



Data Review: Case Viewer



Case Viewer Overview

The MPOG Case Viewer application displays individual case data in a standardized way, similar to an anesthesia information management system (AIMS) but agnostic to the electronic health record used by the participating site.



MPOG Case Viewer

(No case loaded) X +

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.

- Age
- CPT Code
- ICD Code
- Institution
- Location
- Location Tag
- 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
Coronary Artery Bypass	Pediatric	May 2022	Today
Knee Arthroplasty	Adult	April 2022	Yesterday
Labor Analgesia		March 2022	This Week
Labor Epidural		Year to Date	Last Week
			May 2022
			April 2022

Enter Case List

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

Import

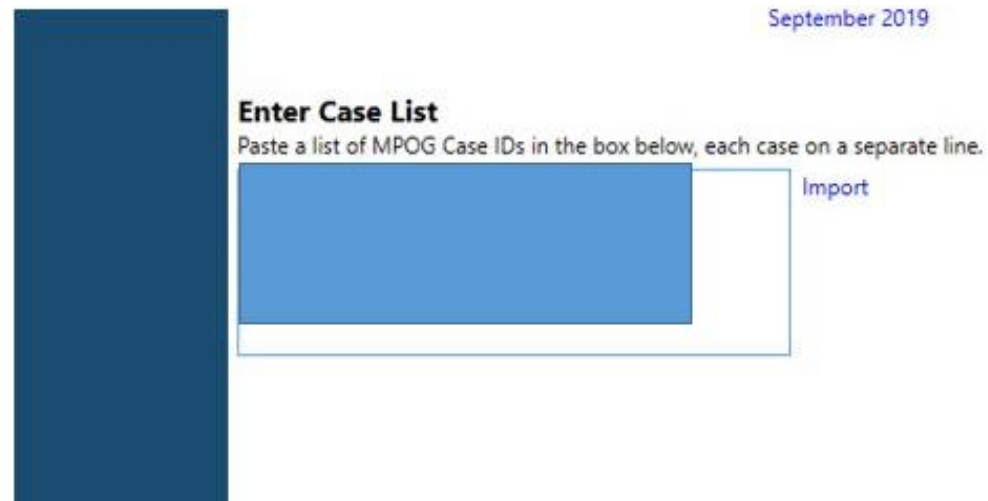
To open a case, search by MPOG Patient ID, MPOG Case ID, AIMS Case ID, or MRN in either location

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.

A screenshot of a web interface for entering case IDs. On the left is a dark blue vertical sidebar. To its right is a white panel. At the top right of the white panel is the text "September 2019". Below this is the heading "Enter Case List" followed by the instruction "Paste a list of MPOG Case IDs in the box below, each case on a separate line." There is a large blue rectangular input box. To the right of the input box is a button labeled "Import".

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
ICD Code
Institution
Location
Location Tag
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
Coronary Artery Bypass	Pediatric	May 2022	Today
Knee Arthroplasty	Adult	April 2022	Yesterday
Labor Analgesia		March 2022	This Week
Labor Epidural		Year to Date	Last Week
			May 2022
			April 2022

- **Age** - Search for cases by specific age ranges
- **CPT code** - Search for cases that include a specific CPT code.
- **ICD code** - Search for cases that include a specific ICD 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.
- **Location** - allows users to search for procedures done at a specific location at their site based on Location Mapping (Module: Getting Started: Location Mapping)
- **Location Tag** – allows users to search by tags applied in Location Mapping
- **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 (e.g., 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 From 50 to 90 years old ✕

[CPT Code](#)

[ICD Code](#)

[Institution](#)

[Location](#)

[Location Tag](#)

[MPOG Concept ID](#)

3011 ✕

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


Cardiac ✕

[Procedure Text](#)

[Registry Data](#)

Surgery Date Range

From 9/1/2021  ✕

To 9/30/2021 

Filter Shortcuts

Case Type	Patient Age	Date of Surgery	Recently Opened
Coronary Artery Bypass	Pediatric	May 2022	Today
Knee Arthroplasty	Adult	April 2022	Yesterday
Labor Analgesia		March 2022	This Week
Labor Epidural		Year to Date	Last Week
			May 2022
			April 2022

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.

MPOG Case Viewer

(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

ICD Code

Institution

Location

Location Tag

MPOG Concept ID

Opened Date Range

Primary Surgical Service

Procedure Text

Registry Data

Surgery Date Range

Filter Shortcuts

Case Type

Coronary Artery Bypass

Knee Arthroplasty

Labor Analgesia

Labor Epidural

Patient Age

Pediatric

Adult

Cardiothoracic-vascular

Colorectal

Dentistry

Dermatology

General

Gynecology

Hand Surgery

Medical - cardiology

Medical - gastroenterology

Medical - hematology/oncology

Medical - nephrology

Medical - not specified

Medical - other

Enter Case List

Paste a list of MPOG Case IDs in the box below

Table View

Preferences

Search Results

Case Time	Service	Patient Age	Procedure	Institution
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.

Fast Case Lookup

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Table View

Preferences

(No case loaded) X +

Find a Specific Case

Enter patient ID / case ID / MRN

Browse for Cases

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

Age

CPT Code

ICD Code

Location

Location Tag

MPOG Concept ID

Opened Date Range

Primary Surgical Service

Procedure Text

Registry Date

Surgery Date Range

From

To

Filter Shortcuts

Case Type

Patient Age

Date of Surgery

Recently Opened

Enter Case List

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

Import

Search Results

Case Time	Service	Patient Age	Procedure
09-03-2021 07:30	General		
09-03-2021 15:55	General		
09-07-2021 07:30	General		
09-02-2021 08:30	General		
09-01-2021 10:00	General		
09-01-2021 09:45	General		
09-01-2021 07:30	General		
09-01-2021 14:30	General		
09-07-2021 09:30	General		
09-04-2021 00:30	General		
09-03-2021 07:30	General		
09-02-2021 15:15	General		
09-02-2021 08:30	General		
09-02-2021 10:30	General		
09-02-2021 13:00	General		
09-01-2021 13:45	General		
09-08-2021 14:30	General		
09-01-2021 11:45	General		
09-01-2021 07:45	General		
09-07-2021 12:00	General		
09-07-2021 11:30	General		
09-10-2021 09:35	General		
09-07-2021 07:30	General		
09-07-2021 07:30	General		
09-07-2021 13:30	General		
09-03-2021 13:20	General		
09-03-2021 07:45	General		
09-03-2021 10:00	General		
09-03-2021 10:45	General		

Next, filter down to September cases by clicking “Surgery Date Range” and specifying 9/1/2021 to 9/30/2021.

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) ✕ +

Fast Case Lookup

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Find a Specific Case

Enter patient ID / case ID / MRN

Browse for Cases

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

Age

CPT Code

ICD Code

Location

Location Tag

MPOG Concept ID

50002, 10377, 10007 ✕

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
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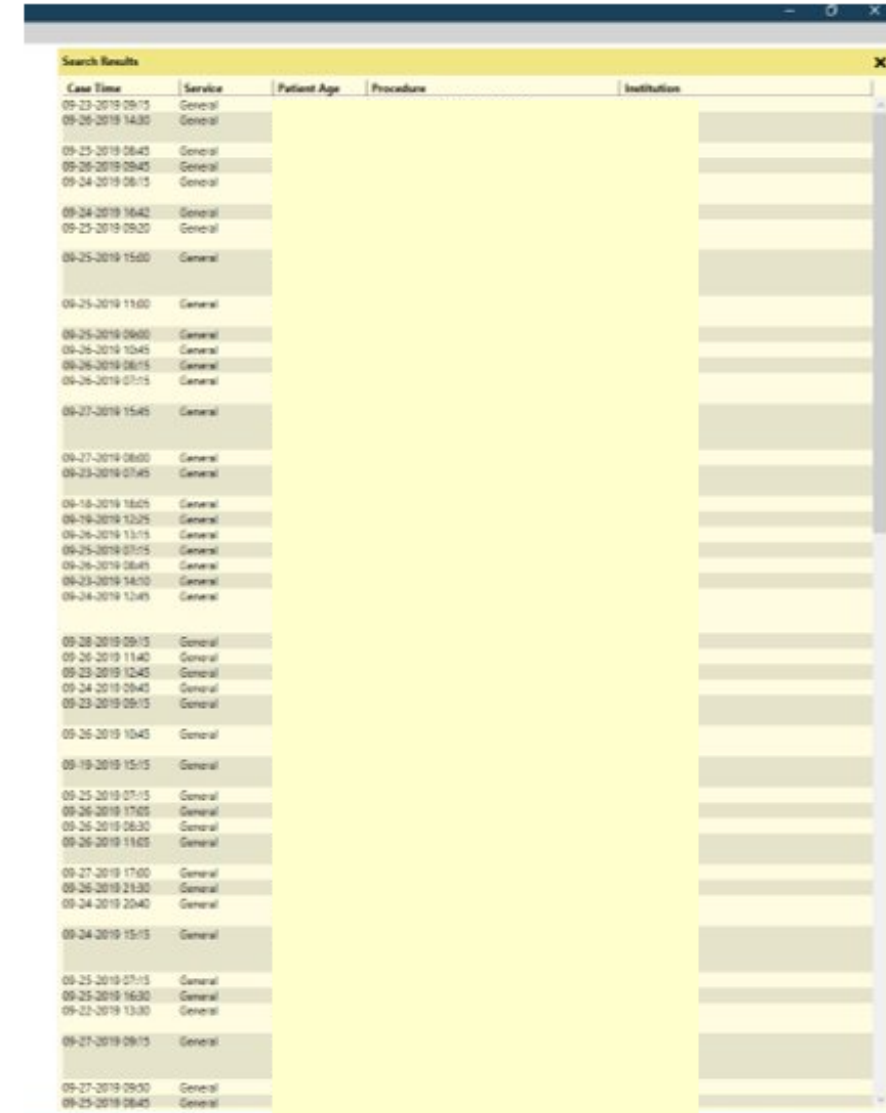
Import

“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.



