

Effective: 07/20/2020

Expiration:

Replaces Medical Directive #:

Subject: COVID-19 Pandemic - Nasal Specimen Collection Procedure

**Purpose:** To outline the procedure for obtaining nasal swab specimens for respiratory infection testing, to aid in the identification of SARS-CoV-2 (the COVID-19 virus). The quality of the specimen collection is critical, and the sensitivity of the test correlates directly with the correct collection of the specimen. This directive may be used by System-credentialed providers who are individually approved by OMD. This procedure may only be performed on patients at the specific request of TCPH or the Medical Director.

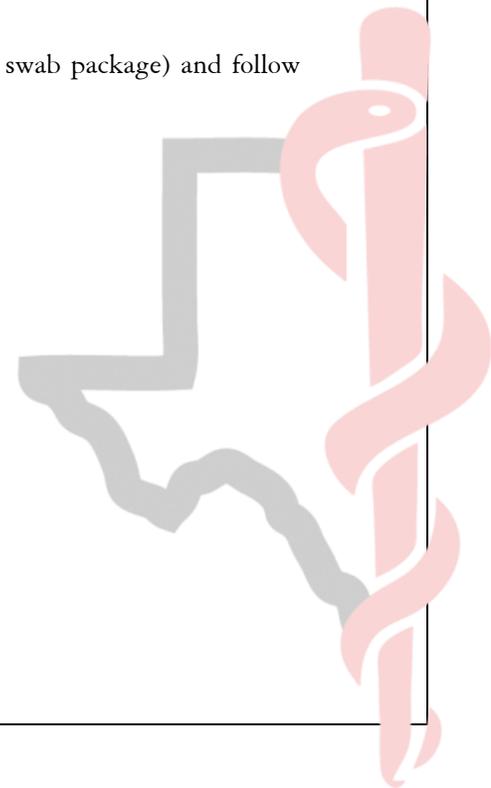
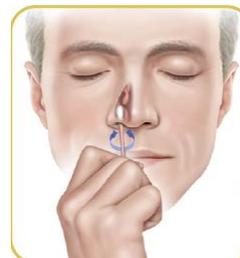
**Materials:** For respiratory viruses - universal transport media (UTM) with flexible or standard Minitip FLOCKED swab. Use this swab for any viral respiratory test (for example, influenza) that need nasal swab (vs. nasopharyngeal). Check the expiration date before use. Do NOT use bacterial flocked swabs.

**Procedure:**

- 1) Follow all infection prevention & control steps, including:
  - a) Hand hygiene before and after the procedure, and before and after the patient encounter
  - b) Adhere to the isolation status of the patient. Minimum PPE includes mask, eye protection, gloves, gown, and a respirator mask (e.g., N95).
- 2) If the patient has nasal congestion or a moderate-large amount of rhinorrhea, ask them to clear their nose into a tissue before collecting the sample.
- 3) Apply the label to the UTM tube
- 4) Do not stand directly in front of the patient.
- 5) Instruct the patient to tilt their head back slightly and ask them to close their eyes, if possible
- 6) Insert the Minitip flocked swab into the first nostril until resistance is met at the level of the turbinates.
- 7) Rotate the swab a few times against the nasal wall.
- 8) Remove swab and repeat the same process in the other nostril with the same swab.
- 9) After completing the second swab, immediately place into the sterile vial containing the universal transport media. Snap the shaft of the swab off at the score line. This line usually aligns with the length of the swab that can fit into the tube.
- 10) Close the cap tightly.
- 11) Place the tube into a biohazard bag with an absorbent cloth (comes with the swab package) and follow protocol for delivery.



Veer D. Vithalani MD, FACEP, FAEMS  
Medical Director



Effective: 07/01/2020

Expiration:

Replaces Medical Directive #:

Subject: Procedure - Endotracheal Intubation-Video Laryngoscopy

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The introduction of Video Laryngoscopy (VL) into the airway management techniques of the MAEMSA System allows for increased patient and provider safety while optimizing first-pass success.

1. If equipped and trained, endotracheal intubation using video laryngoscopy is the preferred airway management technique.
2. Supraglottic airway placement should be used as the primary backup to unsuccessful video laryngoscopy.
3. Direct laryngoscopy should only be performed in cases of catastrophic video laryngoscope device failure, along with anticipated difficulty of supraglottic airway placement.
  - a. Direct laryngoscopy is not prohibited, but should only be utilized after special consideration has been given to alternative, safer means of airway management; such as described above.
  - b. Cases of catastrophic VL device failure should be communicated as per the *Equipment Failure* policy

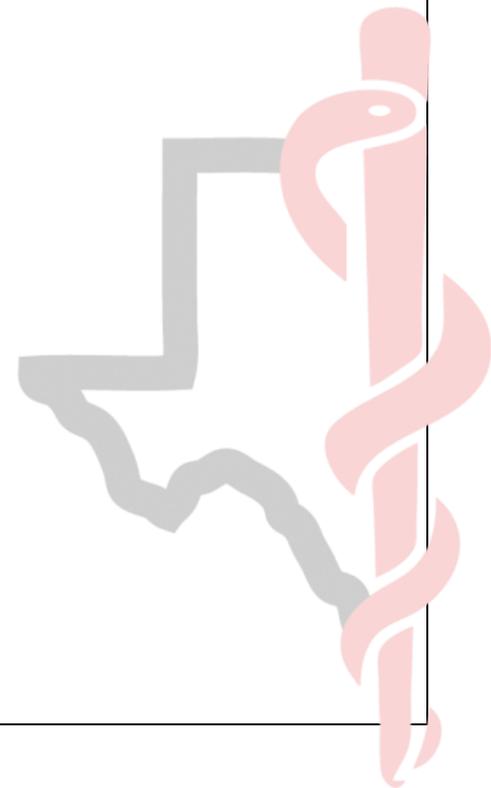
New Procedures

- Endotracheal Intubation-Video Laryngoscopy (UEScope)
- Endotracheal Intubation-Video Laryngoscopy (AirTraq)

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Medical Director



PROCEDURES		OFFICE OF THE MEDICAL DIRECTOR EMERGENCY PHYSICIANS ADVISORY BOARD
<b>Endotracheal Intubation/Video Laryngoscopy (UEScope)</b>		
<b>Indications:</b> → Respiratory failure → Cardiac arrest → Suspected airway obstruction  <b>Contraindications:</b> None (in presence of hypoxia, complete FBAO, or inability to ventilate)	<b>Pearls &amp; Pitfalls:</b> → Unless clearing the airway, withhold laryngoscopy until the best attempt at preoxygenating to a $SPO_2 \geq 90\%$ (minimum 60-seconds of high-flow $FiO_2$ with a patent airway) → Do not interrupt CPR to obtain a view → Avoid soft tissue damage associated with excessively aggressive/violent blade technique → Avoid damage to the patient's teeth → Maintain manual cervical spine precautions if suspected cervical spine injury	<b>BASIC</b>
<ul style="list-style-type: none"> <li>Assist in preparation <i>see</i> Advanced Airway Preparation Procedure               <ul style="list-style-type: none"> <li>Oxygenate/Preoxygenate</li> <li>Establish Kit Dump</li> <li>See Advanced Airway Preparation Procedure</li> <li>Place appropriate size ETT on bougie and create D-loop</li> </ul> </li> <li>External Laryngeal Manipulation (ELM) under guidance from laryngoscopist</li> </ul>		<b>ASSIST</b>
<ul style="list-style-type: none"> <li>Position for patency               <ul style="list-style-type: none"> <li>Ear-to-Sternal-Notch (with ramp shoulders for patients <math>\geq 70</math> kg)</li> <li>Neutral position (if suspected trauma)</li> </ul> </li> <li>Select appropriate UEScope blade for patient size and attach to monitor</li> <li>Assure monitor is on and recording</li> <li>Open patient's mouth               <ul style="list-style-type: none"> <li>Use scissor technique (index/thumb)</li> </ul> </li> <li>Suction airway as required</li> <li>Insert blade midline along the tongue and identify the epiglottis (do not deliver tube if unable to visualize epiglottis)</li> <li>Insert blade into vallecula and lift to view vocal cords               <ul style="list-style-type: none"> <li>Perform head-lift or ELM to maximize view if necessary</li> </ul> </li> <li>Deliver bougie and follow (insert) ETT               <ul style="list-style-type: none"> <li>If resistance to passage, rotate ETT clockwise or counterclockwise</li> </ul> </li> <li>Check insertion depth and inflate ETT cuff</li> <li>Remove bougie first and then VL device</li> <li>Confirm placement: WAVEFORM <math>EtCO_2</math> every breath within 5-breaths               <ul style="list-style-type: none"> <li>Secondary Confirmation:                   <ul style="list-style-type: none"> <li>Bougie "hold-up"</li> <li>Positive chest sounds</li> <li>Absent/diminished epigastric sounds</li> <li>"Misting" in tube</li> </ul> </li> </ul> </li> <li>Secure ETT and continue to monitor placement with <math>EtCO_2</math> waveform</li> </ul>		



PROCEDURES		OFFICE OF THE MEDICAL DIRECTOR EMERGENCY PHYSICIAN ADVISORY BOARD
<b>Endotracheal Intubation/Video Laryngoscopy (AirTraq)</b>		
<b>Indications:</b> → Respiratory failure → Cardiac arrest → Suspected airway obstruction  <b>Contraindications:</b> None (in presence of hypoxia, complete FBAO, or inability to ventilate)	<b>Pearls &amp; Pitfalls:</b> → Unless clearing the airway, withhold laryngoscopy until the best attempt at preoxygenating to a $SPO_2 \geq 90\%$ (minimum 60-seconds of high-flow $FiO_2$ with a patent airway) → Do not interrupt CPR to obtain a view → Avoid soft tissue damage associated with excessively aggressive/violent blade technique → Avoid damage to the patient's teeth → Maintain manual cervical spine precautions if suspected cervical spine injury	<b>BASIC</b>
<ul style="list-style-type: none"> <li>Assist in preparation <i>see</i> Advanced Airway Preparation Procedure               <ul style="list-style-type: none"> <li>Oxygenate/Preoxygenate</li> <li>Establish Kit Dump</li> <li>See Advanced Airway Preparation Procedure</li> </ul> </li> <li>External Laryngeal Manipulation (ELM) under guidance from laryngoscopist</li> </ul>		
<ul style="list-style-type: none"> <li>Position for patency               <ul style="list-style-type: none"> <li>Ear-to-Sternal-Notch (with ramp shoulders for patients <math>\geq 70</math> kg)</li> <li>Neutral position (if suspected trauma)</li> </ul> </li> <li>Select appropriate AirTraq SP blade for patient size and corresponding ETT size</li> <li>Lubricate the superior section of the channel and insert ETT with tip not to extend beyond the end of the track</li> <li>Power on the blade, attach monitor, and assure camera is on and recording</li> <li>Open Patient's mouth               <ul style="list-style-type: none"> <li>Use scissor technique (index/thumb)</li> </ul> </li> <li>Suction airway as required</li> <li>Insert blade midline and identify the epiglottis (do not deliver tube if unable to visualize <i>epiglottis</i>)</li> <li>Lift blade to view vocal cords and rotate to center vocal cords on camera               <ul style="list-style-type: none"> <li>Perform head-lift or ELM to maximize view if necessary</li> </ul> </li> <li>Deliver ETT, or utilize Bougie               <ul style="list-style-type: none"> <li>If resistance to passage, rotate ETT in the channel clockwise or counterclockwise</li> </ul> </li> <li>Check insertion depth and inflate ETT cuff</li> <li>Confirm placement: WAVEFORM <math>EtCO_2</math> every breath within 5-breaths               <ul style="list-style-type: none"> <li>Secondary Confirmation:                   <ul style="list-style-type: none"> <li>Bougie "hold-up"</li> <li>Positive chest sounds</li> <li>Absent/diminished epigastric sounds</li> <li>"Misting" in tube</li> </ul> </li> </ul> </li> <li>Upon confirmation of tube placement, peel ETT gently out of the channel</li> <li>Secure ETT and continue to monitor placement with <math>EtCO_2</math> waveform</li> </ul>		<b>ASSIST</b>
		<b>ADVANCED</b>
		 Mac technique (inside vallecula)
		 Miller technique (lift epiglottis)

Effective: 06/02/2020

Expiration:

Replaces Medical Directive #:

Subject: COVID-19 Pandemic – Cardiac Arrest Management & Testing

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The introduction of Video Laryngoscopy into the airway management techniques of the MAEMSA System allows for increased patient and provider safety. Further, at the request of, and in collaboration with, Tarrant County Public Health (TCPH), patients in Cardiac Arrest may undergo COVID-19 testing before termination of resuscitation.

