

# MPOG Data Extract Import Manager



# **GOAL**: Get Data from Source System → MPOG to use for Research/QI







#### **File Pipeline Diagram**



- Extract Files are generated by extracting data from its source system. These files are then placed into a file share accessible by the MPOG
  import utility.
- 2. Import Files are removed from the file share and inserted directly into the Import Manager database.
- 3. Consume File stored within the Import Manager are parsed into tabular data and inserted into staging tables. Additionally, metadata regarding variable usage is generated for later mapping.
- 4. Handoff The tabular data is inserted into the designated MPOG MAS database.
- 5. Upload Using the transfer utility within the MPOG application suite, surgical cases are uploaded to the central repository.

# **STEP 1: EXTRACT**

- 1. Files are generated by extracting data from its source system (Epic, Cerner etc.)
- 2. Extracted files are placed into a file share so the import utility can access them.
- 3. This process is completed by the site technical person





# **STEP 2: IMPORT**

- Files are removed from the file share and inserted directly into the Import Manager Database via the import utility.
- The Import Manager Database is located on the site's **LOCAL** MPOG Database SERVER.





# **STEP 3: CONSUME**

- Files are parsed into tabular data and are then inserted into "staging data tables".
- The data are separated into the following "tabs":
  - Administration Route
  - Administration Type
  - Admission Type
  - Ethnicity
  - Gender
  - Lab Type
  - Observation Type
  - Observation Detail Type
  - Procedure Service
  - Race
  - Staff Type
  - Units of Measurement (Administration)







# **STEP 4: HANDOFF**

- The tabular data is inserted into the designated MPOG MAS database (LOCAL).
- The data within this database is accessible to the clinical team through the MPOG App Suite (Workstation)





# **STEP 5: UPLOAD**

 Finally, after the data has been validated and scrubbed from PHI, the ACQR or QI champion will use the App Suite to upload the data from the site "LOCAL" MPOG database to the "CENTRAL" MPOG database.

# Workstation MPOG Central

#### 🤹 MPOG Uploader 🦳 🗆

Database Selection V





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# In Summary...





# MPOG App Suite: Allows Site Clinical Team to Access Local Database





## **CASE VIEWER**

• Displays patient records similar to an Anesthesia Information Management System (AIMS) allowing users to review surgical cases efficiently through the MPOG App.





# There are 5 main areas where data is displayed...

25 g Whitacre 3,5 inch needle advanced to L4/5 sub... [-] Spinal Needle Approach Notes Airway Assessment Anesthesia End Anesthesia Machine Checked Anesthesia Start Anesthesia Start Patient arms placed and padded on arm boards Arm Position Spinal Level Obtained T8 Bilateral Sensory Level Tested Blood was not aspirated Blood Observed in Spinal Needle Skin prep performed using Chlorhexidine as per dep... Compliance/Billing (Misc) Controlled Substance Forced air warmer (convective) placed on upper bod... Convective Warmer Equipment Verified Fall Risk Score Free Text Note Handoff of Care Head of Bed Elevated Anesthesia Induction End Induction End IV Access (Misc) Number of attempts: 1 Neuraxial Number of Attempts NPO Verification 4 L/Min O2 administered via nasal cannula Oxygen via Nasal Cannula PACU Care Complete

#### **1. Notes and Flowsheet data**: Includes Preop/Intraop/PACU Notes.



## Notes continued.

 Click on any note to view more details (if applicable). The Source (AIMS) concept as well as what MPOG concept it is currently mapped to is listed





## **Case Viewer**

# **2. Physiologic and Administrations**: Timed medication/fluid administration, intraoperative and physiologic data organized similar to a flowsheet

Bolus Meds	[-] ACETAMINOPHEN			
	ASPIRIN			
	BUPIVACAINE 0.75%	1.8 ml		
	CALCIUM GLUCONATE		1000 mg	
	CEFAZOLIN	2 gm		
	CELECOXIB			
	CLONIDINE			
	DEXAMETHASONE	4 mg		
	FENTANYL	20 mcg		
	GABAPENTIN			
	GLYCOPYRROLATE		0.2 mg	
	KETOROLAC			30 mg
Physio	[-] Temperature - Skin			warm
	Temperature Route			Oral
	Temp 1 - Unspecified Site		33.9 35.5 35.9 3	36.3 36.5 99
	SpO2 Pulse Rate	74	54 55 55	59 71
	EKG Pulse Rate	74	55 53 55	56 63
	Respiratory Rate - Unspecified source			18
	Respiratory Rate Actual from EtCO2 trac	0	16 13	14
	BP Sys Non-invasive	149 10	3 96 88 93	92 112
	BP Dias Non-invasive	88 60		65
	BP Combined Non-invasive			117/67



#### **Case Viewer**

 Patient IDs
 61 years, M, White, not of Hispanic Origin

 Age/Sex/Race
 61 years, M, White, not of Hispanic Origin

 Height/Weight
 172.7 cm, 94.2 kg

 ASA Class
 ASA 2

 Surgical Service
 Orthopedics

 Admission
 Admit

 Room Name
 Image: Comparison of the service o

**3. THE BANNER**: Contains Patient Name/MRN as well as Date of Surgery, Procedure Name, Diagnosis, OR location, ASA Status, Race, Age, Gender, Height, Weight and MPOG Case ID.