Case Time	Service	Patient Age	Procedure	Institution
09-23-2019 09:15	General			
09-26-2019 14:30	General			
09-25-2019 08:40	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 16:05	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 09:40	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 17:00	General			
09-26-2019 08:30	General			
09-26-2019 11:00	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 09:30	General			
09-25-2019 08:40	General			

Chart View

MPOG Case Viewer

Fast Case Lookup

Case ID [x] + [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

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

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)

Multiple Values

Time	Mapped As	Value	Original Variable
			Activity
			Patient in Facility
			Station Band
			Patient ID Verified
			Machine Checked
			Anesthesia Machine Checked
			verified
			Equipment verified
			ified, chart review
			Patient identified, chart review
			confirmed to be s
			NPO status confirmed to be _
			left Hand 18 g, pla
			Peripheral IV
			placed on R upper a
			NIBP Cuff placed on _
			Start
			Anesthesia Start
			y
			Room Ready
			Room In Room
			duction/Initiation c
			PRIOR to Induction/Initiation c
			xygenated using E
			Patient preoxygenated by _ L
			ation Grade 1: Veni
			Mask ventilation _
			ved and Eyes taped
			Mask removed and Eyes _
			ated using Direct I
			Orally intubated using _ on th
			ile-lumen cuffed E
			_ mm _ ET tube taped @ _ c
			al breath sounds :
			Equal bilateral breath sounds :
			Laryngoscopy
			Atraumatic Laryngoscopy
			Induction End
			Anesthesia Induction End
			tioned Supine
			Patient positioned _
			s placed on arm bc
			Patient arms _
			hed
			Bed _
			temperature probe chec
			_ temperature probe checked
			eck maintained in
			Free text
			erve stimulator pl
			Peripheral nerve stimulator pl
			#1 Right Leg up @
			Tourniquet #1 _ up @ _
			sion
			Surgical Incision
			warmer (convective
			Forced air warmer (convective
			#1 down (total elay
			Tourniquet #1 down
			placed
			Oral airway placed
			netic by Surgeon
			Local Anesthetic by Surgeon
			anesthesiologist fo
			Page Staff Anesthesiologist fo
			assing Complete
			Surgical Dressing Complete
			tioned
			Pharynx suctioned
			ular function intact
			Neuromuscular function intact
			ys commands
			Patient obeys commands
			ated Awake
			Patient extubated _
			Substances SECURI
			Controlled Substances SECURI
			ported to PACU
			Patient transported to _
			mitted to PACU
			Patient Admitted to PACU

Chart View

The MRN and MPOG Case ID can be copied using the 'Copy' button

Case ID	Patient IDs	(Last Name Missing), (First Name Missing) (MRN Missing)
1	101	101
2	102	102
3	103	103
4	104	104
5	105	105
6	106	106
7	107	107
8	108	108
9	109	109
10	110	110
11	111	111
12	112	112
13	113	113
14	114	114
15	115	115
16	116	116
17	117	117
18	118	118
19	119	119
20	120	120
21	121	121
22	122	122
23	123	123
24	124	124
25	125	125
26	126	126
27	127	127
28	128	128
29	129	129
30	130	130
31	131	131
32	132	132
33	133	133
34	134	134
35	135	135
36	136	136
37	137	137
38	138	138
39	139	139
40	140	140
41	141	141
42	142	142
43	143	143
44	144	144
45	145	145
46	146	146
47	147	147
48	148	148
49	149	149
50	150	150
51	151	151
52	152	152
53	153	153
54	154	154
55	155	155
56	156	156
57	157	157
58	158	158
59	159	159
60	160	160
61	161	161
62	162	162
63	163	163
64	164	164
65	165	165
66	166	166
67	167	167
68	168	168
69	169	169
70	170	170
71	171	171
72	172	172
73	173	173
74	174	174
75	175	175
76	176	176
77	177	177
78	178	178
79	179	179
80	180	180
81	181	181
82	182	182
83	183	183
84	184	184
85	185	185
86	186	186
87	187	187
88	188	188
89	189	189
90	190	190
91	191	191
92	192	192
93	193	193
94	194	194
95	195	195
96	196	196
97	197	197
98	198	198
99	199	199
100	200	200

Fast Case Lookup

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Table View

Preferences

Case ID

1

Copy

Case Institution

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)	Patient identified, chart review	Patient ID Verified
01-02-2020 07:42	Anesthesia Machine Checked	Anesthesia Machine Checked	Anesthesia Machine Checked
		Equipment verified	Equipment verified
		Patient identified, chart review	Patient identified, chart review
		NPO status confirmed to be s	NPO status confirmed to be _
		New Site - Left Hand 18 g, pla	Peripheral IV
		NIBP Cuff placed on R upper a	NIBP Cuff placed on _
		Anesthesia Start	Anesthesia Start
		Room Ready	Room Ready
		Patient In Room	Patient In Room
		PRIOR to Induction/Initiation c	PRIOR to Induction/Initiation c
		Patient preoxygenated using E	Patient preoxygenated by _ L
		Mask ventilation Grade 1: Veni	Mask ventilation _
		Mask removed and Eyes taped	Mask removed and Eyes _
		Orally intubated using Direct I	Orally intubated using _ on th
		7.5 mm single-lumen cuffed E	_ mm _ ET tube taped @ _ c
		Equal bilateral breath sounds :	Equal bilateral breath sounds :
		Atraumatic Laryngoscopy	Atraumatic Laryngoscopy
		Anesthesia Induction End	Anesthesia Induction End
		Patient positioned Supine	Patient positioned _
		Patient arms placed on arm bc	Patient arms _
		Bed not turned	Bed _
		Nasal temperature probe chec	_ temperature probe checked
		Head and neck maintained in	Free text
		Peripheral nerve stimulator pl	Peripheral nerve stimulator pl
		Surgical Incision	Surgical Incision
		Forced air warmer (convective	Forced air warmer (convective
		Tourniquet #1 down (total elay	Tourniquet #1 down
		Oral airway placed	Oral airway placed
		Local Anesthetic by Surgeon	Local Anesthetic by Surgeon
		Page Staff Anesthesiologist fo	Page Staff Anesthesiologist fo
		Surgical Dressing Complete	Surgical Dressing Complete
		Pharynx suctioned	Pharynx suctioned
		Neuromuscular function intact	Neuromuscular function intact
		Patient obeys commands	Patient obeys commands
		Patient extubated Awake	Patient extubated _
		Controlled Substances SECURI	Controlled Substances SECURI
		Patient transported to PACU	Patient transported to _
		Patient Admitted to PACU	Patient Admitted to PACU

The left side pane allows users to toggle between different views:

- Chart
- Record Search
- Administrative
- H&P
- Outcomes
- Labs.

The current tab is highlighted in a lighter blue

Record Search

Administrative

H & P

Outcomes

Labs

Collapse All

Main Chart [-]

Times [-]

All Staff [-]

Bolus Meds [-]

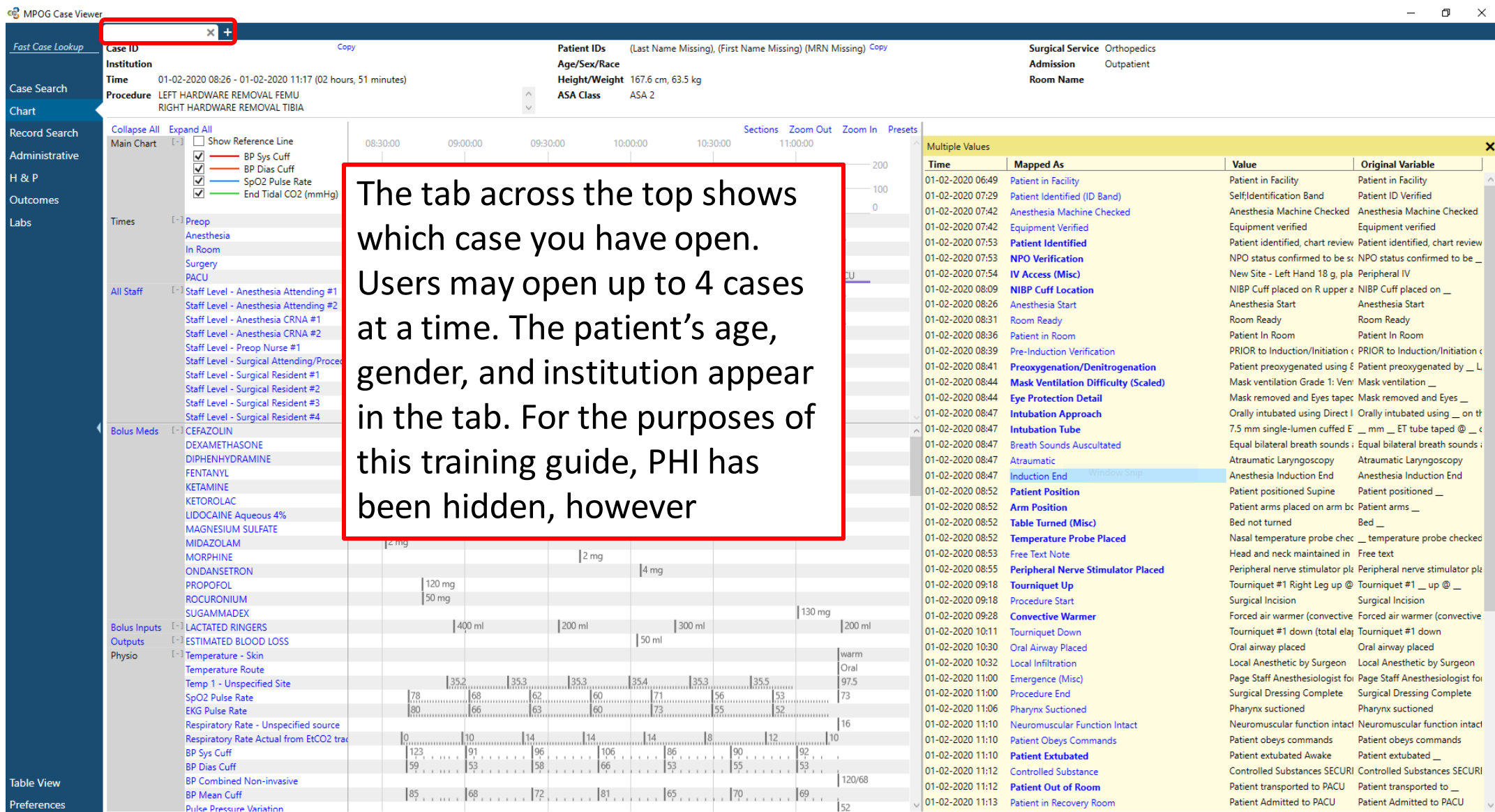
Bolus Inputs [-]