For all patients in Cardiac Arrest:

1. Continue to follow PPE & AGP Minimization guidance per:
  - a. *Medical Directive #2003002 - "COVID-19 Pandemic - Identification and PPE"*
  - b. *Medical Directive #2003003 - "COVID-19 Pandemic - Aerosol Generating Procedure Minimization"*
  - c. Agency policy
2. Continue the practice of early advanced airway placement, whenever feasible
  - a. If equipped and trained, video laryngoscopy for endotracheal intubation is the preferred airway management technique
  - b. King airway placement should be used in the absence of, or as a backup to, video laryngoscopy
  - c. Direct laryngoscopy is not prohibited, but should only be utilized after special consideration has been given to alternative, safer means of airway management; such as described above
3. If available, place mechanical compression devices early, ensuring a minimal pause in chest compressions

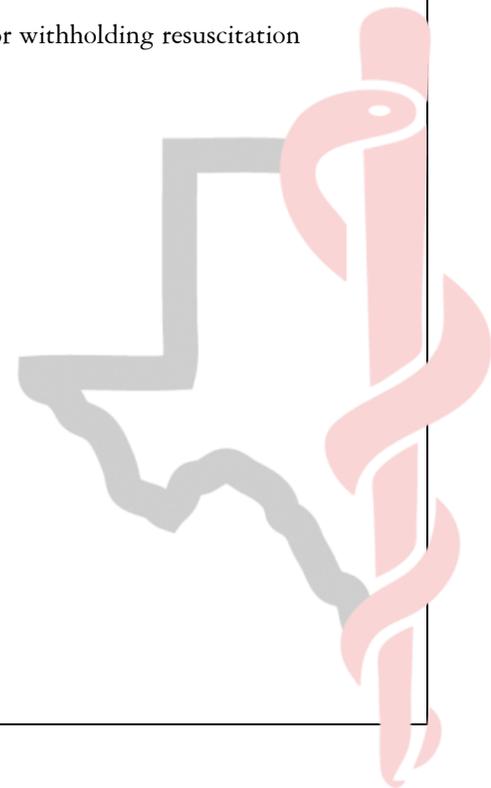
For patients in Cardiac Arrest from suspected Medical cause, who meet criteria for Termination of Resuscitation:

1. Before termination of resuscitation, and if equipped and trained under *Medical Directive #2003005 – "COVID-19 Pandemic – Nasopharyngeal Specimen Collection Procedure"*:
  - a. Collect a nasopharyngeal specimen sample
  - b. Label, store, and transport sample per agency and TCPH policy
  - a. This process currently does not include patients who meet the criteria for withholding resuscitation or who are transported to an Emergency Department.

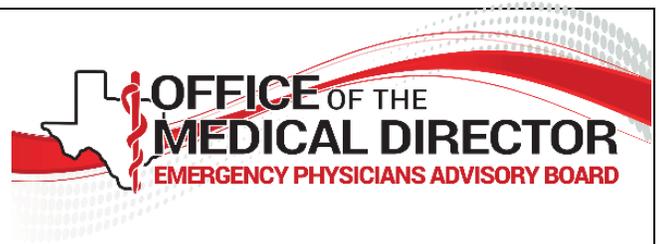
If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 2006001  
FOR IMMEDIATE DISTRIBUTION  
Date: June 1, 2020



Effective: 6/8/2020      Expiration: 6/14/2020

Replaces Medical Directive #: N/A

Subject: Responses to Charles Schwab Challenge at Colonial

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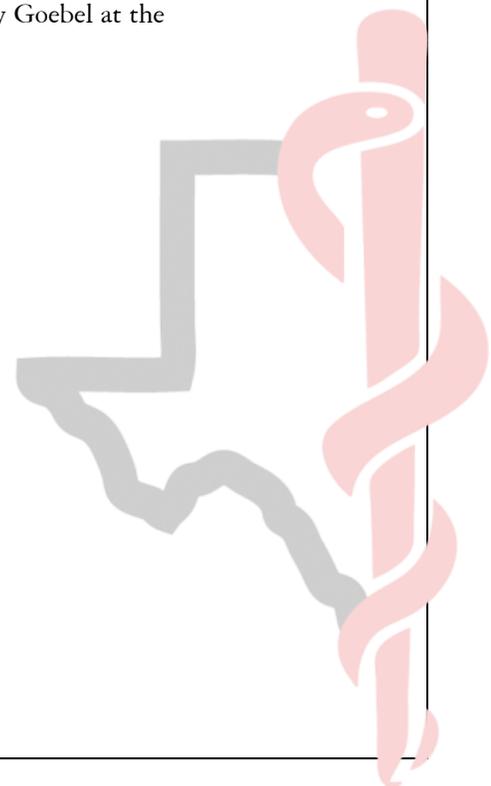
This year's Charles Schwab Challenge at Colonial is scheduled for June 8<sup>th</sup> – June 14<sup>th</sup>. We will follow the same procedure as in years past during the event. Please make sure that the necessary individuals receive the directions to avoid any miscommunications. The procedures are as follows during Colonial Operational hours:

- When dispatching ambulances to medical calls at the Charles Schwab Challenge event location, fire department first responders are not to respond. A team of first responders are on location to respond to any call within the Colonial event grounds. Each time an ambulance is dispatched from a 911 request, the Colonial First Response Team should be contacted by calling Robin Beardsley at: 817-239-3170, the Colonial First Response Coordinator. The coordinator will make sure that first response crews respond to the incident and will provide "Best Approach" instructions for responding ambulances.
- Colonial First Response personnel will "ride-in" with MedStar if necessary to assist with critical calls. However, if at any time a MedStar crew requests the fire department, the fire department should be dispatched immediately for additional assistance.
- When dispatching ambulances, please inform the crew that Colonial representatives request a "Quiet Approach." While we should make an effort to honor their request, at no time shall this request come before the safety of crews or the public.
- This procedure is only for EMS calls within the Colonial event area throughout the duration of the tournament.

For questions concerning the fire department response, please contact Captain Jimmy Goebel at the fire department alarm 817-922-3000.

If you have any questions, please do not hesitate to contact us directly.

Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 5/20/2020

Expiration: N/A

Replaces Medical Directive #: N/A

Subject: COVID-19 Pandemic - Multisystem Inflammatory Syndrome in Children

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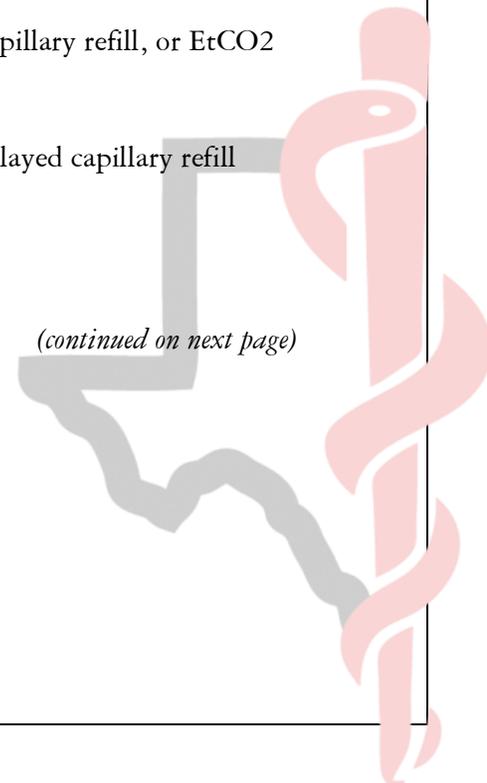
Since April 2020, cases of a new syndrome, the “Multisystem Inflammatory Syndrome in Children (MIS-C),” have been identified. MIS-C is thought to be related to COVID-19, and mainly affects children. Similar to Kawasaki disease, it causes widespread, multi-system inflammation, and may occur with associated hypotension. They may occur in the presence or absence of COVID-19 symptoms, requiring extra attentiveness. While the diagnosis of MIS-C involves laboratory testing and pediatric clinician evaluation, you must remain vigilant for infants and children who may have these signs and symptoms.

#### Signs & Symptoms of MIS-C

The following symptoms may occur, in the presence or absence of fever and respiratory disease:

- GI symptoms
  - Abdominal pain, nausea, vomiting, diarrhea
- Conjunctivitis (“pink eye”) in both eyes, usually without purulent discharge
- Skin rash
  - Red rash (often with peeling & swelling) of hands, feet, lips, tongue or oral mucosa
  - May also include discolored blotches on toes, resembling frostbite (“COVID toes”)
- Neurological symptoms
  - Weakness, lethargy, or poor feeding
- Signs and symptoms of shock:
  - “Warm” shock
    - tachycardia, tachypnea, altered mental status, brisk capillary refill, or EtCO<sub>2</sub> less than 30 mmHg
  - “Cold” shock
    - narrow pulse pressure, cool and pale extremities, or delayed capillary refill
  - Hypotension is a late sign in pediatric sepsis

*(continued on next page)*



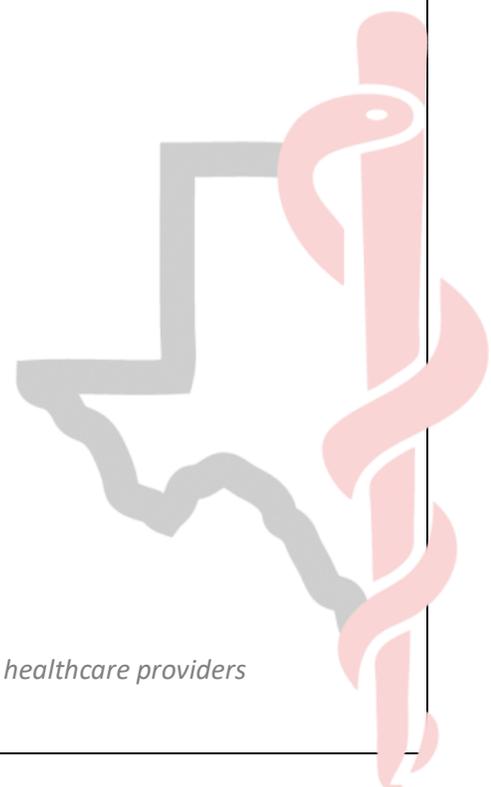
### Guidance

- Maintain a high index of suspicion for COVID-19 in children, including those with mild symptoms or atypical signs and symptoms.
  - Infants and children are less likely to have typical symptoms of COVID-19, such as fever, cough, shortness of breath, and they may have only mild, cold-like symptoms of nasal congestion, rhinorrhea, or sore throat.
- Follow PPE guidance in the “COVID-19 Pandemic - Identification and PPE” directive and agency policy
- Aerosol generating procedures should only be performed as outlined in Medical Directive #2003003 and QA Memo #2004001
- Perform a thorough physical exam including a skin inspection
- Strongly encourage transport to an appropriate ED for ANY ill infant or child with known or suspected COVID-19 (even if symptoms appear mild or atypical), especially for any pediatric patient with a chronic, underlying medical condition
  - Consider OLPG consultation for any high-risk refusal for pediatric patients with fever or worrisome symptoms of MIS-C.
- Do not utilize the “COVID-19 Pandemic – Non-Transport and Referral” policy for pediatric patients under the age of 14.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 2005001  
FOR IMMEDIATE DISTRIBUTION  
Date 05/07/2020



Medical Oversight for the MedStar System

Effective: 05/07/2020

Expiration:

Replaces Medical Directive #:

Subject: Update – Mechanical Compression Device Procedure

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The “Mechanical Compression Device” procedure has been updated to accommodate multiple brands of devices in the System. The information on the following page replaces the “Mechanical Chest Compression Device” procedure on Page 109 of the protocols.