 To share this case or to review it on the MPOG Dashboard, you can copy the MPOG Case ID by simply clicking "copy".



## VARIABLE MAPPING

🍪 MPOG Application Suite	- 🗆 ×
MULTICENTER PERIOPER OUTCOMES GROUP	Edit Connections About Connection: Import Manager
Case Viewer	Concept Browser
Variable Mapping	STS Import Disabled due to insufficient rights or missing connection.
<b>NSQIP Import</b> Disabled due to insufficient rights or missing connection.	PHI Scrubber
Data Diagnostics	Case Validation
Transfer to MPOG Central	Batch MRN Lookup
Content Synchronization	Research Data Cleaning Disabled due to insufficient rights or missing connection.
Location Mapping	Provider Contacts
Import Manager Assistant	



📽 MPOG Configuration – 🗆 🗙									
Mapping Type:	Observation Type				~				Export
Organization:	University of Michigan Ann Arbor Direction: Normal					Normal		~	
Display Mode:	All Variables				Ý	Options:	Auto Search On	Auto	Select On
Search Filter:						Search Filter:			
							_ mm _; ET tube taped @_	cm ( Peo	ds )
ID	Org	Name	Times Used	Mapped As	Туре	Мар	Name	ID	Туре
30411684162	University of Michigan Ann Arbor	Skin WDL	17,986	Unknown Concept	Meta ^	map	Unmapped Physiologic Concept	3000	Physiologic ^
160001035	University of Michigan Ann Arbor	Sedation Level	17,576	Sedation Level	Physiologic		Perfusion- Cardiopulmonary Flow (ml/min)	3001	Physiologic
40865	University of Michigan Ann Arbor	Patient Position: Left lateral decubitis#44 roll placed behind patient#44	17,380	Positioning - Patient positioned in left lateral decu	ił Intraop Notes	Unmap	Perfusion- Cardiopulmonary Line Pressure (mm	F 3002	Physiologic
40869	University of Michigan Ann Arbor	Left arm on bed along patient's side#44 right arm along body on right	17,014	Positioning - Patient arm position detail	Intraop Notes		Perfusion- Cardiopulmonary volume (ml)	3003	Physiologic
7170	University of Michigan Ann Arbor	Proced  MC AP Existing Vascular Acc	16,455	Physical Exam - Existing Vascular Access	Preop		Inhaled Monitor Calculated MAC Equivalent	3004	Physiologic
28428	University of Michigan Ann Arbor	Mask Induction with liters O2 / liters N20 and Sevoflurane	16,312	Induction - GA Induction type (mask, iv, rapid)	Intraop Notes	Exclude	EKG Pulse Rate	3005	Physiologic
30402660781	University of Michigan Ann Arbor	Mood	16,134	Unknown Concept	Meta		Isoflurane actual consumption (ml)	3006	Physiologic
30401100056	University of Michigan Ann Arbor	BP Cuff Information	16,003	Variable Excluded from Import	Meta		Desflurane actual consumption (ml)	3007	Physiologic
3040110169	University of Michigan Ann Arbor	Behavior - Patient Conduct	15,786	Unknown Concept	Meta		Sevoflurane actual consumption (ml)	3008	Physiologic
29129	University of Michigan Ann Arbor	mm ; ET tube taped @ cm (Peds)	15,649	Intubation Tube Note	Intraop Notes		BIS - Suppression Ratio	3009	Physiologic
8248	University of Michigan Ann Arbor	Patient's Arms Tucked and Padded	15,503	Positioning - Pressure points checked and padded	I Intraop Notes		SpO2 Pulse Rate	3010	Physiologic
45737	University of Michigan Ann Arbor	GI Faculty present	15,045	Variable Excluded from Import	Meta		BP Sys Invasive Unspecified Site 1	3011	Physiologic
47907	University of Michigan Ann Arbor	Orally intubated using On the attempt(s);; (PEDS)	14,582	Intubation - Approach	Intraop Notes		BP Dias Invasive Unspecified Site 1	3012	Physiologic
661176	University of Michigan Ann Arbor	Speech	14,236	Unknown Concept	Meta		BP Mean Invasive Unspecified Site 1	3013	Physiologic
663012	University of Michigan Ann Arbor	"Position Every 2 Hours "	14,089	Unknown Concept	Meta		BIS - Total Power	3014	Physiologic
5118	University of Michigan Ann Arbor	LMA Placed: Type: Degree of Difficulty: Size:; Cuff pressure c	13,840	Airway - Laryngeal Mask Airway placement note	Intraop Notes		BP Sys Non-invasive	3015	Physiologic
30411682634	University of Michigan Ann Arbor	Cardiac WDL	13,822	Unknown Concept	Meta		Pulse Pressure Variation	3016	Physiologic
19339	University of Michigan Ann Arbor	Anes  Postop Satisfaction New	13,792	Postoperative visit patient satisfaction score	Outcomes		Regional Oxygen Saturation	3017	Physiologic
16014702	University of Michigan Ann Arbor	Numeric Pain Rating	13,695	Pain Score (Generic)	Physiologic		Regional Oxygen Saturation Baseline	3018	Physiologic
27898	University of Michigan Ann Arbor	Pain Score	13,386	Misc - Intraoperative pain score detail	Intraop Notes	Examine	Stroke Volume Variation	3019	Physiologic

