoracic Surgery Database - 2020					
	Harvest Submission Window Start	Harvest Window End	Includes procedures performed through this date:	Report Posting	Comments
Spring	Week of February 10	3/6/2020 Opt Out: 3/9/2020	12/31/2019	TBD	MIPS Star Rating
Fall	Continuous	9/25/2020 Opt Out: 9/29/2020	7/1/2017 - 6/30/2020	End of December 2020	Star Rating

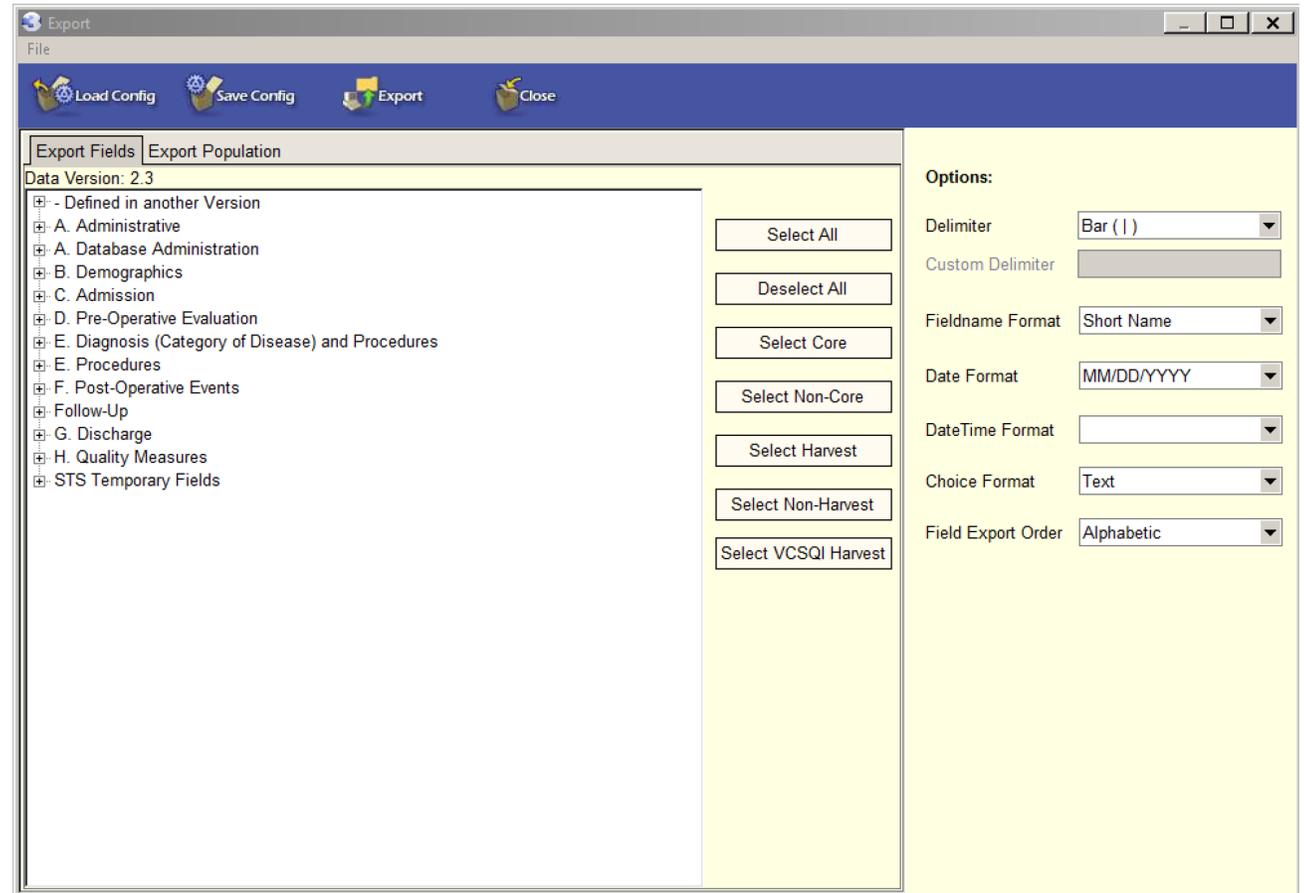
Congenital Heart Surgery Database - 2020					
	Harvest Submission Window Start	Harvest Window End	Includes procedures performed through this date:	Report Posting	Comments
Spring/Fall	Continuous	TBD	7/1/2016- 6/30/2020	TBD	Star Rating