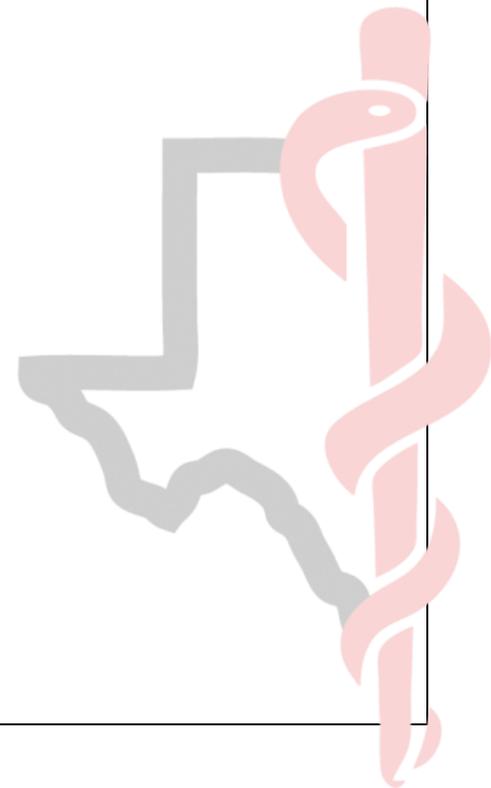
It is important to remember that interruptions of high-quality, manual, chest compressions for greater than 10-seconds harm your patient’s chance of survival. Placement of mechanical compression devices must be well coordinated with on-going resuscitation efforts by all providers on-scene.

During the declared COVID-19 pandemic and for risk minimization, it may be necessary to apply the device with less than 4-responders.

If you have any questions, do not hesitate to contact me directly.

A handwritten signature in black ink, appearing to read "Vithalani".

Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



## Mechanical Compression Device

<p><b>Indications:</b></p> <ul style="list-style-type: none"> <li>→ Adult cardiac arrest</li> <li>→ Situations where manual chest compressions increase risk to providers (highly-contagious diseases, confined spaces, etc.)</li> </ul> <p><b>Contraindications:</b></p> <ul style="list-style-type: none"> <li>→ Application will delay CPR &gt; 10 sec</li> <li>→ Patient size prevents proper application</li> </ul>	<p><b>Pearls &amp; Pitfalls:</b></p> <ul style="list-style-type: none"> <li>→ Consider withholding Mechanical Compression Device placement until transport or ROSC if able to maintain quality uninterrupted manual CPR</li> <li>→ Minimally-interrupted manual CPR is better than perfect CPR after an unacceptable pause (&gt;10 seconds)</li> </ul>	<b>BASIC</b>
<ul style="list-style-type: none"> <li>• Follow <a href="#">Pit Crew Procedure</a> to ensure high quality chest compressions prior to placement Do not attempt Mechanical Compression Device placement until <u>at least</u> 4 providers are at the bedside</li> <li>• Perform Pre-application Timeout <ul style="list-style-type: none"> <li>S: Size - determine if device will fit on patient per manufacturer recommendations</li> <li>T: Turn on - ensure the device powers on and battery charge is adequate</li> <li>A: Abort - voice abort procedure; ensure all providers are comfortable with procedure</li> <li>R: Roles - ensure all providers understand their role in application procedure</li> </ul> </li> <li>• Power on device, prepare, and stage all equipment near patient's head</li> <li>• Position providers at patient's right and left shoulders, and above patient's head <b>AT THE NEXT 2 MIN RHYTHM CHECK (DO NOT DELAY CPR &gt; 10 SEC)</b></li> <li>• Each provider lift patient by respective shoulder</li> <li>• Third provider place the back piece below the patient's back, under the armpit</li> <li>• Resume <u>manual</u> chest compressions immediately</li> <li>• Lock the side opposite the chest compressor while continuing CPR <b>AT THE NEXT 2 MIN RHYTHM CHECK (DO NOT DELAY CPR &gt; 10 SEC)</b></li> <li>• Secure the other side of the arch</li> <li>• ADJUST the piston suction cup down to the midsternum, and lock in place (Manufacturer dependent)</li> <li>• Activate device using correct compression protocol and ensure appropriate rhythm/pulse check every 2 minutes</li> </ul> <p><i>If patient's size not appropriate for Mechanical Compression Device application</i></p> <ul style="list-style-type: none"> <li>• Perform high-quality manual chest compressions</li> <li>• Continue Pit Crew Procedure and other treatment as appropriate</li> </ul>		<b>ASSIST</b>
		<b>ADVANCED</b>

Effective: 03/25/2020

Expiration:

Replaces Medical Directive #:

Subject: COVID-19 Pandemic – Non-transport and Referral

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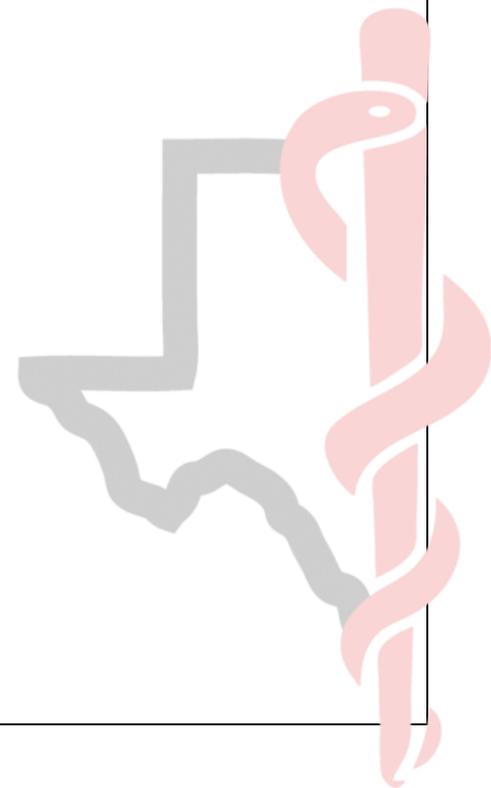
**Purpose:** The purpose of this directive is to provide guidance for evaluation, non-transport, and referral of low acuity patients with signs and symptoms consistent with COVID-19 during times of pandemic declaration within the jurisdiction of the Metropolitan Area EMS Authority (MAEMSA). This directive may be utilized by all Basic, Assist, and Advanced credentialed providers.

**Indications:**

1. Age 5-64 years
2. Patients with signs and symptoms consistent with COVID-19:
  - a. Fever
  - b. Cough
  - c. Shortness of breath
  - d. Sore throat
  - e. Nasal congestion
  - f. Body aches
  - g. Headache
  - h. Chills
  - i. Fatigue
  - j. Nausea / vomiting
  - k. Diarrhea

**If any of the following, begin standard stabilization, treatment, and transport:**

1. Abnormal vital signs
  - a. Systolic blood pressure < 90 mmHg (or age-specific)
  - b. Heart rate  $\geq$  110 or  $\leq$  50 beats per minute
  - c. Respiratory rate > 20 or < 8 breathes per minute
  - d. Pulse oximetry < 94% on room air
2. High-acuity symptoms:
  - a. Syncope
  - b. Ischemic chest pain
  - c. Severe shortness of breath
3. High-acuity physical exam findings:
  - a. Neck pain or rigidity
  - b. Signs of hypo-perfusion or dehydration
  - c. Abnormal breath sounds or respiratory distress
4. High-risk medical history
  - a. Immunocompromised, e.g., chemotherapy, HIV
  - b. Pregnant women or within 2-weeks postpartum
  - c. Unsafe to leave in place or inability to care for themselves
5. EMS provider suspicion for severe illness



**Procedure:**

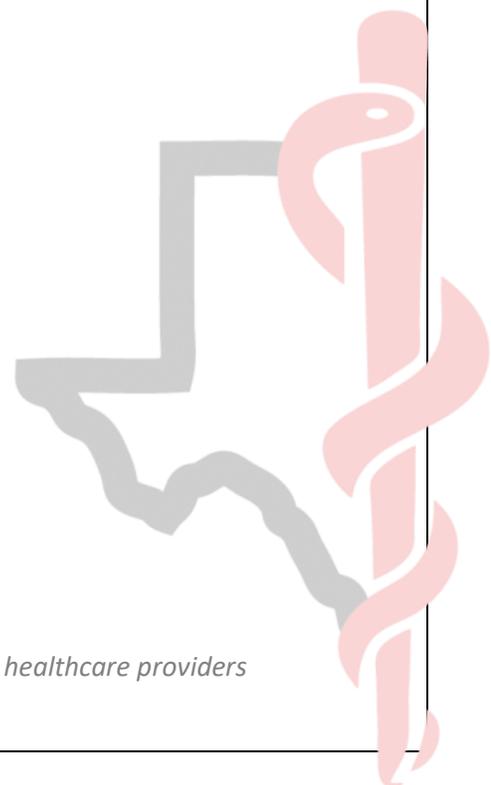
1. For patients who meet indications with no criteria for transport, complete a full history and physical.
2. Inform the patient that they do not meet indications for transportation by ambulance to the emergency department.
3. Provide the patient with the "COVID-19 Related Illness" home care instructions, and instruct the patient to follow the home care and home isolation guidance described.
4. Instruct the patient to contact their healthcare provider for further medical care, or call 911 if their condition becomes severe.
5. Inform the patient that they can be screened and evaluated for COVID-19, including testing as indicated, using the Health System websites and phone numbers in the handout.
6. Complete a patient care report and select "COVID-19 Non-transport and Referral" in the Incident / Patient Disposition dropdown.
7. If the patient continues to request transport to the ED, contact OLPG.
8. If need for further guidance or questions, contact OLPG.

OMD will complete 100% review of all patients in which this directive was used.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 03/20/2020

Expiration:

Replaces Medical Directive #:

Subject: COVID-19 Pandemic - Aerosol Generating Procedure Minimization

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**Purpose:** The purpose of this directive is to provide guidance regarding the use and minimization of aerosol-generating procedures (AGPs) in patients with signs and symptoms of lower respiratory infections, such as COVID-19, during times of pandemic declaration within the jurisdiction of the Metropolitan Area EMS Authority (MAEMSA).

**Definition:** Aerosol-generating procedures (AGPs) include nebulization, suction, high-flow nasal cannula (>15 LPM), non-rebreather, non-invasive positive-pressure ventilation (CPAP or BiPAP), bag-valve mask ventilation (BVM), CPR, and endotracheal intubation.