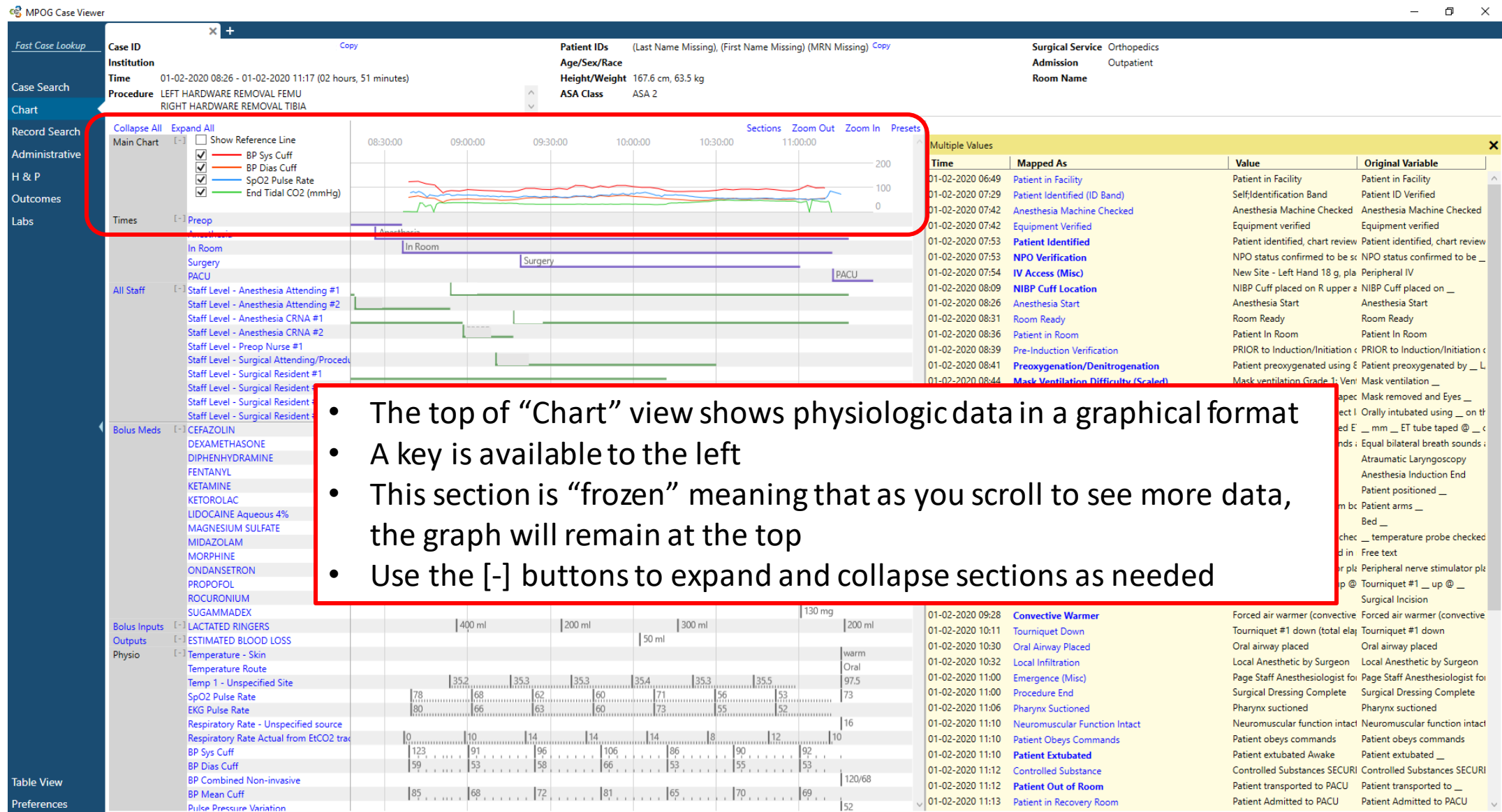
Outputs [-]

Physio [-]



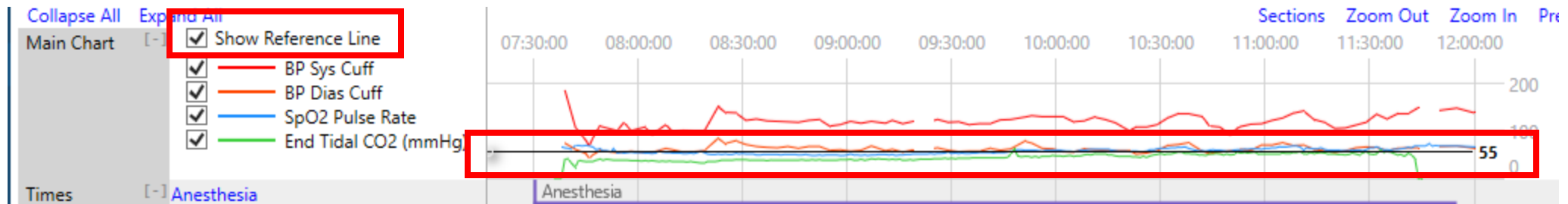
- For viewing on smaller laptop screens, the blue panel can be collapsed to save space by using the small arrow

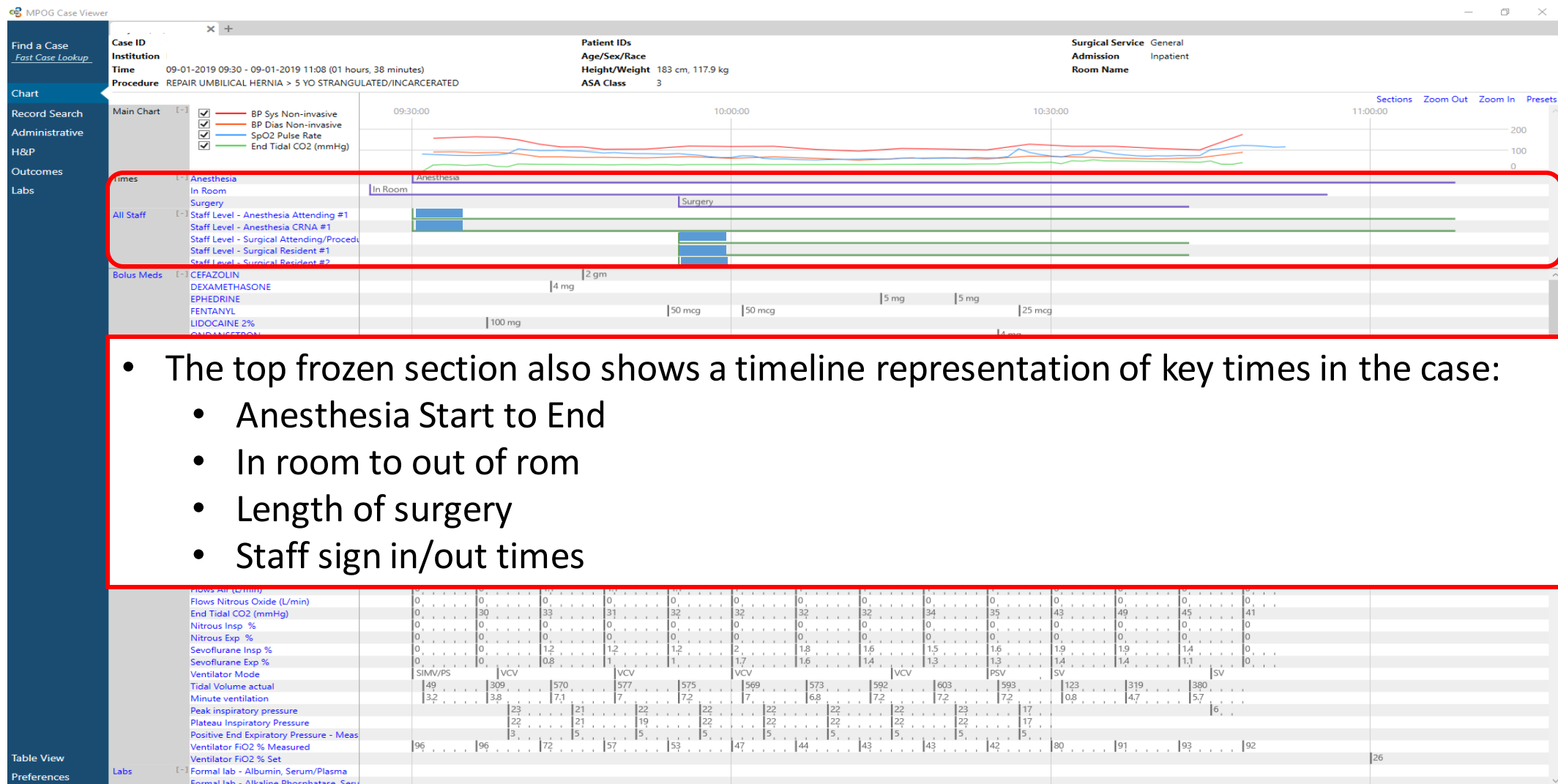




- The top of “Chart” view shows physiologic data in a graphical format
- A key is available to the left
- This section is “frozen” meaning that as you scroll to see more data, the graph will remain at the top
- Use the [-] buttons to expand and collapse sections as needed

- 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

MPOG Case Viewer

Fast Case Lookup

Case Search

Chart

Record Search

Administrative

H & P

Outcomes

Labs

Case ID

Institution

Time

Procedure

Patient IDs

Age/Sex/Race

Height/Weight

ASA Class

Surgical Service

Admission

Room Name

Cardiac

Admit

CVC-OR 04

MIDLINE MITRAL VALVE REPAIR OR REPLACEMENT

MIDLINE CORONARY ARTERY BYPASS GRAFT

ASA 4

Sections

Zoom Out

Zoom In

Presets

Notes

Multiple Values

Time	Mapped As	Value	Original Variable
10-12-2017 06:15	Patient in Facility	Patient in Facility	Patient in Facility
10-12-2017 06:17	Patient Available	Assigned PreOp	Assigned PreOp
10-12-2017 06:19	Anesthesia Machine Checked	Anesthesia Machine Checked	Anesthesia Machine Checked
10-12-2017 06:19	Equipment Verified	Equipment verified	Equipment verified

BP Sys Arterial

BP Dias Arterial

BP Sys Cuff

BP Dias Cuff

EKG Pulse Rate

SpO2 Pulse Rate

End Tidal CO2 (mmHg)

Preop

Anesthesia

In Room

Surgery

All Staff

Meds - IV

Calcium Chloride

Cefuroxime

Fentanyl

Furosemide

Glycopyrrrolate

Heparin

Hydralazine

Insulin Regular

Lidocaine

Magnesium Sulfate

Mannitol

Midazolam

Milrinone

Morphine

Neostigmine

Norepinephrine

Pancuronium

Phenylephrine

Potassium Chloride

Propofol

Protamine

Tranexamic Acid

Vancomycin

Vasopressin

Chlorhexidine Alcohol Free 0.1

Amiodarone

Insulin Regular

Meds - PO

Infusion Meds

- The grey column to the left divides the case into the following sections
 - Meds – IV
 - Meds – PO
 - Infusion Meds
 - Inputs
 - Outputs
 - Physiologic
 - Ventilator
 - Flowsheet
 - Notes
 - Labs

Case ID 6

Institution 1

Time 1

Procedure MIDLINE MITRAL VALVE REPAIR OR REPLACEMENT
MIDLINE CORONARY ARTERY BYPASS GRAFT

Patient IDs Patient IDs hidden Copy

Age/Sex/Race 79

Height/Weight 154

ASA Class ASA 4

Surgical Service Cardiac

Admission Admit

Room Name CVC-C

Collapse All Expand All

Main Chart

☐ Show Reference Line☒ BP Sys Arterial☒ BP Dias Arterial☒ BP Sys Cuff☒ BP Dias Cuff☒ EKG Pulse Rate☒ SpO2 Pulse Rate☒ End Tidal CO2

Times [-] Preop

Anesthesia

In Room

Surgery

All Staff [-]

Meds - IV [-]

