# Variable Mapping Tips
## Epic sites

*See the Getting Started – Import Manager Variable Mapping presentation first

# Pre-Mapping

- For **new** Epic sites, select 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 Et( | 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-40100001 | OHSU | ETO2 | 9,216 | Oxygen Exp % | Physiolog |
| FLO-40100001 | 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-40100015 | 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 |

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# Reviewing Pre-Mapped Variables

- Choose the 'Pre-Mappings Only' Display Mode to review those variables that have already been pre-mapped
- Pre-mapped variables will appear in green
  - Review these mappings, use the 'Examine' button for clarification if needed
  - Update any variables that whose pre-mapping does not match your institution's variable/documentation

# Reviewing Pre-Mapped Variables

- Once per year, MPOG will review the common Epic AIMS IDs and update the pre-mapping for these variables.

- Click on the 'Pre-mappings' button at the bottom middle of the Variable Mapping tool
  - A list of variables that do not match the current MPOG mapping recommendations will populate
  - Review the variables and either accept or reject the updates
    - Can click on 'Select All' or 'Unselect All' buttons in bottom left corner
    - Can check/uncheck individual variables
  - Choose 'Apply Selected' in lower right corner to apply the mapping updates

# Variable Prefix Descriptions

| 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. |
| ERX-* variables | Electronic Medication Record – Administered and Home Medications only. Medication Orders are not included. | Administered mediations can be found under Administration Type. Home medications can be located under Observation Type. |

# Variable Prefix Descriptions

| 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

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# Additional Notes continued

- Injection – Epic has a generic Injection route used for multiple types of injections (IV, IM, etc.). Map this variable to 2042 INJECTION - NOT SPECIFIED

- 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)