**Indications:**

1. Patients with signs and symptoms consistent with COVID-19:
  - a. Fever
  - b. Cough
  - c. Shortness of breath
  - d. Sore throat
  - e. Nasal congestion
  - f. Body aches
  - g. Headache
  - h. Chills
  - i. Fatigue
  - j. Nausea / vomiting
  - k. Diarrhea

**Procedure:**

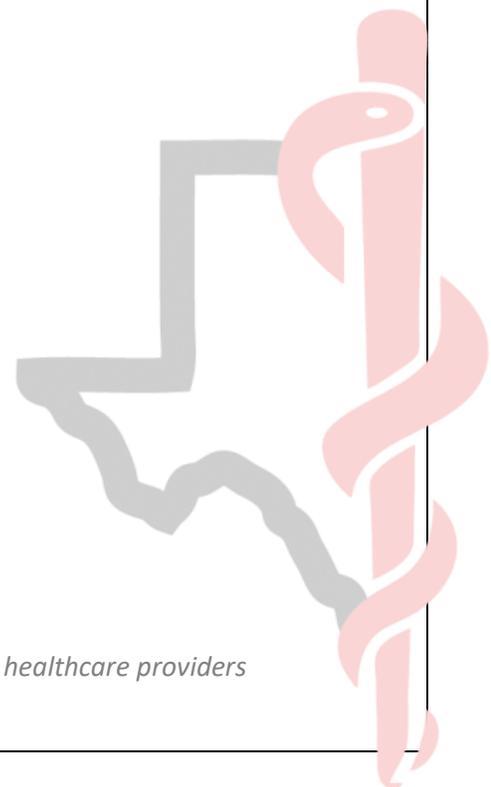
1. Minimize utilization of AGPs to when absolutely essential to patient care.
2. If possible, perform in an open space (i.e. outside the ambulance) and minimize the number of personnel present.
3. Follow PPE guidance per "COVID-19 Pandemic Identification and PPE" directive and agency policy.
4. **ONLY** perform AGPs when wearing full airborne isolation PPE.
5. Use the minimum amount of oxygen supplementation necessary to maintain oxygen saturation  $\geq 94\%$ .
6. Whenever nasal cannula or non-rebreather is used for oxygen supplementation, place a surgical mask on the patient over the device as well.
7. If bronchodilator therapy is needed, utilize the patient's personal albuterol or albuterol/ipratropium (Combivent) inhaler, if available, prior to consideration of nebulizer therapy. By estimation, 5 puffs = 1 nebulizer dose. This does not apply to other types of inhalers.

8. For respiratory failure thought to be secondary to asthma, consider early use of intramuscular epinephrine instead of nebulizer therapy.
9. If available, use viral filter when utilizing CPAP/BiPAP, BVM, or advanced airway.
10. For patients who require an advanced airway, a King airway should be the airway of choice.
  - a. Place tape over the gastric port if not in use.
  - b. Do not attempt endotracheal intubation due to the significantly increased risk of viral transmission associated with this procedure.
11. Minimize the use of suction. For advanced airways, only suction through the port of the green swivel adapter (do not disconnect the circuit to suction through the opening).
12. In the setting of cardiac arrest, place a King airway as soon as possible.
13. Whenever possible, avoid intranasal medications and utilize intravenous or intramuscular routes of administration instead.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 03/20/2020

Expiration: N/A

Replaces Medical Directive #: 2003001

Subject: COVID-19 Pandemic - Identification and PPE

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Given the current reports of community transmission in DFW, providers should wear a baseline level of PPE when responding to all emergent and non-emergent calls. The determination of this baseline will be agency dependent, but should at a minimum include a surgical mask and gloves.

If you are evaluating a patient with symptoms of respiratory illness (e.g., cough, difficulty breathing, fever), first maintain at least 6-feet of separation, if possible. Then, place the patient in a surgical mask, followed by the “Identify, Isolate, Inform” Process:

### Identify

All patients with signs and symptoms of lower respiratory illness should be treated as if they are currently infected with COVID-19. Further, there may be patients who have recently traveled to areas with more wide spread community transmission, which should significantly raise the clinical suspicion of COVID-19. The same is true for patients who have been in close contact with confirmed or suspected COVID-19

Remember that fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. Further, many patients with COVID-19 do not initially present with fever.

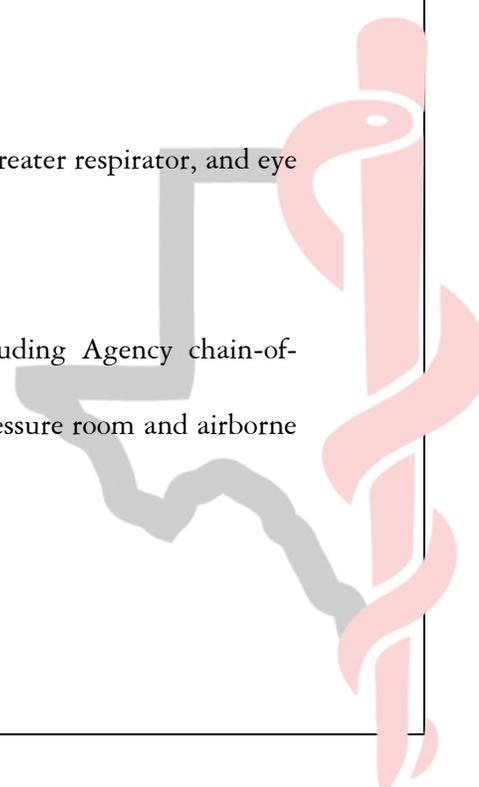
For patients identified through the 911 call-taking process, begin with below Isolation instructions while confirming screening questions.

### Isolate

- Ensure patient continues to wear surgical mask
- Don airborne precaution PPE: gloves, fluid-resistant gown, N-95 or greater respirator, and eye protection

### Inform

- Follow Agency institutional policy on notification for HCID, including Agency chain-of-command
- Notify destination receiving facility of a patient requiring negative pressure room and airborne precautions



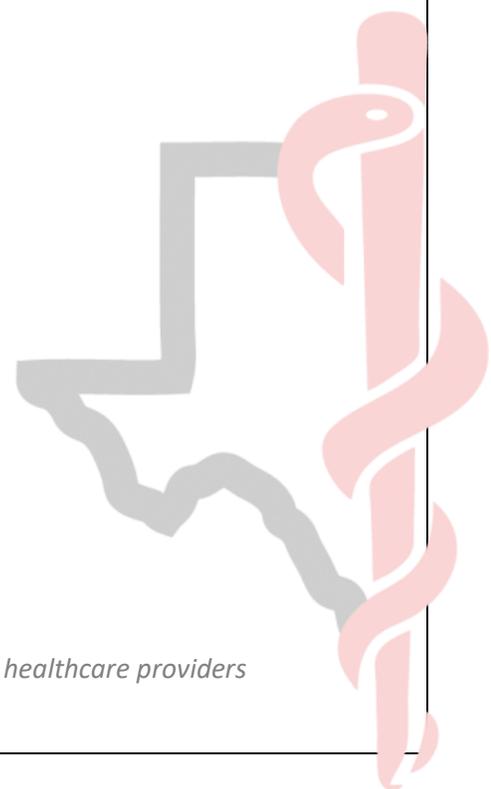
- For patients refusing treatment or transport, contact OLPG
- Plan for decontamination of personnel, equipment, and ambulance

Further background information is available at the CDC's Health Advisory Network:  
<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 2002002  
FOR IMMEDIATE DISTRIBUTION  
Date: 02/24/2020



Medical Oversight for the MedStar System

Effective: 02/29/2020

Expiration: 05/31/2020

Replaces Medical Directive #: 1912001

Subject: Epinephrine Dilution Procedure

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Due to the shortage of epinephrine 1 mg/10ml (1:10,000), your ambulance may be supplied with epinephrine 1 mg/1ml (1:1,000) concentration; requiring you to dilute prior to administration.

For patients in cardiac arrest, ambulances may be supplied with epinephrine dilution kits containing:

- 3 – epinephrine 1 mg/1ml (1:1,000)
- 3 – saline flush 10 ml

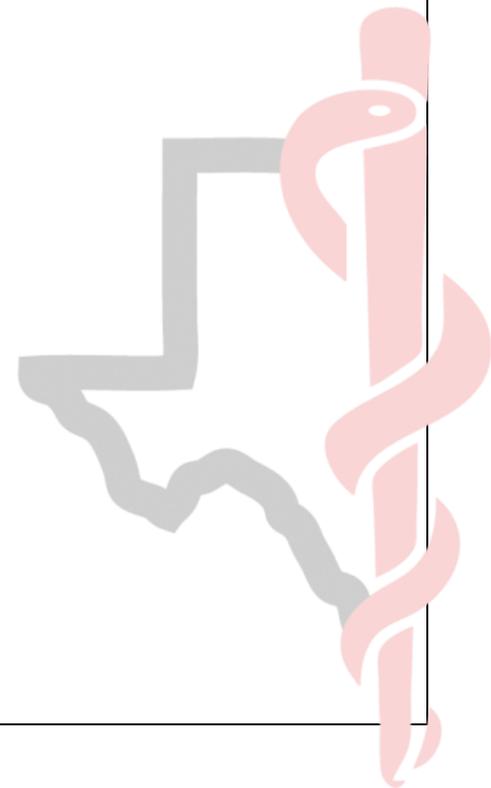
To dilute, simply “Push 1, Pull 1”:

- Push out 1 ml of saline from the saline flush syringe
- Pull 1 ml of epinephrine 1mg/1ml (1:1,000) from the vial into the saline flush syringe
- Administer IV as per protocol

If you have any questions, do not hesitate to contact me directly.

A handwritten signature in black ink that reads "Vithalani".

Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 01/08/2020

Expiration:

Replaces Medical Directive #:

**Subject: Homeless Outreach Program and Enforcement (HOPE)  
Program Overview & Medical Directive**

---

## Background

A high number of 911 encounters occur in the East Lancaster corridor and in selected sites in downtown Fort Worth for incidents among people experiencing homelessness. Many of these encounters are not of the severity that requires a full emergency response or transport to an emergency room, thereby tying up vital resources, driving avoidable community costs, and creating lost opportunities for appropriate patient interventions.

Under the current policy and procedures in use by emergency responders, Fire, Police and MedStar Mobile Healthcare must respond to each call resulting in the transport of nearly all patients requiring treatment to a hospital emergency center. The very high volume of low acuity/low priority calls engages critical resources inappropriately, potentially delays the response to high acuity/high priority callers, drives avoidable costs across the community and continuum of care, and creates lost opportunities for appropriate caller interventions and education.

## Program Components

In response to this problem, a cross-functional and collaborative street outreach team will be created and piloted with members from the Fort Worth Fire Department, Fort Worth Police Department, MHMR Outreach, John Peter Smith (JPS) Street Medicine, and Tarrant County Homeless Coalition (TCHC). This Homeless Outreach Program and Enforcement (HOPE) Team will work as a group utilizing the expertise and skill set of each member to effectively engage with citizens experiencing homelessness, staying in or visiting the East Lancaster corridor, and calling 911 with non-emergent conditions.

The HOPE Team will seek out citizens with a history of high volume, low acuity 911 calls in the East Lancaster corridor to proactively offer care, treatment, support and education in an attempt to reduce the volume of inappropriate 911 calls and increase the utilization of ambulatory care and/or social services moving forward. In addition, the HOPE Team may respond to low acuity/low priority 911 calls in the East Lancaster corridor utilizing revised policies and procedures that will facilitate assessment, triage, treatment and/or intervention for ambulatory conditions and education regarding more appropriate utilization and access to health care. The HOPE Team may also be called upon to support emergency responders for low acuity/low priority calls in the identified HOPE Team coverage area. Finally, the HOPE Team will

respond to questions or concerns raised by citizens as the HOPE Team walks the East Lancaster corridor in the course of its duties that may include assessment, triage, care or interventions, education, or support.

