MEDICAL DIRECTION SERVICE AGREEMENT

October 1, 2017

Contract No. 167-0194-P

PINELLAS COUNTY
EMERGENCY MEDICAL SERVICES AUTHORITY
12490 Ulmerton Road
Largo, FL 33774-2700

AGREEMENT made this _____ day of _____ 2017, between **EmCare, Inc., Clearwater FL**, ("Contractor"), and the **PINELLAS COUNTY EMERGENCY MEDICAL SERVICES AUTHORITY**, a special taxing district established by Chapter 80-585, Laws of Florida, as amended ("Authority").

RECITALS

1. On March 15, 2017, the Authority released a Request for Proposal No. 167-0194-P for the provision of Medical Direction Services ("RFP").

2. On May 4, 2017, the Authority selected the Contractor as the number one ranked proposer and authorized negotiations with Contractor.

3. Pursuant to the RFP, Contractor and Authority now desire to enter in to this Medical Direction Service Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants of each other contained in this Agreement and other good and valuable consideration, receipt of which is hereby acknowledged, the parties agree as follows:

ARTICLE I
THE AGREEMENT

SECTION 101. PURPOSE

The purpose of this Agreement is to define the obligations and responsibilities of the Contractor and Authority (collective "Parties") hereto with respect to the provision of Medical Direction Services in Pinellas County.

SECTION 102. COOPERATION

The Parties shall cooperate and use all reasonable efforts, pursuant to the terms of this Agreement, to facilitate the terms of this Agreement. Accordingly, the Parties further agree in good faith to mutually undertake resolution of disputes, if any, in an equitable and timely manner so as to limit the need for costly, time-consuming, adversarial proceedings to resolve such disputes.

SECTION 103. CONTRACT DOCUMENTS

The following Appendices are attached to and made part of this Agreement:

Appendix A. First Responders in Pinellas County
Appendix B. Medical Operations Manual
Appendix C. Certificate of Insurance
Appendix D. Business Associate Agreement

This Agreement, together with the foregoing Appendices, constitutes the entire Medical Direction Service Agreement between the Parties with respect to the provision of Medical Direction services, shall supersede any prior agreement, contract or memorandum of understanding between the Parties regarding such services and the Parties agree that the

terms and conditions of this Agreement, including the Appendices, shall govern exclusively the obligations of the Parties. In the event of, and/or to the extent there exists a conflict among this Agreement and the above listed Appendices, this Agreement shall govern.

ARTICLE II
DEFINITIONS

SECTION 201. WORDS AND TERMS

Unless the context otherwise requires, capitalized terms used herein shall have the following meanings ascribed to them:

"Advanced Life Support" or **"ALS"** means treatment of life-threatening and non-life-threatening trauma and medical conditions through the use of techniques such as endotracheal intubation, the administration of drugs or intravenous fluids, cardiac monitoring, and cardiac defibrillation by a qualified person, pursuant to rules of the Department.

"Ambulance Contractor" means the entity contracted by the Authority to provide Ambulance Services and Mental Health Interfacility Transport Services.

"Ambulance Services" means the emergency, non-emergency, inter-facility, critical care, and other Specialized Rescue and other specialized transport services offered by the Authority through its Ambulance Contractor.

"Ambulance" means any vehicle permitted by the Department, approved by the Executive Director, and operated by the Ambulance Contractor, which is equipped to provide Advanced Life Support services or Basic Life Support services, and used for the transportation of Patients.

"Associate Medical Director" means physician who is (1) duly licensed osteopathic or medical doctor in the State of Florida, (2) meets the requirements of the Department, (3) is board certified in emergency medicine, and (4) has a valid employment agreement with the Contractor to serve as an assistance to the Medical Director.

"Authority" means the Pinellas County Emergency Medical Services Authority, a special taxing district established by Chapter 80-585, Laws of Florida, as amended.

"Basic Life Support" or **"BLS"** means treatment of life-threatening and non-life-threatening trauma and medical conditions by a qualified person through the use of techniques described in the Emergency Medical Technician Basic Training Course Curriculum of the United States Department of Transportation.

"Caller" means a person accessing the EMS system by telephone.

"Certificate of Public Convenience and Necessity" or "COPCN" means that certificate issued by the Board of County Commissioners pursuant to Chapter 401.25(2)(d), Florida Statutes or the Authority through Chapter 54 of the Pinellas County Code.

"Continuing Medical Education" or **"CME"** means the current Continuing Medical Education Program for the continuing and remedial education and training of all EMS Personnel.

"County" means Pinellas County, Florida, a political subdivision of the State of Florida.

"County-Certified" or **"County Certification"** means authorized to work in the EMS System in accordance with requirements established by the Medical Control Board and the Medical Director, and approved by the Authority.

"Department" means the State of Florida Department of Health, Bureau of Emergency Medical Services.

"Disaster" means an occurrence of a severity and magnitude that normally results in death, injuries, and/or property damage, and which cannot be managed through routine procedures and resources of the EMS system.

"Emergency Medical Technician" or **"EMT"** means any person who is trained in Basic Life Support, who is County-Certified, and who is certified by the Department to perform such services in emergency and non-emergency situations.

"EMS Advisory Council" means the Pinellas County Emergency Medical Services Advisory Council.

"EMS Confidential Information" means EMS System information deemed confidential and/or exempt from §119.07, Florida Statutes, and Section 24(a), Article 1 of the Florida Constitution, HIPAA, HITECH, or other applicable law, including, but not limited to, Protected Health Information (PHI), trade secrets, data processing software obtained by the EMS System under a licensing agreement and EMS System-produced data processing software and security systems, and any other information designated in writing by the Executive Director as EMS Confidential Information.

"EMS Emergency" means any occurrence or threat thereof, in the County or any municipality therein, or in any surrounding County or Counties, which may result in unexpected increased demand for EMS services and is designated as such by the Executive Director.

"EMS Ordinance" means Chapter 54, Article III, of the Pinellas County Code.

"EMS Personnel" means the County-Certified Physicians, Paramedics, Registered Nurses, EMTs, and Wheelchair Transport drivers employed by ALS and BLS First Responders, the Ambulance Contractor, the Authority or the Contractor.

"EMS System" means the network of organizations and individuals established to provide emergency medical services to citizens of the County and includes: all ALS and Critical Care Ambulance Services, all ALS and BLS First Responder Services, Regional 9-1-1 and EMS Communications Center operations, Medical Direction Services, citizen CPR training and public education.

"EMS" means Emergency Medical Services.

"Executive Director" means the Authority's Director of the EMS System or his/her designee.

"**EMS Fellow**" means a graduate of an Accreditation Council for Graduate Medical Education (ACGME) approved residency training program in emergency medicine, who is enrolled in an approved post-graduate program of study in the sub-specialty of Emergency Medical Services.

"First Responder Services" means the rapid response of EMS Personnel to medical and traumatic emergencies to provide patient assessment and ALS or BLS patient care, as necessary, at the scene of an emergency including Specialized Rescue services.

"First Responders" means any municipalities, fire districts, entities, as listed in Appendix A, or any future entities under contract with the Authority and located within Pinellas County that possess (1) a valid Certificate of Public Convenience and Necessity, and (2) a valid agreement with the Authority to provide ALS or BLS First Responder Services.

"Fiscal Year" means the period commencing October 1 in any given year and ending September 30 of the following year.

"Medical Communications Officer" means the specially trained Paramedic or EMT employed by the Ambulance Contractor to relay information to hospitals and monitor the status of hospital resources and EMS System resources in accordance with the Medical Operations Manual.

"Medical Control Board" means the board appointed by the Authority, pursuant to the EMS Ordinance, and having the duties and responsibilities set forth in the EMS Ordinance and any rules and regulations adopted pursuant thereto.

"Medical Control Physician" means the specially trained and County-Certified physician authorized to provide Online Medical Control. Medical Control Physicians must be licensed to practice in the State of Florida and board certified and active in a broad-based clinical medical specialty with demonstrated experience in emergency medicine or other related specialty.

"Medical Direction" or **"Medical Direction Services"** means the (1) clinical oversight and leadership, protocol and policy review (offline medical control), (2) the provision of Online Medical Control services, (3) review and approval of medical supply and equipment standards, (4) review and approval of the certification and re-certification of EMS Personnel, (5) Review and approval of all CME training materials and curriculum, and (6) field observation of EMS Personnel rendering patient care as required by the Department.

"Medical Director" means the physician who is (1) duly licensed osteopathic or medical doctor in the State of Florida, (2) meets the requirements of the Department, (3) is board certified in emergency medicine, (4) meets the requirements of the EMS Ordinance and (5) has a valid employment agreement with the Contractor, to serve as the clinical leader of the EMS System. The Medical Director must also meet the approval of the Medical Control Board and be appointed by Authority.

"Medical Operations Manual" means the current clinical, operational and administrative procedures, protocols and guidelines, a copy of which is attached hereto as Appendix B,

prepared for the EMS System and approved by the Medical Control Board, as the same may be amended from time to time.

"Mental Health Interfacility Transport Services" means the interfacility transportation of mental health clients, in accordance with Chapter 394, Florida Statutes, and any successor statute.

"Online Medical Control" means the clinical management, direct orders and supervision provided by the Medical Director or a Medical Control Physician via radio, telephone or scene response to EMS Personnel rendering ALS and BLS patient care and treatment at the scene of an emergency and prior to or during emergency, non-emergency or specialized transport.

"Paramedic" means a person who is County-Certified and certified by the Department to perform Basic and Advanced Life Support procedure, pursuant to the provisions of state statute and regulations.

"Party" or **"Parties"** means either the Authority or Contractor, or both, as the context of the usage of such term may require.

"Patient" means an individual who is ill, sick, injured, wounded, or otherwise incapacitated, and is in need of, or is at risk of needing, medical attention or care on scene and/or during transport to or from a health care facility.

"Performance Requirements" means the requirements of this Agreement intended to ensure; (1) clinical and operational performance is consistent with approved medical standards and protocols; (2) Contractor is unrelenting in its effort to detect and correct performance deficiencies; and (3) Contractor assists the Authority in upgrading the performance and reliability of the EMS System; (4) Contractor meets all the requirements of providing Medical Direction Services; (5) Contractor meets all of the requirements of providing a Medical Director.

"Priority Dispatch Protocols" means the interrogation protocols and pre-arrival instructions, as set forth in the "Advanced Medical Priority Dispatch System" (AMPDS) guidelines developed by the National Academy of Emergency Medical Dispatch, or any successor method approved through processes adopted by the Board of County Commissioners.

"Protocols" means protocols, procedures and standards to be followed by all EMS personnel including, but not limited to, clinical treatment protocols; standing orders; multiple casualty incident and disaster protocols; transport protocols including hospital destination, hospital bypass and first responder transports; trauma transport protocols and use of helicopter ambulances; protocols for the transfer of patient care and professional interaction between EMS personnel; on-scene medical authority; standard for allowed clinical procedures; policies and protocols to govern Specialized Rescue teams and situations; standards for emergency (9-1-1) and non-emergency EMS call-taking, call processing and radio and data communications including, but not limited to, priority dispatch and pre-arrival instruction protocols; standards for patient care reporting and record keeping; standards for Baker Act transport services and wheelchair/stretcher van services.

"Quality Assurance Review" means an audit, inquiry or review, by the Medical Director, into procedures and practices of EMS Personnel, First Responders, or the Ambulance Contractor on an individual EMS incident or overall EMS System performance or compliance.

"Registered Nurse" means a person who is County-Certified and licensed to practice professional nursing pursuant to the provisions of Chapter 464, Florida Statutes and any successor statute.

"Rules and Regulations" means the rules and regulations adopted by the Authority, as may be amended from time to time.

"Specialized Rescue" means the hazardous materials response team(s), tactical (SWAT) EMS teams, water rescue teams and technical rescue teams provided by the Ambulance Contractor or First Responders to mitigate emergency situations and affect the rescue of Patients.

"State of Emergency" means a Disaster, which has been declared by proclamation of the State, County, or a municipality in the County.

"State" means the State of Florida.

"Wheelchair/Stretcher Van Transport" means the services, vehicles and personnel regulated by the Authority for the transport of wheelchair bound clients within the County.

SECTION 202. TERMS GENERALLY

Whenever the context may require, any pronoun shall include corresponding masculine, feminine, and neuter forms. The words "include," "includes" and "including" shall be deemed to be followed by the phrase "without limitation," except as the context may otherwise require. The words "agree," "agreement," "approval" and "consent" shall be deemed to be followed by the phrase "which shall not be unreasonably withheld or unduly delayed," except as the context may otherwise require. The words "approved," "designate," or similar words shall be deemed to be preceded by the word "reasonably," except as the context may otherwise require.

ARTICLE III
REPRESENTATIONS

SECTION 301. REPRESENTATIONS OF CONTRACTOR

Contractor represents and warrants to the Authority that each of the following statements are presently true and correct:

(a) Existing. Contractor has been organized and validly exists, under the laws of the State of Delaware, and has been qualified to conduct business in the State of Florida, as having all requisite power and authority in Florida to carry on its business as now conducted, to

own or hold or otherwise its properties, and to enter into and perform its obligations under this Agreement and under each instrument described herein to which it is or will be a party.

(b) Due Authorization. This Agreement has been duly authorized by all necessary actions on the part of, and has been duly executed and delivered by, Contractor, and neither the execution and delivery thereof, nor compliance with the terms and provisions thereof or hereof at the time such action is required (i) requires the approval and consent of any other party, except such as have been duly obtained, certified copies thereof having been delivered to the Authority; (ii) contravenes any existing law, judgment, governmental rule, regulation, or order applicable to or binding on Contractor; or (iii) the corporate charter or bylaws of Contractor or any other agreement or instrument in existence on the date of this Agreement to which Contractor is a party.

(c) Enforceability. This Agreement constitutes a legal, valid, and binding obligation of Contractor enforceable against Contractor in accordance with the terms thereof, except as such enforceability may be limited by applicable bankruptcy, insolvency, or similar laws, from time to time in effect, which affect creditors' rights generally and subject to usual equitable principles in the event that equitable remedies are involved.

(d) No Litigation. There are no pending, or to the knowledge of Contractor, threatened actions or proceedings before any court or administrative agency to which Contractor is a party, questioning the validity of this Agreement of any document or action contemplated hereunder, or which are likely, in any case or in the aggregate, to materially adversely affect the consummation of the transactions contemplated hereunder.

(e) Financial Capability. Contractor is fully capable, financially and otherwise, to perform its obligations hereunder.

(f) Requirements of Applicable Law. Contractor is aware of, acknowledges its ongoing duty to comply with, and represents that it is fully prepared to comply with, any applicable federal, state and local laws, regulations and requirements, including but not limited to the Health Insurance Portability and Accountability Act of 1996, Pub. Law 104-191(August 21, 1996), as amended, and regulations promulgated thereunder ("HIPAA"), the Health Information Technology for Economic and Clinical Health Act - Division A, Title XIII, and Division B, Title IV, of the American Recovery and Reinvestment Act of 2009 ("ARRA"), Pub. Law 111-5, 123 Stat. 115 (Feb. 17, 2009), and regulations promulgated thereunder ("HITECH"), the Medicare and Medicaid Patient Protection Act of 1987, as amended, 42 U.S.C. §1320a-7b and regulations promulgated thereunder (the "Anti-kickback Statute"), and 42 U.S.C. §1395nn and regulations promulgated thereunder (the "Stark Act").