#### **AIMS CONCEPTS**

- GREEN = Mapped
- WHITE = Unmapped
- RED = Excluded

#### **MPOG CONCEPTS**



Please note the data below may not be a representative sample.

												1	
ObsID	CaseID	Phaseof_Care_ID	Phaseof_Care_Name	ObsType_ID	ObsType_Name	ObservationTime	EnteredTime	WasDeleted	WasUser_Entered	WasUser_Entry_Expected	ObsValue	DbsValue_Code	
18819885-1070100321-5-2018-01-01 09:27:00-1500155-329	1500155	Preop	Preop	5	BP	1/1/2018 9:27:00 AM	1/1/2018 9:29:00 AM		✓		100/56	<b>-</b>	~
18819885-10730401155-5-2018-01-01 13:21:00-1500155-688	1500155	PACU	PACU	5	BP	1/1/2018 1:21:00 PM	1/1/2018 2:48:00 PM				123/79		
18819885-10730401155-5-2018-01-01 13:36:00-1500155-659	1500155	PACU	PACU	5	BP	1/1/2018 1:36:00 PM	1/1/2018 2:47:00 PM				114/69		
18819885-10730401155-5-2018-01-01 13:51:00-1500155-663	1500155	PACU	PACU	5	BP	1/1/2018 1:51:00 PM	1/1/2018 2:47:00 PM				104/68		
18819885-10730401155-5-2018-01-01 14:06:00-1500155-667	1500155	PACU	PACU	5	BP	1/1/2018 2:06:00 PM	1/1/2018 2:47:00 PM				105/71		
18819885-10730401155-5-2018-01-01 14:21:00-1500155-694	1500155	PACU	PACU	5	BP	1/1/2018 2:21:00 PM	1/1/2018 2:48:00 PM				105/73		
18819885-10730401155-5-2018-01-01 14:36:00-1500155-671	1500155	PACU	PACU	5	BP	1/1/2018 2:36:00 PM	1/1/2018 2:47:00 PM				104/67		
18819885-30401100044-5-2018-01-01 07:52:00-1500155-193	1500155	Preop	Preop	5	BP	1/1/2018 7:52:00 AM	1/1/2018 7:53:00 AM		<		91/62		
18819885-30401100044-5-2018-01-01 15:12:00-1500155-734	1500155	PACU	PACU	5	BP	1/1/2018 3:12:00 PM	1/1/2018 3:16:00 PM		<		117/69		
18819885-30401100044-5-2018-01-01 16:58:00-1500155-855	1500155	PACU	PACU	5	BP	1/1/2018 4:58:00 PM	1/1/2018 5:00:00 PM		<		110/68		
18819885-30401100044-5-2018-01-01 18:00:00-1500155-896	1500155	PACU	PACU	5	BP	1/1/2018 6:00:00 PM	1/1/2018 6:05:00 PM		<		120/76		
18819885-30401100044-5-2018-01-01 18:52:00-1500155-920	1500155	PACU	PACU	5	BP	1/1/2018 6:52:00 PM	1/1/2018 6:55:00 PM		<		104/74		
18820003-1070100321-5-2018-01-01 09:08:00-1500145-266	1500145	Preop	Preop	5	BP	1/1/2018 9:08:00 AM	1/1/2018 9:10:00 AM		<		121/69		
18820003-10730401155-5-2018-01-01 11:27:00-1500145-375	1500145	PACU	PACU	5	BP	1/1/2018 11:27:00 AM	1/1/2018 11:34:00 AM				108/55		
18820003-10730401155-5-2018-01-01 11:42:00-1500145-477	1500145	PACU	PACU	5	BP	1/1/2018 11:42:00 AM	1/1/2018 11:43:00 AM				108/59		
18820003-10730401155-5-2018-01-01 11:57:00-1500145-507	1500145	PACU	PACU	5	BP	1/1/2018 11:57:00 AM	1/1/2018 12:11:00 PM				122/74		
18820003-10730401155-5-2018-01-01 12:12:00-1500145-537	1500145	PACU	PACU	5	BP	1/1/2018 12:12:00 PM	1/1/2018 12:28:00 PM				114/65		
18820003-10730401155-5-2018-01-01 12:27:00-1500145-636	1500145	PACU	PACU	5	BP	1/1/2018 12:27:00 PM	1/1/2018 12:41:00 PM				115/73		
18820003-10730401155-5-2018-01-01 12:42:00-1500145-672	1500145	PACU	PACU	5	BP	1/1/2018 12:42:00 PM	1/1/2018 12:43:00 PM				119/70		
18820003-30401100044-5-2018-01-01 08:13:00-1500145-216	1500145	Preop	Preop	5	BP	1/1/2018 8:13:00 AM	1/1/2018 8:15:00 AM		<		108/57		
18820003-30401100044-5-2018-01-01 14:13:00-1500145-719	1500145	PACU	PACU	5	BP	1/1/2018 2:13:00 PM	1/1/2018 2:15:00 PM		<b>~</b>		115/66		
18820108-30401100044-5-2018-01-01 07:19:00-1500172-452	1500172	Preop	Preop	5	BP	1/1/2018 7:19:00 AM	1/1/2018 7:26:00 AM				96/52		
18820108-30401100044-5-2018-01-01 11:51:00-1500172-708	1500172	PACU	PACU	5	BP	1/1/2018 11:51:00 AM	1/1/2018 2:08:00 PM				95/55		
18820108-30401100044-5-2018-01-01 12:01:00-1500172-703	1500172	PACU	PACU	5	BP	1/1/2018 12:01:00 PM	1/1/2018 2:07:00 PM				97/48		
18820108-30401100044-5-2018-01-01 12:16:00-1500172-698	1500172	PACU	PACU	5	BP	1/1/2018 12:16:00 PM	1/1/2018 2:07:00 PM				96/55		
18820108-30401100044-5-2018-01-01 12:31:00-1500172-688	1500172	PACU	PACU	5	BP	1/1/2018 12:31:00 PM	1/1/2018 2:07:00 PM				95/44		
18820108-30401100044-5-2018-01-01 12:33:00-1500172-691	1500172	PACU	PACU	5	BP	1/1/2018 12:33:00 PM	1/1/2018 2:07:00 PM				103/52		
18820108-30401100044-5-2018-01-01 12:47:00-1500172-683	1500172	PACU	PACU	5	BP	1/1/2018 12:47:00 PM	1/1/2018 2:07:00 PM				94/55		
18820108-30401100044-5-2018-01-01 13:01:00-1500172-678	1500172	PACU	PACU	5	BP	1/1/2018 1:01:00 PM	1/1/2018 2:07:00 PM				98/60		
18820108-30401100044-5-2018-01-01 13:16:00-1500172-673	1500172	PACU	PACU	5	BP	1/1/2018 1:16:00 PM	1/1/2018 2:07:00 PM				99/54		
18820108-30401100044-5-2018-01-01 13:29:00-1500172-668	1500172	PACU	PACU	5	BP	1/1/2018 1:29:00 PM	1/1/2018 2:07:00 PM				97/49		
18820108-30401100044-5-2018-01-01 13:31:00-1500172-663	1500172	PACU	PACU	5	BP	1/1/2018 1:31:00 PM	1/1/2018 2:07:00 PM				98/49		
18820108-30401100044-5-2018-01-01 13:46:00-1500172-658	1500172	PACU	PACU	5	BP	1/1/2018 1:46:00 PM	1/1/2018 2:07:00 PM				107/61		$\sim$
1													