EMS Personnel Training:

FWFD personnel approved by the Office of the Medical Director (OMD) will undergo specialized training designed by the OMD. Only FWFD personnel who have successfully completed the HOPE Team training will be authorized to use the HOPE Team protocol.

Alternative Care Sites:

The OMD has designated the JPS Urgent Care Center and the JPS True Worth Clinic as the primary medical alternate locations that will be utilized. Other alternative destinations may be designated as appropriate.

Patient Engagement:

For the purposes of the HOPE Team, a patient is defined as outlined in the Uniform EMS Ordinance. A patient is “An individual who is ill, sick, injured, wounded, or otherwise incapacitated, and in need of or at risk of needing medical care at the scene of a medical emergency or during transport to or from a healthcare facility.”

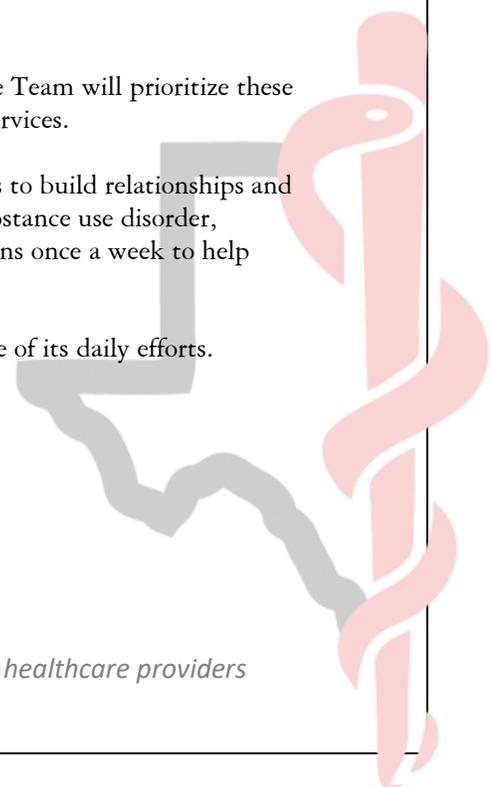
Any person who is encountered and meets the above definition will require a medical screening utilizing these guidelines and will require completion of the appropriate encounter form in the ImageTrend ePCR system as available. In the absence of the ImageTrend ePCR system being available an approved alternate PCR form, accessible to OMD, will be utilized. In addition to these guidelines, FWFD Team members must follow all existing OMD protocols applicable to their credential level and scope of practice in the assessment and management of any patient that is encountered.

Methods of Engagement:

911 low acuity/low priority calls may be routed to the HOPE Team, and the Team will prioritize these encounters, assess and render or facilitate the appropriate level of care and services.

The Team will proactively engage with known frequent users of 911 services to build relationships and offer education and access regarding available medical, behavioral health/substance use disorder, homelessness, and other social services. The team will conduct case evaluations once a week to help coordinate care.

The Team will respond to direct engagement by the population in the course of its daily efforts.



Should the person encountered meet the definition of patient and meet the criteria for a potential alternate care site, the patient will be offered the opportunity to receive care at the selected site. Once the patient has agreed to receive care at the alternate site, FWFD personnel will follow the outlined process for verifying the patient's condition is appropriate for care at in the selected care setting and will arrange the most appropriate method of connecting the patient with that approved destination.

Patient Consent:

If the patient meets criteria for an alternate care site, the FWFD Team member will read a script approved by the OMD for alternate care settings. This script will be available to the HOPE Team for use during patient encounters.

If the patient agrees to be referred to the approved alternate site, the on-scene FWFD Team member will utilize online medical control through the JPS True Worth Clinic or JPS ED Physicians to verify that the patient is appropriate for care at an alternative site. The online medical control physician will either approve or deny the request for the patient to receive care at the alternative site. If the request is denied, the FWFD Team member will follow the orders of the online medical control physician for the most appropriate care setting for the patient.

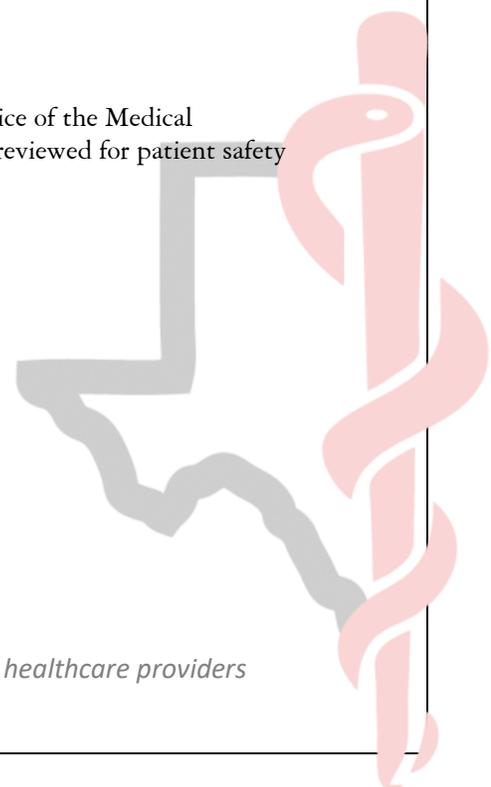
If approved for the alternate care site, the patient will be asked to sign a consent for alternative site navigation and the Team will arrange the most appropriate method of connecting the patient with that approved destination.

Patient Follow-Up:

Part of the process for being approved as an alternate destination facility is the requirement for the facility to notify OMD of the patient's disposition from the facility. OMD's Quality Assurance team and HOPE team leaders will receive these notifications and provide reports on the dispositions of patients referred to alternate destinations.

Quality Assurance:

Quality assurance for this program will be performed by staff within the Office of the Medical Director. Initially, 100% of all navigations to alternate care settings will be reviewed for patient safety and clinical appropriateness.



## Program Processes

### Determining Clinical eligibility

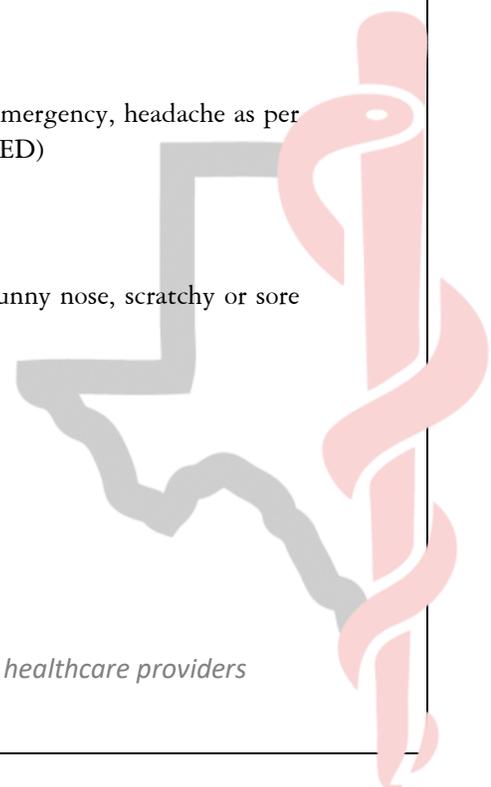
1. Every person encountered should be evaluated to determine if they any medical complaints and/or meet the definition of patient as outlined above.
2. If the person meets the definition of patient a clinical evaluation must be completed to determine most appropriate care setting to recommend to the patient.
3. Most appropriate care setting should be determined based on the following guidelines:
  - a. Emergent: Potential loss of life or limb if not treated immediately (911 transport to ED).
    - i. Ambulance transport to the Emergency Department (Emergent/Urgent/Non-Urgent)
  - b. Urgent: Patient has serious medical condition, but will not die or lose limb if treatment is delayed 2 hours.
    - i. Referral to other medical care within 24 hours (Urgent/Non-Urgent)
    - ii. Non-Ambulance transport to a local urgent care center or clinic (Urgent/Non-Urgent)
    - iii. Ambulance transport to a local urgent care center (Urgent/Non-Urgent)
    - iv. Non-Ambulance transport to the Emergency Department (Urgent/Non-Urgent)
    - v. Ambulance transport to the Emergency Department (Emergent/Urgent/Non-Urgent)
    - vi. Urgent behavioral health/SUD resource (Urgent/Non-Urgent)
    - vii. Referral to OB Triage (Urgent/Non-Urgent)
  - c. Non-Urgent: Patient may need to see a physician, but will not be harmed if treatment delayed longer than 2 hours.
    - i. Referral to other medical care within 24 hours (Urgent/Non-Urgent)
    - ii. Non-Ambulance transport to a local urgent care center or clinic (Urgent/Non-Urgent)
    - iii. Ambulance transport to a local urgent care center (Urgent/Non-Urgent)
    - iv. Non-Ambulance transport to the Emergency Department (Urgent/Urgent)
    - v. Ambulance transport to the Emergency Department (Emergent/Urgent/Non-Urgent)
    - vi. Urgent behavioral health/SUD resource (Urgent/Non-Urgent)
    - vii. Referral to OB Triage (Urgent/Non-Urgent)
4. If the patient is eligible for care at an alternative care site, utilize the alternative care site panel of the ImageTrend ePCR chart. This panel will walk you step-by-step through the process of verifying patient consent to alternative care and verifying patient eligibility for alternative care. In the absence of ImageTrend being available, navigation will be completed through use of this guideline in combination with the use of an alternatively approved PCR form.
5. Read the consent script to the patient.
  - a. Patient refuses – proceed with normal patient management per current OMD protocol.
  - b. Patient agrees – have the patient sign the alternative care setting consent form.
6. Contact online medical control to provide patient report and discuss desire for alternative care setting

- a. Online medical control physician agrees to alternative care setting - arrange the most appropriate method of connecting the patient with that approved destination.
- b. Online medical control physician does not agree to alternative care setting – follow the orders of the online medical control physician for the most appropriate care setting for the patient.