ARTICLE IV
DUTIES AND RESPONSIBILITIES OF CONTRACTOR

SECTION 401. MEDICAL DIRECTOR

(a) Obligation to provide a Medical Director. Contractor shall continuously provide a physician to provide clinical leadership to the EMS System and serve as its sole Medical Director.

Contractor shall ensure that its agreement with the physician to fulfill the position of Medical Director fully discloses the requirements of this agreement and requires that if the Medical Director intends to voluntarily resign the position, he/she shall continue to serve as the Medical Director until such time as the Authority approves a replacement physician.

(b) Requirements of the Medical Director. Medical Director shall:

- Be duly licensed to practice as a medical or osteopathic doctor in the State of Florida;
- Is board certified by the American Board of Emergency Medicine (ABEM), the American Osteopathic Board of Emergency Medicine (AOBEM) Shall be active in a broad-based clinical medical specialty with demonstrated experience in pre-hospital care and hold an Advanced Cardiac Life Support (ACLS) certificate or equivalent.
- Meet the requirements of the Department under applicable Florida Statutes and Administrative Code;
- Meet the requirements of the EMS Ordinance;
- Have a valid employment agreement with the Contractor or one of its professional contractual affiliates, and submit a copy of such to the Authority, and
- Be recommended by the Medical Control Board and appointed by the Authority.

(c) Activities of the Medical Director. Medical Director shall:

- Assume direct responsibility for the clinical activities performed by all EMS Personnel performing within the EMS System;
- Discharge all duties identified in Florida Statutes, Florida Administrative Code, the EMS Ordinance, the Rules and Regulations and the Medical Operations Manual;
- Be a participant in a statewide physician group involved in pre-hospital care, and
- Be an active member of a national professional organization that promotes the clinical practice of EMS.

SECTION 401.1. ASSOCIATE MEDICAL DIRECTOR

(a) Obligation to provide An Associate Medical Director. Contractor shall provide a physician(s) on a part-time basis totaling sixty (60%) percent of a full-time equivalent. Such time shall predominately be in the office or field.

(b) Requirements of the Associate Medical Director. Associate Medical Director shall:

- Be duly licensed to practice as a medical or osteopathic doctor in the State of Florida;
- Is board certified by the American Board of Emergency Medicine (ABEM), the American Osteopathic Board of Emergency Medicine (AOBEM) Shall be active in a broad-based clinical medical specialty with demonstrated experience in pre-hospital care and hold an Advanced Cardiac Life Support (ACLS) certificate or equivalent.
- Meet the requirements of the Department under applicable Florida Statutes and Administrative Code;
- Have a valid employment agreement with the Contractor, or one of its professional contractual affiliates, and submit a copy of such to the Authority.

(c) Activities of the Associate Medical Director. Associate Medical Director shall:

- Assist the Medical Director with duties in Section 401 and any subsequent Sections; and

- Exercise the authority, duties, and responsibilities of the Medical Director when the Medical Director is absent.

SECTION 402. MEDICAL OPERATIONS MANUAL

(a) Comprehensive Review. Authority's staff shall conduct an on-going and comprehensive review of all Protocols, rules, regulations and standards as may be necessary to ensure reliable service delivery in the EMS System and appropriate patient care. These are collectively contained within the Medical Operations Manual. Authority's staff will research and draft all protocols, processes and procedures.

Authority's staff and the Medical Director shall consider the results of Quality Assurance Reviews, review of medical literature, and input from the Medical Control Board and interested physicians, the EMS Advisory Council, First Responders, Ambulance Contractor, EMS Personnel, and the Authority in drafting and reviewing proposed protocols.

The medical director shall monitor the number of on-line medical consultations within the EMS system, and seek to maintain at an acceptable level though the use of revised protocols as necessary.

SECTION 403. ONLINE MEDICAL CONTROL

Contractor shall provide a primary Online Medical Control Physician on a continual basis that is available by telephone and access via radio to the Pinellas County Intergovernmental Public Safety Radio and Data System.

Online Medical Control shall be made available 24 hours per day to provide clinical guidance, patient care and treatment orders, medication orders for all First Responders and the Ambulance Contractor on all pre-hospital and interfacility activities of the EMS System including, but not limited to, Specialized Rescue services, critical care transport, and mental health interfacility transports.

All Online Medical Control staff members shall be County-Certified Medical Control Physicians in accordance with the Rules and Regulations and receive specialized training in the provision of Online Medical Control. All Online Medical Control staff shall satisfactorily complete a minimum of 10 hours per year of continuing medical education. Five (5) of the continuing education hours must be related to pre-hospital care.

Online Medical Control staff members shall fully comply with all laws, standards, rules, and regulations established by the State, the County, and the Medical Control Board, including the protocols established in the Medical Operations Manual, and shall assist the Medical Director in monitoring, regulating, and the oversight of the EMS System.

SECTION 404. CONTINUING MEDICAL EDUCATION

Contractor shall be responsible for ensuring the quality of the CME training provided to the EMS system by:

- Reviewing and approving all curriculum and courses for the CME training program prior to EMS Personnel being trained;

- Actively participating in the CME steering committee;

- Make staff available to serve as subject matter experts or curriculum consultants to the core and remedial CME programs;

- Advise the Authority's Executive Director or the Medical Control Board anytime the Contractor believes the quality of the CME program is failing to ensure high quality patient care is provided by EMS Personnel;

- Medical Director shall monitor and audit at least one (1) class of every CME course.

SECTION 405. MEDICAL EQUIPMENT AND SUPPLIES

Authority's staff shall conduct an on-going and comprehensive review of all EMS medical equipment, medications and medical supplies as may be necessary to ensure reliable service delivery in the EMS System and excellence in patient care.

Authority's staff shall prepare clinical justification for medical equipment, pharmaceuticals and medical supplies. Staff shall ensure implementation instructions are distributed to the Ambulance Contractor and First Responders prior to training or implementation, and training through the CME program has been completed, if necessary prior to implementation of new equipment, pharmaceuticals or medical supplies.

Medical Director shall review and approve all changes to medical equipment, pharmaceuticals and medical supplies and seek approval of the Medical Control Board for items that institute new treatment modalities.

Authority's staff and the Medical Director shall take into consideration the results of Quality Assurance Reviews, review of medical literature, and input from the Medical Control Board, interested physicians, the EMS Advisory Council, First Responders, Ambulance Contractor, EMS Personnel, and the Authority.

SECTION 406. QUALITY ASSURANCE AND IMPROVEMENT

The Medical Director is expected to have a high level of involvement in the areas of Quality Assurance and continuous improvement of clinical processes and service delivery. It is contemplated that over the life of this agreement the methods which are used by the Authority in implementing these activities will change and evolve based upon the needs of the system as determined by the Authority through its Rules and Regulations or through changes to state law. At present it is contemplated that the Medical Director will be involved and support these processes as follows:

(a) Complaint Analysis and Performance Monitoring – Authority's staff shall establish procedures for routine auditing and monitoring of EMS System performance and adherence to Protocols on individual EMS incidents and overall EMS System compliance. Medical Director or designees may, at any time and without limitation, conduct performance monitoring and complaint analysis to ensure that EMS Personnel, First

Responders and the Ambulance Contractor comply with the Protocols and Rules and Regulations of the Medical Control Board and the Authority. Contractor will support the informal analysis of complaints arising from patients or interested parties in assuring that protocols were followed and appropriate services were rendered and making recommendations regarding resolution of any issues not requiring any formal action regarding a Quality Assurance Review or Professional Standards Investigation. Alternatively, as a result of the informal analysis of complaints a referral may be made for a Quality Assurance Review or for action regarding Professional Standards.

(b) Quality Assurance Review – Medical Direction Services will support the Authority in their discharge of the process contained in F.S. 401.425 through their Emergency Medical Services Review Committee in assisting in the analysis of issues before the committee and appropriate resolution of any issues arising out of the review process. The Emergency Medical Review Committee may require remedial training of EMS Personnel. Such remedial training may be conducted by the Medical Director, the CME Contractor, First Responder agencies or the Ambulance Contractor at the Medical Director's discretion.

(c) Professional Standards – Medical Director shall take actions necessary, in accordance with Section 409, to ensure that EMS Personnel conduct themselves professionally, have appropriate clinical assessment and treatment skills, appropriate clinical and operational decision-making skills, and adhere to Protocols and, Rules and Regulations. The Medical Director will be the final decision making authority for issues regarding certification to practice as part of the Pinellas County EMS system subject to the professional standards process in the Rules and Regulations.

The Medical Director and staff will comply with the time requirements of either state law or the Rules and Regulations of the Authority, which apply to the incidents being evaluated under this section and which are in force at the time of the investigation.

Section 407. CERTIFICATION OF EMS PERSONNEL

(a) Certification Process. Authority's staff shall validate that all EMS Personnel meet the initial requirements and continuously comply with the established standards to attain and maintain County certification required to be classified as County-Certified. Medical Director shall review and approve new certifications of EMS Personnel. Medical Director shall issue, renew, suspend and revoke the County-Certification of EMS Personnel following the Rules and Regulations and due process requirements.

(b) Due process. Authority's staff shall provide for all procedures for the suspension, revocation, refusal to renew, or refusal to initially issue a personnel certificate or vehicle permit. The due process standards shall be subject to approval of the County Attorney and may not be adopted until the Medical Control Board and the Authority have given such approval. Medical Director shall comply with the due process requirements when suspending, revoking or refusing to issue County Certification for EMS Personnel.

SECTION 408. FIELD ACTIVITY AND SYSTEM MONITORING

Medical Director or designee shall substantially perform and document in its monthly summary report to the Authority evidence of the following required activities:

- Direct field observation of EMS Personnel performing patient care at a minimum of five (5) EMS incidents per month;

- Visit and interact with EMS Personnel, hospital emergency department staff, and other public safety personnel on a regular basis. Contractor shall document at least three (3) visits to a First Responder, Ambulance Contractor station, or a hospital emergency room each month, and

- The Medical Director shall ride along and observe field activity as a crewmember on an Ambulance or First Responder unit for a minimum of ten (10) hours per year.

Such field responses, visits and ride-alongs shall be distributed equally among each of the First Responder agencies, the Ambulance Contractor and the hospitals on an annual basis.

SECTION 409. INTEGRATED DATA SYSTEM

(a) Integrated Data System. Medical Director shall assist the Authority in improving the clinical user requirements for the Authority's existing medical record-keeping system. The Parties understand that the database of the Authority's automated medical record-keeping system shall be fully comprehensive, including complete and integrated information on all system activities. Contractor shall, without additional compensation:

- Require all Contractor personnel to comply with all record-keeping and data entry requirements of the EMS System, to document online medical control consults, as approved and periodically revised by the Authority;

- Comply with coding and data format conventions as specified by the Authority.

(b) Ownership of Data and Records. Contractor agrees that all data, whether written or an electronic file, relating to the Authority's Patients, operations and EMS System including, but not limited to, dispatch records, patient care reports, research and quality assurance databases, hospital status and capability, personnel certification, and continuing education rosters are all the property of the Authority.

(c) EMS Confidential Information. Contractor shall not disclose to any third party EMS Confidential Information that Contractor, through its personnel, has access to or has received from the Authority pursuant to its performance of services pursuant to the Agreement, unless approved in writing by the Executive Director. All such EMS Confidential Information will be held in trust and confidence from the date of disclosure by the Authority, and discussions involving such EMS Confidential Information shall be limited to Contractor's personnel except as is necessary to complete the requirements of this Agreement.

SECTION 410. PERSONNEL

The Parties understand that the EMS System requires professional and courteous conduct at all times from Contractor's personnel.

Contractor is responsible for ensuring, through in-service and new employee orientation, that its personnel possess a thorough understanding of the structure, finance, and operation of the EMS System and its underlying structure and philosophy.

Contractor shall utilize management practices, which ensure that Online Medical Control personnel working extended shifts, part-time jobs, voluntary overtime, or mandatory overtime have not been on-duty to an extent, which might impair clinical judgment or job performance.

After prior written notice and a meeting between the Parties to discuss alternatives or remedial plans (meeting shall be within ten (10) calendar days of the notice), the Authority may demand the removal of any person employed by Contractor who chronically misconducts himself or is chronically incompetent or negligent in the due and proper performance of his duties, and Contractor shall not reassign such persons for production of services under this Agreement without the prior written consent of the Authority. Provided, however, that the Authority shall not be arbitrary or capricious in exercising its rights under this provision.

SECTION 411. NOTIFICATIONS

Contractor shall make reasonable efforts to notify the Executive Director or their designee, via telephone, electronic medium or verbally, upon occurrence, of the following:

- Significant complaints, unusual occurrences or investigations;
- Instances when an acting Medical Director is providing coverage;
- Changes in Medical Control Physician staff;

SECTION 412. COORDINATION AND APPROVAL

Medical Director shall notify the Executive Director or their designee, in writing, thirty (30) days prior to implementing changes in protocols or equipment standards, except emergency actions deemed necessary to ensure public health, safety and welfare.

Medical Director shall request the approval of the Medical Control Board before adopting changes to any protocol, equipment standards or Rules and Regulations developed by the Medical Director prior to implementation except emergency actions deemed necessary to ensure public health, safety and welfare.

SECTION 413. CONSTITUENT AND QUALITY ASSURANCE MEETINGS

Medical Director or his/her designee shall regularly attend the monthly or periodic meetings of the EMS Advisory Council, Medical Control Board, Pinellas County Fire Chief's Association, the EMS Leadership Group and Ambulance Services Quality

Committee, to keep EMS System constituents and stakeholders informed of the Contractor's activities and to provide an opportunity for feedback regarding clinical policies in the EMS System.

Contractor shall conduct a meeting with the Executive Director to discuss the clinical status of the EMS System and discuss Quality Assurance Reviews on a quarterly basis.

Contractor shall conduct a meeting with the Ambulance Contractor and all Fire Responders to discuss the clinical status of the EMS System and discuss Quality Assurance Reviews. This shall be done no less frequently than quarterly.

SECTION 414. DISASTER ASSISTANCE AND PLANNING

Immediately upon notification by the Authority of a Disaster, State of Emergency or EMS Emergency, Contractor shall commit all resources as are necessary and appropriate, given the nature of the disaster, and shall assist in accordance with plans and protocols applicable in the locality where the State of Emergency or EMS Emergency has occurred.

Contractor will actively cooperate in planning, updating, and following the Pinellas County Comprehensive Emergency Management Plan, including, but not limited to, participation in disaster drill critiques and providing a representative to the meetings of the Disaster Advisory Council, and for emergency management drills and activation of Emergency Operations Center at Contractor's sole expense.