# Mapping Types

CAN EXCLUDE	DO NOT EXCLUDE	Мар
Administration Type	Administration Route	Org
Observation Type	Units of Administration	Disp
Observation Type Detail	Room Type	Sear
Lab Type	Procedure Type	
	Units of Measurement (LAB) – Do Not MAP either. **This will prevent all data with a unit of measurement from pulling over to MPOG.**	ID

#### 🍕 MPOG Configuration

lapping Type:		~
)rganization:	Administration Route	
rigamzation.	Administration Type	
)isplay Mode:	Admission Type	
Organization:       Administration Route         Administration Type       Admission Type         Display Mode:       Admission Type         Ethnicity       Gender         Lab Type       Observation Detail Type         Observation Type       Procedure Service         Race       Race		
earch Filter:	Gender	
	Lab Type	
	Observation Detail Type	
	Observation Type	
ID	Procedure Service	
	Race	
	Staff Type	
	Units of Measurement (Administration)	



# **OBSERVATION TYPE**

- 1. Physiologic
- 2. Preop/Intraop/Postop Notes and Events

#### 3. Outcomes

Administration Route
Administration Type
Admission Type
Ethnicity
Gender
Lab Type
Observation Detail Type
Observation Type
Procedure Service
Race
Staff Type
Units of Measurement (Administration)