STS Harvest Schedule

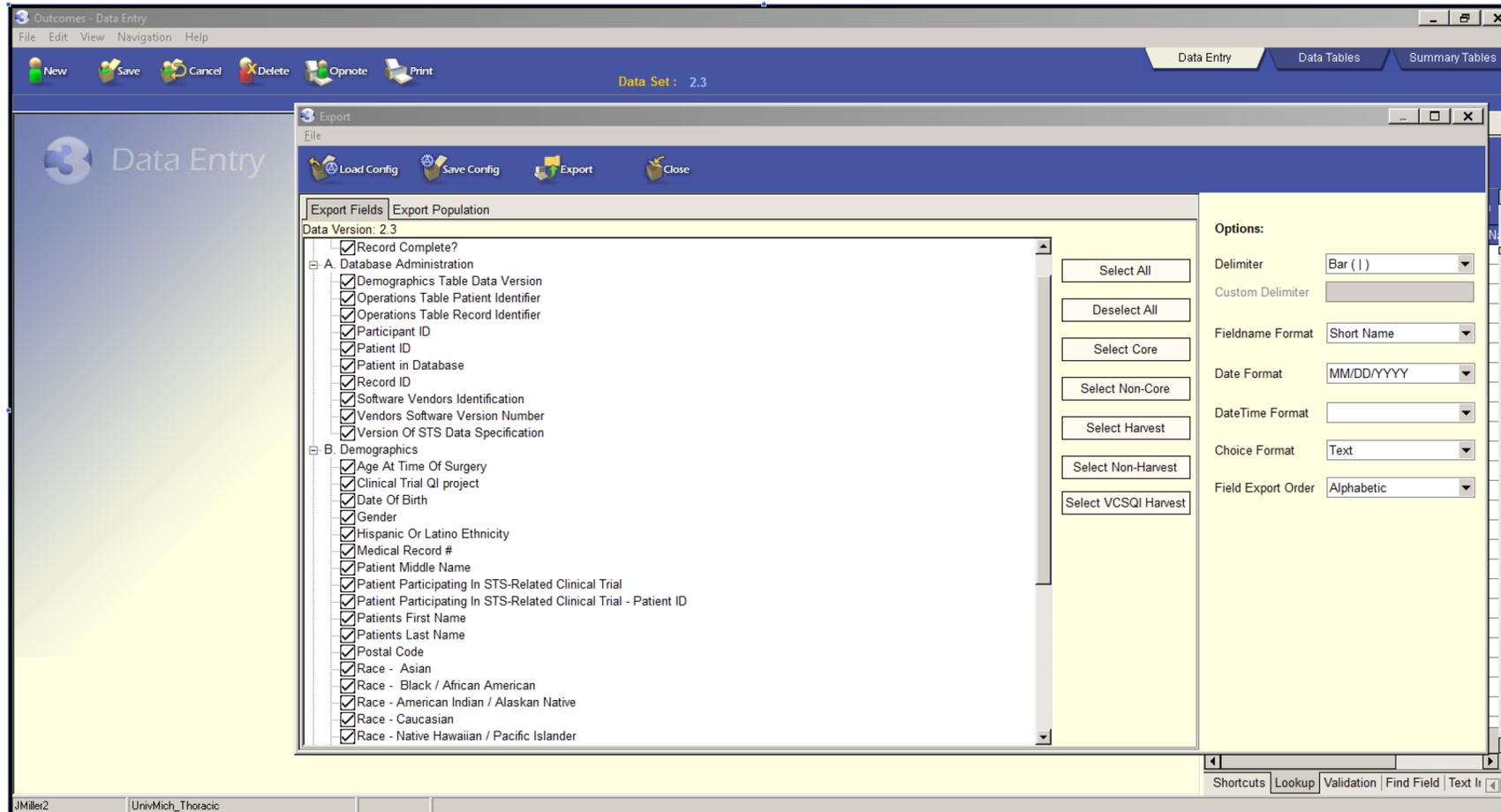
- Latest STS Harvest schedule available [here](#)