SECTION 415. ETHICS AND COMPLIANCE

Contractor shall at all times conduct its business and perform its responsibilities under this Agreement in accordance with ethical business practices. Contractor, its agents, employees, and Medical Director shall provide services hereunder in compliance with all applicable federal, state and local laws, ordinances, Rules and Regulations.

Contractor further agrees to follow and comply with all Medicare, Medicaid, and other applicable regulations regarding the determination of medical necessity. Contractor shall assist the Authority, First Responders and Ambulance Contractor on an as needed basis to maintain any ambulance billing compliance programs implemented by the Authority.

Contractor shall comply with the provision of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Business Associate Agreement attached as Appendix D hereto.

Contractor shall assist the Authority, First Responders and the Ambulance Contractor in attaining and continually complying with accreditation requirements related to Medical Direction Services that affect the various service accreditations sought by the Authority, First Responders or the Ambulance Contractor. Such service accreditations shall include, but not be limited to, the Commission for the Accreditation of Ambulance Services (CAAS), the National Academy of Emergency Dispatch Accredited Center of Excellence (ACE), the Commission on Accreditation of Medical Transport Systems (CAMTS), and the Commission on Fire Accreditation International (CFAI).

ARTICLE V
DUTIES AND RESPONSIBILITIES OF AUTHORITY

SECTION 501. COMMUNICATIONS INFRASTRUCTURE

Except as otherwise provided herein, the Authority shall furnish, own and maintain, at no cost to Contractor, the EMS System's entire communications infrastructure and shall make available for the use of the Contractor the following: portable radios for up to twelve (12) personnel; pagers for up to twelve (12) personnel; unified communication platform between SmartPhone and the 800MHz radio network; maintenance of such equipment throughout the life of this Agreement, except for losses and repairs due to loss, theft, abuse, or neglect. The Authority shall replace portable radios according to its normal replacement schedule.

SECTION 502. CENTRAL FACILITIES AND EQUIPMENT

The Authority shall provide, at no cost, an office to be used by the Medical Director to perform the duties required in this Agreement. The Authority reserves the right to provide office space in an alternative location at its sole discretion. Contractor shall pay, on a monthly basis, for any personal telephone charges. Additional office space may be provided upon request, if approved by the Executive Director.

The Authority shall allow an existing County emergency vehicle to be used by the EMS Medical Director, Associate Medical Director, or EMS Fellow in the performance of field observation and system monitoring duties as required in Section 408 of this Agreement and to respond to EMS Incidents, Mass Gatherings or large scale Mass Casualty Incidents.

Such vehicle shall not be permanently assigned.

ARTICLE VI
INSURANCE AND INDEMNIFICATION

SECTION 601. MINIMUM INSURANCE REQUIREMENTS

Contractor shall pay for and maintain at least the following insurance coverage and limits. Said insurance shall be evidenced by delivery to the County of: a certificate of insurance executed by the insurers listing coverage and limits, expiration dates and terms of policies and all endorsements whether or not required by the County, and listing all carriers issuing said policies; and, upon request, a certified copy of each policy, including all endorsements. The insurance requirements shall remain in effect throughout the term of this Agreement.

(a) Worker's Compensation Insurance with employer liability limits as required by law, as follows:

- Per Employee - $500,000.00
- Per Employee Disease - $500,000.00
- Policy Limit Disease - $500,000.00

(b) Comprehensive General Liability Insurance including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations and Personal Injury covering the liability assumed under indemnification provisions of this Agreement, with limits of liability for personal injury and/or bodily injury, including death, as follows:

- General Aggregate - $2,000,000.00
- Products/Completed Operations Aggregate - $2,000,000.00
- Personal Injury and Advertising Injury - $1,000,000.00
- Combined Single Limit Per Occurrence - $1,000,000.00

(c) Business Automobile or Trucker's/Garage Liability Insurance covering owned, hired and non-owned vehicles. Coverage shall be on an "occurrence" basis, such insurance to include coverage for loading and unloading hazards, unless Contractor can show that this coverage exists under the Commercial General Liability policy. Limits are as follows:

- Combined Single Limit Per Accident - $1,000,000.00

(d) Professional Liability Insurance (Medical Malpractice) with at least the minimum limits as follows. If "claims made" coverage is provided "tail coverage" extending five (5) years beyond the termination of the contract shall be required. Proof of "tail coverage" must be submitted sixty (60) days prior to the termination of the contract, or immediately if contract termination is less than sixty (60) days. In lieu of "tail coverage", Contractor may submit annually to the Authority, for a five (5) year period, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than commencement date of the initial contract. The limits are as follows:

- General Aggregate - $10,000,000.00
- Each Occurrence or Claim - $5,000,000.00

For acceptance of Professional Liability coverage included with another policy required herein, a statement notifying the certificate holder must be includes on the certificate of insurance and the total amount of said coverage per occurrence or claim must be greater than or equal to the amount of Professional Liability and other coverage combined.

(e) Cyber Risk Liability (Network Security/Privacy Liability) Insurance including cloud computing and mobile devices, for protection of private or confidential information whether electronic or non-electronic, network security and privacy; privacy against liability for system attacks, digital asset loss, denial or loss of service, introduction, implantation or spread of malicious software code, security breach, unauthorized access and use; including regulatory action expenses; and notification and credit monitoring expenses with at least minimum limits as follows:

Limits	
Each Occurrence	$ 2,000,000.00
General Aggregate	$ 2,000,000.00

For acceptance of Cyber Risk Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Cyber Risk Liability and other coverage combined.

(e) Property Insurance. Contractor will be responsible for all damage to its own property, equipment and/or materials.

SECTION 602. ADDITIONAL INSURANCE REQUIREMENTS

Each insurance policy shall include the following conditions by endorsement to the policy:

(a) Contractor shall provide notice forty-five (45) days prior to expiration, cancellation, non-renewal or any material change in coverage or limits, a written notice thereof to the Authority. Contractor shall also notify the Authority within twenty-four (24) hours after receipt of any notices of expiration, cancellation, non-renewal or material changes in coverage received by said Contractor from its insurer.

(b) Companies issuing the insurance policy, or policies, shall have no recourse against the Authority or County for payment of premiums or assessments for any deductibles, which are all at the sole responsibility and risk of Contractor.

(c) Pinellas County shall be endorsed to the required policy or policies as an additional insured, exclusive of professional liability insurance.

(d) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County or to any such future coverage, or to County's Self-Insured Retention of whatever nature. Contractor's insurance shall be primary and non-contributory. Contractor hereby waives subrogation rights for loss or damage against the County.

SECTION 603. INDEMNIFICATION

Contractor covenants and agrees that it will indemnify and hold harmless the Authority and the County and all of their officers and employees, from any claim, loss, damage, cost, charge or expense, including any claim or amounts recovered under the "Workers' Compensation Law" or of any other laws, by-laws, ordinance, order or decree brought or recovered against it by reason of any act, action, neglect or omission by Contractor, its agents, or employees, during the performance of the contract, whether direct or indirect, and whether to any person or property to which the County, the Authority, or said parties may be subject, except that neither Contractor nor any of its subcontractors, or assignees, will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the County, the Authority, or any of their officers, or employees.

ARTICLE VII
COMPENSATION AND OTHER FINANCIAL PROVISIONS

SECTION 701. COMPENSATION

Authority shall pay Contractor the annual amount of $796,856.00 for the first year of the Agreement.

The annual payment shall be made in twelve (12) equal installments. Each installment shall be made within forty-five (45) days after receipt and acceptance by the Authority of an invoice for services rendered during the preceding calendar month in accordance with the Local Government Prompt Payment Act, §218.70 et. seq., Florida Statutes. Each invoice shall include an activity report in a form agreed upon by the Parties that summarizes the Contractor's efforts and accomplishments during the preceding month.

SECTION 702. AUTOMATIC ANNUAL RATE ADJUSTMENT

Beginning on October 1, 2018 and annually thereafter, Contractor's compensation for all services and deductions shall follow the below table:

	Year 1 FY 2017	Year 2 FY 2018	Year 3 FY 2019	Year 4 FY 2020	Year 5 FY 2021	Total
Total Annual Proposed Compensation	$796,856	$805,469	$814,219	$823,108	$832,138	**$4,071,790**

SECTION 703. AUDITS AND INSPECTIONS

Contractor shall make available to the Authority for its examination its records with respect to all matters covered by this Agreement. Authority may audit, examine, copy, and make excerpts or transcripts from such records, and may make audits of all contracts, invoices, materials, payrolls, inventory records, personnel records, daily logs, conditions of employment, and other data related to all matters covered by this Agreement.

Contractor shall retain all records pertaining to this Agreement for a period of at least three (3) years after final payment is made or longer if required under the retention requirements for public records in Florida.

SECTION 704. REIMBURSEMENT FOR QUALITY ASSURANCE SERVICES

The Authority may utilize Contractor's staff for quality assurance and improvement projects, data analysis and performance monitoring on a regular or episodic basis at its discretion. Authority shall reimburse the Contractor for the actual cost of salary and benefits up to $60.00 per hour for quality assurance analyst hours that are actually performed and preapproved in writing. Contractor shall submit invoices to Authority within twenty (20) days following the last day of each month. Contractor shall be reimbursed monthly in arrears. For each year during the term of this Agreement, the total

compensation amounts shall be established through the Authority's budget process, but in no event, shall the cumulative compensation to the Contractor for all payments under this provision for any Fiscal Year exceed the amount budgeted by the Authority. The reimbursement amount shall not exceed $50,000.00 in any fiscal year.

SECTION 705. FISCAL NON-FUNDING

In the event sufficient budgeted funds are not available for a new fiscal period, the Authority shall notify Contractor of such occurrence and this Agreement shall terminate on the last day of current fiscal period without penalty or expense to the Authority.

ARTICLE VIII
TERM AND TERMINATION

SECTION 801. TERM

This Agreement shall be for five (5) years, commencing October 1, 2017 and ending on midnight September 30, 2022. There will be no extensions of this Agreement.

SECTION 802. TERMINATION

(a) Termination For Cause. This agreement may be terminated by the Authority for cause if at any time the Contractor fails to fulfill or abide by any of the terms or conditions of this agreement. "Cause" shall include, but not be limited to, the event that Contractor fails to provide a Medical Director meeting the requirements of Section 401 herein; Medical Director cease, for any reason, to be licensed to practice medicine in the State of Florida pursuant to the provisions of Chapter 458, Florida Statutes; and substantial breach of any covenant or warranty contained in this Agreement; provided, however, the Authority shall provide written notice of such breach and the Contractor shall have the opportunity to cure such breach within thirty (30) calendar days of receipt of such notice. Notwithstanding the preceding, if Contractor fails to provide Online Medical Control, the Authority shall provide written notice of such breach and the Contractor shall have the opportunity to cure such breach within one (1) calendar day of receipt of such notice.

This Agreement may be terminated by Contractor for cause if at any time the Authority fails to fulfill or abide by any of the terms or conditions of this Agreement. Authority shall have the opportunity to cure such breach within thirty (30) calendar days or receipt of such notice.

(b) Termination Without Cause. Except as provided in Section 801 herein, this agreement may be terminated at will at the option of the Authority or Contractor upon one hundred and twenty (120) days written notice at any time during the initial term or any renewal term. Contractor shall be entitled to all compensation earned through the date of termination.

ARTICLE IX
MISCELLANEOUS

SECTION 901. ASSIGNMENT

Contractor shall not assign any portion of the Agreement for services to be rendered without first obtaining written consent from the Authority. Any assignment made contrary to the provisions of this section shall be cause for termination of the Agreement and, at the option of the Authority, shall not convey any rights to the assignee. Any change in Contractor's ownership shall, for purposes of the Agreement, be considered a form of assignment. The Authority shall not unreasonably withhold its approval of requested change in ownership, so long as the transferee is of known financial and business integrity and the Authority has the opportunity to research the transferee's background. For clarity, this Section 901 shall not restrict or prohibit Contractor's use of its affiliated and contracted entities and health care providers that provide health care services (including for Medical Direction and Medical Control Physicians), provided however that, Contractor remains completely responsible for the successful and complete performance of the requirements of this Agreement.

-SECTION 902. NON-DISCRIMINATION IN EMPLOYMENT

Contractor will not discriminate against any applicant for employment because of age, race, color, religion, sex or national origin. Contractor will take affirmative action to ensure that applicants are employed, and that during employment employees are treated equally without regard to age, race, color, religion, sex or national origin. Such action shall include, but not be limited to, recruiting and related advertising, layoff or termination, upgrading, demotion, transfer, rates of pay and compensation, and selection for training, including apprenticeship. Contractor will post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

Contractor shall make reasonable accommodations for employees with disabilities and comply with the federal requirements of the Americans with Disabilities Act (ADA).

SECTION 903. NOTICES

All notices, consents and agreements required or permitted by this Agreement shall be in writing, and, as applicable, shall be transmitted by registered or certified mail, return receipt requested, with notice deemed to be given upon receipt; postage prepaid, and shall be addressed as follows:

If to Authority:

Executive Director
Pinellas County EMS Authority
12490 Ulmerton Road, Suite 134
Largo, FL 33774-2700

If to Contractor:

South Division CEO
EmCare, Inc.
18167 US Hwy 19 N, Suite 650

Clearwater, FL 33764

With Copy To:
Pinellas County Purchasing Department
Attn: Purchasing Director
400 S. Ft. Harrison, 6th Floor
Clearwater, FL 33756

SECTION 904. ENTIRE AND COMPLETE AGREEMENT

This Agreement, as amended, and all Appendices hereto, constitute the entire and complete agreement of the Parties with respect to the services to be provided hereunder. This Agreement, unless provided herein to the contrary, may be modified only by written agreement duly executed by the Parties with the same formality as this Agreement.

SECTION 905. OTHER DOCUMENTS

Each Party agrees to execute and deliver any instruments and to perform any acts that may be necessary or reasonably requested in order to give full effect to this Agreement.

SECTION 906. APPLICABLE LAW

The law of the State of Florida shall govern the validity, interpretation, construction and performance of this Agreement.

SECTION 907. WAIVER

Unless otherwise specifically provided by the terms of this Agreement, no delay or failure to exercise a right resulting from any breach of this Agreement shall impair such right or shall be construed to be a waiver thereof, but such may be exercised from time to time and as often as may be deemed expedient. Any waiver shall be in writing and signed by the Party granting such waiver. If any representation, warranty or covenant contained in this Agreement is breached by either Party and thereafter waived by the other Party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach under this Agreement.

SECTION 908. SEVERABILITY

In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal, or unenforceable in any respect, the Parties hereto shall negotiate in good faith and agree to such amendments, modifications, or supplements of or to this Agreement or such other appropriate actions as shall, to the maximum extent practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected herein, and the other provisions of this Agreement shall, as so amended, modified, supplemented, or otherwise affected by such action, remain in full force and effect.