## 1. PHYSIOLOGIC → CHART VIEW

ID	Org	Name	Times Used	Mapped As	Туре
201424	University of Michigan Ann Arbor	Monitor [ETCO2 Resp	15,967,422	Respiratory Rate Actual from EtCO2 tracing	Physiologic
1448	University of Michigan Ann Arbor	NFF- [End Tidal CO2	15,958,835	End Tidal CO2 (mmHg)	Physiologic
201408	University of Michigan Ann Arbor	Monitor (Oxygen Insp	15,817,064	Oxygen Insp %	Physiologic
201407	University of Michigan Ann Arbor	Monitor  Oxygen Exp	15,757,556	Oxygen Exp %	Physiologic
201405	University of Michigan Ann Arbor	Monitor Nitrous Insp	15,749,649	Nitrous Insp %	Physiologic
201404	University of Michigan Ann Arbor	Monitor  Nitrous Exp	15,724,303	Nitrous Exp %	Physiologic
15	University of Michigan Ann Arbor	NFF-CV  Pulse	15,294,073	EKG Pulse Rate	Physiologic
42603	University of Michigan Ann Arbor	Vent  Flows O2	15,293,551	Flows Oxygen (L/Min)	Physiologic
308	University of Michigan Ann Arbor	NFF-CV  SpO2	15,210,773	SpO2 %	Physiologic
9066	University of Michigan Ann Arbor	CBD - JSpO2 HR	15,081,690	SpO2 Pulse Rate	Physiologic

Physio	[-] Temperature - Skin
	Temperature Route
	Temp 1 - Unspecified Site 35.6
	SpO2 Pulse Rate 51
	EKG Pulse Rate 48
	Respiratory Rate - Unspecified source
	Respiratory Rate Actual from EtCO2 trac 15
	BP Sys Non-invasive 1 101
	BP Dias Non-invasive 50
	BP Combined Non-invasive
	BP Mean Non-invasive 72
	Pulse Pressure Variation
	Cardiac Rhythm dy Sinus Brady
	ST aVF -0.1
	ST aVL 0.2
	ST aVR -0.1
	ST Lead I 0.3
	ST Lead II
	ST Lead III -0.2
	SpO2 % 97
	Train-of-four (subjective assessment)
Ventilator	[-] Flows Oxygen (L/Min) 0.7
	Flows Air (L/min) 13
	Flows Nitrous Oxide (L/min) 14
	End Tidal CO2 (mmHg) 48.6
	Inspired CO2 %
	Oxygen Insp % 64
	Oxygen Exp % 66
	Nitrous Insp %
	Nitrous Exp % 0.5
	Sevoflurane Insp % 2.4 0.9



# 2. INTRAOP NOTES → CHART VIEW

ID	Org	Name	Times Used	Mapped As	Туре
3279	University of Michigan Ann Arbor	Anesthesia End	146,605	AACD Anesthesia End Date/Time	Intraop Notes
30624	University of Michigan Ann Arbor	Anesthesia Ready	52	AACD Anesthesia Ready Date/Time	Intraop Notes
177	University of Michigan Ann Arbor	Anesthesia Start	158,927	AACD Anesthesia Start Date/Time	Intraop Notes
181	University of Michigan Ann Arbor	Anesthesia Induction End	130,891	AACD Induction End Date/Time	Intraop Notes
30621	University of Michigan Ann Arbor	Anesthesia Induction	10	AACD Induction Start Date/Time	Intraop Notes
40672	University of Michigan Ann Arbor	Assigned PreOp	73,266	AACD Patient Available Date/Time	Intraop Notes
30594	University of Michigan Ann Arbor	Patient in Facility	111,926	AACD Patient In Facility Date/Time	Intraop Notes

	· · · ·	
lotes	[-] Airway Assessment	
	Anesthesia End	
	Anesthesia Machine Checked	
	Anesthesia Start	
	Arm Position	Patient arms plac
	Atraumatic	Atraumatic Laryng
	Breath Sounds Auscultated	Equal bilateral bre
	Controlled Substance	С
	Convective Warmer	Forced air w
	Emergence (Misc)	F
	Equipment Verified	
	Eye Protection Detail	Mask removed and
	Fall Risk Score	
	Handoff of Care	
	Head of Bed Elevated	
	Induction End	Anesthesia Induct



# PREOP → H & P(Preoperative)

ID	Org	Name	Times Used	Mapped As	Туре
7184	University of Michigan Ann Arbor	MC AP Consent	148,751	Assessment and Plan - Anesthesia Consent	Preop
4456	University of Michigan Ann Arbor	PAT  Anesthesia Technique	166,965	Assessment and Plan - Anesthesia Technique	Preop
13781	University of Michigan Ann Arbor	SD ENT Anesthetic consideration	30,098	Assessment and Plan - Anesthetic Consideration	Preop
4449	University of Michigan Ann Arbor	PAT  Physical Status	164,538	Assessment and Plan - ASA Physical Status	Preop
4453	University of Michigan Ann Arbor	PAT  Aspiration Risk	147,764	Assessment and Plan - Aspiration Risk	Preop
5848	University of Michigan Ann Arbor	PAT (Attending Presence	14	Assessment and Plan - Attending Presence	Preop
7185	University of Michigan Ann Arbor	Anes Attending Signature	2	Assessment and Plan - Attending Signature	Preop
7112	University of Michigan Ann Arbor	Lab(S) - JCOLLECTION DURATION	7,481	Assessment and Plan - Billing Comments	Preop