#### Alternative Destination Criteria

For care at JPS True Worth Clinic or JPS UCC

- Patient is 18 years of age or older
- Seasonal Allergies (True Worth)
- Bug bites and stings (True Worth)
  - Shortness of breath, GI symptoms, wheezing on exam (ED)
- Childhood diseases (chicken pox, hand, foot and mouth disease, whopping cough) (True Worth)
- Runny Nose (True Worth)
- Contusions (True Worth)
- Ear Pain / Drainage (True Worth)
- Eye Pain/Redness (True Worth)
  - Sudden onset of symptoms or visual deficits (ED)
- Flu-like symptoms (True Worth)
- Foreign object removal (True Worth)
  - Airway involvement, GI foreign objects (ED)
- Headaches and migraines
  - History of symptoms with same pattern (True Worth)
  - Neuro deficits, Co-morbidities (HTN, fever, neck pain and stiffness), AMS (ED)
- Immunizations (True Worth)
- Joint Pain (True Worth)
  - Signs of acute inflammation/infection (ED)
- Nausea/Vomiting (True Worth)
  - Signs of significant volume loss, risk factors for ACS, signs of diabetic emergency, headache as per above, GI bleeding (upper or lower), pregnancy beyond mild vomiting (ED)
- Rashes (True Worth)
  - Shortness of breath, GI symptoms, Wheezing on exam (ED)
- URI Symptoms
  - Coughing, sinus pressure/congestion, excess mucus, nasal congestion, runny nose, scratchy or sore throat (True Worth)
  - SOB or chest pain (ED)
- Scrapes, cuts, minor lacerations (True Worth)



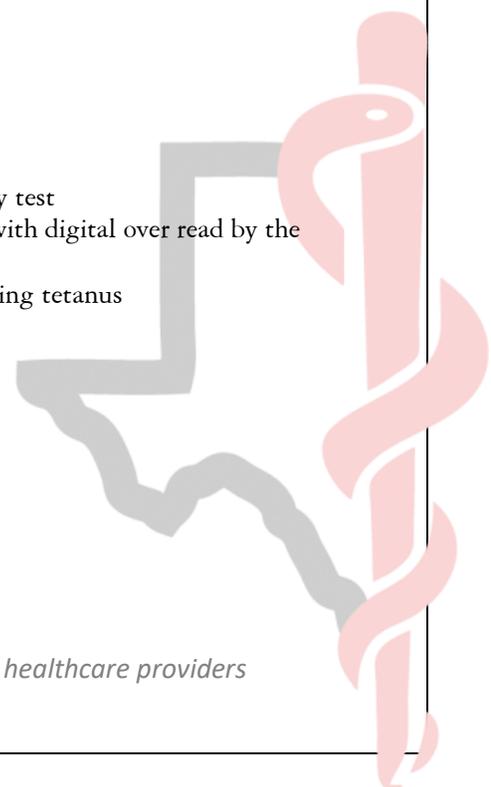
- Overlying joints, difficulty with movement (ED)
- Shingles (True Worth)
- Extremity Injury
  - No bony deformity (True Worth)
  - Gross deformity, open fractures, suspected partial amputation, angulation, long bones (ED)
- Skin Conditions (acne, eczema, poison ivy, scabies) (True Worth)
- Sore throat, strep throat (True Worth)
  - Shortness of breath or wheezing on exam (ED)
- UTI Symptoms
  - Burning feeling with urination, increased urge to urinate or increased urination, pain or pressure in lower back or lower abdomen accompanied by other UTI symptoms (True Worth)
  - Abnormal vital signs (ED)
- BGL Issues
  - Successfully treated hypoglycemia without need for ongoing IV dextrose (True Worth)
  - BGL >400 mg/dL (ED)
  - Signs or symptoms of DKA (ED)
- Back Pain (True Worth)
  - Abnormal vital signs (ED)
- Cellulitis
  - Stable vital signs and area of spread <20 cm (True Worth)
- VS parameters requiring ED
  - Heart rate: <50 or >120
  - Respiratory rate: >20
  - Systolic blood pressure: <90 mmHg or >200 mmHg
  - Temperature: No specific range. Dependent on other VS.
  - SpO2: <90%

#### True Worth Clinic Information

**Clinic Hours:** Monday – Friday 0800 to 1700

- **Medical Care Available:**
  - On site testing for blood sugar, HBA1C, strep, flu, urinalysis, pregnancy test
  - X-ray services available for back, neck, extremities, chest and abdomen with digital over read by the JPS radiologists
  - Injectables – Rocephin, Narcan, Toradol, Bicillin, immunizations including tetanus
  - Portable butterfly ultrasound
  - Simple laceration repairs, I&Ds, joint injections
  - Ankle, wrist and knee braces with crutches and canes- but no casting
- **Support Services Provided:**

*Our Mission: Excellence in patient care by partnering with our community's healthcare providers through medical direction, education and research.*



- Social Worker
- Behavioral Health Liaison to JPS Behavioral Health
- Eligibility specialist for connecting to JPS coverage
- Community Health Workers
- Lab drawing station for specimens sent to the JPS lab

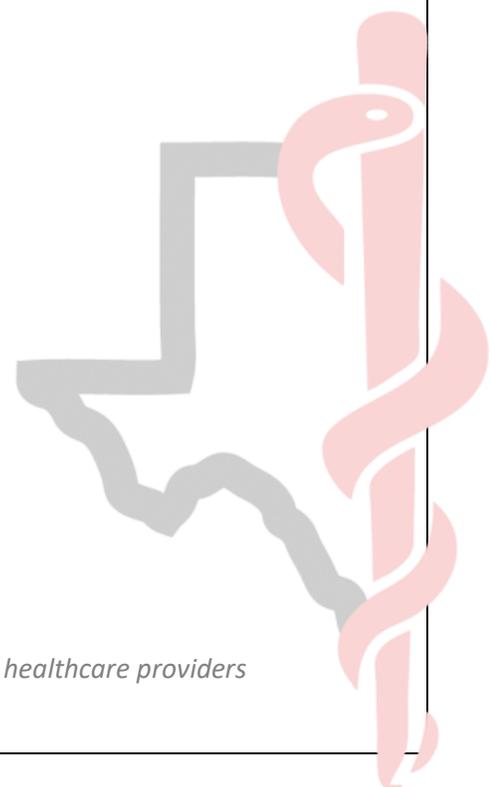
**QA Process:**

- A weekly report will be generated for all HOPE Team encounters that resulted in the creation of an ePCR.
- The ePCRs generated for these encounters will be reviewed. The review of the documentation will include, but not be limited to:
  - Patient assessment
  - Patient intervention
  - Compliance with protocol for eligibility of an alternate care setting
  - Compliance with patient consent process
  - Compliance with alternate care setting protocol and facility selection
- The outcome/disposition report from the facility for the patient will be reviewed by OMD staff.
- Feedback regarding the QA review will be provided to the Team involved in the patient's care and navigation.
- A monthly QA summary report will be generated and presented to the appropriate stakeholders to identify any opportunities for additional training/education.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 01/03/2020

Expiration:

Replaces Medical Directive #:

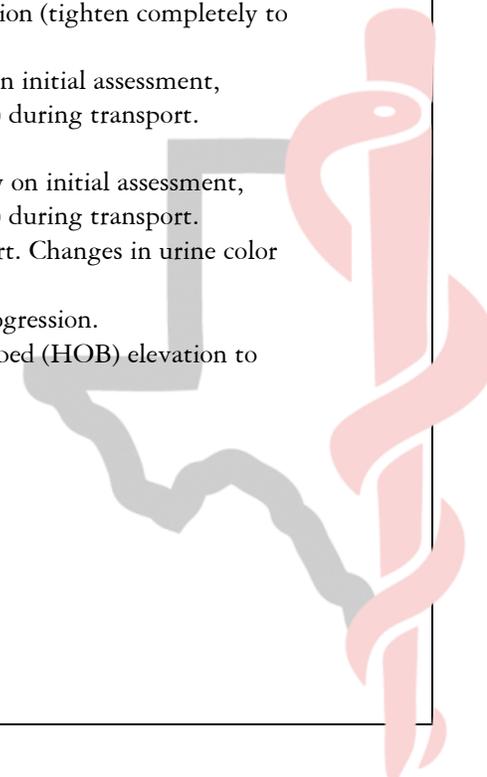
Subject: Update – Ventricular Assist Procedure - Impella

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For CCP credentialed providers, the following Ventricular Assist Device Procedure is effective immediately for the transport of patients while on an Impella:

The Impella is intended for partial circulatory support using an extracorporeal bypass unit, for periods from 6 hours (Impella 2.5) to 2 weeks (Impella 5.0).

1. Confirm that Impella placement has been verified with echocardiography. Document position of the Impella as reported by sending facility. If possible, bring reports and/or imaging studies that document confirmation of placement.
2. Verify the patient's Activated Clotting Time (ACT) has been checked and is between 160-180 seconds.
  - a. If the ACT is not verified, ensure it is evaluated before transport.
  - b. If the ACT is <160 or >180 seconds, request that it is addressed before transport per the sending facility guidelines.
3. Evaluate and confirm Impella settings. Document and monitor:
  - a. pump performance level (P2-P9)
  - b. flow (1.1 to 5.3 L/min [device dependent])
  - c. placement signal pulsatile [mmHg] (red waveform)
  - d. purge pressure 300-1100 mmHg
  - e. motor current <1000 and pulsatile (green waveform)
  - f. pump position
  - g. purge fluid infusion rate (2-30 mL/hr)
4. Ensure the Tuohy bore on the Impella catheter is tight to prevent catheter migration (tighten completely to the right).
5. Evaluate insertion site for signs of bleeding, swelling or hematoma, and catheter on initial assessment, following each patient transfer, and frequently (every 15 minutes and as needed) during transport. Document findings following each evaluation.
6. Evaluate pulses, capillary filling time, and temperature of affected lower extremity on initial assessment, following each patient transfer, and frequently (every 15 minutes and as needed) during transport.
7. Evaluate urine output and color on initial assessment and monitor during transport. Changes in urine color may indicate hemolysis.
8. Establish the patient's baseline condition. Evaluate hemodynamics and clinical progression.
9. Patients should remain flat throughout transport. Under no conditions is head of bed (HOB) elevation to exceed 30°.



10. Instruct the patient to keep the affected leg straight. Apply knee immobilization device if needed to prevent movement.
11. During transport, maintain pump performance level and flow rate at ordered levels. If unable to maintain ordered flow rate at ordered levels, contact OLMC for guidance.
12. If alarms occur during transport, follow on-screen troubleshooting guidance for resolution. If alarms not resolved following troubleshooting, contact OLMC for further guidance.
13. If purge solution requires replacement during transport replace with D10 solution or solution provided by sending facility.
14. Refer to the hemodynamic monitoring protocol for arterial line maintenance.

**Precautions:**

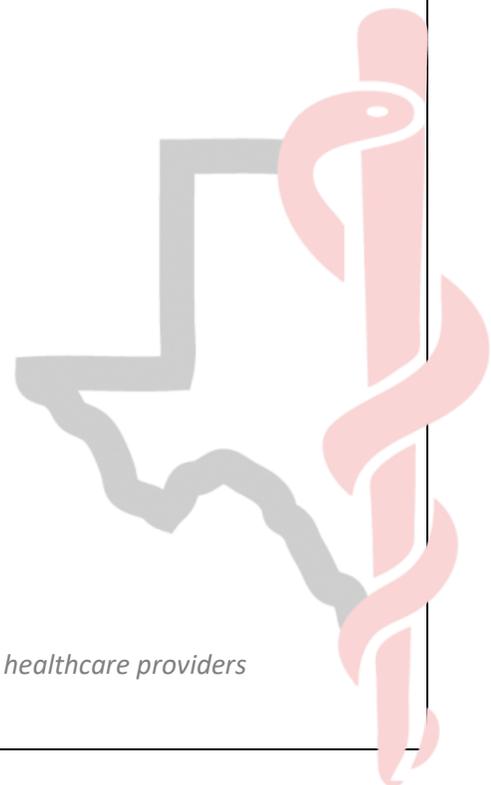
- Verify the battery charge level before unplugging and moving the Impella controller. A fully charged battery will support the system for approximately 60 minutes. The Impella controller should always be plugged in for transport.
- Place the Impella controller must on a flat surface, where the screen is easily visible during transport. The controller must be secured during transport to avoid accidental dislodgement of the sheath and to prevent the controller from becoming a dangerous projectile. Consider using the bed mount as a loop through which to secure the device with straps.
- Movement of the HOB is the primary cause of migration of the Impella during transport. Do not move the HOB from its initially established position.
- Keep the stopcock on the peel-away introducer or repositioning sheath in the closed position. Significant bleeding can occur if the stopcock is in the open position.
- Do not decrease pump performance (P) level below P2 as long as the pump is in the ventricle. Below P2, retrograde flow will occur across the aortic valve.
- CPR should be initiated immediately per MedStar protocol if indicated. When starting CPR, reduce the Impella flow rate to P2. If return of spontaneous circulation, return the flow rate to the previous P-level, by increasing one P-level every 30-60 seconds and assess placement signals on the controller.
- Infusion through the side port of the introducer can be done only after all air is removed from the introducer. If performed, the infusion should be done for flushing purposes only and NOT for delivering therapy or monitoring blood pressure or MAP.
- Base the management of the patient's hemodynamic status on MAP readings from an arterial line. Target MAP to >65 mmHg or level ordered by sending facility.
- If there are any changes in the patient's condition during transport or there are unresolved Yellow or Red alarms, contact the receiving facility with updated information so they can prepare for the proper interventions before patient arrival.
- Contact the 24-hour clinical support line at 1-800-422-8666 with any questions or concerns during transport. Use only for general information about the device functionality only. For any orders needed for patient management, contact OLMC and the receiving facility with updated

information so they can prepare for the proper interventions before patient arrival.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 01/03/2020