SECTION 909. INDEPENDENT CONTRACTOR

Nothing in this Agreement shall be construed to create a relationship of employer and employee, or principal and agent, partnership, joint venture, or any other relationship other than that of independent parties contracting with each other solely for the purpose of carrying out the provisions of this Agreement.

SECTION 910. HEADINGS

Captions and headings in this Agreement are for ease of reference and do not constitute a part of this Agreement.

SECTION 911. DRAFTING

The Authority and Contractor negotiated this Agreement (including the Appendices annexed hereto) at arm's length. The Authority and Contractor jointly prepared this Agreement, and its provisions shall be construed on parity between all parties. As such, no rule of construction shall apply which construes the language of this Agreement more favorably for, or more strictly against, any Party by reason of the preparation of this Agreement.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF the parties hereto, by and through their undersigned authorized officers, have caused this Agreement to be executed on this _____ day of _____, 2017.

ATTEST:

KEN BURKE, CLERK

by:_____
Deputy Clerk

PINELLAS COUNTY EMERGENCY MEDICAL SERVICES AUTHORITY

by:_____
Chairman

APPROVED AS TO FORM

By: _____
Office of the County Attorney

EMCARE, INC.

Contractor: Paul A. Andrulonis

by: _____ MD

Title: EVP, Southeast Operating Unit

Appendix A
FIRST RESPONDERS IN PINELLAS COUNTY

FIRST RESPONDERS

ALS

1) City of Clearwater including the Clearwater Fire District
2) City of Dunedin including the Dunedin Fire District
3) East Lake Fire and Rescue District
4) City of Gulfport
5) City of Largo including the Largo Fire District, Highpoint Fire District served by Largo, Town of Belleair, City of Belleair Bluffs, and Belleair Bluffs Fire District
6) Lealman Fire Rescue District including the Town of Kenneth City
7) City of Madeira Beach
8) City of Oldsmar
9) Pinellas Suncoast Fire and Rescue District
10) Palm Harbor Fire and Rescue District
11) City of Pinellas Park including the Pinellas Park Fire District
12) City of Safety Harbor including the Safety Harbor Fire District
13) City of Seminole including the Seminole Fire District
14) City of South Pasadena
15) City of St. Petersburg including the portion of the Highpoint Fire District served by St. Petersburg, and the Gandy Fire District
16) Tierra Verde Fire District (including Ft. Desoto)
17) City of St. Pete Beach
18) City of Tarpon Springs including the Tarpon Springs Fire District
19) City of Treasure Island

BLS

Airport Rescue Fire Fighters (ARFF)

Eckerd College Search and Rescue (EC-SAR)

Appendix B

2017 v.1

Medical Operations Manual

Effective January 4, 2017

FOREWORD

This document, at its core, represents the delegation of physician medical practice to a group of trusted Clinicians. It is designed to be an enabling rather than restrictive document. It is crafted to provide guidance in the treatment of common clinical presentations rather than the myriad of unusual cases we may encounter. In essence this document provides a framework for the care we provide. Clinicians are expected to consult the On-Line Medical Control Physician when faced with a situation where further clinical guidance or clarification is required.

Each treatment protocol is formatted in color coded boxes representing BLS, ALS, and OLMC level treatments as well as clinical pearls for optimizing care. The components of these boxes are bulleted rather than numbered to allow the clinician to tailor their care but should generally be followed in order. Occasionally, flowcharts are used to illustrate stepwise decision and treatment algorithms. You will not see "general supportive care" components such as IV, O2, or monitor listed in each protocol unless they are specifically required when not necessarily obvious. Clinicians should use their judgment and provide these foundational steps in care to all patients who require them regardless of whether or not they are specifically listed in the protocol. The boxes for Quality Measures and References have continued to be expanded to more protocols in our continued effort to facilitate moving towards evidenced based protocols wherever possible. Quality Measure criteria are equivalent to FirstPass Criteria. References are provided to identify the evidence base underlying a protocol. We will continue to update the treatment protocols, quality measures, and references that define our practice of prehospital medicine on an ongoing basis with periodic updates to this document.

The "2017 Version 1 of the Pinellas County EMS Medical Operations Manual" is hereby authorized for use effective January 4, 2017.

Angus M. Jameson MD MPH
EMS Medical Director
Pinellas County

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

AD1 Priority Dispatch and Response Modes to 911 Calls

Purpose:
To establish a procedure to ensure that the appropriate resources are dispatched in the appropriate response to 911 requests for assistance received by the Pinellas County EMS System.

Description:
The Pinellas County EMS System responds to a large number of requests for emergency and non-emergency medical assistance every day. To ensure that all requests receive a consistent determination of appropriate response assignment, gathering of information to relay to responders, and pre-arrival medical instructions, a comprehensive and pre-determined system of call classification and triage is necessary.

Definitions:

- "Response Mode" means either an "Emergency Response" (lights and sirens) or a "Downgraded Emergency" response (no lights and sirens).
- "Emergency Response" may be called "HOT", "Upgraded", or "Priority 1" and indicates use of lights and sirens.
- "Downgraded Emergency" may be called "COLD", "Downgraded", or Priority 2" and indicates that no lights or sirens are being used.
- "Response Configuration" means First Responder, Ambulance, or both sent to a call for assistance.
- "EMD" means an Emergency Medical Dispatcher certified by the National Academies of Emergency Medical Dispatch.
- "911 Center" means the Pinellas County Regional 911 Center
- "Sunstar Communications" means the Sunstar staff located in the 911 center who perform call taking, dispatching, and System Status Management.
- "911 Dispatcher" means a 911 Center staff member who is performing EMD or radio channel operator function.
- "EMD Determinant" is the code assigned to each type of 911 call processed using the MPDS.
- "Unfounded Incident" means an incident that is unable to be located or has no patient able to be found when responders arrive.
- "At Patient" means that a responder has arrived at the patient's side such that patient assessment and care can be initiated.
- "On Scene" means that a responder has arrived at the address or physical location of the incident. In general, this is the time at which the response vehicle is parked.

ADMINISTRATIVE POLICIES

Policy

Medical Priority Dispatch System

The Pinellas County EMS System has adopted caller interrogation instructions set forth in the National Academies of Emergency Dispatch's Medical Priority Dispatch System (MPDS), Version 13 Protocols. From time to time, it may become necessary for the system to amend or modify interrogation questions, pre-arrival medical instructions, and response configurations because of medical research, local needs, and the evolution of the MPDS via protocol or medical control directive (Reference AD4).

Response Matrix

All Pinellas County EMS ALS First Responders and Ambulances will respond following the response matrix:

Call Determinant	ALS First Responder	ALS Ambulance
Echo	Emergency	Emergency
Delta	Emergency	Emergency
Charlie	Emergency	Emergency
Bravo	Emergency	Emergency - if Ambulance is assigned per EMD Determinant
Alpha	Downgraded Emergency	Downgraded Emergency - if Ambulance is assigned per EMD Determinant
Omega	Downgraded Emergency	Downgraded Emergency – if Ambulance is assigned per EMD Determinant

Response Matrix Exceptions

23 Ω may be processed with Poison Information Center consultation prior to dispatching response units (Reference AD3).

First Responder Only Determinants

The following determinants will receive and ALS First Responder assignment only (no Ambulance):

ADMINISTRATIVE POLICIES

Category	Determinants
2 Allergies(Reactions)/Envenomations (Stings, Bites)	02A01, 02A02
3 Animal Bites / Attacks	03A01, 03A02, 03A03
4 Assault / Sexual Assault / Stun Gun	04A01, 04A02, 04B00, 04B01, 04B02, 04B03
7 Burns (Scalds) / Explosion (Blast)	07A01, 07A02, 07A03
8 Carbon Monoxide / Inhalation / Hazmat / CBRN	08O01, 08B00, 08B01
9 Cardiac or Respiratory Arrest / Death	09O01, 09B00, 09B01(a-g, x, y)
Eye Problems / Injuries	16A01, 16A02, 16A03
20 Healt / Cold Exposure	20A01, 20B00, 20B01, 20B02
22 Inaccessible Incident / Other Entrapments	22A01
29 Traffic / Transportation Incidents	29O01, 29A01
Unknown Problem (Man Down)	32B01, 32B02, 32B03, 32B04

Unit Assignment

Upon receipt of a 9-1-1/EMS call, Pinellas County Emergency Communications (9-1-1) will process the call and dispatch the appropriate unit(s) by closest available unit regardless of jurisdiction following the response determinant matrix. The Sunstar Communications Center will dispatch the closest available and most appropriate ambulance(s) following the response determinant matrix.

Initial Dispatch and Response Mode Determination

All EMS Units will initially respond EMERGENCY to an incident until an EMD Determinant is reached. The 9-1-1 Dispatcher and the Sunstar SSC will advise responding units of any scene safety information, the primary complaint (chest pain, falls, etc.) and response mode (emergency vs. downgraded emergency). Patient's age, sex, conscious and breathing status may also be relayed as time permits and when appropriate.

The EMD will document additional information obtained during the caller interrogation (medical, scene safety, infection control precautions) in the call notes and will update the response configuration and response mode when the EMD Determinant has been established. The 911 Dispatcher and the Sunstar SSC will advise the responding units of the response determinant over the assigned radio tactical channels or via Mobile Communications Terminal (MCT). Units will alter their response upon receipt of the determinant via radio or MCT message.

Response Mode Coordination

Upon receipt of the response information, First Responder and Ambulance units will monitor and utilize the working Fire Tactical Channel as assigned during response and on-scene operations and will promptly acknowledge upgrades, downgrades, cancellations and requests for locations or estimated time of arrival (ETA). The first arriving ALS (First Responder or

ADMINISTRATIVE POLICIES

Ambulance) unit will advise "On-Scene" and "At Patient" on the working Fire Tactical Channel. BLS Units will advise "On-Scene" and "At-Patient" when they arrive before any ALS unit.

The first arriving ALS or BLS unit shall assess the condition of the patient(s) and scene and rapidly advise other responding units to upgrade or downgrade and request any additional resources needed. The first ALS Unit may cancel other responding units as appropriate after patient assessment. A BLS unit or a law enforcement officer on scene may *downgrade, but cannot cancel* the nearest ALS Unit. At least one licensed/permitted ALS Unit (or BLS Unit with a County Certified paramedic) must arrive to evaluate all patients.

If the Ambulance is the first ALS unit to reach the scene of a motor vehicle crash with all patients refusing EMS evaluation and transport, the Ambulance will downgrade the incoming First Responders and complete the refusal documentation. The Ambulance will not cancel the First Responders. First Responders will continue in non-emergency, await law enforcement, and perform hazard assessment and abatement as necessary. The Ambulance will go available when refusals are completed and scene is turned over to First Responders. If multiple First Responder units are enroute to the scene, First Responders will use their discretion to cancel other incoming First Response units as appropriate, as long as one First Responder unit continues to the scene

Sunstar SSCs shall advise ambulance units when they are being assigned as a closer unit at the time of dispatch. When an ambulance is advised that they are being dispatched as a "Closer Unit," they will immediately come up on the Fire Tactical Channel using their portable radio and advise the First Responder unit that they are responding as a closer unit, their response mode, and location/ETA.

When responding with the First Responder to a fire incident, Ambulances are to respond non-emergency unless requested emergency by the incident commander or pre-arrival information indicates possible or known patients at the scene. Ambulances will not prompt Command for an assignment or staging location.

Staging

When responding to volatile, violent or unsecured incidents requiring staging, First Responder or Ambulance units will respond emergency to the staging location unless their ETA to the staging location is less than five minutes; or another ALS unit has arrived at the staging location; or the call has been downgraded by EMD. If the scene is cleared by law enforcement while enroute non-emergency, the unit may then upgrade if necessary.

Units Self-Altering Response Mode

First Responders, Ambulances, and other Pinellas County EMS System personnel responding to requests for assistance may deviate (upgrade or downgrade) from the response determinant at their discretion as conditions dictate (i.e. staging, scene hazards, weather, heavy traffic, or additional patient information). All response mode deviations will be relayed to the appropriate 9-1-1 working tactical dispatcher and documented in the "notes" of the call. This is a mandatory reporting requirement. First Responder and Ambulance Units may not order the upgrade or downgrade of any other responding units until they are physically with the patient and completed a primary patient assessment.

Cancellation Enroute

A Pinellas County EMS unit must continue to the scene of every 911 request for service and determine the need for EMS first hand. *An EMS response shall not be cancelled by the general public or law enforcement.*

"Unfounded" Incidents

"Unfounded" Incidents shall be investigated with the highest degree of diligence (i.e. thorough search of the reported incident location and perimeter, forced entry consideration, call back attempts to the location by either the Sunstar Communications Center or 9-1-1, confirmation of CAD information, etc.). The first arriving EMS unit at the dispatched scene location will advise 9-1-1 or the Sunstar Communications Center of all efforts made to locate the patient and reason for cancellation of EMS units as applicable.

Calls to 911 Requesting Services Other Than an Emergency Medical System Response

a. "Request for Information" - Medical Related

   The EMD will process the incident with the MPDS. If the caller refuses EMS response, the EMD may advise the caller of other options (ER, immediate care clinic, call their physician, etc.). EMD will document all information in CAD. EMD's may not give patient care instructions outside of the MPDS protocols, or above a BLS level of care (stingray treatment with hot water, bleeding control, etc. are acceptable, but, medication administration is not.)

b. Request for Poison Information - Reference Protocol AD3.

c. Request for Directions

ADMINISTRATIVE POLICIES

If a caller is requesting directions to a care facility, the EMD will provide the caller with the option of an EMS response to their vehicle if they will stop. If the caller refuses to stop, EMD may give the requested information to the caller. EMD will document all information in CAD.

ADMINISTRATIVE POLICIES

AD2 Ambulance Requests on a Non-Emergency Line

Purpose

To establish a procedure to ensure that the appropriate resources are dispatched in the appropriate response to requests for assistance received by the Pinellas County EMS System on the 7-digit non-emergency line.

Description

The Pinellas County EMS System responds to a large number of requests for emergency and non-emergency medical assistance every day. To ensure that all requests receive a consistent determination of appropriate response assignment, gathering of information to relay to responders, and pre-arrival medical instructions, a comprehensive and pre-determined system of call classification and triage is necessary.

Definitions

- "Patient Transfer" means a request for service where the patient does not have a medical or traumatic chief complaint, but an Ambulance is needed to facilitate transport between hospitals, physicians' offices, and nursing homes. There is no anticipated EMS care intervention other than general assessment for the duration of the call. The MPDS is not utilized for this classification of request.
- "Medical Professional" means a licensed health care worker **that is with the patient and will remain with the patient until arrival of EMS**. This classification includes: LPN, RN, ARNP, PA-C, and Medical Physician.

Policy

General Guidance

Sunstar Communications Staff who answer calls on the non-emergency line will upgrade to a normal 911 system response and ship the call to the 911 Dispatcher anytime there is uncertainty regarding the appropriate response and when there is an identified patient who does not fall into one of the categories below.