Record Search	Assessment							
Administrative								
LL OL D	Airway	Airway - Mallampati Score Unspecified Exam Position						
ΠαΡ		Airway - Freetext Comments	facial changes c/w					
Outcomes		Airway - Dentition	None;Upper Left Normal					
labs		Airway - Hyoid to Mentum	T to M >= 6 cm					
		Airway - Jaw Protrusion	A: Normal, lower incisors					
		Airway - Beard	No					
		Airway - Mouth Opening	>= 3 cm mouth opening					
		Airway - Snoring	Yes					
		Airway - Neck anatomy	(Normal)					
		Airway - Cervical spine	Normal					
		Airway - Existing Airway	None					
	Anesthetic Plan	Assessment and Plan - Anesthesia Technique	General?ET					
	Heart	Physical Exam - Cardiac Auscultation and Exam	S1, S2					
	Lung	Physical Exam - Lung Fields	Clear?Bilat					
	Neuro	Physical Exam - Neurologic	Grossly normal					
	History							
	Medications							
	Physical Exam							
	Review of Syste	ems						



# **OBSERVATION DETAIL TYPE**

- Details regarding:
  - Preop/Intraop/Postop Notes and Events
  - Outcomes

Administration Route
Administration Type
Admission Type
Ethnicity
Gender
Lab Type
Observation Detail Type
Observation Type
Procedure Service
Race
Staff Type
Units of Measurement (Administration)



# NOTE DETAILS

ID	Org	Name	Times Used	Mapped As	Туре
47918	University of Michigan Ann Arbor	Blade/View	45,594	Intubation view note	Intraop Notes
47910	University of Michigan Ann Arbor	Blade/View	14,007	Intubation view note	Intraop Notes
44130	University of Michigan Ann Arbor	Motor Blockade	9,167	Regional - Motor response to stimulus	Intraop Notes
5991	University of Michigan Ann Arbor	Blood	6,243	Neuraxial insertion aspiration of blood or CSF - detail	Intraop Notes
47434	University of Michigan Ann Arbor	Type of bite block	2,281	Airway - Bite block placed	Intraop Notes

	Intraop Note		×
	Back		
	Concept	Intubation Tube Note	
	Value	7.0 mm EMG - Monitoring ET tube taped @ 2	:3 cm
	Time	02-01-2019 07:56	
	Details	Concept Value	
	Details	Endotracheal Tube Size 7	
Notes in <b>BOLD</b> have details		Endotracheal Tube Size 7.5	
		Endotracheal Tube Type EMG - N	/onitoring
		Endotracheal Tube Type single-lu	umen cuffe
		Endotracheal Tube Secured Distance 23	
		Endotracheal Tube Secured Distance 21	
02-01-2019 07:56 7.0 mm EMG - Monitoring ET tube taped Intubation Tube			
02-01-2019 07:56 Equal bilateral breath sounds auscultated Breath Sounds Auscultated			
equilibria di alterar breatir boariab dabeartatea			
	Variable	Mapped As Origi	inal
	Mappings	Note Type Intubation Tube Note m	m _ EI tube taped
		50205 17.	216



# ADMINISTRATION TYPE

- Medications
- Fluids in/out
- Blood Products

Administration Route
Administration Type
Admission Type
Ethnicity
Gender
Lab Type
Observation Detail Type
Observation Type
Procedure Service
Race
Staff Type
Units of Measurement (Administration)



# Administation Type: Medications and Fluids

#### Medications with **RED** lines were administered as an infusion

Bolus Meds	[-] ACETAMINOPHEN		
	CEFAZOLIN	2000 mg	
	DEXAMETHASONE	4 mg	
	DIMENHYDRINATE	25 mg	
	EPHEDRINE	10 mg	
	FENTANYL	50 mcg 50 mcg	25 mcg
	HEPARIN	5000 units	
	LABETALOL	5 mg	
	MIDAZOLAM	2 mg	
	ONDANSETRON	4 mg	
	PROPOFOL	70 mg	
	SUCCINYLCHOLINE	60 mg	
Infusion Meds	[-] REMIFENTANIL	0.1 mcg/kg/min	
Bolus Inputs	[-] LACTATED RINGERS	800 ml	