Expiration:

Replaces Medical Directive #:

Subject: Update – Ventricular Assist Device Procedure - IABP

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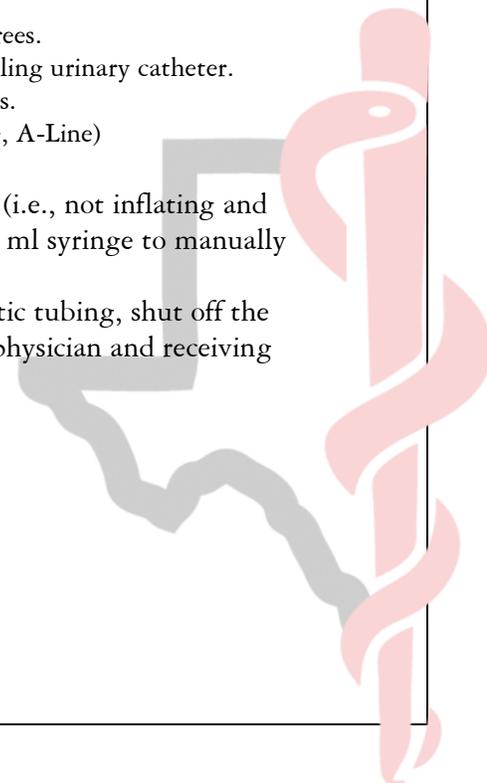
For CCP credentialed providers, the following Ventricular Assist Device Procedure is effective immediately for the transport of patients while on an IABP:

**Procedure:**

1. Review the most recent 12-lead EKG. Select lead with greatest R-Wave amplitude. Place patient in this lead on cardiac monitor for continuous monitoring during transport. Limit chest artifact. EKG leads for the IABP will be secured with tape to the patient's chest and maintained during transport. Lead selection may need to be changed in order to get the best R-wave and capture on the balloon pump (if EKG triggered).
2. Arterial line shall be maintained on the IABP. If a transducer is used, ensure that it is directly connected to the pump and in working order. Maintain adequate arterial tracing. If radial site is used, secure arm with arm board to protect site during transport. Secure tubing.
3. Evaluate balloon insertion site. Note balloon size in the medical record. Check dressing site appearance. Monitor site frequently (every 15 minutes and as needed) during transport. Instruct patient to keep affected leg straight. Ensure that a knee immobilizer is in place prior to transport for additional reinforcement.
4. Establish baseline condition. Evaluate hemodynamics and clinical condition.
5. Hemodynamic assessment will include: temperature; blood pressure; respiration rate and quality; heart rate and rhythm; arterial blood pressure; Augmented pressures, MAP; CVP; PAP; augmented diastolic pressure (ADP). Document findings including patient's weight.
6. Evaluate pulses, both radial sites as well as posterior tibial and dorsalis pedis to facilitate subsequent localization during transport, also capillary filling times and extremity temperature.
7. Review lab values and trends.
8. Maintain H.O.B. at lowest point tolerated by patient, never to exceed 30 degrees.
9. Evaluate and closely monitor urinary output. All patients will have an in-dwelling urinary catheter.
10. Maintain IABP at prescribed timing/ratio (i.e.: 1:1; 1:2; 1:4). Evaluate effects.
11. Document hemodynamics. Document: IABP type, model and trigger (EKG, A-Line)

**Precautions:**

- Never leave balloon pump inactive in patient for more than 20-30 minutes (i.e., not inflating and deflating). Thrombosis formation could occur after 30 minutes. Utilize 60 ml syringe to manually fill and deflate balloon.
- Balloon leak: Observe tubing for blood. If blood is observed in the pneumatic tubing, shut off the balloon pump and leave intact. Maintain sterile technique and notify the physician and receiving facility immediately.

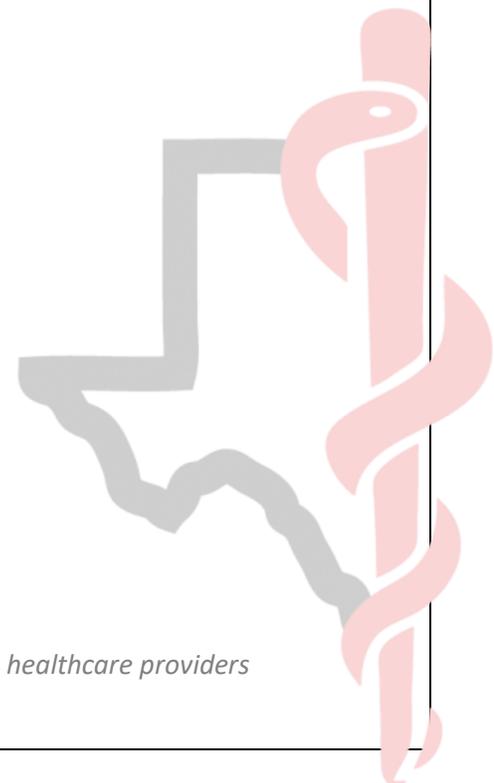


- IABP Failure: Evaluate patient's condition and hemodynamics. Troubleshoot the device and make every effort to correct the problem and maintain the patient's safety. If IABP is inoperable for greater than 20-30 minutes, inflate IABP manually with 60 cc syringe every 3-5 minutes to avoid clot formation (Inflate with 10cc less than balloon size).
- Ensure IABP battery is charged and Helium tank level is sufficient for transport. The balloon pump should be plugged into the ambulance inverter or generator outlets during transport.
- Ensure there is ample tubing length for transfer and loading the patient into the ambulance. Secure the IABP tubing at patient end and stretcher end, but not mid-line. Put loops in tubing if length permits.
- If bleeding is observed at the insertion site, apply direct pressure to the site until bleeding stops
- If CPR is required, the IABP should be switched to "pressure trigger" mode

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 01/03/2020

Expiration:

Replaces Medical Directive #:

Subject: Update to Adult & Pediatric Nausea and Vomiting Protocol

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The following has been added to the ECA and Basic scope of practice for patients who are experiencing nausea and who are able to follow commands:

Adult – Nausea and Vomiting

- Isopropyl Alcohol – 3-pads. Instruct patient to hold pads 1-2 cm from nose and inhale deeply as frequently as required to achieve nausea relief. IIRR x 1.

Pediatric – Nausea and Vomiting

*If pediatric patient is able to follow instructions, then*

- Isopropyl Alcohol – 3-pads. Instruct patient to hold pads 1-2 cm from nose and inhale deeply as frequently as required to achieve nausea relief. IIRR x 1.

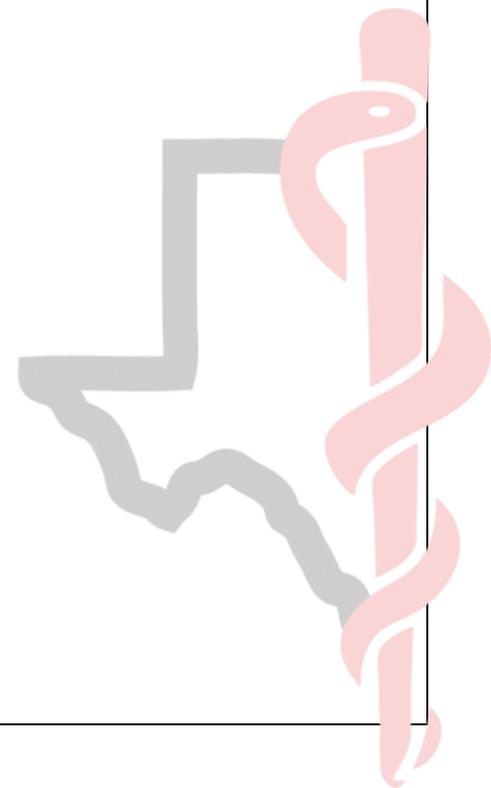
Document patient response and medication administration within the patient care report.

- Medication: Isopropyl Alcohol
- Route: Inhalation

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 1905001  
FOR IMMEDIATE DISTRIBUTION  
Date: May 13, 2019



Medical Oversight for the MedStar System

Effective: 05/13/2019

Expiration:

Replaces Medical Directive #: N/A

Subject: Epinephrine Use in Cardiac Arrest Protocol

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Effective immediately for patients in Cardiac Arrest, the following changes will be made to the respective protocols. Note, specifically the change in frequency and maximum number of doses.

**Adult**

VF/VT – Epinephrine 1:10,000 – 1 mg IV/IO q 5-mins x 3 doses

Asystole/PEA – Epinephrine 1:10,000 – 1 mg IV/IO immediately, then q 5-mins x 2 doses

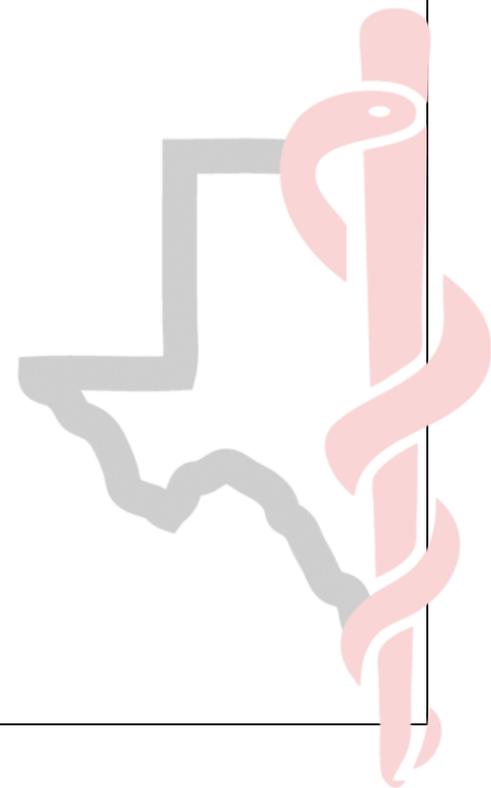
**Pediatric**

VF/VT – Epinephrine 1:10,000 – 0.01 mg/kg (max dose 1 mg) IV/IO q 5-mins x 3 doses

Asystole/PEA – Epinephrine 1:10,000 – 0.01 mg/kg (max dose 1 mg) IV/IO immediately, then q 5-mins x 2 doses

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Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 4/24/19

Expiration: N/A

Replaces Medical Directive #: N/A

Subject: Indications for Naloxone (Narcan) Administration

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### Directive

Effective immediately for all levels:

- Naloxone should only be administered when opiate intoxication is suspected based on known or suspected opiate overdose, AND the presence of all three of the following:
  - Miosis (pinpoint pupils)
  - CNS depression
  - Respiratory depression
    - i.e. RR <10, SpO2 <92%, and/or EtCO2 >45 mmHg
- Naloxone should not be given to patients who are awake, talking, not displaying significant respiratory depression, or displaying CNS depression or pinpoint pupils in isolation.
- Cardiac arrest is not an indication for naloxone administration, as there is no clinical benefit.