CALCIUM CHLORIDE

CEFUROXIME

FENTANYL

FUROSEMIDE

GLYCOPYRROLATE

HEPARIN

HYDRALAZINE

INSULIN REGULAR

LIDOCAINE

MAGNESIUM SULFATE

MANNITOL

MIDAZOLAM

MILRINONE

MORPHINE

NEOSTIGMINE

NOREPINEPHRINE

PANCURONIUM

PHENYLEPHRINE

POTASSIUM CHLORIDE

PROPOFOL

PROPRANOLOL

TRANEXAMIC ACID

VANCOMYCIN

VASOPRESSIN

Meds - PO [-] CHLORHEXIDINE ALCOHOL FREE 0.12%

Infusion Meds [-] AMIODARONE

INSULIN REGULAR

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

Hover Mouse Pointer

Multiple Values

Time	Mapped As	Value	Original Variable
10-12-2017 06:15	Patient in Facility	Patient in Facility	Patient in Facility
10-12-2017 06:17	Patient Available	Assigned PreOp	Assigned PreOp
10-12-2017 06:19	Anesthesia Machine Checked	Anesthesia Machine Checked	Anesthesia Machine Checked
10-12-2017 06:19	Equipment Verified	Equipment verified	Equipment verified
10-12-2017 06:23	Patient Identified (ID Band)	Self-identification Band	Patient ID Verified
10-12-2017 06:23	Chlorhexidine Skin Prep	Chlorhexidine Skin Prep	Chlorhexidine Skin Prep
10-12-2017 06:23	Resp: Effort/Depth	Resp: Effort/Depth	Resp: Effort/Depth
10-12-2017 06:23	Patient ID Verified	Patient ID Verified	Patient ID Verified
10-12-2017 06:23	Anesthesia Start	Anesthesia Start	Anesthesia Start
10-12-2017 06:23	review Patient identified, chart review	review Patient identified, chart review	review Patient identified, chart review
10-12-2017 06:23	to be st: NPO status confirmed to be	to be st: NPO status confirmed to be	to be st: NPO status confirmed to be
10-12-2017 06:23	18 g. Peripheral IV	18 g. Peripheral IV	18 g. Peripheral IV
10-12-2017 06:23	Room Ready	Room Ready	Room Ready
10-12-2017 06:23	Patient In Room	Patient In Room	Patient In Room
10-12-2017 06:23	upper a NIBP Cuff placed on	upper a NIBP Cuff placed on	upper a NIBP Cuff placed on
10-12-2017 06:23	Arterial Line	Arterial Line	Arterial Line
10-12-2017 06:23	iation: PRIOR to Induction/Initiation	iation: PRIOR to Induction/Initiation	iation: PRIOR to Induction/Initiation
10-12-2017 06:23	line on Free text	line on Free text	line on Free text
10-12-2017 06:23	ul will: Free text	ul will: Free text	ul will: Free text
10-12-2017 06:23	unsucc: Free text	unsucc: Free text	unsucc: Free text
10-12-2017 06:23	now at: Free text	now at: Free text	now at: Free text
10-12-2017 06:23	using & Patient preoxygenated by	using & Patient preoxygenated by	using & Patient preoxygenated by
10-12-2017 06:23	2: Ven: Mask ventilation	2: Ven: Mask ventilation	2: Ven: Mask ventilation
10-12-2017 08:40	Eye Protection Detail	Mask removed and Eyes taped	Mask removed and Eyes
10-12-2017 08:43	Intubation Approach	Orally intubated using Direct I	Orally intubated using
10-12-2017 08:43	Intubation Tube	7.5 mm Single-lumen cuffed E	7.5 mm Single-lumen cuffed E
10-12-2017 08:43	Breath Sounds Auscultated	Equal bilateral breath sounds	Equal bilateral breath sounds
10-12-2017 08:43	Atraumatic	Atraumatic Laryngoscopy	Atraumatic Laryngoscopy
10-12-2017 08:43	Bite Block Placed	TEE Single-lap sponge bite b	TEE Single-lap sponge bite b
10-12-2017 08:50	Anesthesia Procedure Start	Central Line placement Start	Central Line placement Start
10-12-2017 09:00	Pulmonary Artery Catheter Placed	PAC Placement w/ Introducer	PAC Placement w/ Introducer
10-12-2017 09:26	Induction End	Anesthesia Induction End	Anesthesia Induction End
10-12-2017 09:26	Anesthesia Procedure End	Central Line placement finish	Central Line placement finish
10-12-2017 09:38	Temperature Probe Placed	Nasal temperature probe plac	temperature probe checke
10-12-2017 09:41	Patient Position	Patient positioned Supine	Patient positioned
10-12-2017 09:41	Arm Position	Patient arms padded and tuck	Patient arms
10-12-2017 09:44	Peripheral Nerve Stimulator Placed	Peripheral nerve stimulator pl	Peripheral nerve stimulator p
10-12-2017 09:44	Cardiac Surgery (Misc)	Amount of Autologous Whole	Amount of Autologous Whole



Information available in the body of the chart is arranged to match the chronological timeline listed across the top of the view. To view more information, use the “Zoom Out” and “Zoom In” buttons in the upper right corner. You can also click and drag left or right in the chart to zoom in.