Vendor Application Instructions: ARMUS

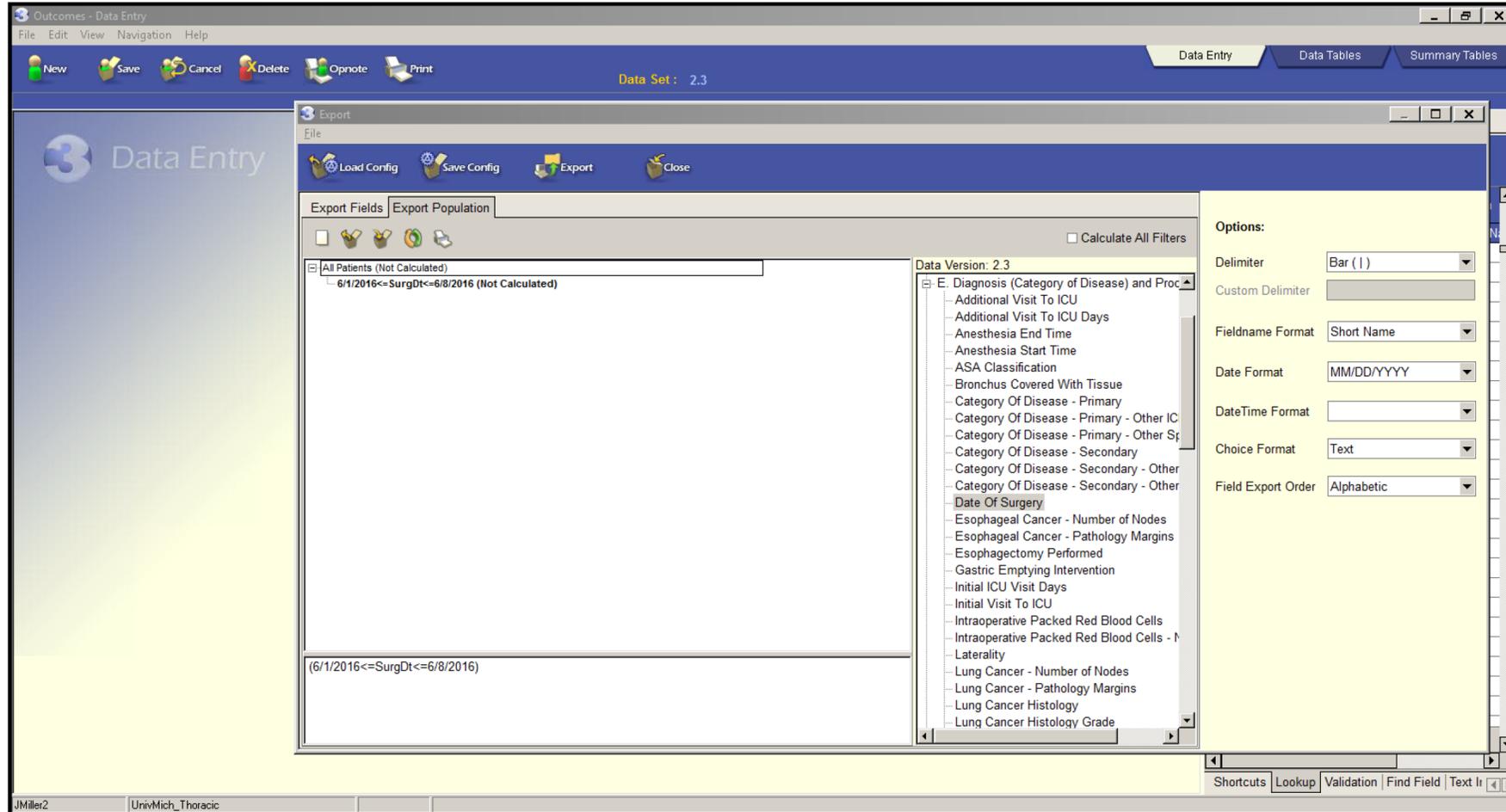
1. File → Export → Select All
2. Pick Date Range: Chose Chose field within Diagnoses and Procedures → Date of Surgery → add date range as filter
3. Fieldname Format: Short Name
4. Choice Format: Choose Harvest (codified values)
5. Field Export Order: Automatic
6. Export as a .dat file



