



# Variable Mapping Tips

## Epic sites

\*See the [Getting Started – Import Manager Variable Mapping](#) presentation first



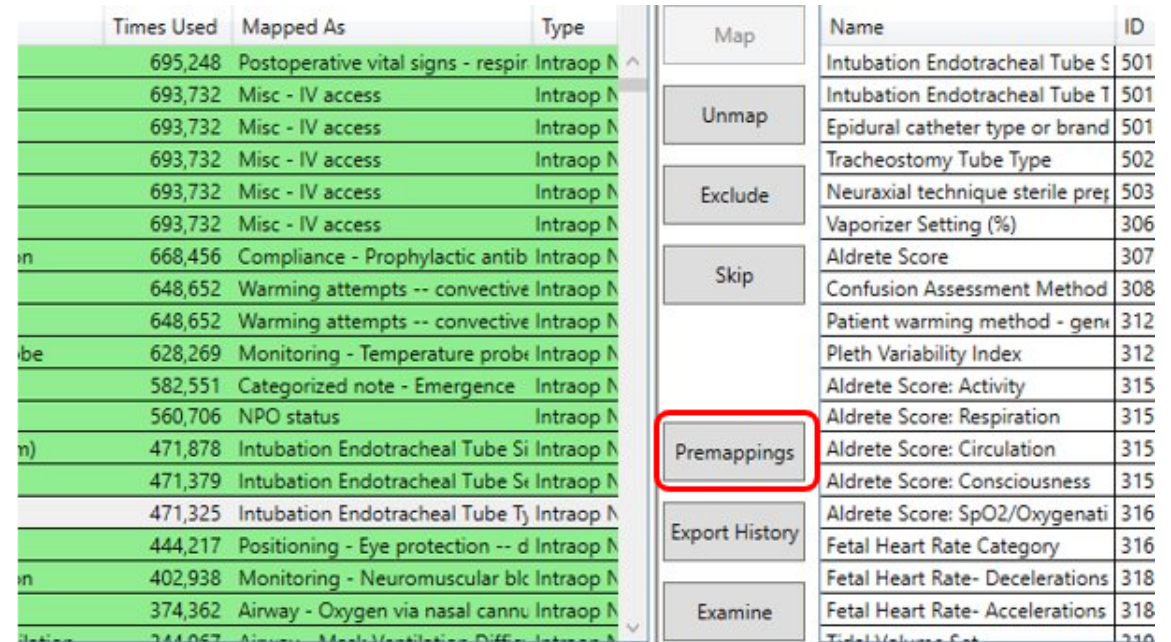
# Pre-Mapping

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

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

# Reviewing Pre-Mapped Variables

- Click on the 'Pre-mappings' button at the bottom middle of the Variable Mapping tool to either accept or reject recommended mappings.
- Choose the 'Pre-Mappings Only' Display Mode to review those variables that have already been pre-mapped
- Once per year, MPOG will review the common Epic AIMS IDs and update the pre-mapping for these variables.



The screenshot displays the Variable Mapping tool interface. On the left, a table lists pre-mapped variables with columns for 'Times Used', 'Mapped As', and 'Type'. The 'Times Used' column shows values ranging from 374,362 to 695,248. The 'Mapped As' column lists various medical procedures and monitoring types. The 'Type' column indicates 'Intraop' for all entries. On the right, a control panel contains buttons for 'Map', 'Unmap', 'Exclude', 'Skip', 'Premappings', 'Export History', and 'Examine'. The 'Premappings' button is highlighted with a red rectangle. Below the control panel, a table lists variable names and their corresponding IDs, such as 'Intubation Endotracheal Tube S' (501) and 'Aldrete Score' (307).