Establishing Response Priority Codes

Sunstar Communications Staff will code requests for service using the following Response Priority Codes:

Priority 1	Emergency Request
Priority 2	Downgraded Emergency Request
Priority 3 and 4	ALS Non-Emergency Request (Unscheduled and Scheduled)
TBD	BLS Non-Emergency Request (Unscheduled and Scheduled)
Priority 5	Omega/Hold Call
Priority 6 and 8	Long Distance Transfer – (Unscheduled and Scheduled)
Priority 7	Critical Care Transport
Priority 10	Mental Health Transport

Establishing Acuity Levels for Interfacility Transfers

Acuity Level I	Requires specialized equipment, personnel, or resources (CCT, CCP, etc.) (Reference CCT MOM AP1, CT2)
Acuity Level II	ALS Ambulance
Acuity Level III	BLS Ambulance

General Public calling party and Patient with a Chief Complaint

All calls received on the 7-digit non-emergency line from the general public in which a chief complaint or priority symptom is identified will be processed as if they were received on the 911 line and assigned as Priority 1 or Priority 2. (Reference AD 1)

Interfacility Transfers--Acute Care Hospital to Acute Care Hospital

Calls received on the 7-digit non-emergency line from medical professionals who are in attendance with the patient at an acute care hospital and are requesting an interfacility transfer to another acute care hospital, will initially be processed using MPDS. If a potential Critical Care Team transport is requested the Sunstar Communication Center Staff will refer to Protocol AP3 and CT2 from the Critical Care Transport volume of the Pinellas County EMS Medical Operations Manual to determine the appropriate ambulance type to assign to the call. (Acuity Level I or II)

Interfacility Transfers to a higher level of care (excluding acute care to acute care)

Calls received on the 7-digit non-emergency line from medical professionals who are in attendance with the patient at a residential or non-acute care facility and requesting an interfacility transfer to a higher level of care will initially be processed using MPDS. If a Charlie or Delta determinant is assigned or a chief complaint or priority symptom is identified that prompts processing using another card, the call will be shipped to the 911 Dispatcher for full system response (Priority 1) (Reference AD 1)

Once EMD has been completed and the EMD determinant level is an Alpha level response the incident should be coded as a Priority-3 response, with only an ambulance being assigned to the incident. (Acuity Level II)

Interfacility Transfers to a Lower Level of Care, Discharges, and Other Routine Patient Transfers

Calls from staff at a medical facility for transfer to a lower level of care (Hospital discharge to a nursing facility, dialysis appointment, wound care treatment, doctor's appointment etc.) do not fall under a category of "Chief Complaint" and are not required to be processed using the MPDS. Calls may be assigned an acuity level (I, II, or III) based upon needed resources. If all criteria in AD5 are met, a Mental Health Transport Unit may be dispatched in place of an ambulance.

Law Enforcement Requests For Non-Emergency Response

All calls received on the 7-digit non-emergency line from law enforcement in which a chief complaint or priority symptom is identified will be processed as if they were received on the 911 line and assigned as Priority 1 or Priority 2. (Reference AD 1)

Requests from Law Enforcement Agencies for non-emergency transport (Baker Act, sick person, "routine transport") with Law Enforcement on scene may be coded as Priority 3 and not shipped to 911 Dispatchers. Sunstar Communications Staff (must be EMD) will employ the MPDS to assign an appropriate determinant to the incident. *The EMD may use discretion to upgrade call to Priority 1 or Priority 2 and ship to 9-1-1 due to lack of patient information and/or no confirmation that Law Enforcement will remain with the patient until the arrival of EMS.*

ADMINISTRATIVE POLICIES

AD3 Poison Information Center Consultation

Purpose

To establish the procedure for Emergency Medical Dispatchers to handle consultations and transfers between the Pinellas County EMS System and the Florida Poison Information Center - Tampa (Poison Center).

Description

The Pinellas County EMS System and the Florida Poison Information Center – Tampa are obligated to work cooperatively to minimize the impact of poisonings and overdoses on our community. This policy describes the ways in which the Pinellas County EMS System will access the Poison Center's resources.

Policy

Emergency Medical Dispatchers

Emergency Medical Dispatchers (EMDs) will process all calls to 911 and the seven digit non-emergency number for patients experiencing overdoses and poisonings utilizing the Medical Priority Dispatch System (MPDS) and other established protocols (Reference AD1 and AD2). After completing call classification, dispatching, and giving appropriate Post Dispatch Instructions, EMD's may elect to contact Poison Center to obtain further information regarding the case for relay to responding units.

EMD's may conference a caller with the Poison Center to assist in determining the need for an EMS response only if the patient is ***asymptomatic, the exposure was unintentional, and the 23-Ω-1*** determinant is reached. The EMD must remain on the line to initiate an EMS response as recommended by the Poison Center.

EMD's may transfer a call to the Poison Center without initiating an EMS response only if the caller is seeking information about a medication or poisoning and there has been ***no ingestion***. EMDs will verify the address transfer the call to Poison Control and may disconnect the line.

Pinellas County Certified Professionals

Pinellas County Certified Clinicians may consult the Poison Center to obtain information regarding a case only after consultation with the OLMC Physician. Every effort should be made to conference the Clinician, the OLMC Physician, and the Poison Center on a single line to ensure common understanding of a situation and continuity of care.

Medical Direction Standing Orders for Consultation

From time to time, the Pinellas County EMS Medical Director may initiate automatic or standing consultation to the Poison Center to assist in the management and investigation of cases deemed associated with threats to public health, large scale gatherings, mass casualty incidents, or other significant events. Such consultations may be initiated using an automated system.

ADMINISTRATIVE POLICIES

AD4 MPDS Local Options

Purpose

To define the local options authorized for use with the Medical Priority Dispatch System (MPDS).

Description

The Pinellas County EMS System Processes calls for service using the MPDS System. Certain protocols within the system allow for local EMS Medical Director to specify options. Additionally, the local EMS Medical Director may alter specific parts of the system as deemed necessary. This directive applies only to call processing/dispatching and not to care provided at a patient's side.

Policy

Protocol 9 Cardiac or Respiratory Arrest/Death

The following criteria are authorized to be defined as "Obvious Death":

a- Cold and Stiff in a warm environment
b- Decapitation
c- Decomposition
d- Incineration
e- Non-Recent Death (6 hours or more)
f- Severe Injuries obviously incompatible with life

The following criteria are authorized to be defined as "Expected Death". Note that Pinellas County EMS responds on all Expected Death calls (Reference AD1):

x- Terminal Illness
y- Do Not Resuscitate Order (DNR)

The "C Only – Continuous compressions until responder arrival" as the "Cardiac Arrest Pathway" is authorized.

ASA Aspirin Diagnostic and Instructions

Aspirin Administration is authorized in patients presenting to EMS with chest pain or heart attack symptoms per MPDS criteria.

Aspirin (ASA) is the only approved medication for the EMD to advise to be administered. The other medications listed on the "Aspirin-Containing Medication" list found in the "Additional Information (AI)" section of the "Aspirin Diagnostics and Instructions" are not approved for use.

Protocol 24 Pregnancy/Childbirth/Miscarriage

The "OMEGA Referral" for "Waters Broken" is NOT authorized. Pinellas County EMS responds on all Pregnancy/Childbirth/Miscarriage calls.

ADMINISTRATIVE POLICIES

In the case if 1st trimester miscarriage (ONLY), the instruction found on Panels F-40 and G-1a to; "*Tie a string (shoelace) tightly around the umbilical cord, about 6 inches (15 cm) from the baby. "Do Not cut it*" is NOT to be read to the caller.

The HIGH RISK Complications List found in the Additional Information (AI) section under Protocol 24 has been authorized by Medical Control in its entirety and may be revised as is deemed necessary and medically prudent.

Protocol 28 Stroke (CVA)

4.5 hours is authorized as the amount of time for the "Stroke Treatment Window".

Stroke Diagnostic Tool

The Stroke Diagnostic Tool is to be used only after the SEND point has been reached and sent, by ProQA or only after an EMD determinant has been reached and sent via use of the card set (post dispatch).

MPDS Tourniquet Instruction

The EMD Case Exit instruction found on Panel X-5 *"(Extremities) Do not use a tourniquet*" is NOT to be read to the caller.

Instructions for the Use of Naloxone (Narcan)

The presence of Naloxone (Narcan) is NOT to be solicited by the EMD. The instruction for administration of Naloxone is only to be offered when the caller volunteers that they have Naloxone available on scene.

ADMINISTRATIVE POLICIES

AD5 Mental Health Transport Unit

Purpose

To enable the use of a specialized Mental Health Transport Unit for interfacility transportation of individuals not requiring acute medical care.

Description

The Pinellas County EMS System has identified a need to provide specialized transportation options to mental health clients who have been medically cleared for transport to an appropriate receiving facility for further mental health examination and treatment. This policy establishes the criteria for the appropriate and safe utilization of such specialized transportation.

Definitions

- "Mental Health Client" means an individual who is voluntarily or involuntarily protected in accordance with the Florida Mental Health Law (Baker Act), Chapter 394, Florida Statutes, and requires transportation to or from a Health Care Facility.
- "Mental Health Transport Driver" or "MHT Driver" means any person who is specially trained and certified for Mental Health transport, and who is County Certified to perform such services.

Policy

Criteria for Utilization

To be considered a Client rather than a patient and be eligible for transport by the Mental Health Transport Unit all of the following criteria must be met:

1. Transport is from a hospital to Mental Health Receiving Facility or between two Mental Health Receiving facilities within Pinellas or adjoining counties
2. Individual has been medically cleared by a physician to be transported as a mental health client rather than as a patient and there is no expected requirement for oxygen, restraints, or other medical care during transport, ***and*** the physician (or RN authorized by the physician) has signed the required EMS Transfer Form
3. Client is ambulatory without restriction (able to walk to and from transport unit without assistance)
4. Client has not exhibiting current or recent violent behavior and is not high risk for elopement

ADMINISTRATIVE POLICIES

ADMINISTRATIVE POLICIES

Safety Precautions

The safety of both the client and the MHT Driver is the highest priority. The following precautions will be observed at all time when dispatching and performing Mental Health Transports:

1. The EMD and the MHT Driver will independently verify that the client meets criteria as above.
2. If the MHT Driver, during the process of assessing or transferring the client, deems the transfer by MHT would be unsafe, they may stop the transport and require the client be transported by ambulance. The MHT Driver will notify dispatch and their supervisor.
3. Only one client may be inside a unit at a time.
4. The client must have been determined to not be in possession of any weapons and all of the client's belongings must be transported in a separate compartment of the MHT Unit.
5. The MHT Driver will obtain the assistance of staff from the sending and receiving facilities during transfer between vehicle and facility to ensure the safety of both the client and the MHT Driver
6. If at any time the client requires medical assistance, threatens or becomes violent, attempts to harm themselves, or attempts to escape, the MHT Driver will immediately call for assistance on the appropriate radio channel or depress their emergency ("Code H") radio button.
7. If a client becomes violent, the MHT Driver will remain in the cab of the vehicle and utilize verbal de-escalation techniques, unless the MHT driver determines that physical restraint is warranted and is safe to be performed by one person. (Ex. pediatric patients and/or the frail elderly).
8. If a Client escapes, the MHT Driver will follow the Client at a safe distance and not attempt physical confrontation without assistance, unless the MHT driver determines that physical restraint is warranted and is safe to be performed by one person.
9. If a Client requires medical assistance, the MHT Driver will render first aid and/or cardiopulmonary resuscitation (CPR) until EMS arrives on scene, if the MHT Driver determines that it is safe to do so.

AD6 EMS Supply Handling

Purpose

To describe the proper inventory, accounting, disposal and record keeping for non-controlled pharmaceuticals, IV fluids and single use disposable medical supplies within Pinellas County EMS (First Responder, Sunstar Ambulance, Critical Care, Hubs, Stations, Disaster Vehicles, Tactical)

- Inventory shall be controlled by the current computerized inventory control system
- All inventory will be physically examined for expired items on a monthly basis
- Inventory shall be rotated on a first in first out method moving the oldest dated product closest to the end user.
- Removal of expired items
  - Items with expiration date expressed as month and year (e.g. 02/02) shall be removed the first of the listed month (e.g. item with 02/02 expiration would be removed from inventory on February 1)
  - Items with expiration date expressed as month, day and year (e.g. 02/01/02) shall be removed on the first of the prior month (e.g. item with 02/01/02 expiration would be removed from inventory on January 1)
- All items deemed "expired or unusable" shall be kept in the original packaging, whenever possible, and placed in the Pinellas County EMS "Expired" container (blue in color). The "Expired" container shall be located in a separate location from in-date active inventory.
- Expired/Damaged/No longer authorized pharmaceuticals in which credit cannot be obtained, shall be inventoried and sent for destruction through the current authorized destruction company. ***EXPIRED MEDICATIONS ARE NOT TO BE DISPOSED OF IN THE REGULAR TRASH OR BIOHAZARD WASTE CONTAINER***
- Expired/Damaged/No longer authorized single use disposable medical supplies shall be made inoperable/disabled or in a condition that someone would not be able to be reused and then recycle applicable components and dispose of the balance in the normal waste
- Any damaged items that contain "sharps" shall be placed in a sharps safety container for proper disposal.

ADMINISTRATIVE POLICIES

AD8 Blood Pressure Screening

Paramedics and EMTs are occasionally requested to provide non-emergency health promotion and screening activities, such as blood pressure assessment. Electrocardiograms (ECGs) and blood sugar assessment are never to be utilized as a component of health promotion and screening activities.

Any significantly abnormal values or symptoms discovered shall result in the individual becoming a patient.

ADMINISTRATIVE POLICIES

AD10 Mutual Aid Medical Care Procedure

Purpose:

The purpose of this protocol is to describe the roles and responsibilities of certified EMTs and Paramedics in the event of a mutual aid request for disasters outside of Pinellas County and to address the utilization of their medical skills for the public good under such extraordinary circumstances.

Description:

The Pinellas County EMS System may from time to time be called upon to provide mutual aid coverage. Such requests may include emergency scene requests just outside our jurisdictional borders as well as throughout Florida and other states. Whenever Pinellas County provider agencies supply BLS or ALS medical coverage at such requests, their medical services remain under the auspices of the Pinellas County EMS Authority, the Medical Control Board, and the Medical Director. Therefore, such medical coverage shall conform to the same standards of care and other procedural requirements of the Pinellas County EMS System.

- **Intent and Scope**
  - The Medical Operations Manual (MOM) is a document which delineates the standards of care for the EMS System and describes the method and scope of practice for clinicians working in the System, or assigned special duty through a mutual aid request. The MOM contains Administrative Protocols, Treatment Protocols, Drug Summaries, and a Procedure Manual.
  - Any requests made for our services (i.e. disaster assistance or mutual aid) within the State of Florida shall necessitate our Medical Director contacting the receiving licensed provider's Medical Director over the issues of standards of care and medical policy.
  - It is our desire that our Clinicians work under the Pinellas County medical care protocols and directives. However, the receiving provider's Medical Director may request that you function under his/her license. In this case, you must work with a receiving provider's Clinician at the same level of authority. Alternatively, you must receive sufficient training on the receiving licensed provider's Medical Operations Manual (MOM), as well as receive a copy of the procedures for reference in order to work as the Clinician-in-charge.