# **Table View**

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

Administrative	AIMSDose_Start_DT	AIMSDose_End_DT	AIMSMed_Name	AIMSMed_Dose	AIMSMed_UOM	AIMSMed_Route	AIMSMed_Commen
H & P	2/1/2019 1:53:00 PM		acetaminophen 500 mg tablet	500.000	mg	Oral	
0	2/1/2019 10:10:00 AM		fentaNYL (PF) 50 mcg/mL injection solution	25.000	mcg	Intravenous	
Outcomes	2/1/2019 10:24:00 AM		fentaNYL (PF) 50 mcg/mL injection solution	50.000	mcg	Intravenous	
Labs	2/1/2019 11:07:00 AM		fentaNYL (PF) 50 mcg/mL injection solution	25.000	mcg	Intravenous	
	2/1/2019 7:48:00 AM		CEFAZOLIN 2 GRAM/20 ML IV SYRINGE (OR)	2000.000	mg	Intravenous	
	2/1/2019 11:07:00 AM		ondansetron HCI (PF) 4 mg/2 mL injection solution	4.000	mg	Intravenous	
	2/1/2019 7:44:36 AM		Midazolam (IV)	2.000	MG	IV	
	2/1/2019 7:48:52 AM		Cefazolin	2.000	GM	IV	
	2/1/2019 7:54:13 AM	2/1/2019 9:16:22 AM	Remifentanil (25 mcg/ml)	0.100	MCG/KG/MIN	<no given="" id=""></no>	
	2/1/2019 7:53:00 AM		Fentanyl	50.000	MCG	IVP	
	2/1/2019 7:53:00 AM		Propofol Induction	70.000	MG	IV	
	2/1/2019 7:54:00 AM		Succinylcholine	60.000	MG	IV	
	2/1/2019 8:10:56 AM		Ephedrine	10.000	MG	IV	
	2/1/2019 8:13:45 AM		Dexamethasone	4.000	MG	IV	
	2/1/2019 8:37:08 AM		Dimenhydrinate	25.000	MG	IV	
	2/1/2019 8:11:00 AM		Heparin 5000 U SQ	5000.000	UNITS	SQ	
	2/1/2019 8:45:08 AM		Fentanyl	50.000	MCG	IVP	
	2/1/2019 9:23:24 AM		Ondansetron	4.000	MG	IV	
	2/1/2019 9:27:00 AM		Labetalol	5.000	MG	IV	
able View	2/1/2019 9:35:00 AM		Labetalol	5.000	MG	IV	

**IPOG** 



#### • Labs taken 365 days before and after DOS are listed in the Labs section

	Procedure REPA	IR UMBILICAL HERNIA > 5 YO STRAN	GULATED/INCAF	RCERATED		ASA C	ass 3		Г				
Chart	Ŷ		06-03-2019	08-19-2019	08-28-2019	08-29-2019		08-30-2019	08-31-201	19 09-01-20	19		9-02-2019
Record Search			15:43	17:19	01:43	10:10	12:27	05:43	0. :4	42 07:	03 09	9:07	07 05:01
Administrativo	Blood Bank	ABO/Rhesus (Rh) Factor									B Posit	tive	ive
Auministrative		Antibody Screen									Nega	tive	
H&P	Blood Gas	None documented											
<b>~</b> .	Cardiac	Cholesterol	219										
Outcomes		HDL	53										
Labs 🧹		LDL	145										
		Triglycerides	107										
	Chemistry	Alanine Aminotransferase (ALT)	41								51		
		Albumin	4.3							1	.6		
		Alkaline Phosphatase	101								33		
		Aspartate Aminotransferase (AST)	23								28		• Shows labs in clinical groupings and
		Biliturbin, Total	0.6								1		Shows labs in chinear groupings and
		Calcium	9.7	10.1	9	9.7		8.7	9	9.1 9	.5		
		Chloride	108	107	106	104		109	10	08 1	07		abranalagical ardar
		Creatinine	1.1	1.1	1.1	1.1		1		1	.3		
		Glucose	91	71	105	117		98	10	00	93		
		Lactate	208				1.3		1	.2			
		LDH	208										
		Magnesium						2.2		2	51		
		Potassium	4.2	3.7	4.2	4.2		3.9	4	4.3	4		• Into is also available in chart view
		Protein	7.2								.5		
		Sodium	144	142	139	140		141	14	41 1	41		
		Urea Nitrogen	13	13	13	10		9		7	9		
	Coagulation	International Normalized Ratio (INR)		1		1.1					.1	1	1
		Partial Thromboplastin TIme (PTT)		28.3		27.3					2	27.5	<sup>75</sup> Plue chading across the ten shows
		Protrhombin Time (PT)		13.1		13.2				13	.2 1	12.9	<sup>29</sup> Dide Shadilig acioss the top shows
	Complete Blood	Hemaglobin (HGB)	14.3	14.2	12.2	14.2		12.6	12	2.5 12	.7		8
	Count	Hematocrit (HCT)	45.3	44.9	37.6	43.2		39.3	38	3.3 34	.6		
		Platelets (PLT)	268	272	270	328		289	30	02 3	23		the day of surgery
		WBC Count	5.9	5.8	11.8	13.8		11.1	11	.3 1	.3		the day of surgery
	Drug Monitoring	None documented											
	Endocrine	Hemoglobin A1c	4.7										
	Other	None documented											
	Urine	None documented											
			1										