Fast Case Lookup

Case Search

Chart

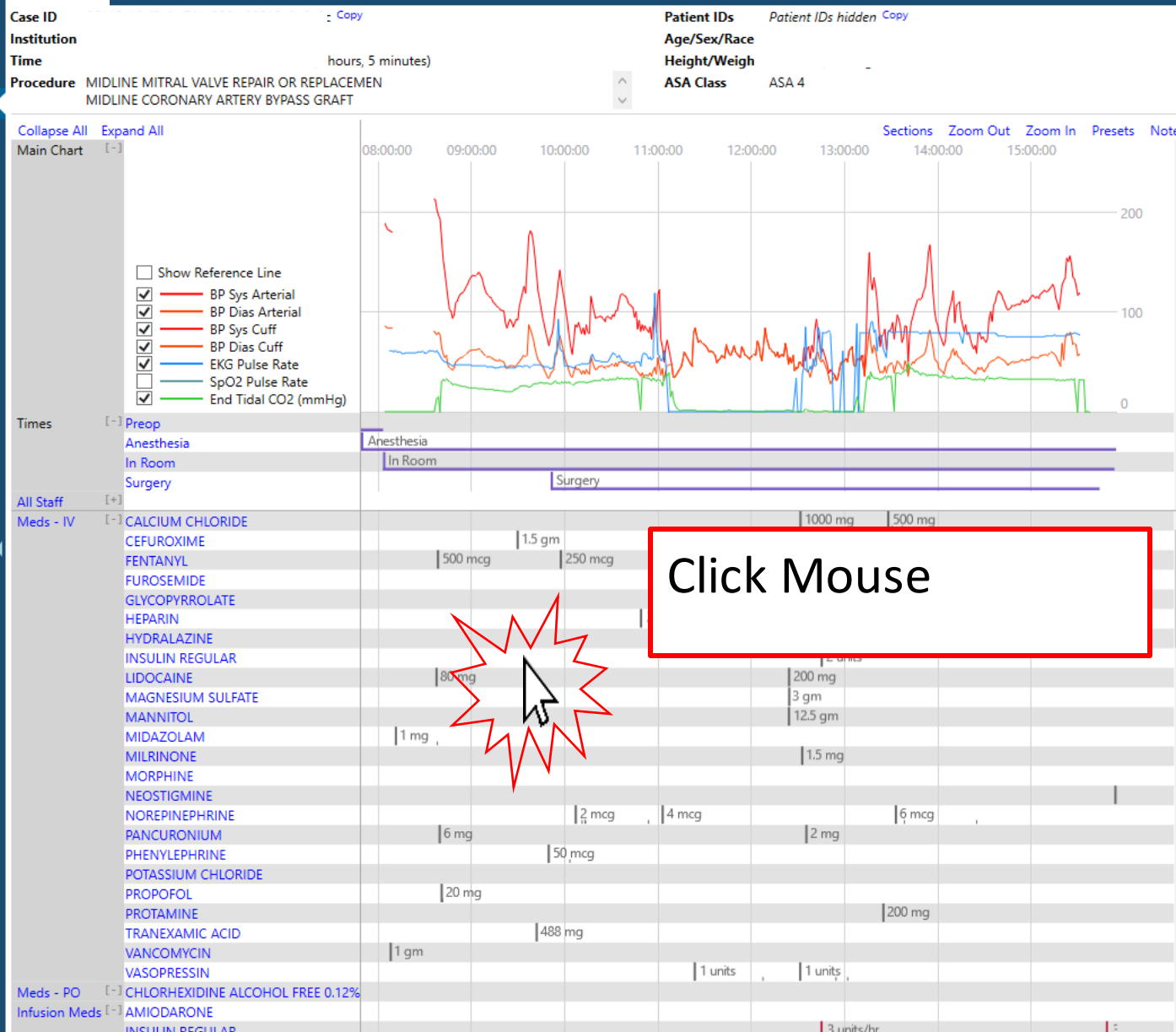
Record Search

Administrative

H & P

Outcomes

Labs

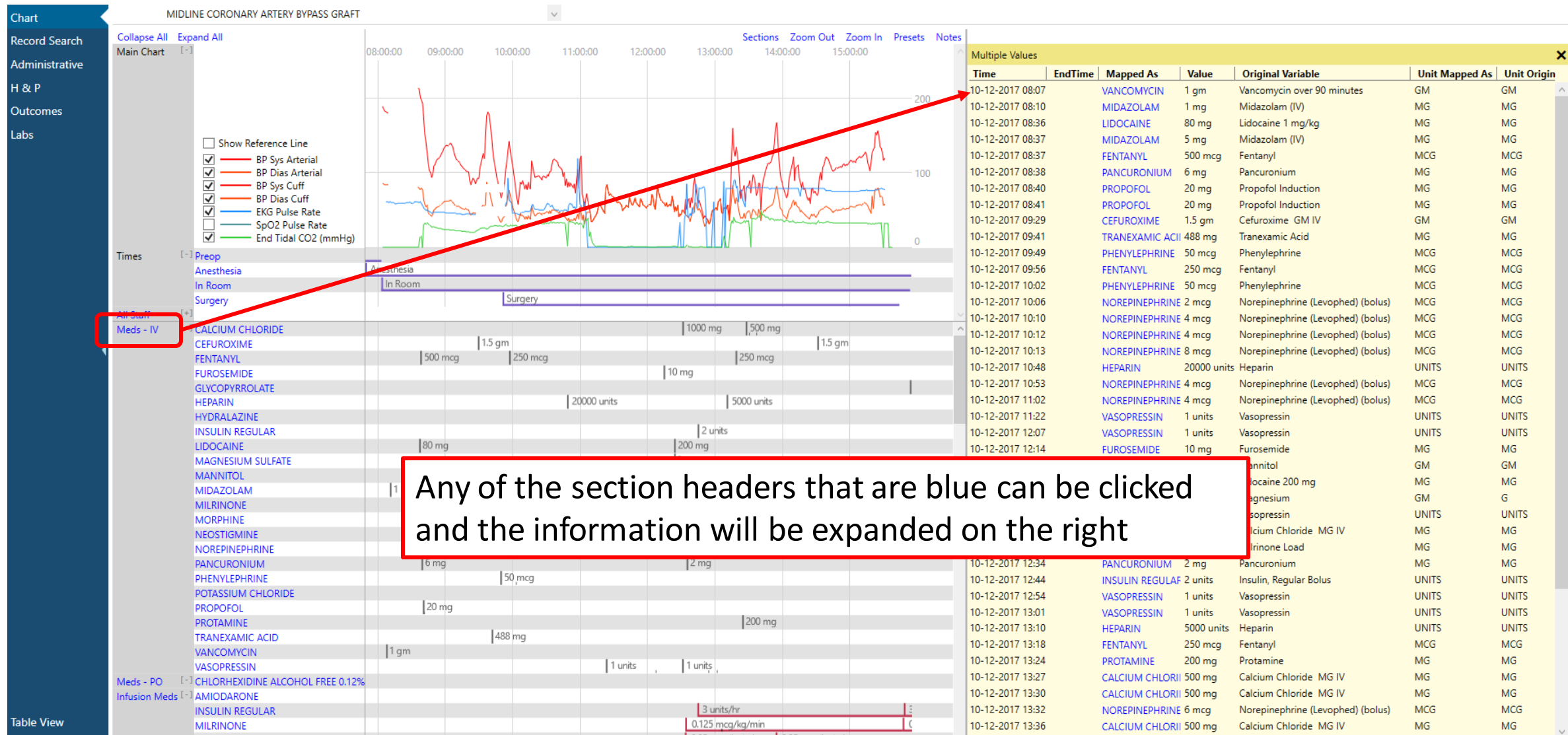


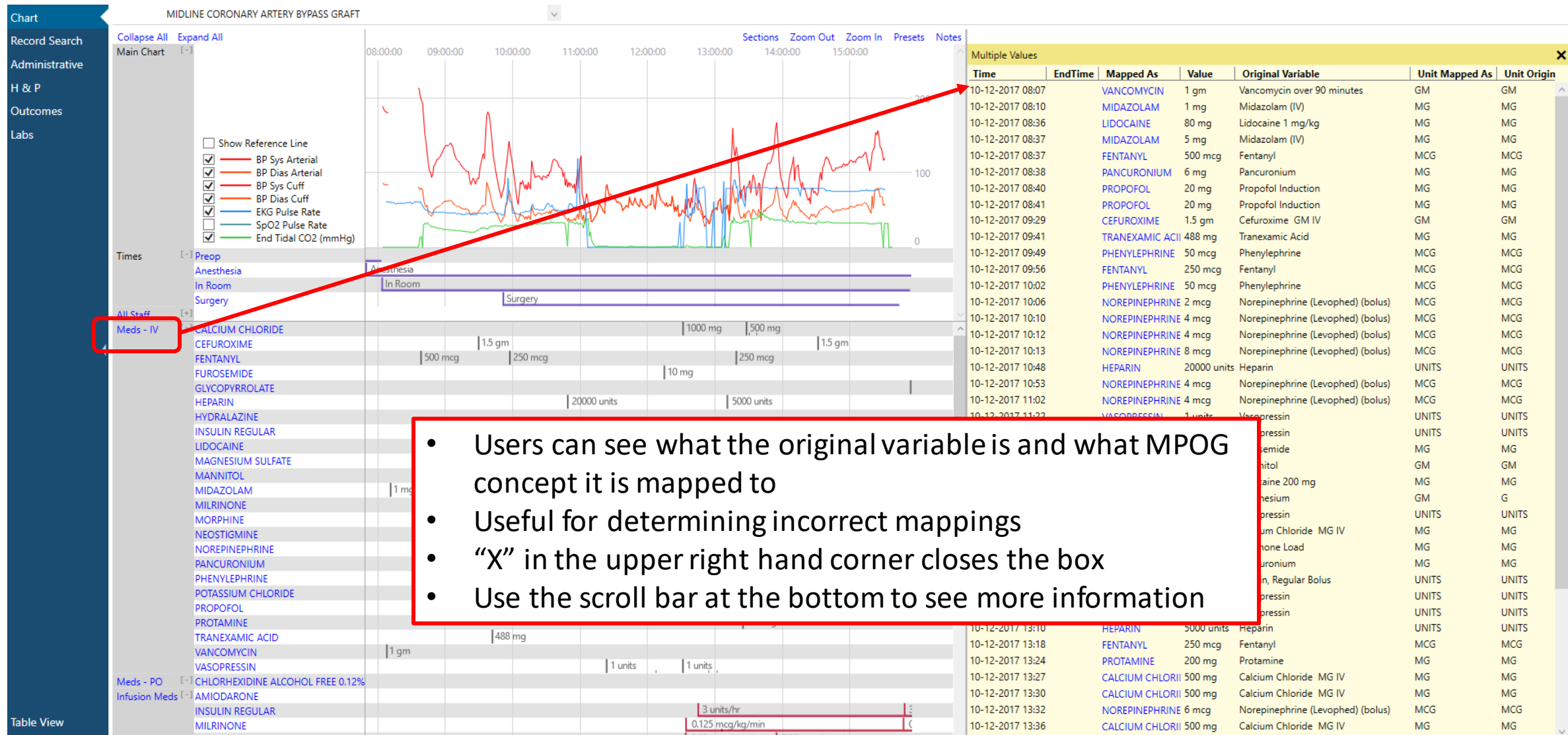
Click the middle button on the mouse and drag mouse left or right to zoom in or out



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

Multiple Values			
Time	Mapped As	Value	Original Variable
10-23-2017 11:34	BP Sys Cuff	156	7
10-23-2017 11:36	BP Sys Cuff	176	7
10-23-2017 11:38	BP Sys Cuff	181	7
10-23-2017 11:39	BP Sys Cuff	170	7
10-23-2017 11:40	BP Sys Cuff	148	7
10-23-2017 11:42	BP Sys Cuff	134	7
10-23-2017 11:44	BP Sys Cuff	132	7
10-23-2017 11:46	BP Sys Cuff	126	7
10-23-2017 11:48	BP Sys Cuff	124	7
10-23-2017 11:50	BP Sys Cuff	113	7
10-23-2017 11:52	BP Sys Cuff	107	7
10-23-2017 11:54	BP Sys Cuff	104	7
10-23-2017 11:56	BP Sys Cuff	102	7
10-23-2017 11:58	BP Sys Cuff	106	7



Multiple Values			
Time	Mapped As	Value	Original Variable
10-23-2017 13:46	BP Sys Cuff	90	7
10-23-2017 12:50	BP Sys Cuff	90	7
10-23-2017 12:38	BP Sys Cuff	91	7
10-23-2017 12:28	BP Sys Cuff	92	7
10-23-2017 13:34	BP Sys Cuff	92	7
10-23-2017 12:26	BP Sys Cuff	92	7
10-23-2017 13:24	BP Sys Cuff	92	7
10-23-2017 13:44	BP Sys Cuff	93	7
10-23-2017 12:24	BP Sys Cuff	95	7
10-23-2017 13:58	BP Sys Cuff	95	7
10-23-2017 13:32	BP Sys Cuff	96	7
10-23-2017 13:12	BP Sys Cuff	97	7

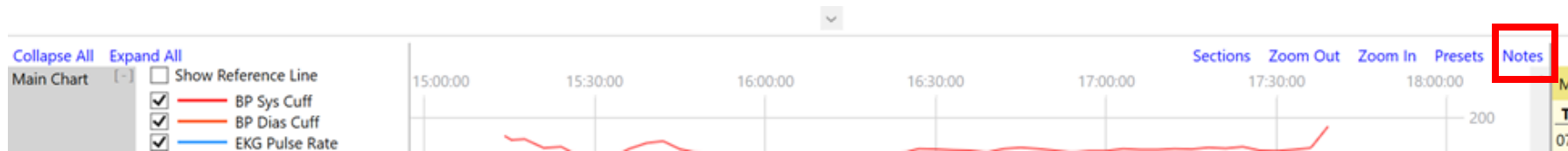
Values
sorted in
order

- Side box view can be especially helpful when reviewing notes if users wish to see them in chronological order similar to some EHRs
- The note information is also available in the body of the flowsheet

Time	Mapped As	Value	Original Variable
11-29-2019 20:43	Patient in Facility	Patient in Facility	Patient in Facility
12-01-2019 07:28	Fall Risk Score	No Risk Factors Present	Fall Risk Assessment
12-01-2019 08:22	Patient Identified (ID Bar	Self-Identification Band	Patient ID Verified
12-01-2019 08:59	Anesthesia Machine Che	Anesthesia Machine Che	Anesthesia Machine Che
12-01-2019 08:59	Equipment Verified	Equipment verified	Equipment verified
12-01-2019 08:59	Patient Identified	Patient identified, chart	Patient identified, chart
12-01-2019 08:59	NPO Verification	NPO status confirmed to	NPO status confirmed to
12-01-2019 09:00	Patient Identified (ID Bar	Identification Band;Self	Patient ID Verified
12-01-2019 09:05	Room Ready	Room Ready	Room Ready
12-01-2019 09:07	Anesthesia Start	Anesthesia Start	Anesthesia Start
12-01-2019 09:13	Patient in Room	Patient In Room	Patient In Room
12-01-2019 09:15	Patient in Room	Patient In Room	Patient In Room
12-01-2019 09:16	Monitors Specified	Standard monitors place	Standard monitors place
12-01-2019 09:17	Pre-Induction Verification	PRIOR to Induction/Initi	PRIOR to Induction/Initi
12-01-2019 09:24	Pre-Induction Verification	PRIOR to Induction/Initi	PRIOR to Induction/Initi
12-01-2019 09:24	Preoxygenation/Denitr	Patient preoxygenated b	Patient preoxygenated b
12-01-2019 09:25	Medication Administered	Medication Administered	Medication Administered

[illegible]

- 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	Note Type AACD Patient In Facility Date/Time 50016	Mapped As AACD Patient In Facility Date/Time 50016	Original Patient in Facility 30594

If you notice a gray box around the time in the note section, there is no Observed Time entered

10-13-2021 09:00 Ankle Block

Intraop Note

[Back](#)

Concept	Regional - Ankle Block
Value	Peripheral Block-anesthesia block type
Observed Time	

- Bolded “parent” notes have associated “child” detail notes. Clicking on a bolded note will give the additional details as well
- The original variable as well as the value are displayed in the note details

e	Mapped As	Value	Original Variable
9-2021 07:30	Eye Protection Detail	Mask removed and f	Mask removed and f
9-2021 07:32	Breath Sounds Auscultated	Equal bilateral breat	Equal bilateral breat
9-2021 07:32	Intubation Tube	8.0 mm Single-lume	__ mm __ ET tube tap
9-2021 07:32	Intubation Approach	Orally intubated usir	Orally intubated usir
9-2021 07:32	Atraumatic	Atraumatic Laryngos	Atraumatic Laryngos
9-2021 07:37	Bite Block Placed	TEE Plastic bite bloc	TEE __ bite block pla
9-2021 07:38	Anesthesia Procedure Start	Central Line placem	Central Line placem