ADMINISTRATIVE POLICIES

- Any requests made for our services (i.e. disaster assistance or mutual aid) outside the State of Florida shall necessitate that the Pinellas County Medical Director contact the receiving licensed provider's Medical Director over the issues of standards of care and medical policy. It is our desire that our Clinicians work under the Pinellas County medical care protocols and directives. However, if the mutual aid provider's Medical Director requests that you function under his/her license, then you must work with another Clinician at the same level of authority. Alternatively, you must receive sufficient training on the receiving licensed provider's Medical Operations Manual, as well as receive a copy of the procedures for reference in order to work as the Clinician-in-charge.
- Should such a situation arise just outside the jurisdictional boundaries of Pinellas County where a certified Pinellas County Clinician is called upon to participate in patient care in conjunction with another licensed service, the on-duty personnel representing the receiving licensed provider shall have the primary responsibility and should assume the role of Clinician-in-charge, if they are the first arriving provider.
- However, if the Clinician representing the mutual aid provider has a lower degree of medical authority (i.e., EMT), then the person with the highest level of clinical authority (Paramedic) is in charge of patient care. This advanced level of care must remain congruent throughout the transportation phase of care.
- Should individuals of identical clinical authority be working "side-by side", those who are representing the receiving provider shall be considered to assume the role of Clinician-in-charge, unless the provider's Medical Director determines differently.
- Use of Controlled Substances
  - Pinellas County Certified Paramedics shall follow the Pinellas County MOM for the administration of controlled substances used from Pinellas County. Due to the nature of the circumstances placed upon your delivery of service, OLMC will not be required to approve the administration of controlled substances. Extremely prudent use of controlled substances is authorized. Remember that re-supply may be difficult. Proper documentation must be made and a copy of the patient care record must be retained for QA purposes upon your return to Pinellas County.
  - Controlled substances used from the Pinellas County EMS system must be witnessed by at least two Clinicians.
  - Controlled substances issued by the receiving provider must follow the protocols in place for that jurisdiction.
- Patient Care Documentation
  - The Clinician with the highest level of clinical authority (Paramedic) is responsible for starting and completing a patient care report (PCR). He/she is also responsible for initiating and/or completing any other reporting

ADMINISTRATIVE POLICIES

requirements outlined in the Medical Operations Manual, or requested by the receiving Medical Director. The only exception to this requirement would be the scene environment or the severity of the patient(s) being treated in which the first paramedic in attendance of the patient may delegate the initiation of the PCR and other reporting requirements to an EMT.

- If patient care is transferred to another unit, PCR completion and any other documents, including electrocardiograms, initiated by the Clinician with the highest level of clinical authority should be transferred to the clinician continuing patientcare during transport. If, based upon the patient's severity and continued care delivery methods, the first Clinician elects not to ride in the ambulance, a complete verbal report must be provided to the transport Paramedic. The transport of critically ill or critically injured patient(s) must not be delayed for report completion.

- Communications
  - Radio communications provided or used during a mutual aid incident shall allow ambulance and first response crews to talk among themselves, and with in-coming units, dispatchers and medical direction without recurring significant interference from other calls and without impediment to the dispatching of other calls. Frequencies should be available for communications on so-called standard "mutual aid" frequencies that may be needed in the event of incidents involving multi-casualty and disaster operations.
- Ambulances / ALS Rescues and Engines
  - All ambulances or ALS rescues and Engines requested for mutual aid from Pinellas County shall carry, at all times and at a minimum, the equipment specified on the most current pertinent inspection lists from the State, the Authority, and the system Medical Director. Any clinical equipment not on these lists shall have specific prior approval from the Medical Director.
  - If our system is provided sufficient notification and time for ample preparation, a double set of expendable items and pharmaceuticals is authorized because of re-supply problems that may be encountered.
- Agency Reporting Requirements
  - Upon the agency's return to Pinellas County, a report shall be submitted to the EMS Medical Director within 30 days to include the following information
    - Controlled substances cards and copies of all PCRs in which controlled substances have been utilized.

ADMINISTRATIVE POLICIES

AD11 Newborn Babies Surrendered at Fire/EMS Stations

Newborn babies (up to 7 days old) may be abandoned by a parent at Fire/EMS Stations.

Treatment of Surrendered Newborn Infants

Florida Statues Chapter 383 allows a parent to leave a newborn infant (7 days old or younger) at a Fire or EMS Station. Each Fire/EMS Station shall accept any newborn infant left with a Firefighter, EMT, or Paramedic. The Paramedic/EMT shall consider this action as implied consent to and will assess, treat and arrange for transport of the newborn infant by Ambulance to the nearest hospital having emergency services following all standard protocols.

Except when there is actual or suspected child abuse or neglect, any parent who leaves a newborn infant at a Fire/EMS Station has the absolute right to remain anonymous and to leave at any time and may not be pursued or followed unless the parent seeks to reclaim the newborn infant.

Requirements

1. A neonate presented to a Fire Station or EMS shall be evaluated, provided treatment and transported to the closest Hospital Emergency Department by Ambulance under implied consent.
2. Document all information on the Patient Care Report
3. If the neonate would benefit from a hospital other than the closest facility, contact Online Medical Control.
4. Refer to Treatment Protocol P12 Neonatal Resuscitation.

ADMINISTRATIVE POLICIES

AD12 Staging

Purpose:

The purpose of this protocol is to ensure protection of all emergency services personnel responding to a violent, or possibly violent, incident.

Description:

- Responding to Possible Violence:
  - While enroute to a call where violence exists or is a possibility, check with Dispatch to see whether police agencies are also enroute to the scene. You may be advised by Dispatch to consider staging.
  - In situations where law enforcement agencies have indicated the need for other responding public safety agency units to stage:
    - The information will be forwarded to Central Dispatch and the Sunstar Communications Center
    - The first arriving unit shall coordinate the staging location
    - Upon making the decision to stage, they will immediately notify appropriate dispatch – decision to stage, location and recommended access route
    - While still a few blocks away from the area, all responding units shall:
      - Turn off emergency lights and siren.
      - Advise Central Dispatch of a safe approach to the area for all other incoming emergency responders.
      - Upon notification of a staging situation, all units shall downgrade to non-emergency response unless notified differently.
      - Routinely park out of sight of the scene location or safely outside the Danger Zone (an area about 120 degrees in front of the scene that is normally partially exposed).
      - A request will be made for clearance from the law enforcement agency before entering the scene. Once law enforcement agencies have stabilized the area, emergency units may enter the scene with caution. ***DO NOT ENTER A VIOLENT INCIDENT AREA WITHOUT FIRST HAVING RECEIVED THE GO-AHEAD BY THE LAW ENFORCEMENT AGENCY SECURING THE AREA.***
  - If the decision to stage has been made and law enforcement agencies are not on the scene:
    - Request a law enforcement agency estimated time of arrival (ETA) from Central Dispatch.

        - Consider Central Dispatch updates. You may use your discretion to determine whether to enter the scene before the law enforcement agencies arrive.
- Encountering Scene Violence:
    - Upon the arrival at the scene of a medical emergency, the Clinician(s) should assess the condition of and promptly treat any sick or injured person unless the health or safety of the Clinician(s) is jeopardized.
    - If you find an unanticipated violent situation, advise Central Dispatch of your location address. Also advise Central Dispatch of safe approach to the area for all other incoming emergency responders.
    - If you find a violent situation and law enforcement agencies have not been called, advise Central Dispatch of your need for law enforcement's assistance and request the law enforcement agency's ETA and frequent updates from Central Dispatch before taking further action. Utilize the appropriate help procedures as identified by the different agencies. Once law enforcement agencies have stabilized the area, emergency units may enter the scene with caution.

ADMINISTRATIVE POLICIES

AD14 Basic Life Support (BLS) Transport Unit

Purpose:

To enable the use of Basic Life Support (BLS) ambulances for interfacility transport of acuity III patients, and to define specific requirements and procedures

Description:

The Pinellas County EMS System has identified a need to provide basic life support transportation of patients who meet certain criteria. This policy establishes the criteria for the appropriate and safe utilization of such specialized transportation.

Definitions:

- "Basic Life Support ambulance" means an ambulance staffed with two certified emergency medical technicians.
- "Acuity III patient" means a patient requiring non-emergency transport to a lower level of care, discharge or other routine transport that can be safely managed by a BLS ambulance.

Policy:

- An acuity III patient may be transported by Basic Life Support (BLS) ambulance, so long as ***NONE*** of the following exclusion criteria are met:
  1. Patient has a peripheral IV line with fluids or medications infusing. A patient with only a reseal or only a PICC line may be transported by a BLS unit.
  2. Patient requires cardiac monitoring, including capnography
  3. Patient requires airway assistance beyond simple suctioning and monitoring
  4. Patient is combative and requires or might require chemical sedation
  5. Patient requires seizure precautions
  6. The sending facility and/or EMD determined that the patient requires ALS or CCT transport due to any other reasons
  7. The EMT has conducted an initial assessment and determined that the patient is not a candidate for BLS transport due to current or potential complications during transport that will require ALS intervention. The EMT shall notify the communications center in this instance.

- Special Circumstances

  - BLS Ambulances may be utilized to respond to and transport other types of patients during a disaster, EMS Emergency, or other special circumstances as approved by the EMS Medical Director.

ADMINISTRATIVE POLICIES

- Requesting Assistance
  - Should the patient deteriorate to the point of requiring ALS intervention, the EMT shall notify the communications center. They shall use best judgement as to if the best course of action is to divert to the nearest ED or wait for ALS assistance to arrive.
  - In the case of emergency, press the emergency button on the portable or on-board radio and advise "Confirm Sims Code H"
  - BLS units may not cancel an EMS Response. Responding units may elect to upgrade or downgrade according to pre-arrival information given.
  - Should a BLS unit witness or come across an emergency scene (MVC or other emergency) they will notify dispatch and render BLS care if appropriate. At no time is a patient to be alone in the patient compartment.

ADMINISTRATIVE POLICIES

AD15 Post Exposure Prophylaxis (PEP)

Pinellas County EMS may use this same procedure to advise law enforcement officers and members of the public assisting fire, EMS, and law enforcement in the performance of their duties should they experience a bloodborne or body fluid exposure. (The costs associated with employee PEP testing may be borne by the employer, employee and/or the nonmedical Personnel involved.)

EMS goal: Limit time from exposure to PEP consultation (by Hospital or Clinic Physician) to no longer than two hours.

- Helpful Information for Emergency Workers:
  - We believe that extra care and attention should always be employed with any "sharp" used during the care of a patient.
    - The potential for these exposures occur:
      - During patient extrication at a motor vehicle crash (MVC): Glass fragments and sharp metal objects may penetrate through protective barriers and lacerate the emergency worker.
      - During patient assessment at a MVC: Glass fragments are often left on the patient after extrication, posing a risk to the clinician.
      - During intubation and management of the combative patient.
      - During intramuscular and subcutaneous injections.
  - The emergency worker should take extra precautions in these areas of patient care management by:
    - Developing an acute awareness of the sharp objects at a MVC. Place protective barriers between you and the object.
    - Wearing heavy-duty gloves or using a towel when clearing (brushing) glass fragments from the patient.
    - Wearing Personal Protective Equipment (PPE) when performing invasive skills or when patient information and/or the situation dictates so.
    - Proper handling of sharps.
- Procedure for Obtaining Source Blood:
  - The PEP kit has been locally designed to assist the emergency worker or bystander that becomes exposed to bloodborne pathogens. The kit contains blood sampling tubes and a pre-counseling form for the source patient's consent before EMS can draw their blood for HIV testing.
    - Should an exposure occur:
      - Obtain permission for testing for HIV from source of exposure (patient or source patient/subject).

ADMINISTRATIVE POLICIES

- The PEP kit contains this Source Information and Consent Form. (NOTE: No permission is needed for Hepatitis testing.) If permission is given, do brief pre-test counseling per the form in the kit, and obtain signature, name, address, and phone number on the Source Information and Consent Form. Then draw blood, obtaining two red top tubes and two purple top tubes (found in PEP kit).

(CRITICAL NOTE: If possible, draw this blood prior to or during transport of the source patient to the hospital or prior to releasing him/her. This decreases delays in obtaining appropriate testing and counseling.)

- Blood samples that have been drawn must be labeled with either the patient's name or the hospital identification number, time of draw, date, the initials of the clinician and county EMS ID number (ID labels located in PEP Kit).

  NOTE: Included in the PEP kit besides the regular safety style blood tube holder is a blood tube holder with a direct draw adapter. This style blood tube holder is utilized when a patient already has IV access established. The blood tube holder with the direct draw adapter will possibly prevent having to restick the patient for a blood sample.

- To utilize the blood tube holder with direct draw adapter:
  - Place a tourniquet on the upper extremity that has the IV already placed.
  - Tamponade the vein that the IV catheter is in. Disconnect either the IV extension set or IV tubing from the IV catheter hub.
  - Connect a 10 mL syringe to the IV catheter hub and withdraw 10 mL of blood and waste in an approved sharps container.
  - Attach the blood tube holder with the direct draw adapter to the IV catheter hub.
  - While securely holding the blood tube holder with direct draw adapter, use the device to obtain two red top tubes and two purple top tubes of blood. After obtaining the blood samples, reattach the IV extension set of IV tubing to the IV catheter hub.
  - If Normal Saline was being used as the IV fluid, open the IV line and infuse approximately 50cc of fluid to clear the IV line and IV catheter of any blood.
  - If the IV access was a reseal, flush the IV extension set and IV catheter with 10cc of 0.9% Sodium Chloride to ensure the IV access does not clot off with residual blood.
  - Dispose of the blood tube holder with direct draw adapter in an approved sharps container.

ADMINISTRATIVE POLICIES

- If the source patient has a decreased level of consciousness (LOC) or is otherwise judged via system protocol to not be competent to consent/refuse, the blood sample can be taken under implied consent.
- The Clinician must document two witness signatures attesting to the patient's incapacity to provide consent on the Source Information and Consent form, should this mechanism be used.
- If the source patient is competent and refuses to permit blood samples to be drawn and as a result, permission for HIV testing is NOT obtained, the COURT ORDER DOCUMENTATION at the bottom of the SOURCE OF CONTACT CONSENT form in the PEP Kit should be completed with the notation "refused to sign" in the Signature block. This will help facilitate a request to obtain a COURT ORDER for testing.
- If a COURT ORDER is necessary, a statement has been provided that must be signed by a physician licensed under chapter 458 or chapter 459 attesting to the fact that a significant exposure has occurred and that, in the physician's medical judgment, testing is medically necessary to determine the course of treatment, constituting probable cause for the issuance of an order by the court.