# LOCATION MAPPING

🍪 MPOG Application Suite	- 🗆 X
MULTICENTER PERIOPER OUTCOMES GROUP	Edit Connections About Connection: Import Manager
Case Viewer	Concept Browser
Variable Mapping	STS Import Disabled due to insufficient rights or missing connection.
<b>NSQIP Import</b> Disabled due to insufficient rights or missing connection.	PHI Scrubber
Data Diagnostics	Case Validation
Transfer to MPOG Central	Batch MRN Lookup
Content Synchronization	Research Data Cleaning Disabled due to insufficient rights or missing connection.
Location Mapping	Provider Contacts
Import Manager Assistant	



# LOCATION MAPPING

#### 📽 Location Mapping

#### Unmapped Rooms

#### ▲ University of Michigan Health System Location Tags (Room Name Not Available) ▲ Ann Arbor - Main HOLDING Facility type - Acute care hospital C. S. Mott Children's Hospital LD-ADD ON WAIT Facility type - Attached ambulatory surgery center Comprehensive Cancer Center ORs Slots Frankel Cardiovascular Center Facility type - Freestanding ambulatory surgery center U-MRI 07 University Hospital Facility type - Office-based anesthesia U-OFFS AN2 Von Voigtlander Women's Hospital OB-GYN - Labor and delivery D Briarwood Medical Group OB-GYN - Obstetric operating room **Brighton Health Center** Other - Hybrid operating room East Ann Arbor Health and Geriatrics Center Other - Minor procedure room Kellogg Eye Center Livonia Health Center Other - Mixed use operating room Other - Offsite anesthesia Other - Outpatient surgery room Other - Pediatric Radiology - Interventional radiology Radiology - MRI Recovery - ICU Recovery - PACU Map to No location selected Unmap Location View Tag Members Auto Tag Add Location Rename Location Delete Location



Room Hierarchy

# LOCATION MAPPING

#### 📽 Location Mapping

#### **Unmapped Rooms** Room Hierarchy ▲ University of Michigan Health System Location Tags $\sim$ (Room Name Not Available) ▲ Ann Arbor - Main HOLDING ✓ Facility type - Acute care hospital ▲ C. S. Mott Children's Hospital LD-ADD ON WAIT Facility type - Attached ambulatory surgery center ANTIRO-01 Slots ANTIRO-05 Facility type - Freestanding ambulatory surgery center U-MRI 07 ANTIRO-06 Facility type - Office-based anesthesia U-OFFS AN2 APR-M OB-GYN - Labor and delivery IRMT01 OB-GYN - Obstetric operating room M-APR Other - Hybrid operating room M-APR2 ✓ Other - Minor procedure room M-CPU-CTH1 M-CPU-CTH2 Other - Mixed use operating room M-CPU-EP Other - Offsite anesthesia M-CPU-NEW Other - Outpatient surgery room M-CPU-OLD ✓ Other - Pediatric M-CT 01 Radiology - Interventional radiology M-CTMT 01 M-IR Radiology - MRI M-MRI Recovery - ICU M-MRI 01 $\sim$ Recovery - PACU . . . . . . . Map to C. S. Mott Children's Hospital View Tag Members Add Location Rename Location Delete Location Unmap Location Auto Tag



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Data Sets Reports	s Variables	Filters					럳 倄 Data S
∽ ৯ MPOG.Patier	nt Views		+ •	✓ Departmental Dasl	hboard		IIII → 20 ☆
∨ ≢ Filters		0	c +	Based on UM Production v2.0			E
Age	>=						
Emergent	=	•					
BMI Classification	=	•		Overview	Nouromuso	lar Mapitaring	Chucasa Mr
Height (cm)	<=			Opioid Management	Neuromuscu	nar morntoring	Glucose IVIa
ASA Status	=	•		Opioid Equivalency			
Surgical Service	=	-		Neuromuscular Monitoring	NMB-01	NMB-02	GLU-01
Sex	=	·		NMB-01	Target 90%	Target 90%	Target 90%
Date of Service	<=			NMB-02	♥ 9078	◆ 3378	▼ 3078
Date of Service	>=			Glucose Management			
Case	=			GLU-01	Transformiere	NA	
Location	=			GLU-02	Iranstusion	Management	Blood P
Month	=	Ann Arbor - Main Brianwood Medical Group		Transfusion Management			
AimsStaffld	=	Brighton Health Center C. S. Mott Children's Hospital		TRAN-01	TRAN-01	TRAN-02	BP-01
Admission Type	-	East Ann Arbor Health and Geriatrics Frankel Cardiovascular Center		TRAN-02	₩ 700/ Target 90%	Target 90%	Target 90%
Year	=	Kellogg Eye Center Livonia Health Center		Blood Pressure	× 1970	♥ 97 %	♥ 99%
		Not in a reporting group University Hospital		BP-01			
		Showing 10 of 12		BP-02		D.I.	
				Pulmonary		Pulmonary	
				PUL-01			