Times Used	Mapped As	Type
695,248	Postoperative vital signs - respir	Intraop
693,732	Misc - IV access	Intraop
693,732	Misc - IV access	Intraop
693,732	Misc - IV access	Intraop
693,732	Misc - IV access	Intraop
693,732	Misc - IV access	Intraop
668,456	Compliance - Prophylactic antib	Intraop
648,652	Warming attempts -- convective	Intraop
648,652	Warming attempts -- convective	Intraop
628,269	Monitoring - Temperature probe	Intraop
582,551	Categorized note - Emergence	Intraop
560,706	NPO status	Intraop
471,878	Intubation Endotracheal Tube Si	Intraop
471,379	Intubation Endotracheal Tube Si	Intraop
471,325	Intubation Endotracheal Tube Tj	Intraop
444,217	Positioning - Eye protection -- d	Intraop
402,938	Monitoring - Neuromuscular blk	Intraop
374,362	Airway - Oxygen via nasal cannu	Intraop
344,067	Airway - Mask Ventilation Diff	Intraop

Name	ID
Intubation Endotracheal Tube S	501
Intubation Endotracheal Tube T	501
Epidural catheter type or brand	501
Tracheostomy Tube Type	502
Neuraxial technique sterile pre	503
Vaporizer Setting (%)	306
Aldrete Score	307
Confusion Assessment Method	308
Patient warming method - geni	312
Pleth Variability Index	312
Aldrete Score: Activity	315
Aldrete Score: Respiration	315
Aldrete Score: Circulation	315
Aldrete Score: Consciousness	315
Aldrete Score: SpO2/Oxygenati	316
Fetal Heart Rate Category	316
Fetal Heart Rate- Decelerations	318
Fetal Heart Rate- Accelerations	318
Tidal Volume Set	319

# Variable Type Mapping Guide- EPIC Sites Only

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

# Variable Type Mapping Guide - EPIC Sites Only

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

# Variable Mapping Tips

- For key anesthesia events such as ETT/LMA placement, extubation, arterial/central line placement, regional and neuraxial block notes:  
Prioritize LEV/HLX/EAP variables for mapping
  - Exclude FLO variables associated with these concepts ***if*** both an HLX/EAP and LEV variable exists.
- If duplicate variables exist for critical times such as anesthesia start/end, surgery start/end, In room times, etc.:
  - Consider excluding CT variables (typically nursing documentation). If there are only nursing (CT) variables, keep them and map (Phase I, Phase II in/out times, etc.).
  - Bottom line: Anesthesia documentation is preferred but adopt nursing documentation if anesthesia documentation is not available for critical times/events.

# Additional Notes

- When a procedure variable has multiple uses (lines, CT, etc.) map to 50665 Procedures - Other unlisted procedure.
- Map Non-Invasive Blood Pressure location to 3266 Noninvasive blood pressure cuff location
- Map patient position to 3096 'Positioning'
- PONV assessment: If the values listed under 'Examine' are y/n, map to 90010 PONV Assessment. If the values are text, i.e. vomiting, diarrhea, etc., map to 50227 GI symptoms
- Cardiopulmonary Bypass Start should be mapped to 50410 - Cardiopulmonary bypass initiated (full/partial/left-heart) and Cardiopulmonary Bypass End should be mapped to 50409 - Cardiopulmonary bypass (full/partial/left-heart) terminated. The concepts that have 'Perfusion Start' and 'Perfusion End' are used when documented by a Perfusionist
- OB Frequency of Contractions should be mapped to 3181 Frequency of Contractions
- OB Duration of Contractions should be mapped to 3188 Duration of Contractions

# Additional Notes continued

- Surgical Admission Type – Inpatient (500): should be used for a patient that was admitted prior to the procedure (i.e. inpatient who went to OR)
- Surgical Admission Type – Admit (502): should be used for patients that were admitted after the procedure (i.e. c-sections)
- Variables with the prefix HLX-EPIC#RS are usually Review of Systems, and should be mapped as available. This will show up in the H&P section of Case Viewer.
- Variables with the prefix HLX-EPIC#HPI are usually H&P documentation and should be mapped as available. This will show up in the H&P section of Case Viewer.
- Check that Anesthesia start/end, Patient in room/out of room, in PACU/out of PACU, uterine incision, etc. are all mapped to LEV concept when available and CT concept is excluded/unmapped (unless no LEV concept available then map CT concept)