

## 2020 COG Summary of Updates

### All

- PL1 ≤ Reformatting and general edits that did not change content. Specific content changes are listed below.  
Removed “if available” when referring to ETCO<sub>2</sub> and 12-lead ECG equipment.

### Universal Patient Care

- Added 10 Cardinal Questions of HPI to S/S.  
Added CRM to all providers.  
Modified O<sub>2</sub> admin to SpO<sub>2</sub> reading & as indicated
- PL1 ≤ Refusal, Lift Assist, and Capacity Checklist is removed and will be a standalone checklist document, which is then referenced in this COG.  
Transport Decision Process updated to include PL6 in addition to PL5, and moved to Clinical Standard.  
... “and monitor” EtCO<sub>2</sub> ...
- PL2 ≤ Exception to Transport Decision Process regarding single dose of IN narcotic for pain control for injuries not to the head/chest/abdomen, clarified to ... “non-IV narcotic”...

### Airway Management & Ventilation

- PL1 ≤ Relocated from Pearls to Clinical Procedures: Gastric Tube Insertion, Needle Cricothyrotomy, Surgical Cricothyrotomy, Tracheostomy Tube Change/Replacement.  
Relocated from Pearls to Checklist, Airway Management for RSI.
- PL6 ≤ Added Use Airway Management Checklist for All RSI

### Allergic Reaction

- PL2 ≤ Added monitor ETCO<sub>2</sub>

### Altered Mental Status

- PL1 ≤ Added under if BGL < 50 ... Consider turning off insulin pump if present using Insulin Pump Clinical Procedure  
Added monitor ETCO<sub>2</sub>
- PL2 ≤ Moved Cincinnati Pre-hospital Stroke Screen from Pearls to Checklist  
Deleted insulin pump.

### Behavioral & Violent Excited Delirium

- PL1 ≤ Added to use Restraint Checklist when using restraints  
Moved Domestic Violence or Abuse from Pearls to Differential  
Moved Restraints to Clinical Procedure & Restraint Checklist to Checklists
- PL3 ≤ Added, “preferred cold if excited delirium” to fluid therapy
- PL5 ≤ Clarified indications for midazolam (uncontrolled anxiety), haloperidol (antipsychotic), and ketamine (excited delirium, violent, or combative)

### Burns

- PL1 ≤ Added stridor to respiratory signs and symptoms
- PL2 ≤ Added nebulized epinephrine if airway burn
- PL3 ≤ Replaced Parkland Formula with Rules of 10 to calculate 1<sup>st</sup> hour mL for Adult with table.

Added weight and age based pediatric criteria for fluid administration with tables.

### **Carbon Monoxide**

PL2 ≤ Added to monitor ETCO2

### **Cardiac related COGs**

Split bundled COGs into specific Cardiac: abc COGs  
Added SBP and MAP qualifications for Isotonic solutions  
Added EtCO2 application

PL1 ≤ STEMI Alert Criteria moved to Clinical Standard  
Rapid 12-lead Criteria moved to Check Lists  
Moved 12-lead ECG Placement to Clinical Procedure  
Pediatric and Infant Pit Crew CPR moved to Clinical Procedure  
LVAD Moved to Clinical Standard

PL5 ≤ Added Ketamine, in addition to Midazolam, to Rx for sedation for related procedures.

PL6 ≤ Added Simple Thoracostomy to Treatable Causes with Pulse

### **Cardiac Arrest COGs**

Separated each specific type of cardiac arrest into a standalone COG

1. Pulseless Vtach & Vfib
2. Asystole & PEA
3. ROSC and Induced Hypothermia

Created separate COG for Cardiac Arrest: Treatable Causes  
Created Clinical Standard for Cardiac Arrest Documentation  
Moved Pit Crew CPR to Clinical Procedure  
Moved Cardiac Arrest Checklist to Checklists

PL1 ≤ Move Post Resuscitation Checklist to Checklists  
Moved Medical & Trauma Arrest Termination of Resuscitation Checklist to Checklists  
Moved Double Sequential to Clinical Procedure  
Moved Criteria for Death or Withhold Resuscitation to Clinical Standards  
Moved DNR/Advance Directives to Clinical Standard  
Moved Discontinuation of Prehospital Resuscitation to Clinical Standard  
Moved Crime Scene to Clinical Standard  
Removed LUCAS Device

PL 4 ≤ ROSC & Induced Hypothermia: Added total mL reference table for cold isotonic crystalloid

PL5 ≤ Asystole & PEA – added Perform Simple Thoracostomy for the asthmatic patient in arrest

### **Crush Injury**

PL2 ≤ Moved from Pearls to Clinical Management Options:  
“Nebulized albuterol or saline PRN for patients with dust concentrations in airway.”