  Note: It is highly recommended that the physician consult the CDC National Clinicians' Post-Exposure Prophylaxis Hotline at 1-800-448-4911 for assistance in determining significance of the exposure and the most current evaluation and treatment guidelines.)

- The court order can be obtained by the medical personnel involved or by the employer of such person acting on behalf of the employee. Be aware that the treating physician may recommend starting prophylactic therapy while awaiting the results of the court order process. Further information about this process may be obtained via employer risk management or infection control officers.

  NOTE: If the source refuses to give their blood, this does not mean that a PEP consultation should not be done. The consultation is even more important, especially regarding determination of whether a significant exposure has occurred.

- When an Exposure Occurs:
  - Obtain the source blood sample using the PEP kit. If unable to obtain the source blood, the emergency worker and the source patient should go to the same hospital.
  - Once at the hospital, the Clinician must request and obtain a blood sample from the source patient if they desire Rapid HIV testing from a PEP Hospital or PEP Clinic

ADMINISTRATIVE POLICIES

(Hospital/Clinic offering a Rapid HIV test). If this is not the desire of the Clinician, he/she may have their PEP consultation completed at the source patient's hospital. If the clinician chooses this option, they are to be registered into the hospital data system as an ED patient. This will provide a formal record of their consultation, including any recommendations for follow-up care.

- If hospital staff questions the authority for this test, notify OLMC.
- If a PEP Hospital or PEP Clinic is used, the source patient's blood must be delivered in person by the exposed Clinician (unless the patient is already at a PEP Hospital).
- The chain of custody information located on the SOURCE OF CONTACT CONSENT must be used when taking the source blood to a PEP Hospital or PEP Clinic. Upon the arrival at the PEP facility, the Clinician should notify the emergency department charge nurse or clinic staff and request a PEP consultation and rapid HIV testing of the source patient's blood.
- If the Clinician chooses this option, they are to be registered into the hospital data system as a patient. This will provide a formal record of their consultation including any recommendations for follow-up care.
- The actual PEP consultation, lab testing, pre and post counseling, recommended treatment and follow-up care will be initiated by the emergency department and hospital infection control staff or clinic in conjunction with your employer and Worker's Compensation provider.
- The examining/counseling physician is responsible for determining the significance of the exposure. It is highly recommended that the physician consult the CDC National Clinicians' Post-Exposure Prophylaxis Hotline at 1-888-448-4911 for assistance in determining significance of the exposure and the most current evaluation and treatment guidelines.
- Any consultation with OLMC is intended to assist in any logistics necessary for testing. These consultations will not determine the significance of the exposure or whether or not the exposed Clinician should be tested.
- The exposed Clinician should immediately notify their Designated Infection Control Officer (DICO) of the agency, for which they are working at the time of the exposure. They will act as the official agency liaison for infection control information from the Hospital or PEP Clinic regarding lab tests and additional information should it become necessary.
- Follow-up care should also be coordinated through the designated Infection Control Officer.
- If a law enforcement officer or bystander has been exposed, blood collection procedures are the same as for EMS exposures. Law enforcement officers should contact their supervisors and/or designated Infection Control Officer for instructions regarding their department policies.
- Contact OLMC for civilian bystander exposures or if there are any questions about any of these procedures.

ADMINISTRATIVE POLICIES

- Definitions:
  - Rapid HIV Testing: Recommended by the CDC. This test is used for detecting antibody to HIV. It is a screening test that produces very quick results, usually in 5 to 30 minutes. Because most individuals who are tested are not infected, they can receive counseling and learn their HIV exposure status in a single visit. In addition, providing preliminary positive results also increases the number of infected individuals who ultimately learn their infection status and can be referred for education, medical treatment and additional prevention services. Rapid HIV testing is done only on the source patient's blood. Rapid HIV testing is not done on the exposed Clinician.
  - PEP Hospital: A Pinellas County hospital that offers Rapid HIV testing capability. If the test is negative and the source patient is considered low risk, the exposed person may avoid taking PEP medication. It is highly recommended that the physician consult the CDC National Clinician's Post-Exposure Prophylaxis Hotline at 1-888-448-4911 for assistance in determining significance of the exposure and the most current evaluation and treatment guidelines.
  - PEP Clinic: A Florida licensed medical clinic located in Pinellas County capable of providing bloodborne pathogen consultation. This facility shall also provide Rapid HIV testing and services that support the emergent needs of EMS. It is highly recommended that the physician consult the CDC National Clinicians' Post-Exposure Prophylaxis Hotline at 1-888-448-4911 for assistance in determining significance of the exposure and the most current evaluation and treatment guidelines.
  - Non-PEP Hospital: A Pinellas County hospital that does not offer Rapid HIV testing, but will conduct the PEP consultation. In this case, if the exposure is determined to be significant, the Clinician may need to take PEP medications for 2-7 days while waiting for the hospital laboratory to determine whether or not the source patient is HIV positive. It is highly recommended that the physician consult the CDC National Clinicians' Post-Exposure Prophylaxis Hotline at 1-888-448-4911 for assistance in determining significance of the exposure and the most current evaluation and treatment guidelines.
  - Chain of possession/chain of custody: A complete record of individuals and/or organizations that have had custody of a sample of the source blood for any period of time or for any purpose.
  - PEP Kit: A complete kit carried on each Pinellas County ALS unit utilized to obtain blood samples in the event of a significant exposure. The kit also contains associated paperwork necessary to obtain testing of blood samples.
    - The kit contains the following:
      - 3 – Red Top Blood Tubes (Note Expiration)
      - 3 – Purple Top Blood Tubes (Note Expiration)
      - 4 – Source Patient Blood Tube Labels
      - 1 – Chain of Custody/ Consent Form
      - 1 – Blood Tube Holder/Direct Draw Adapter Combination

ADMINISTRATIVE POLICIES

- 4 – Alcohol Prep Pads
- 2 – Vanishpoint Single Use Safety Blood Tube Holders
- 2 – Vacutainer Needles or Equivalent (used with the Vanishpoint safety blood tube holder for venipuncture)
- 1 – Ziploc style bag for completed blood samples

ADMINISTRATIVE POLICIES

AD16 BLS/ALS Pharmaceutical and Medical Supply Authorizations and Substitutions

- ***Cervical Immobilization Devices***
  - Chapter 64J-1.002, Table 1, #12, Florida Administrative Code requires the EMS Medical Director to approve the Adult and Pediatric Cervical Immobilization Devices (CID) used in the EMS System. As EMS Medical Director, I authorize the iTec Multi-Grip Head Immobilizer and the MDI Pediatric Vacuum Mattress in Pinellas County.
- ***Burn Sheets***
  - Chapter 64J-1.002, Table 1, #22, Florida Administrative Code requires Burn Sheets. As EMS Medical Director, I authorize substitution of disposable sheets/blankets and/or cotton sheets/blankets in lieu of Burn Sheets from ALS permitted vehicles in Pinellas County.
- ***Rigid Cervical Collars***
  - Chapter 64J-1.002, Table 1, #29, Florida Administrative Code requires the EMS Medical Director to approve in writing the Rigid Cervical Collars used in the EMS System. As EMS Medical Director, I authorize the AMBU "Perfit" adjustable style Rigid Cervical Collar and the AMBU Perfit "Mini-Ace" adjustable style Rigid Cervical Collar in Pinellas County.
- ***Thermal Absorbent Reflective Blanket***
  - Chapter 64J-1.002, Table 1, #34, Florida Administrative Code requires a Thermal Absorbent Reflective Blanket. As EMS Medical Director, I authorize substitution of regular cotton or wool blankets and cotton baby receiving blankets in lieu of Thermal Absorbent Reflective Blankets in Pinellas County.
- ***Disposable Endotracheal Tubes – Uncuffed Below Size 5.5***
  - Chapter 64J-1.003, Table 2, EQUIPMENT (d), Florida Administrative Code requires all endotracheal tubes below size 5.5, be uncuffed. As EMS Medical Director, I authorize substitution of cuffed endotracheal tubes size 3.0 – size 5.0 in lieu of uncuffed endotracheal tubes size 3.0 – size 5.0 in Pinellas County.
- ***Monitoring Electrodes for Adult and Pediatrics***
  - Chapter 64J-1.003, Table 2, EQUIPMENT (q), Florida Administrative Code requires monitoring electrodes for adults and pediatrics. As EMS Medical Director, I authorize the use of Kendall Medi-trace or 3M Red Dot brands of electrodes for adults and pediatrics in Pinellas County.
- ***Dextrose, 50 Percent***
  - Chapter 64J-1.003, Table 2, Ground Vehicle ALS Equipment and Medications 2, Florida Administrative Code requires Dextrose, 50 Percent. As EMS Medical Director, I authorize substitution of Dextrose 10% 250 mL IV Fluid and Level Oral Glucose Gel 15g in lieu of Dextrose 50 Percent in Pinellas County.

ADMINISTRATIVE POLICIES

AD17 Philips MRx Clinical Configuration

The Philips MRx Clinical Configuration is the clinical standard for patient care in Pinellas County EMS. It reflects a standard configuration for **ALL** Philips MRx devices utilized as a component of patient care under the auspices of Pinellas County EMS. This configuration is not to be altered without prior approval of the EMS Medical Director.

Options

SpO2	NBP	EtCO2	12-Lead	12-Lead Tx	Pacing	Q-CPR
Q-CPR Data		Tx	Event Summary			

General Settings

Institution Name:	PINELLAS COUNTY EMS - FIRE (or SUNSTAR)
Voice Volume:	Medium
Alarm Volume:	Medium
Minimum Alarm Volume:	Medium
QRS Volume:	Off
Time Format:	24 hour
Pacing on Batteries Warning:	No
Units Display:	On
Patient Category:	Adult
Device Owner:	PCEMS - Affiliate
Return-To Password:	XXXX
One-Second Vitals:	Off

HR/ECG Settings

Auto-Gain:	Off
AC Line Filter:	60 Hz
ECG Bandwidth for Display:	1 - 30 Hz EMS
ECG Bandwidth for Printer:	1 - 30 Hz EMS
ECG Electrode Labels:	AAMI
HR/Arrhythmia Alarms:	On
HR/Pulse High Limit:	140 (Adult) , 180 (Pedi)
HR/Pulse Low Limit:	50 (Adult) , 80 (Pedi)
VTach HR Limit:	120 (Adult) , 120 (Pedi)
VTach Run Limit:	3 (Adult) , 3 (Pedi)
Color:	Color: Green

ADMINISTRATIVE POLICIES

NBP Settings

NBP Schedule:	Manual
NBP Alarm Source:	Systolic
Unit:	mmHg
NBP Alarms:	On
Systolic High Limit:	200 (Adult) , 140 (Pedi)
Systolic Low Limit:	90 (Adult) , 70 (Pedi)
Diastolic High Limit:	90 (Adult) , 70 (Pedi)
Diastolic Low Limit:	50 (Adult) , 40 (Pedi)
Mean High Limit:	110 (Adult) , 90 (Pedi)
Mean Low Limit:	60 (Adult) , 50 (Pedi)
Color:	Color: White

EtCO2 Settings

Unit:	mmHg
EtCO2 Alarms:	On
EtCO2 High Limit:	60 (Adult) , 60 (Pedi)
EtCO2 Low Limit:	15 (Adult) , 15 (Pedi)
AwRR Alarms:	On
AwRR High Limit:	40 (Adult) , 60 (Pedi)
AwRR Low Limit:	8 (Adult) , 12 (Pedi)
Apnea Alarm: (sec)	30 (Adult) , 30 (Pedi)
Color:	Yellow

SpO2 Settings

SpO2 Alarms:	On
SpO2 High Limit:	100 (Adult) , 100 (Pedi)
SpO2 Low Limit:	90 (Adult) , 90 (Pedi)
SpO2 Desat Limit:	80 (Adult) , 80 (Pedi)
Color:	Cyan

Pulse Settings

Pulse Source:	SpO2
Pulse Alarms:	Off

Wave Settings

Primary ECG:	Leads
Preferred ECG Lead:	II

ADMINISTRATIVE POLICIES

Wave 2:	III
Wave 3:	CO2
Wave 4:	Pleth

Alarm Settings

Alarm Tone:	Philips
Alarm Pause Time:	3 min.
Startup Alarm State:	Active

12-Lead Settings

Facility ID:	*Blank*
Department ID:	*Blank*
Device ID:	*Blank*
Analysis:	Standard
Critical Value Statements:	Yes
ECG Bandwith for 12-Lead Display:	.05 - 40 Hz
ECG Bandwith for 12-Lead Report:	*Same as Display*
ECG Report:	Sequential
Number of Automatic Printouts:	1
Printer Format:	3 x 4 1R
Rhythm Strip #1:	II
Rhythm Strip #2:	III
Rhythm Strip #3:	aVF
12-Lead Export Format:	1.04
AMI Detection:	EMS

Transmission Device Settings

Bluetooth:	On
Wireless Link:	On
If both on in clinical mode use:	Wireless Link

Wireless Link Settings

Access Point:	Yes
http Proxy Address:	
http Proxy Port:	
Wireless Link Address:	192.168.171.2

Phone/Modem Profile Settings

Profile Name:	
Configuartion String:	
Landline:	
Dial Prefix:	
Dial String:	

ADMINISTRATIVE POLICIES

Wait for Dial Tone:	No
User Name/Password Config:	Per Profile
PPP User Name:	
PPP Password:	
Static IP Address:	
Primary DNS:	
Secondary DNS:	
http Proxy Address:	
http Proxy Port:	
Profile Name:	
Configuartion String:	
Landline: No	
Dial Prefix:	
Dial String:	
Wait for Dial Tone:	No
User Name/Password Config:	Per Profile
PPP User Name:	
PPP Password:	
Static IP Address:	
Primary DNS:	
Secondary DNS:	
http Proxy Address:	
http Proxy Port:	

Hub Settings

Server URL:	24.227.88.236
User Name:	
Password:	

Site Settings:

Site Name:	BAYFRONT
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	
Site Name:	LARGO MED
Site Type:	Hub

ADMINISTRATIVE POLICIES

Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	
Site Name:	NORTH PINELLAS
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	
Site Name:	MEASE COUNTRY
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	
Site Name:	MORTON PLANT
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	
Site Name:	NORTHSIDE
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	

ADMINISTRATIVE POLICIES

Site Name:	ST ANTHONY
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	

Site Name:	TESTSITE
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	

Site Name:	
Site Type:	Hub
Phone Number:	
URL:	
Use Hub's Routing:	Yes
Default Site:	No
User Name:	
Password:	

Reference ID Settings

Reference ID 1:	ST PETERSBURG
Reference ID 2:	GULFPORT

ADMINISTRATIVE POLICIES

Reference ID 3:	ST PETE BEACH
Reference ID 4:	LEALMAN
Reference ID 5:	SOUTH PASADENA
Reference ID 6:	TREASURE ISLAND
Reference ID 7:	MADEIRA BEACH
Reference ID 8:	SEMINOLE
Reference ID 9:	PINELLAS PARK
	PINELLAS
Reference ID 10:	SUNCOAST
Reference ID 11:	LARGO
Reference ID 12:	CLEARWATER
Reference ID 13:	SAFETY HARBOR
Reference ID 14:	DUNEDIN
Reference ID 15:	OLDSMAR
Reference ID 16:	EASTLAKE
Reference ID 17:	PALM HARBOR
Reference ID 18:	TARPON SPRINGS
Reference ID 19:	SUNSTAR
Reference ID 20:	CME

Manual Therapy Settings

Remain in sync Mode After Shock:	Yes
Time To Auto Disarm:	30 sec.
Pacing Rate:	60 ppm
Pacing Output:	60 mA
Manual Therapy Security:	Off
CPR Timer:	On
Auto Switch to Fixed Mode Pacing:	Yes

AED Settings

Shock Series:	1
Protocol Timeout:	Off
NSA Action:	120 sec.
CPR Prompt:	Short
Monitor Prompt Interval:	120 sec.
CPR Display:	Advanced

ADMINISTRATIVE POLICIES

Printer Settings

Print on Alarm:	Red Arrhythmia
Print on Charge:	No
Print on Shock:	No
Print on Mark:	No
Printer Delay:	10 sec.
Strip Print Speed:	25 mm/sec.
12-Lead Print Speed:	25 mm/sec.
Event Summary Report:	Medium
Event Summary Pre-Context:	4 sec.
Event Summary Post-Context:	6 sec.