Intraop Note

Back

Concept

Intubation Tube Note

Value

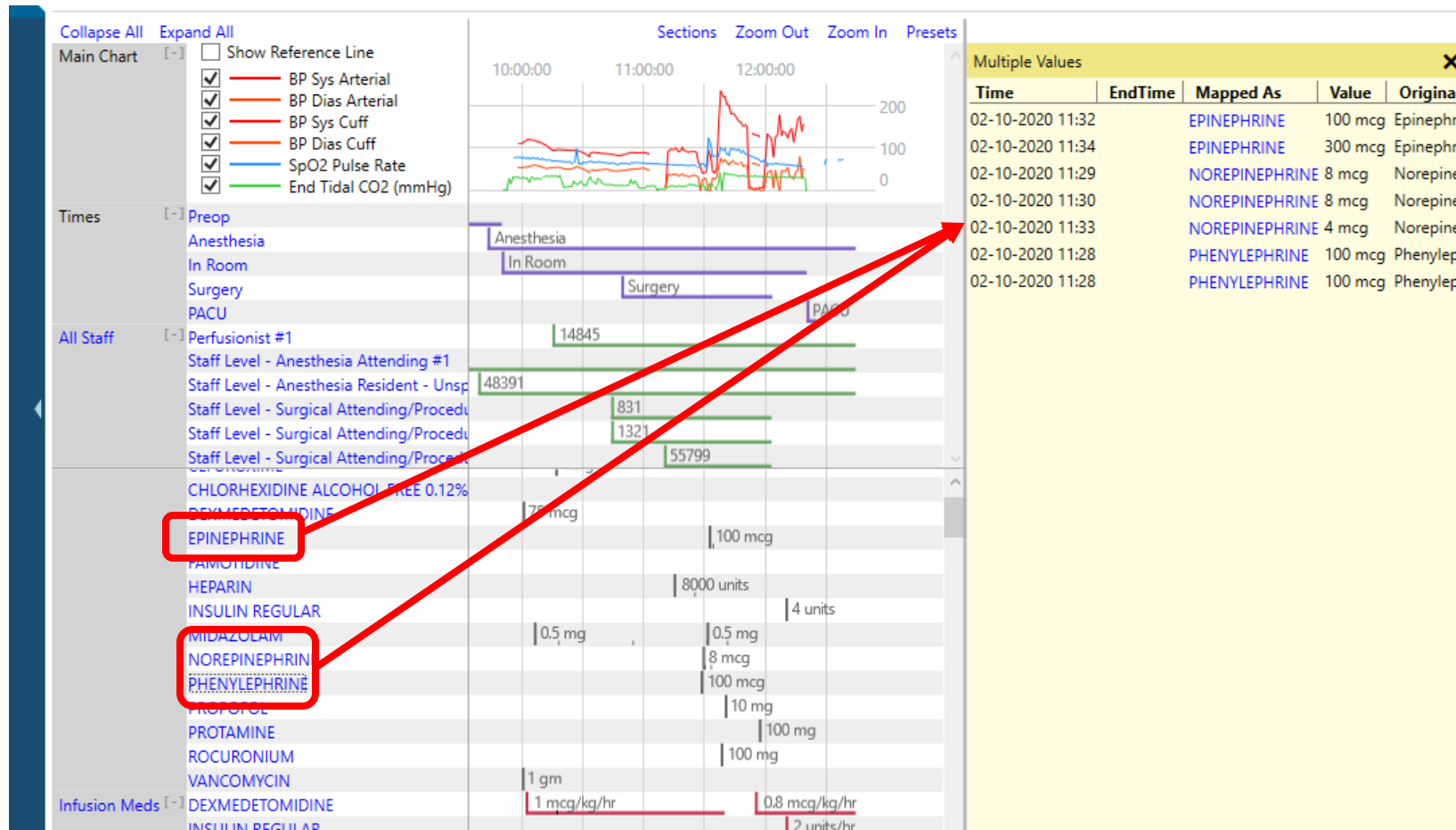
8.0 mm Single-lumen cuffed ET tube taped @ 24 cm

Observed Time

10-19-2021 07:32

Details

Concept	Original Variable	Value
Endotracheal Tube Type	ET Tube Type	Single-lumen cuffed
Endotracheal Tube Type	ET Tube Type	Single-lumen cuffed
Endotracheal Tube Size	ET Tube Size (mm)	8
Endotracheal Tube Secured	Taped at (cm)	21
Endotracheal Tube Size	ET Tube Size (mm)	8
Endotracheal Tube Secured	Taped at (cm)	24



- 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

1:00

200

100

55

0

6951

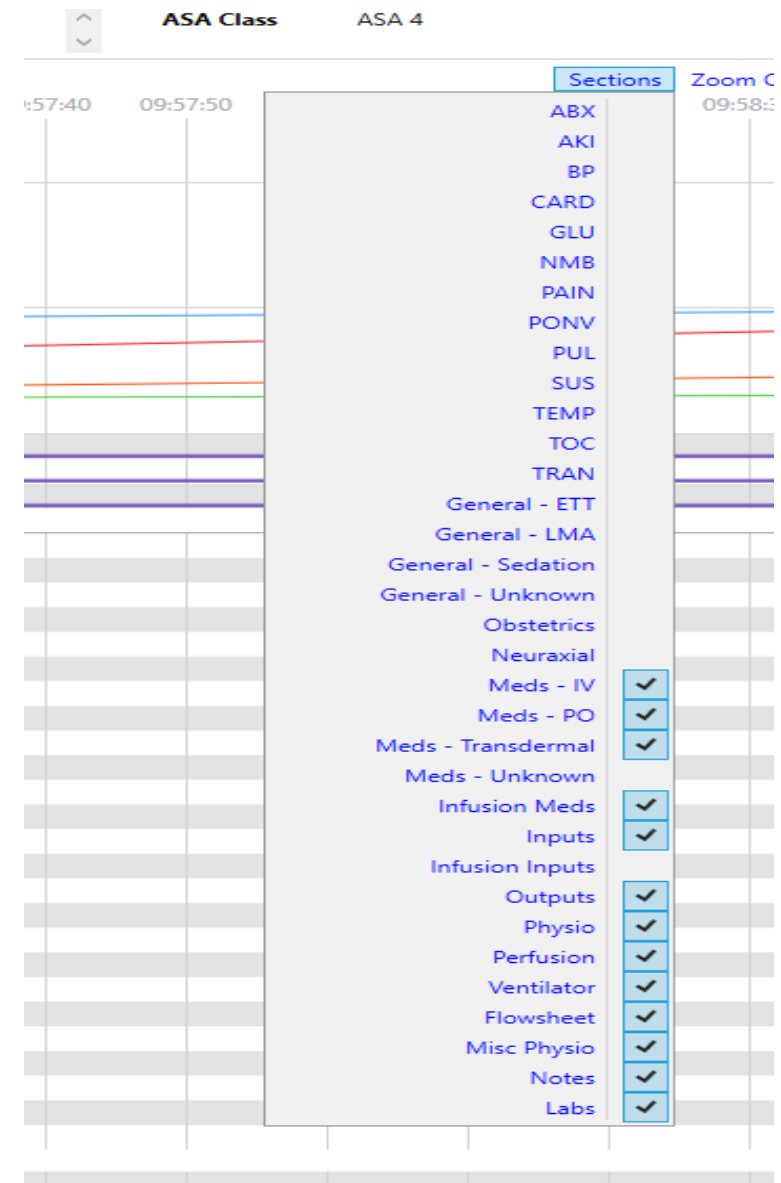
Multiple Values			
Time	Mapped As	Value	Original Variable
02-01-2020 07:39	EKG Pulse Rate	63	FLO-892
02-01-2020 07:40	EKG Pulse Rate	62	FLO-892
02-01-2020 07:41	EKG Pulse Rate	59	FLO-892
02-01-2020 07:42	EKG Pulse Rate	69	FLO-892
02-01-2020 07:43	EKG Pulse Rate	71	FLO-892
02-01-2020 07:44	EKG Pulse Rate	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.



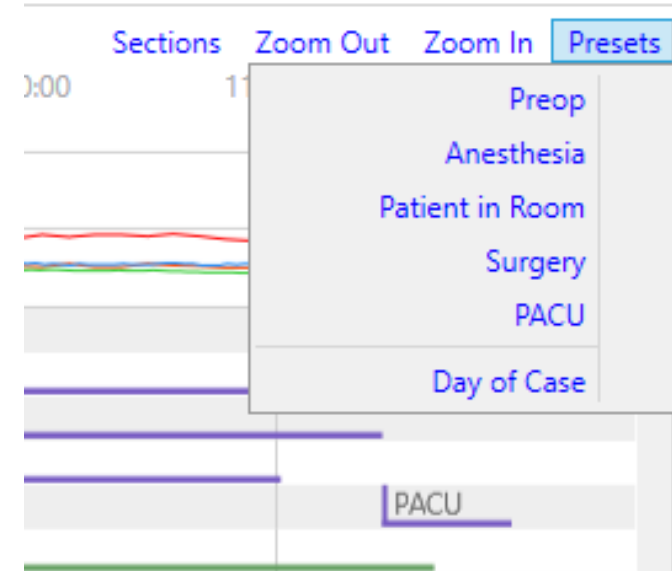
For example, the PONV section summarizes PONV relevant information such as anti-emetics given, anesthetic gases used, and PONV and smoking history and risk factors. While this information is available elsewhere in the chart, this view quickly summarizes and puts the information into one place.

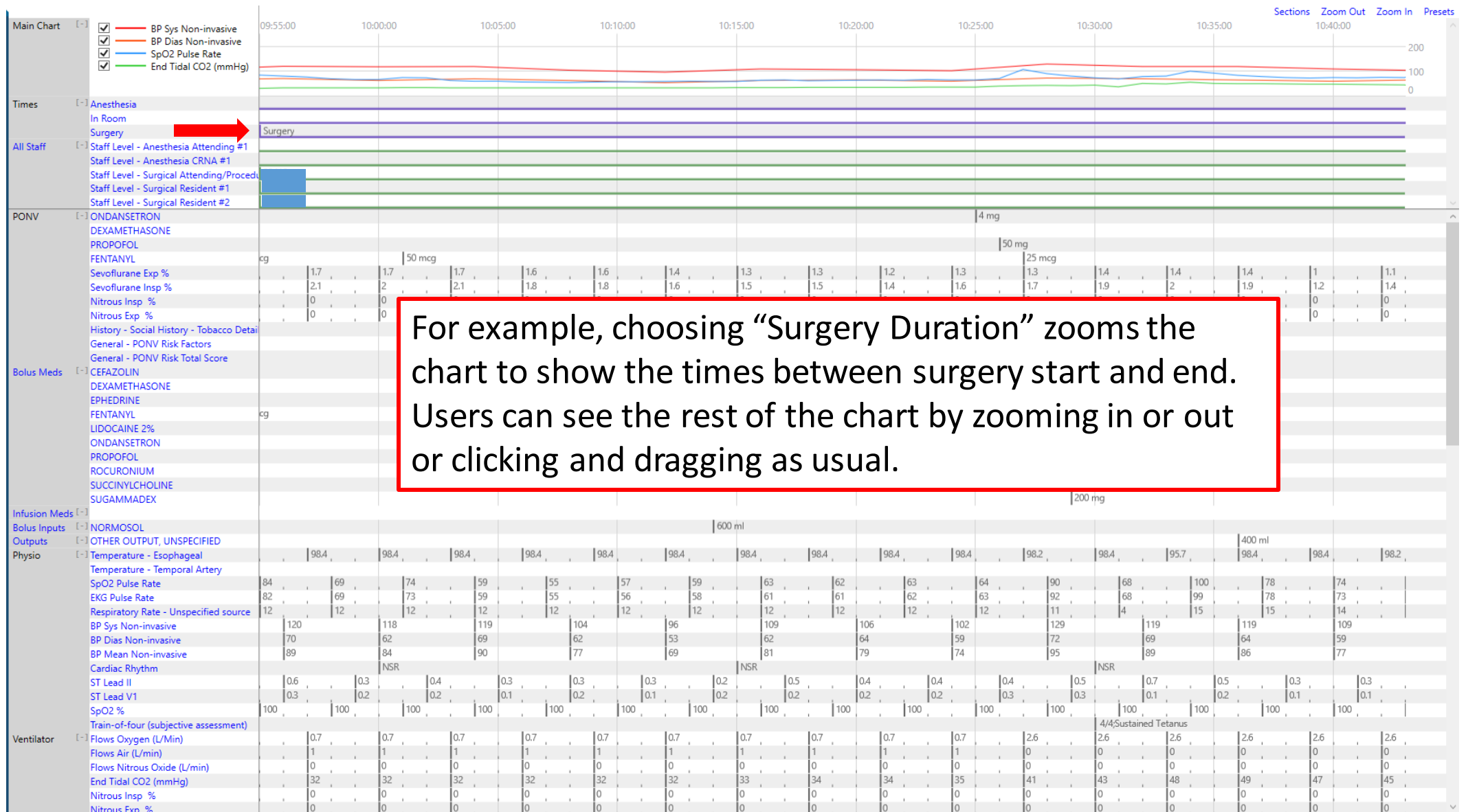
[illegible]

When using an imported case list and the box on the left to move through cases, any 'Section' you have open will remain open case to case

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
 - Use “mpog:” in front of a keyword in order to only consider the MPOG concept ID or name
 - Use “aims:” in front of a keyword in order to only consider the original variable ID or name
 - Use “value:” in front of a keyword in order to only consider the value of the record
- 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 is a navigation menu with options: Chart, Record Search (selected), Administrative, H & P, Outcomes, and Labs. The main search area shows the term 'propofol' entered, with a '(What's This?)' link and a 'Jump to surgery' button. Below the search bar, two panels show results for 'May 01, 2021 (day of surgery)'. The left panel lists four records of propofol administration at 10:20, 10:21, 10:21, and 10:23, each with a dosage and a '+' button in a red circle. The right panel shows a single record at 10:20 with a dosage and an 'X' button in a red circle.