Vendor Application Instructions: ARMUS

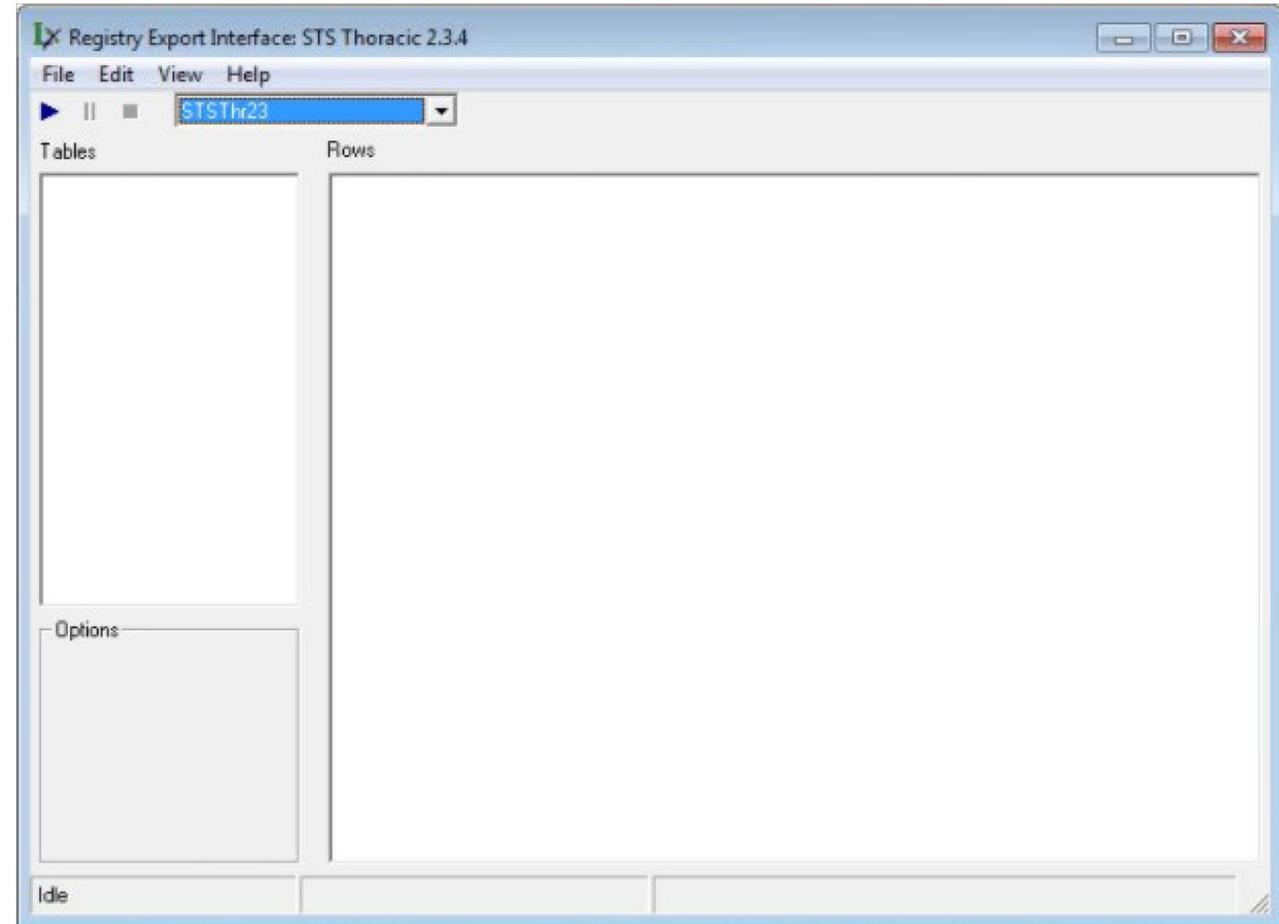


Vendor Application Instructions: ARMUS



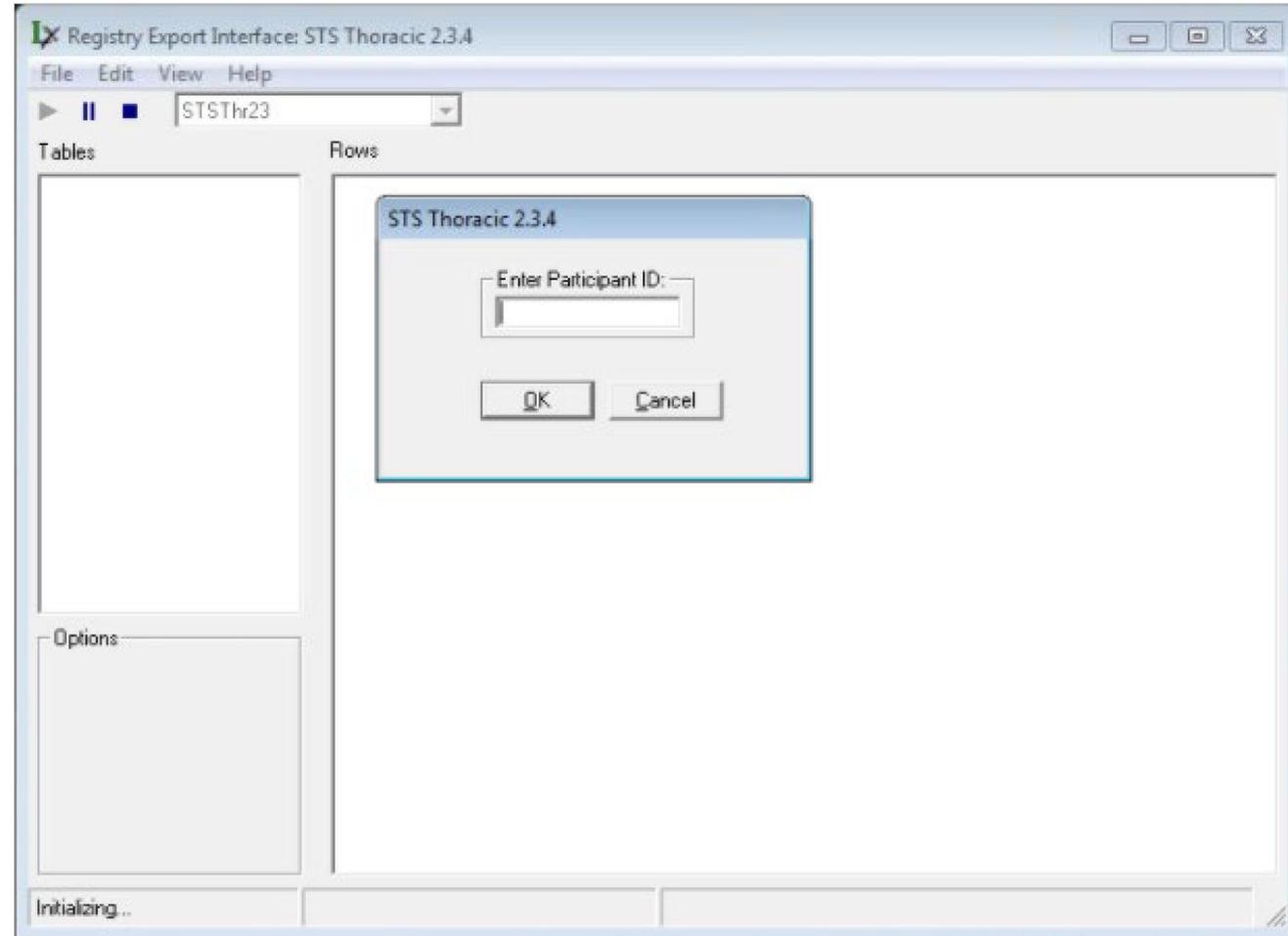
Vendor Application Instructions: LumedX

1. Select from the drop down which STS version you would like to pull data for, then click the “play” button



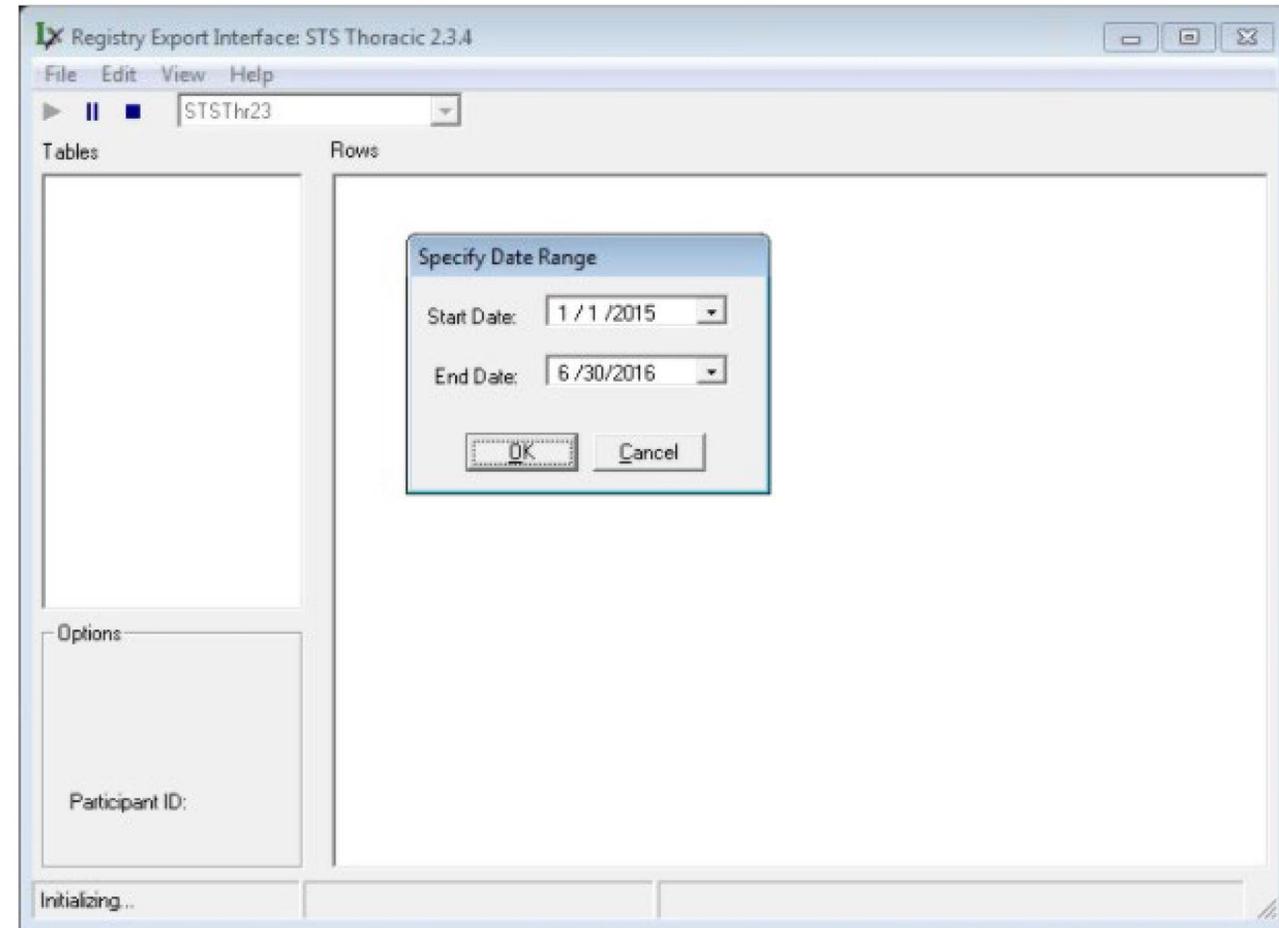