PL5 ≤ Added Ketamine for pain in addition to Fentanyl.

### **Cyanide**

PL2 ≤ Added monitor EtCO<sub>2</sub> as soon as it is practical

### **Eye Injury/Complaint**

PL 1 ≤ Added to complete initial and repeat respiratory assessment for chemical/burn injuries

PL 3 ≤ Moved Eye Irrigation to Clinical Procedures

### **Fever and Infection Control**

PL2 ≤ Added Adult PO Acetaminophen and Ibuprofen, left Pediatric Acetaminophen as  
PL3 ≤

### **Hypertension**

PL1 ≤ COG REMOVED

### **IV Access**

PL 1 ≤ Moved to Clinical Procedure

### **Obstetrical Emergencies**

Separated into three COGs:

1. Obstetrical Emergency
2. Obstetrical Labor and Childbirth
3. Obstetrical Newborn Care

PL1 <

Moved Delivery and Complications to Clinical Procedures

Moved APGAR to Checklist

Removed Umbilical Vein Catherization

### **Overdose**

PL2 ≤ Added, EtCO<sub>2</sub> application and monitoring

### **Pain Management**

PL 1 ≤ Moved Pain Assessment and Documentation to CP

PL2 ≤ Added Acetaminophen and Ibuprofen for Adult PO

### **Patient Referrals**

PL1 ≤ Moved to Clinical Standards

### **Pulmonary Edema**

PL6 ≤ Added RSI

### **Respiratory Distress**

Added Advance airway management as needed;

Added Severe bronchospasm refractory to other medications, Ketamine;

PL5 ≤

Moved from pearls to management: Ultrasound pleural cavity if pneumo/hemothorax is suspected.

Added Rapid sequence induction as needed to secure patent airway for oxygenation and ventilation.

PL6 ≤

Created RSI Clinical Procedure.

### **Seizure**

Moved from Pearls to Management Options:

- For any seizure in a pregnant or recently post-partum patient, consider eclampsia and consult the OB Emergencies COGs
- Examine mental status, HEENT, heart, lungs, extremities, and neuro

PL1 ≤

Moved Vagus Nerve Stimulator to Clinical Procedure

### **Sepsis and Septic Shock**

PL1 ≤ Moved from Pearls to management options, “Treat wheezing, hypoxia, dyspnea, and pain as appropriate per COGs”

PL2 ≤ Moved acetaminophen from > PL3

### **SMR**

PL1 ≤ Moved to Clinical Procedures & Created Checklist

### **Stroke**

Moved Stroke Criterion to Clinical Standard

PL1 ≤ Moved Cincinnati Pre-hospital Stroke Screen to Clinical Procedure

Moved Stroke Checklist to Checklists

### **Trauma General**

PL1 ≤ Created CP for Caring for Amputated Part

Moved Triage to Clinical Procedure and Checklist

Added - Acetaminophen or Ibuprofen for musculoskeletal and/or joint pain/injury

PL2 ≤

Created SMR Checklist and added to SMR Clinical Procedure.

PL3 ≤

Removed Ketorolac

PL5 ≤ Moved Ultrasound from Pearls to Management Options

Created clinical procedure and checklist for simple thoracostomies

PL6 ≤

Created clinical procedures for joint dislocation & escharotomies

### **Trauma Arrest ... Renamed Cardiac Arrest: Trauma**

PL1 ≤ Moved Traumatic Cardiac Arrest Procedure & Post ROSC Checklists to Checklists

Moved Ultrasound from Pearls to Management Options

Emphasized lifesaving interventions prior to or concurrent with CPR.

PL5 ≤

Moved Simple Thoracostomy to Clinical Procedures

Moved Simple Thoracostomy Checklist to Checklists

### **Clinical Standards**

All – General edits and document formatting.

Minimum Equipment to Patient’s Side – All PL levels, added Clinical Operating Guidelines

Refusal of Treatment or Transport – Clarified content to document in ePCR.

### **OMD Reference Documents**

All – General edits and documenting formatting.

Authorized Skills per Credential Level – PL2, added Adult PO Acetaminophen, Ibuprofen, & Diphenhydramine; clarified PL2s can at the discretion of ≥PL4 prepare/draw up non-narcotic, non-sedative, or non-paralytic medications.