May 01, 2021 (day of surgery)			
10:20	PROPOFOL	80 mg	+
10:21	PROPOFOL	20 mg	+
10:21	PROPOFOL	20 mg	+
10:23	PROPOFOL	20 mg	+

May 01, 2021 (day of surgery)			
10:20	PROPOFOL	80 mg	X

Record Search

- Search for multiple terms/variables at the same time using either a comma (,) or a pipe '|' 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

Record Search	50002 50003 Propofol lactated ringers		
Administrative	Feb 01, 2020 (day of surgery)		
H & P	07:30	Anesthesia Start	Anesthesia Start +
Outcomes	07:30	Patient in Room	RN Documented In Room +
Labs	07:39	PROPOFOL	150 mg +
	08:45	LACTATED RINGERS	800 ml +
	10:00	LACTATED RINGERS	50 ml +
	11:31	PROPOFOL	50 mg +

Record Search

- Presets—clicking on this will show what preset options are available.
 - The preset options will auto populate the search area with all variables that are mapped to MPOG concept IDs related to the preset.
 - For example, the MPOG concept IDs under the GLU preset are:
10796|10797|3426|3361|3362|3405|5003|5036
|10152|10153|10229|10230|10231|10232|10233
|10460|10461|10462|10465|10466|10467|10468
|10469|10470|10471|10530|10539|10548|10558
|10559|10588|10594|10602|10659|10752|50012
|50304|6008|50301|50443|50011|50069|50110
|50211|10788|50016

The screenshot shows the 'Record Search' interface. On the left is a dark blue sidebar with a list of categories: 'Record Search' (highlighted), 'Administrative', 'H & P', 'Outcomes', and 'Labs'. The main area has a search bar with the placeholder text 'Search here' and a link '(What's This?)'. Below the search bar is a prompt: 'Enter a search query above to find me'. To the right of the search bar is a 'Presets' button and a link 'Jump to surgery'. The 'Presets' dropdown menu is open, showing a list of medical codes: PAIN, PONV, GLU, NMB, TRAN, TEMP, BP, CARD, AKI, PUL, SUS, ABX, TOC, LMA, ETT, General, Sedation, Obstetrics, and Neuraxial.

This image shows the 'Record Search' interface with the search bar populated with the following text: '10796|10797|3426|3361|3362|3405|5003|5036|10152|10153|10229|10230|10231|10232|10233|10460|10461|10462|10465|10466|10467|10468|10469|10470|10471|10530|10539|10548|10558|10559|10588|10594|10602|10659|10752|50012|50304|6008|50301|50443|50011|50069|50110|50211|10788|50016'. To the right of the search bar are the links '(What's This?)' and 'Presets'.

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 UMBILICAL HERNIA 2.5 TO 3 CM INCISED/RECONSTRUCTED
AN Class

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

- If a case is showing multiple search results from before the surgery date, choose “Jump to Surgery” to quickly scroll down to the day of the case

The screenshot illustrates the 'Jump to Surgery' feature. On the left, a search results page for case 50067 shows multiple entries from before the surgery date. A red box highlights the date 'Dec 23, 2015 (366 days before surgery)'. A red arrow points from a 'Jump to surgery' button to the right-hand panel. The right panel shows the detailed view for the surgery day, 'Dec 23, 2016 (day of surgery)', with a red box highlighting the date header.

Search Results (Left Panel):

Date	Time	Test	Value	Unit
Dec 23, 2015 (366 days before surgery)				
05:21		Formal lab - Glucose, Serum/Plasma	300	+
08:30		POC - Glucose (Fingerstick)	235	+
12:26		POC - Glucose (Fingerstick)	246	+
17:25		POC - Glucose (Fingerstick)	262	+
Jan 19, 2016 (339 days before surgery)				
15:27		POC - Glucose (Fingerstick)	388	+
17:39		POC - Blood gas - Glucose	345	+
Feb 12, 2016 (315 days before surgery)				
11:23		POC - Glucose (Fingerstick)	58	+
12:25		Formal lab - Glucose, Serum/Plasma	85	+
12:25		Formal lab - Glucose, Serum/Plasma	85	+

Surgery Day View (Right Panel):

Date	Time	Test	Value	Unit
Dec 23, 2016 (day of surgery)				
21:11		POC - Glucose (Fingerstick)	322	+
22:24		Formal lab - Glucose, Serum/Plasma	289	+
22:24		Formal lab - Glucose, Serum/Plasma	289	+
Dec 23, 2016 (day of surgery)				
00:47		POC - Glucose (Fingerstick)	244	+
00:47		POC - Glucose (Fingerstick)	244	+
04:15		POC - Glucose (Fingerstick)	197	+
04:15		POC - Glucose (Fingerstick)	197	+
06:59		POC - Glucose (Fingerstick)	148	+
06:59		POC - Glucose (Fingerstick)	148	+
07:02		Formal lab - Glucose, Serum/Plasma	149	+
07:02		Formal lab - Glucose, Serum/Plasma	149	+
11:35		POC - Glucose (Fingerstick)	143	+
11:35		POC - Glucose (Fingerstick)	143	+
12:57		Anesthesia Start	Anesthesia Start	+
14:35		Anesthesia End	Anesthesia Finish	+
15:41		POC - Glucose (Fingerstick)	176	+
15:41		POC - Glucose (Fingerstick)	176	+

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

MIDLINE CORONARY ARTERY BYPASS GRAFT

Demographics

MPOG Patient ID
Diagnosis

AIMS Patient ID
AIMS Case ID
AIMS Encounter ID
AIMS Admission Type
AIMS Surgical Service
MPOG Surgical Service
Scheduled Time

Date of Birth

Professional Fee Billing

Code	Description	Type	Case-Linked?	Start Time	End Time
99204	Unknown Code	Unspecified Professional Fee		08-08-2017 00:00	08-08-2017 15:48
99204	Unknown Code	Unspecified Professional Fee		08-08-2017 00:00	08-08-2017 15:48
99204	Unknown Code	Unspecified Professional Fee		08-08-2017 00:00	08-08-2017 15:48
99152	Unknown Code	Unspecified Professional Fee		08-21-2017 00:00	08-21-2017 15:27
93460	Catheter placement ir	Unspecified Professional Fee		08-21-2017 00:00	08-21-2017 15:27
93010	Unknown Code	Unspecified Professional Fee		08-21-2017 00:00	08-21-2017 15:27
99152	Unknown Code	Unspecified Professional Fee			
93460	Catheter placement ir	Unspecified Professional Fee			
93010	Unknown Code	Unspecified Professional Fee			
93010	Unknown Code	Unspecified Professional Fee			
93460	Catheter placement ir	Unspecified Professional Fee			
99152	Unknown Code	Unspecified Professional Fee			
99152	Unknown Code	Unspecified Professional Fee			

Code	Description	Type	Case-Linked?
I10	Essential (primary) hy	Unspecified Professional Fee	
I34.0	Nonrheumatic mitral	Unspecified Professional Fee	
I34.1	Nonrheumatic mitral	Unspecified Professional Fee	
I10	Essential (primary) hy	Unspecified Professional Fee	
I34.0	Nonrheumatic mitral	Unspecified Professional Fee	
I34.1	Nonrheumatic mitral	Unspecified Professional Fee	

Location Hierarchy

Locations

Level 1
Level 2
Tag
Level 3
Level 4
Tag: Facility type - Acute care hospital
Tag: Other - Mixed use operating room

Hospital Discharge Billing

Code	Description	Type	Start Time
I34.1	Nonrheumatic mitral	Hospital Discharge	08-08-2017 14:10
I34.0	Nonrheumatic mitral	Hospital Discharge	08-08-2017 14:10
I10	Essential (primary) hy	Hospital Discharge	08-08-2017 14:10
I34.1	Nonrheumatic mitral	Hospital Discharge	08-08-2017 14:34
I34.0	Nonrheumatic mitral	Hospital Discharge	08-08-2017 14:34
I10	Essential (primary) hy	Hospital Discharge	08-08-2017 14:34
Z01.812	Encounter for preproc	Hospital Discharge	08-21-2017 08:44
Z01.812	Encounter for preproc	Hospital Discharge	08-21-2017 08:44
Z01.810	Encounter for preproc	Hospital Discharge	08-21-2017 08:44
Z01.810	Encounter for preproc	Hospital Discharge	08-21-2017 08:44
I34.0	Nonrheumatic mitral	Hospital Discharge	08-21-2017 08:44
I34.0	Nonrheumatic mitral	Hospital Discharge	08-21-2017 08:44
I34.0	Nonrheumatic mitral	Hospital Discharge	08-29-2017 10:35

Code	Description	Type	Start Time	End Time
G0463	Unknown Code	Hospital Discharge	08-08-2017 14:10	08-08-2017 14:10
Q9967	Unknown Code	Hospital Discharge	08-21-2017 08:44	08-21-2017 15:27
J7040	Unknown Code	Hospital Discharge	08-21-2017 08:44	08-21-2017 15:27
J3010	Unknown Code	Hospital Discharge	08-21-2017 08:44	08-21-2017 15:27
J3010	Unknown Code	Hospital Discharge	08-21-2017 08:44	08-21-2017 15:27

Combined Tags


Facility type - Acute care hospital
Other - Mixed use operating room

Table View

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.