Vendor Application Instructions: LumedX

2. Enter your 5-digit participant ID into the box that pops up.



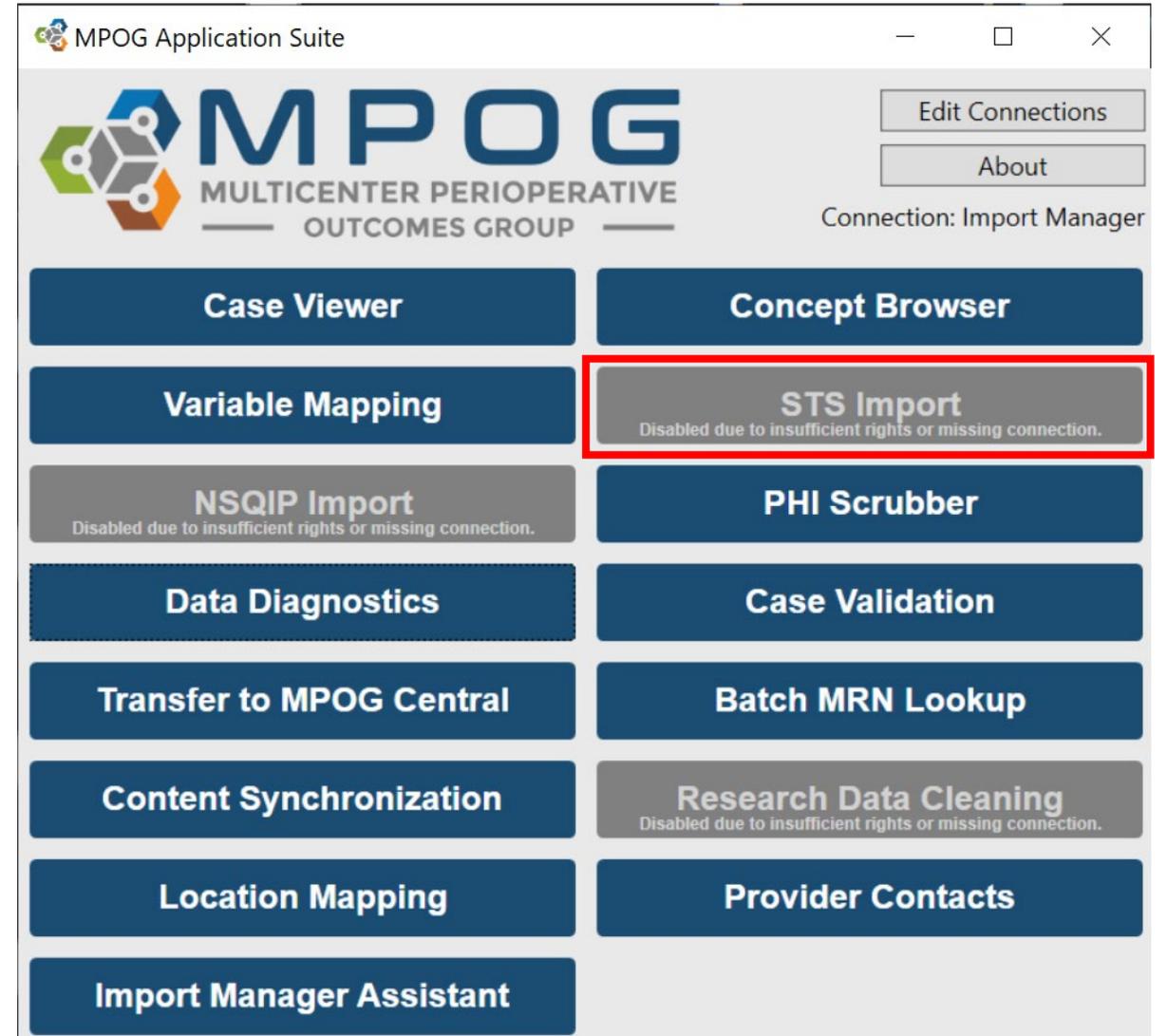
Vendor Application Instructions: LumedX

3. Specify the date range that you would like to extract data for, then click OK



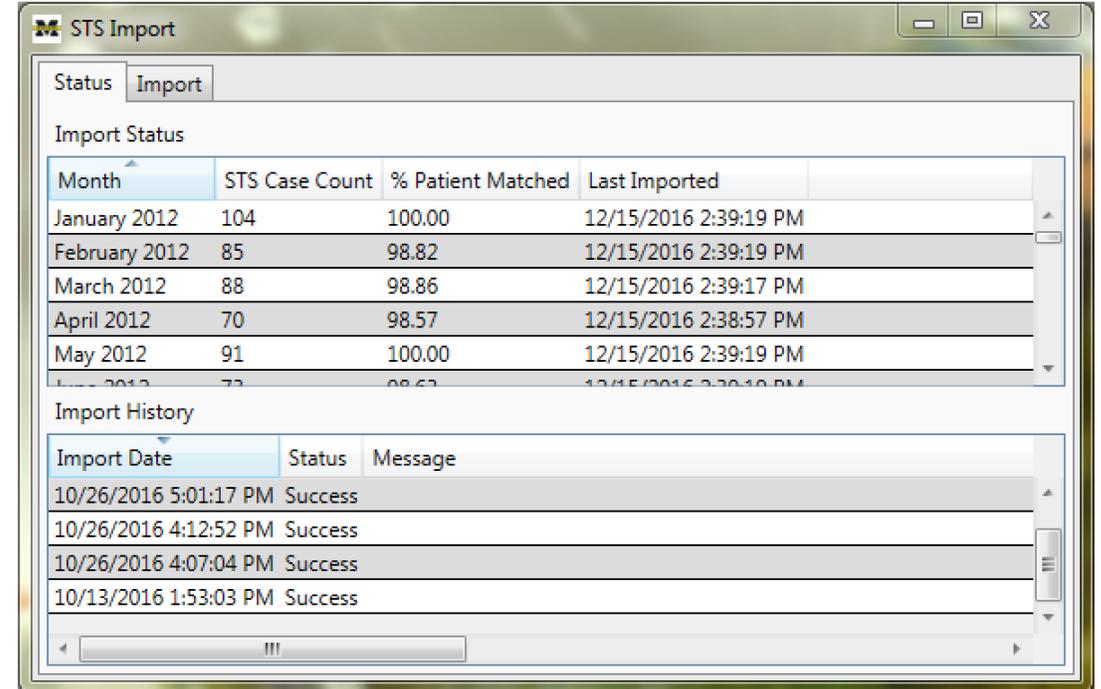
MPOG Import

1. Once you have your harvest file ready, open the MPOG Application Suite.
2. Open the STS Import application.



MPOG Import

3. The first screen will show you the import status (which months of data have been imported and what percentage of those STS records have been patient-matched locally). Click on the import tab to start an import of a harvest file