### **Checklists**

All – created to compliment certain clinical procedures, standards, and clinical guidelines

Lift Assist – Removed 65 years of age or older as High Risk Refusal criteria to call OLMC, added Yes/No questions to inform when to request EMS or OLMC

## Summary of Changes to COG Formulary

| Formulary          | Summary of Changes   |
|--------------------|--|
| All                | <ol style="list-style-type: none"> <li>1. General edits and formatting</li> <li>2. Addition of Onset of Action, Peak Effect, Duration of Action</li> <li>3. Ensured each indication was associated with a dose/rate/route</li> <li>4. mL for Adult IVP doses or number of tablets added based on medication concentration.</li> </ol>                              |
| Acetaminophen      | <ol style="list-style-type: none"> <li>1. Adult PO dose changed to 650mg based on EMS sourcing of 325mg x2 tabs</li> </ol>   |
| Albuterol          | <ol style="list-style-type: none"> <li>2. Added hyperkalemia</li> </ol>  |
| Amiodarone         | <ol style="list-style-type: none"> <li>1. Added Symptomatic A-Fib as an indication as an alternative to diltiazem when there is a clinical concern.</li> </ol>   |
| Atropine           | <ol style="list-style-type: none"> <li>2. Added organophosphate poisoning to pediatric dosing</li> </ol>   |
| Calcium chloride   | <ol style="list-style-type: none"> <li>1. Added blood product administration for adult and pediatric dosing</li> <li>2. Added adult dose for Hydrofluoric acid burn</li> <li>3. Made all slow IVP over 3 minutes</li> </ol>  |
| Crystalloid Fluids | <ol style="list-style-type: none"> <li>1. Created new formulary document.</li> </ol>   |
| Diltiazem          | <ol style="list-style-type: none"> <li>1. Added adult weight/dose chart.</li> </ol>  |
| Diphenhydramine    | <ol style="list-style-type: none"> <li>2. Added dose for persistent nausea/vomiting for adult and pediatric dosing</li> </ol>  |
| Epinephrine        | <ol style="list-style-type: none"> <li>1. Added hypotension indication and dosing for pediatrics</li> <li>2. Added OLMC requirements for some pediatric repeat dosing</li> <li>3. Increased adult epi drip from 10 mcg/min to 20 mcg/min</li> </ol>  |
| Fentanyl           | <ol style="list-style-type: none"> <li>1. Added range for initial dosing and repeat dosing for adults</li> <li>2. Removed Adult SBP, made requirement to MAP &gt; 65 instead</li> <li>3. Added procedural sedation as an indication</li> </ol>   |
| Haloperidol        | <ol style="list-style-type: none"> <li>1. Added Severe nausea/vomiting indication/dose</li> </ol>  |
| Ketamine           | <ol style="list-style-type: none"> <li>1. Added pediatric doses, which require OLMC</li> <li>2. Added adult indication for bronchospasm</li> <li>3. Removed weight based adult dosing, gave standard doses</li> <li>4. Added specifications/requirements regarding pain management</li> </ol>  |
| Ketorolac          | <ol style="list-style-type: none"> <li>1. Removed from formulary</li> </ol>  |
| Lidocaine          | <ol style="list-style-type: none"> <li>2. Added IO Flush for pediatrics</li> <li>3. Added Eye Flush for pediatrics</li> <li>4. Removed weight based adult dosing, gave standard doses</li> </ol>   |
| Midazolam          | <ol style="list-style-type: none"> <li>1. Added adult dosing for uncontrolled anxiety / panic attack.</li> <li>2. Added adult dosing for Acute psychiatric or toxicologic behavioral emergency.</li> <li>3. Added induction dosing for RSI</li> <li>4. Removed Adult SBP, made requirement to MAP &gt; 65 instead</li> <li>5. Added procedural sedation</li> </ol> |
| Nitroglycerin      | <ol style="list-style-type: none"> <li>1. Removed hypertension as an indication</li> </ol>   |
| Oxygen             | <ol style="list-style-type: none"> <li>1. Created new formulary document</li> </ol>  |
| Rocuronium         | <ol style="list-style-type: none"> <li>1. Added Rapid Sequence Induction</li> </ol>  |
| Tranexamic Acid    | <ol style="list-style-type: none"> <li>1. Added topical, nebulizer, IN, routes / indications for wounds</li> <li>2. Added pediatric dosing</li> </ol>  |
| Vecuronium         | <ol style="list-style-type: none"> <li>1. Removed from formulary</li> </ol>  |