5/24/2022

Contact: support@mpog.zendesk.com



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OUTCOMES GROUP

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Professional Fee Billing

Procedure Codes (CPT) Required	Code	Description	Type	Case-Linked?	Start Time	End Time
	01230	Anesthesia for open	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00
	20650	Insertion of wire or p	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	27250	Closed treatment of h	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	73552	Radiologic examinativ	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	76604	Ultrasound, chest (inc	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	76705	Ultrasound, abdomin	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	93010	Unknown Code	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	93308	Echocardiography, tra	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	99152	Unknown Code	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	99153	Unknown Code	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	99221	Unknown Code	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	99285	Unknown Code	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00
	27254	Open treatment of hi	Unspecified Professional Fee	Yes	08-18-2021 00:00	08-21-2021 00:00

Diagnosis Codes (ICD-9/10)	Code	Description	Type	Case-Linked?	Start Time	End Time	Present on Admit?
	S32.421A	Displaced fracture of	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes
	S72.051A	Unspecified fracture o	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes
	S72.301A	Unspecified fracture o	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes
	S73.014A	Posterior dislocation	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes
	V89.2XXA	Person injured in uns	Anesthesia Professional Fee Data	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes
	D72.829	Elevated white blood	Unspecified Professional Fee	Yes	08-17-2021 00:00	08-21-2021 00:00	Yes

The billing section shows all billing codes that have been associated with the patient, including all encounters other than the procedure.

The Professional Fee Billing and the Hospital Discharge Billing sections include a description of what the codes are.

The Case-Linked column flags the billing codes that are linked to the case that you are viewing.

The Diagnosis Codes Sections also have a column that flags diagnoses that were present on admission.

History and Physical

The screenshot displays the 'History and Physical' section of the MPOG interface. A left-hand navigation menu includes options like 'Chart', 'Record Search', 'Administrative', 'H & P' (highlighted), 'Outcomes', and 'Labs'. The main content area is divided into sections: 'History' and 'Medications'. The 'History' section includes 'Family History', 'History Of Present Illness', 'Past Medical History', 'Past Surgical History', and 'Social History'. The 'Medications' section includes 'Current' and 'Home'. Annotations with red arrows point to specific elements: 'MPOG concept' points to the 'Past Medical History' section; 'Value' points to a list of medical conditions under 'Past Medical History'; 'AIMS description' points to a list of medications under 'Current'.

Section	Category	Content	AIMS Description
History	Family History	General - Family History of Anesthetic Problems (None)	Anesth Family Hx of Anesth Problem
	History Of Present Illness	General - Surgical Diagnosis CAD	OR Surgical Diagnosis
	Past Medical History	General - Past Medical History Free Text Comments Allergy Asthma Cancer (CMS/HCC) GERD (gastroesophageal reflux disease) Hodgkin lymphoma (CMS/HCC) Hyperlipidemia Melanoma (CMS/HCC) Seasonal allergies Varicella	Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical Anes MiChart Past Medical
	Past Surgical History	General - Past Surgical History Cardiac Cath Skin Cancer Excision Splenectomy Tonsillectomy and Adenoidectomy CAD	Hx Past Surgical History Hx Past Surgical History Hx Past Surgical History Hx Past Surgical History OR Surgical Diagnosis
	Social History	History - Social History - General ALCOHOL: Amount: Low (Occasional) TOBACCO: Tobacco Use: None	Social Social History Social Social History
Medications	Current	General - Medications - Current ALBUTEROL SULFATE INHL ASCORBIC ACID ORAL ASPIRIN ORAL CALCIUM ORAL fluticasone (FLONASE) fluticasone-salmeterol (ADVAIR DISKUS) levothyroxine (SYNTHROID) metoprolol succinate (TOPROL XL) MULTIVITAMIN ORAL nitroglycerin (NITROSTAT) omeprazole (PRILOSEC) rosuvastatin (CRESTOR) VITAMIN E ACETATE (VITAMIN E ORAL)	Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications Meds Medications
	Home	No Data Found	
Medications	Preop	General - Medications - Anticoagulation General - Medications - Beta Blocker General - Medications - Chronic Steroid Use General - Medications - Infusions	Anes Anticoagulation Input Anes Beta Blocker Continued APS Chronic Steroid Use Hx Proced IMC Vasoactive Infusions

The H&P View shows perioperative assessment data. Similar to 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.

- Most cases will show 'No Data Found' for Registry Data. You will only see data here if your site submits this data to MPOG and it is one of the sampled cases from that registry.
- More information can be found on our website at <https://mpog.org/surgicalregistries/>

The screenshot displays the MPOG Outcomes view interface. On the left is a dark blue sidebar with navigation links: Chart, Record Search, Administrative, H & P, Outcomes (highlighted), and Labs. The main content area has a dark blue header with a dropdown arrow. Below the header, there are three main sections: Documented Outcomes, Mortality, and Registries. The Documented Outcomes section shows a table with columns for Outcomes, Unmapped Outcome Concept, Patient unavailable at time of visit, and MC JPO Anesthesia Events. The Mortality section shows a table with columns for Date of Death and No Data Found. The Registries section shows a table with columns for Registry Name and No Data Found.

Documented Outcomes			
Outcomes	Unmapped Outcome Concept Postoperative visit patient satisfaction score Postoperative Anesthesia Evaluation Complete	Patient unavailable at time of visit 0 = Unable to Assess Postop Anesthesia Evaluation: Assessment of cardiovascular, respiratory, mental functions, temperature, pain, PONV, and hydration is complete. [PHI],[PHI] ([PHI],[PHI])	MC JPO Anesthesia Events Anes Postop Satisfaction New Postop Anesthesia Evaluation: Assessment of cardiovascular, respiratory, mental functions, temperature, pain, PONV, and hydration is complete. [PHI],[PHI] ([PHI],[PHI])

Mortality	
Date of Death	No Data Found

Registries	
NSQIP	No Data Found
STS General Thoracic	No Data Found
STS Adult Cardiac	No Data Found
STS Congenital Heart	No Data Found
MSQC	No Data Found

Labs

Chart Record Search Administrative H&P Outcomes Labs	Procedure	REPAIR UMBILICAL HERNIA > 5 YO 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	09-01-2019 09:07	09-02-2019 05:01
	Blood Bank	ABO/Rhesus (Rh) Factor Antibody Screen									
	Blood Gas	None documented									
	Cardiac	Cholesterol HDL LDL Triglycerides									
	Chemistry	Alanine Aminotransferase (ALT) Albumin Alkaline Phosphatase Aspartate Aminotransferase (AST) Bilirubin, Total Calcium Chloride Creatinine Glucose Lactate LDH Magnesium Potassium Protein Sodium Urea Nitrogen									
	Coagulation	International Normalized Ratio (INR) Partial Thromboplastin Time (PTT) Prothrombin Time (PT)									
	Complete Blood Count	Hemoglobin (HGB) Hematocrit (HCT) Platelets (PLT) WBC Count									
	Drug Monitoring	None documented									
	Endocrine	Hemoglobin A1c									
	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

- Clicking a value brings up more information

Procedure		ASA Class									
REPAIR UMBILICAL HERNIA > 5 TO STRANGULATED/INCARCERATED		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	09-02-2019 05:01	
Blood Bank	ABO/Rhesus (Rh) Factor Antibody Screen								B Positive Negative		
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	8.5	
	Chloride	108	107	106	104		109	108	107	107	
	Creatinine	1.1	1.1	1.1	1.1		1	1	1.3	1	
	Glucose	91	71	105	117		98	100	93	93	
	Lactate	2.0				1.3		1.2			
	LDH	208									
	Magnesium						2.2	2	2.1	2.1	
	Potassium	4.2	3.7	4.2	4.2		3.9	4.3	4	3.9	
	Protein	7.2							6.5		
	Sodium	144	142	139	140		141	141	141	139	
	Urea Nitrogen	13	13	13	10		9	7	9	10	
Coagulation	International Normalized Ratio (INR)		1		1.1				1.1	1	
	Partial Thromboplastin Time (PTT)		28.3		27.3					27.5	
	Prothrombin Time (PT)		13.1		13.2				13.2	12.9	
Complete Blood Count	Hemoglobin (HGB)	14.3	14.2	12.2	14.2		12.6	12.5	12.7	11.6	
	Hematocrit (HCT)	45.3	44.9	37.6	43.2		39.3	38.3	38.6	36	
	Platelets (PLT)	268	272	270	328		289	302	323	319	
	WBC Count	5.9	5.8	11.8	13.8		11.1	11.3	11.3	9.9	
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 >140		

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
aeffd0cb-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
afffd0cb-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		HYDROMorpha
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		Hydrocortisone
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								um
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								line O.i
c5ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10206								rolate
c6ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10315								nine
c7ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10335								tron (I
c8ffd0cb-b60c-eb11-910d-005056b4993c	07b7f25e-17fb-ea11-910c-005056b4993c	10219								orphor

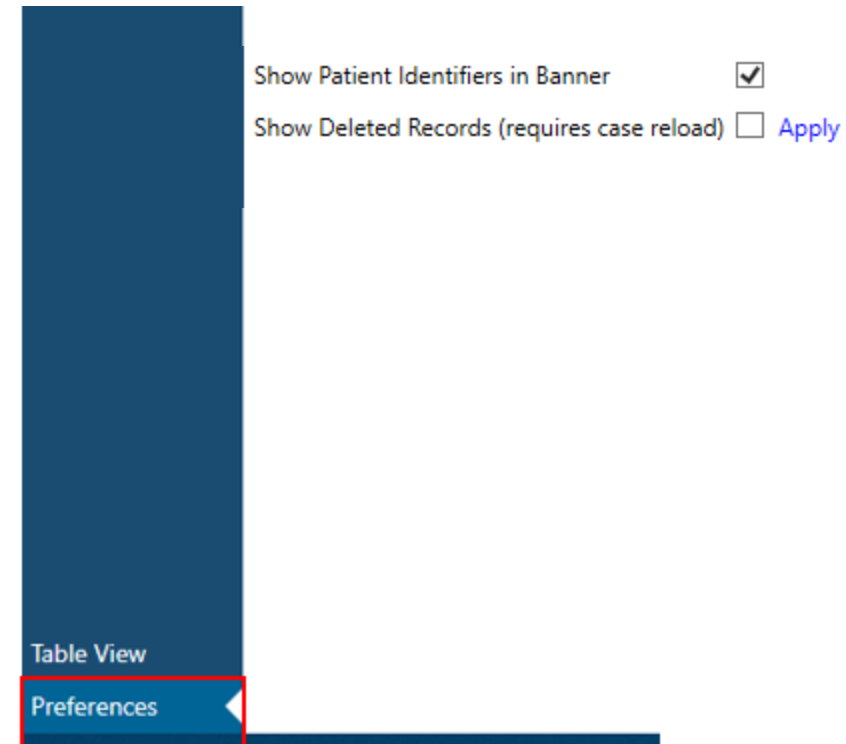
Table View

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 flagged case review. Copy and paste into “Record Search.” This information can also be found under 'Presets' in the Chart Section. Presets are updated during the MPOG Suite Upgrades. If you are reviewing data and the preset doesn't exist, you can reach out to the Coordinating Center for the search string to use.

- **Glucose Measures:**

Glucose | insulin | anesthesia start | anesthesia End | dextrose | diabetes | 50012 | 50304 | 6008 | 50301 | 50443 | 50016 | 50002 | 50011 | 50069 | 50110 | 50211 | 50009 | 10147 | 10233 | 50012 | 50002 | 50304 | 6008 | 50301 | 50443 | 50016 | 50011 | 50069 | 50110 | 50211 | 50009 | 50067

- **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