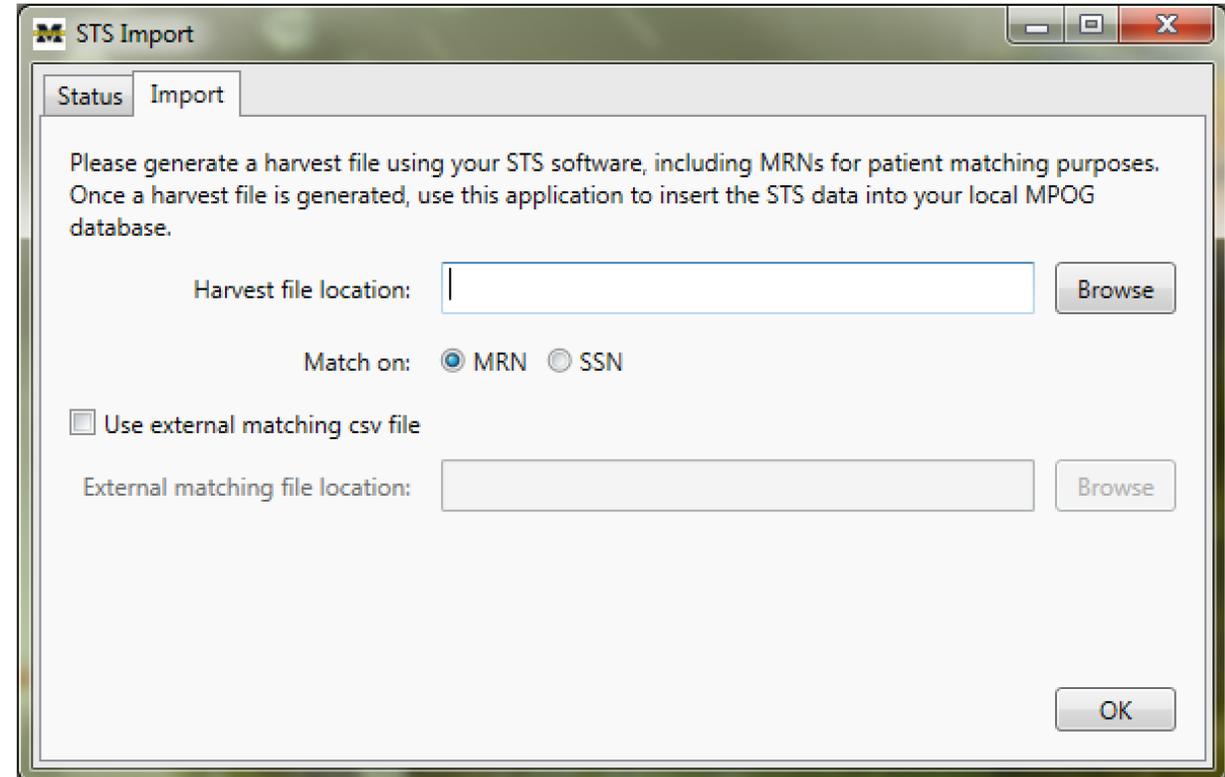
The screenshot shows the 'STS Import' application window. It has two tabs: 'Status' and 'Import'. The 'Status' tab is active, displaying two tables. The first table, 'Import Status', shows data for months from January 2012 to May 2012. The second table, 'Import History', shows a list of import attempts with dates, times, and 'Success' status.

Month	STS Case Count	% Patient Matched	Last Imported
January 2012	104	100.00	12/15/2016 2:39:19 PM
February 2012	85	98.82	12/15/2016 2:39:19 PM
March 2012	88	98.86	12/15/2016 2:39:17 PM
April 2012	70	98.57	12/15/2016 2:38:57 PM
May 2012	91	100.00	12/15/2016 2:39:19 PM

Import Date	Status	Message
10/26/2016 5:01:17 PM	Success	
10/26/2016 4:12:52 PM	Success	
10/26/2016 4:07:04 PM	Success	
10/13/2016 1:53:03 PM	Success	

MPOG Import

4. Locate your STS harvest file using the “browse” button, then select if you are going to match on MRN or SSN (MRN preferred). Use the external matching CSV file option only in MRNs or SSNs are not populated directly within the harvest file