### Rationale

Through the OMD continuous quality improvement process, it has been observed that a significant proportion of naloxone (Narcan) administrations are for inappropriate indications. The purpose of this Directive is to clarify the appropriate indications for naloxone administration.

While opiate intoxication frequently causes CNS depression, nearly all opiate-related deaths occur due to respiratory depression. Therefore, the role of naloxone is solely to support respiratory function and not for improvement of mental status. Furthermore, in some cases administration of supplemental oxygen and assisted ventilation via BVM may abort the respiratory depression without the need for naloxone.

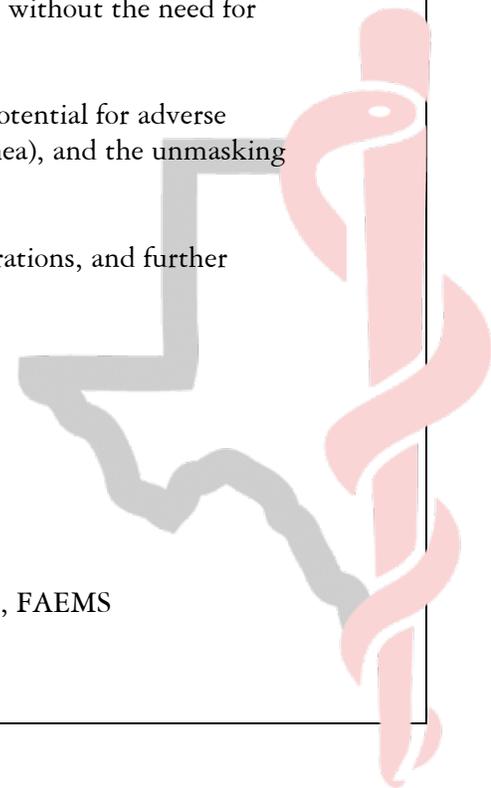
Although often assumed to be a benign medication, naloxone does have the potential for adverse effects include pulmonary edema, opioid withdrawal (nausea, vomiting, diarrhea), and the unmasking of other co-ingested drugs (e.g. cocaine in a “speedball”).

Ongoing quality assurance review will be performed on all naloxone administrations, and further education will occur in the 2019 2<sup>nd</sup> quarter OMD CE.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Effective: 02/01/2019

Expiration:

Replaces Medical Directive #: **1902003**

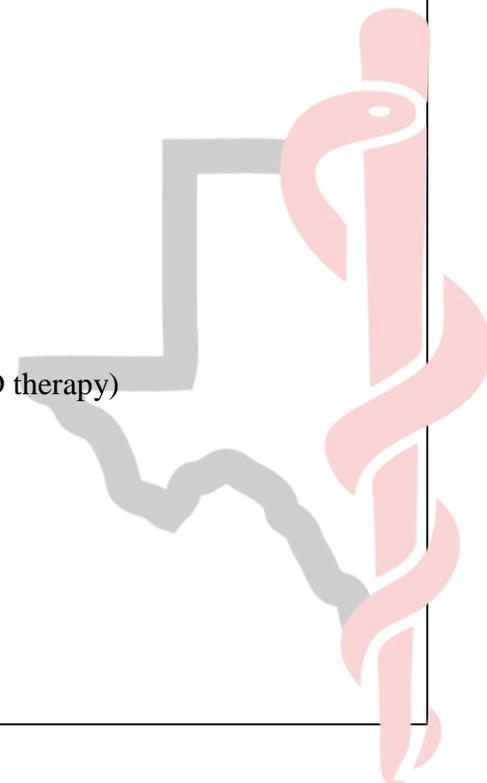
Subject: SCT Level of Care Guidelines

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PROCEDURE: As defined by the Texas Department of Health, “A Specialty Care Transport is defined as the interfacility transfer of a critically ill or injured patient requiring specialized interventions, monitoring and/or staffing.”

**In order to comply with this definition, the following interventions will qualify as a SCT:**

- Pharmacologic agents
  - Vasopressors
    - Any vasopressors not within current protocol
    - > 1-vasopressors
  - Vasoactive agents
    - Including, for example (but not limited to), beta blockers, milrinone, nitroprusside, nitroglycerin
  - Antiarrhythmics
    - Including, for example (but not limited to), procainamide, lidocaine, flecainide
  - Fibrinolytics
    - Including, for example (but not limited to), angiomax, argatroban, integrilin, t-PA, retevase,
    -
  - Paralytics
  - Insulin
  - Blood or blood products (excluding Albumin)
- Monitors or procedures:
  - Mechanical ventilation
  - Invasive line monitoring
  - Chest tube(s) (all – to suction and to gravity)
  - Intra-aortic balloon pump
  - External cardiac support
    - Ventricular assist device (for complaint related to VAD therapy)



- Impella
- Transvenous/transcutaneous pacemaker
- Any other specialized device or procedure unique to the patient's health care needs and clinical course

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The following non-SCT calls may be transported by Advanced Paramedics

- Drug infusions, within dose range, as specifically covered within Advanced protocols
  - Should infusion be found outside the dose range upon arrival, contact OLPG
  - Must be in place  $\geq$  15-minutes prior to transport (for evaluation of negative reactions)
- There may be only 1 infusion not requiring titration, above and beyond maintenance fluids, parenteral nutrition, and/or antibiotics. Examples include:
  - Magnesium sulfate
  - Antiepileptics (not including Dilantin/phenytoin, phenobarbital)
  - Narcotics/opiates
  - Heparin
  - Medications not covered in the above SCT inclusion criteria ( Including, for example (but not limited to sandostatin, protonix, acetadote)
- Ventilators in non-emergent settings where the patient will remain on their home ventilator, and where the home care or facility RN is accompanying the patient specifically for the purpose of managing the ventilator.
- Home medication being administered via personal infusion pump.
- Ventricular assist device (VAD) patients with a complaint not related to VAD therapy

Crew configuration may be a minimum of a CCP and Basic provider when the number of treatments requiring SCT level-of-care is limited to one qualifying intervention.

Protocols are written to address the standard EPAB approved treatment plan and may not address all possible circumstances or therapies. If a patient is receiving medications or therapies not addressed within the Out-of-Hospital & Mobile Integrated Healthcare Protocols, the CCP may continue the medication or therapy following the parameters ordered by the referring physician. OLPG physician shall be contacted for further guidance if the CCP is unfamiliar with the medication or therapy.

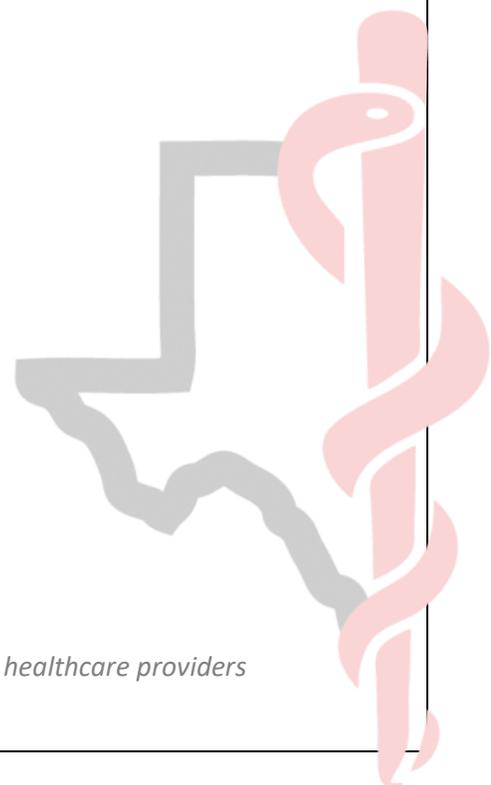
Request for transports that fall outside of these guidelines require the CCP to make patient contact and communicate to the Online Protocol Guidance (OLPG) physician for further guidance. The CCP will then update Communications with final transport level-of-care for final disposition and documentation. For any additional concerns not covered in this policy, the CCP will contact the OLPG physician for further guidance.

In the event that the intercepting CCP is unavailable to meet the responding unit at the requested pick-up time, the Operations Supervisor will notify the OLPG physician with all details concerning the request for SCT (reason for transfer, patient condition, treatment modalities in place) with recommendation for alternative level-of-care – e.g., advanced unit with sending facility RN or other, or mutual aid. Any changes to agreed plan will be communicated directly to OLPG prior to patient transfer. Documentation of alternative-level-of-care is to be recorded in the ePCR.

If you have any questions, do not hesitate to contact me directly.



Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 1902002  
FOR IMMEDIATE DISTRIBUTION  
Date: January 31, 2019



Medical Oversight for the MedStar System

Effective: 02/01/2019

Expiration:

Replaces Medical Directive #: 1712002

Subject: Medication Shortage – Diltiazem Hydrochloride

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Due to the shortage of normal saline products effecting our ability to reconstitute medications, diltiazem hydrochloride availability may vary from truck to truck. When available on the truck, it is to be utilized as indicated within protocol.

Diltiazem Hydrochloride

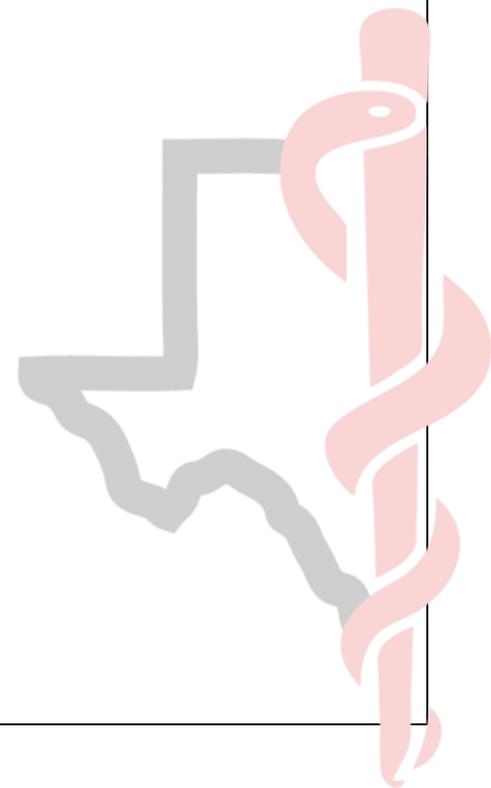
When not available for Adult – Tachycardia A-flutter or A-fib:

- Stable: Proceed with transport
  - o If patient develops hemodynamic instability, proceed with treatment of the unstable patient.

If you have any questions, do not hesitate to contact me directly.

A handwritten signature in black ink that reads "Vithalani".

Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director



Medical Directive # 1902001  
**FOR IMMEDIATE DISTRIBUTION**  
Date: January 31, 2019



Medical Oversight for the MedStar System

Effective: 02/01/2019

Expiration:

Replaces Medical Directive #: 1608003

Subject: Student Administration of Controlled Substances

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For continuity in chain of custody, documentation of administration and waste of controlled substances, Students are not allowed to administer or witness waste of controlled substances. All controlled substances will be administered by the MedStar Advanced Paramedic that signed out the controlled substances.

This Medical Directive is not intended to prevent the MedStar Paramedic from teaching the Student about the medications mechanism of action, indications, contraindications, and side effects.

If you have any questions, do not hesitate to contact me directly.

A handwritten signature in black ink that reads "V. Vithalani". The signature is fluid and cursive.

Veer D. Vithalani MD, FACEP, FAEMS  
Interim Medical Director