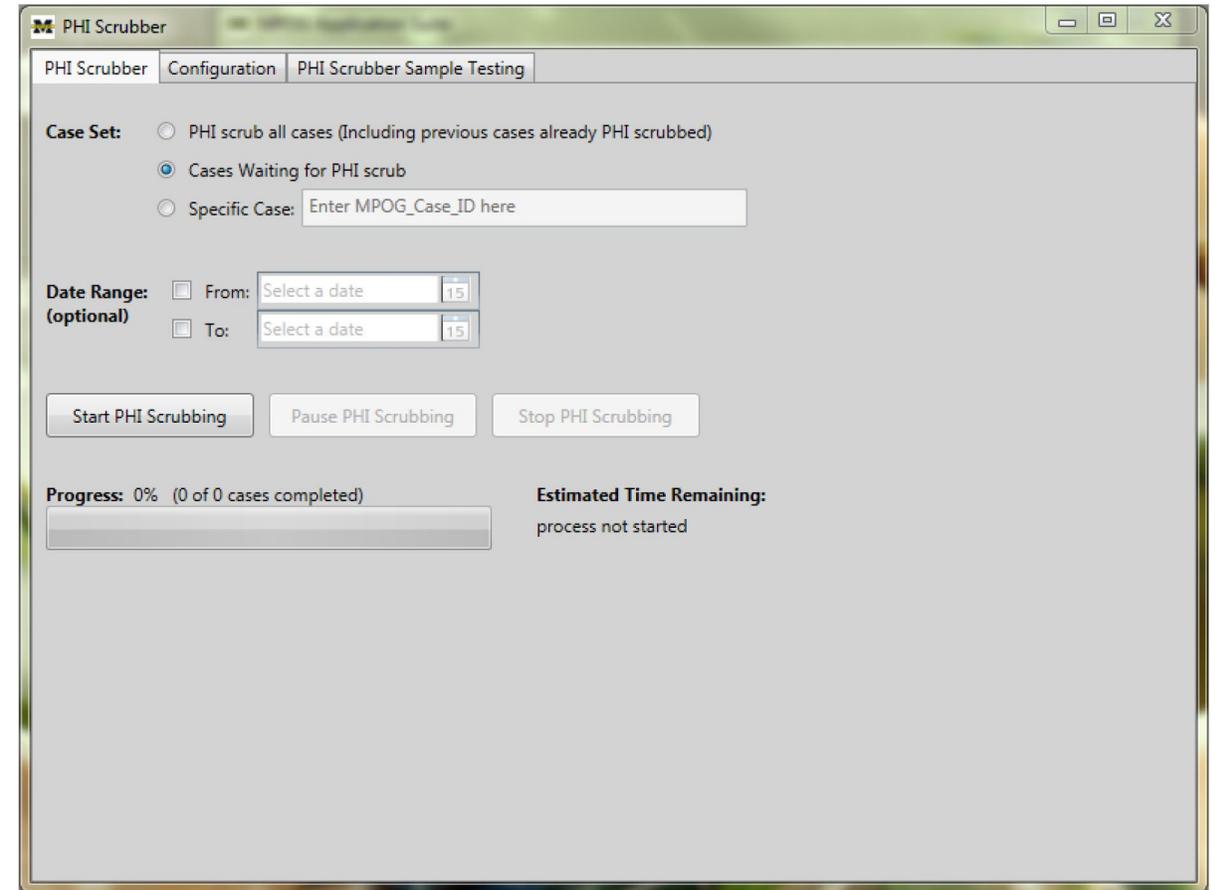


The screenshot shows the 'STS Import' application window with the 'Import' tab selected. The window contains the following elements:

- Status** and **Import** tabs.
- Instructional text: "Please generate a harvest file using your STS software, including MRNs for patient matching purposes. Once a harvest file is generated, use this application to insert the STS data into your local MPOG database."
- Harvest file location:** A text input field followed by a **Browse** button.
- Match on:** Radio buttons for **MRN** (selected) and **SSN**.
- Use external matching csv file**
- External matching file location:** A text input field followed by a **Browse** button.
- OK** button at the bottom right.

MPOG Import

5. Click OK to start the import process. The process will import the STS data into the local MPOG database, perform patient matching, and set any PHI scrubber flags and transfer flags appropriately. After the process is complete, please run the PHI scrubber on “cases waiting for PHI scrub”



MPOG Import

6. To transfer the scrubbed STS records, please use the transfer application. Select “cases awaiting re-upload” and leave “use stored modularity only” option checked

MPOG Uploader

Database Selection
Production

Case Selection
There are 45256 cases that need to be PHI scrubbed.

- Cases awaiting upload 714051
- Cases awaiting initial upload 0
- Cases awaiting re-upload 714051
- All cases (including those already uploaded) 719341

Specify Date Range
From To

Blinded Record Index
Note: You must be running a BRI service in order to use this.

- Create/update the blinded record index for this patient
- Update BRI only (Do not upload case data)

Table Selection (applicable to cases being re-uploaded only)

- Select All
- Billing
- Case Info
- Input Outputs
- Intraop Notes
- Intraop Staff
- Lab Values
- Medications
- Mortality
- Outcomes
- Patients
- Physiologic
- Preop
- Registry Data
- Sites

Use Stored Modularity Only

Start Transfer

Contact Info

- For questions, please contact support@mpog.zendesk.com for any technical assistance with the STS import application