Mark Events Settings

1. King Airway	No
2. IV/IO Access	No
3. Epinephrine	No
4. ETT Placed	No
5. Amiodarone	No
6. Sodium Bicarb	No
7. Aspirin	No
8. Nitroglycerin	No
9. Morphine Sulfate	No
10. STEMI Alert	No

CPR Settings

Q-CPR:	On
CPR Timer:	120 sec.
Q-CPR Voice:	Audible
Compression only CPR:	Off
Comp Color:	Blue
Q-CPR Feedback:	On
Research Storage:	Off
Guidelines:	AHA

Thrombolytic Therapy Contraindications

Prompt for Contraindications:	No

ADMINISTRATIVE POLICIES

Network Settings

IP Address Assignment:
Dynamic
MRx Static IP
Address:
MRx Static IP Submit Gateway: 255.255.255.0
MRx Static IP Default Gateway:

ADMINISTRATIVE POLICIES

ADMINISTRATIVE POLICIES

June 2015

Pinellas County EMS

TRAUMA TRANSPORT PROTOCOL

2015-2017

ADMINISTRATIVE POLICIES

DISPATCH PROCEDURES

Requirements for Soliciting Information:

1. *The TTPs shall include a description of the system that allows the public and other agencies to notify the provider that emergency medical services are needed. The agency responsible for operating the system shall be identified. A description of the information to be solicited from the individual requesting emergency medical assistance in order to determine the number of patients, location of the incident, and extent and severity of reported injuries shall be included.*

   A. The Pinellas County 9-1-1 Regional Communications Center operates as the single primary public safety answering point (PSAP) for all 9-1-1 calls originating in the County – the center answers over 570,000 emergency calls per year. Calls for law enforcement assistance are transferred to the appropriate agency. If a fire department or ambulance response is needed, 9-1-1 telecommunicators will dispatch units and support their activities during the emergency.

   B. The communications center is a necessary link between the person with the problem and the personnel who can help resolve it most effectively. It is the primary goal of the Communications Center to obtain and transfer necessary information in a timely and efficient manner. Accomplishing this goal ensures the effective and timely management of both Fire/EMS apparatus and law enforcement units in their response to the public's need.

   C. The 9-1-1 telecommunicator ascertains the following information when an individual requests emergency medical services and will conduct caller interrogation in accordance with the current Pinellas County version of the Medical Priority Dispatch System (MPDS) protocols:

      - nature of the emergency
      - address of the emergency
      - call back number
      - difficult access
      - specific routing
      - extent and severity of the emergency
      - number of victims

Requirements for Dispatching Emergency Vehicle:

1. A description must be included describing the methods used to ensure that the appropriately staffed and equipped EMS vehicle most readily available is identified and dispatched to the location of the incident.

   A. The closest response unit is determined by the 9-1-1 Center's Computer Aided Dispatch (CAD) system. The CAD system immediately assigns the appropriately staffed and equipped emergency service provider that is closest to the call location regardless of jurisdiction, following the automatic aid/closest unit response policy. In the event the

closest unit is unavailable, the CAD system will assign the next closest unit.

a. Initial dispatch information includes:

- location of the call
- units being dispatched
- nature of the call
- assigned radio tac channel
- response priority

Requirements for Emergency Agency Assistance:

1. *A description of the criteria and process used to request additional EMS air or ground vehicles and/or other emergency response agencies shall be included.*

A. The process used to request assistance for specialized resources or additional assistance is as follows:

a. Request for additional or specialized resources (i.e., Fire apparatus, ambulances, law enforcement, HazMat Team, Marine Patrol, etc.) is made by on-scene personnel through the 9-1-1 Center. The 9-1-1 Center will then coordinate the requested action via telephone, State Warning Point line, and/or radio, as applicable. The 9-1-1 Center, if required, will call for mutual aid.

B. The procedures used by the 9-1-1 Center to request a helicopter to the scene of a "Trauma Alert" patient for transport to a trauma center are as follows:

a. On-scene personnel will request an "Air Transport" through the 9-1-1 Center.
b. The 9-1-1 Center will contact the appropriate helicopter service's dispatch via telephone and request their response.
c. The 9-1-1 Center will advise the helicopter dispatcher of the scene location, the GPS Coordinates, the number of victims, any available patient information, and the ratio designation of the on-scene Incident Commander.
d. The 9-1-1 Center will request the estimated time of arrival (ETA) of the helicopter.
e. The 9-1-1 Center will notify the on-scene Incident Commander of the ETA and radio designation of the responding helicopter service.

C. An "**air transport upgrade"** will be called for all emergencies requiring a helicopter. In most cases, it will not be necessary to ask for a specific air transport service by name. The 9-1-1 Center will make the decision based on the location of the incident and the availability of the helicopter service.

ADMINISTRATIVE POLICIES

Requirements for Transport Assistance:

1. The TTPs must identify the criteria used to include and differentiate between ground and air ambulance services when transport assistance is requested. The TTPs must identify from what agencies assistance can be requested and the process used for obtaining assistance. In the event that air transport is not available within the service area of the provider, the TTPs should state that air ambulance service is not available.

A. All patients in the Pinellas County EMS System shall be transported by a Sunstar Paramedic ambulance.

B. As stipulated in these protocols, an ALS helicopter shall be utilized for the transportation of trauma patients that meet the Trauma Scorecard Methodology standards as stipulated in Chapters 64J-2.004 and 64J-2.005, F.A.C., and as follows:

   a. When LOCAL CONDITIONS (heavy traffic/gridlock, multi-victim/mass casualty incident, remote or barrier island) exist and in the judgment of the attending EMT, Paramedic, or Incident Commander would make transport by Helicopter Ambulance faster than transport by Ground Ambulance.
   b. When SCENE CONDITIONS (extended extrication, heavy machinery extrication, technical rescue, remote location) exist and in the judgment of the attending EMT, Paramedic, or Incident Commander would make transport by Helicopter Ambulance air faster than transport by Ground Ambulance.
   c. When PATIENT CONDITIONS (requirement for Burn Center, Re-implantation Surgery or Hyperbaric Chamber) exist that in the judgment of the attending EMT, Paramedic, or Incident Commander would make transport by Helicopter Ambulance faster than transport by Ground Ambulance.

C. Bayflite and Aeromed, ALS helicopter services, each have a Certificate of Public Convenience and Necessity from the Pinellas County Board of County Commissioners as an ALS provider in this County.

TRAUMA PATIENT ASSESSMENT FOR ADULT AND PEDIATRIC

Requirements for Adult Assessment:

1. The adult trauma scorecard assessment shall be documented in accordance with the requirements of section 64J-2.004, F.A.C.

A. Patients will be evaluated according to the severity of injury and anatomy and mechanism of injury as follows:

   a. Each EMS provider shall ensure that upon arrival at the location of an incident, an EMT or paramedic shall:

      i. Assess the condition of each adult trauma patient using the Adult Trauma Scorecard Methodology, as provided in this section, to determine whether the patient should be a "Trauma Alert" per Chapter 64J-2.004, F.A.C.

ii. In assessing the condition of each adult trauma patient, the EMT or paramedic shall evaluate the patient's status for each of the following components: airway, circulation, best motor response (a component of the Glasgow Coma Scale, which is defined and incorporated by reference in subsection 64J-2.001(6), F.A.C., cutaneous, long-bone fracture, patient's age, and mechanism of injury. The patient's age and mechanism of injury shall only be assessment factors when used in conjunction with assessment criteria included in Subsection C (f and g) of this section.

B. The EMT or paramedic shall assess all adult trauma patients using the following criteria in the order presented and, if any **ONE** of the following conditions is identified, the patient shall be considered a "Trauma Alert" patient:

a. Airway: The patient receives active airway assistance beyond the administration of oxygen.
b. Circulation: The patient lacks a radial pulse with a sustained heart rate greater than 120 beats per minute or has a blood pressure less than 90 mmHg.
c. Best Motor Response (BMR): The patient exhibits a score of four or less on the motor assessment component of the Glasgow Coma Scale, or exhibits the presence of paralysis, or there is the suspicion of a spinal cord injury or the loss of sensation.
d. Cutaneous: The patient has 2nd or 3rd degree burns to 15 percent or more of the total body surface area, or amputation proximal to the wrist or ankle, or any penetrating injury to the head, neck, or torso (excluding superficial wounds where the depth of the wound can be determined).
e. Long-Bone Fracture: The patient reveals signs or symptoms of two or more long-bone fracture sites (humerus [radius, ulna] or femur [tibia, fibula]).

C. Should the patient not be identified as a "Trauma Alert" using the criteria in Subsection B above, the trauma patient shall be further assessed using the following criteria and shall be considered a "Trauma Alert" patient when a condition is identified from any **TWO** of the following seven components:

a. Airway: The patient has a respiratory rate of 30 or greater.
b. Circulation: The patient has a sustained heart rate of 120 beats per minute or greater.
c. BMR: The patient has a BMR of five on the motor component of the Glasgow Coma Scale.
d. Cutaneous: The patient has a soft tissue loss from either a major degloving injury, or a major flap avulsion greater than five inches, or has sustained a gunshot wound to the extremities of the body.
e. Long-Bone Fracture: The patient reveals signs or symptoms of a single long- bone fracture resulting from a motor vehicle collision or a fall from an elevation of ten feet or greater.
f. Age: The patient is 55 years of age or greater.
g. Mechanism of Injury: The patient has been ejected from a motor vehicle (excluding any motorcycle, moped, all terrain vehicle, bicycle, or the open body of a pickup truck), or the driver of the motor vehicle has impacted with the steering wheel causing steering wheel deformity.

ADMINISTRATIVE POLICIES

D. If the patient is not identified as a "Trauma Alert" patient after evaluating the patient using the criteria in Subsections B and C of this section, the trauma patient will be evaluated using all the elements of the Glasgow Coma Scale. If the patient's score is 12 or less, the patient shall be considered a "Trauma Alert" patient (excluding patients whose normal Glasgow Coma Scale score is 12 or less, as established by the patient's medical history or preexisting medical condition when known).

E. Where additional local "Trauma Alert" criteria has been approved by the Medical Director of the EMS service and presented as part of the State Trauma Transport Protocols' approval process, the use of local "Trauma Alert" criteria as the basis for calling a "Trauma Alert" shall be documented as required in Chapter 64J-1.014, F.A.C. Local trauma assessment criteria can only be applied after the patient has been assessed as provided in Subsections B, C, and D of this section.

a. The EMT or paramedic shall assess all adult trauma patients using the following criteria in the order presented and, if any **ONE** of the following conditions is identified, the patient shall be considered a "Trauma Alert" patient per Pinellas County Local Criteria:

- Signs and symptoms/suspicion of a skull fracture, flail chest and/or pelvic fracture
- Death of another passenger from trauma
- Any ejection (complete or partial) from a motor vehicle
- Major blunt trauma to the head, neck, trunk or pelvis

F. In the event that none of the conditions are identified using the criteria in Subsections B, C, D, or E of this section in the assessment of the adult trauma patient, the EMT or paramedic can call a "Trauma Alert" if, in his or her judgment, the patient's condition warrants such action. Where the EMT's or paramedic's judgment is used as the basis for calling a "Trauma Alert," it shall be documented as required in Chapter 64J-1.014, F.A.C.

G. The results of the patient assessment shall be recorded and reported in accordance with the requirements of Chapter 64J-2.002(5), F.A.C. through the completion of a Pinellas County Emergency Medical Services (PCEMS) Patient Care Report.

H. The paramedic or EMT will use the phrase "Trauma Alert" when notifying the 9-1-1 Center and receiving facility.

Requirements for Pediatric Assessment:

1. *The pediatric trauma scorecard assessment shall be documented in accordance with the requirements of section 64J-2.005, F.A.C.*

A. Each EMS provider shall ensure that upon arrival at the location of an incident, the EMT or paramedic shall assess the pediatric trauma patient by evaluating the patient's status for each of the following components: Airway, Consciousness, Circulation, Fracture,

ADMINISTRATIVE POLICIES

Cutaneous, and the pediatric patient's size when used in conjunction with the other components in Subsection C of this section. The assessment of the pediatric patient using the weight and length parameter and the other components of this section shall be referred to as the Pediatric Trauma Scorecard Methodology. In assessing the pediatric patient, the criteria for each of the components in Subsections B and C of this section shall be used to determine the transport destination for pediatric trauma patients.

B. The EMT or paramedic shall assess all pediatric trauma patients using the following criteria, and if any of the following conditions are identified, the patient shall be considered a pediatric "Trauma Alert" patient:

a. Airway: In order to maintain optimal ventilation, the patient is intubated or the patient's breathing is maintained through such measures as manual jaw thrust, continuous suctioning, or through the use of other adjuncts to assist ventilatory efforts.
b. Consciousness: The patient exhibits an altered mental status that includes: drowsiness, lethargy, the inability to follow commands, unresponsiveness to voice, totally unresponsive, is in a coma, there is the presence of paralysis, the suspicion of a spinal cord injury, or loss of sensation.
c. Circulation: The patient has a faint or non-palpable carotid, femoral pulse, or the patient has a systolic blood pressure of less than 50 mmHg.
d. Fracture: There is evidence of an open, long-bone (humerus, (radius, ulna), femur (tibia, or fibula)) fracture, or there are multiple fracture sites or multiple dislocations (except for isolated wrist or ankle fractures or dislocations).
e. Cutaneous: The patient has a major soft tissue disruption, including major degloving injury; major flap avulsions; 2nd or 3rd degree bums to ten percent or more of the total body surface area; amputation at or above the wrist or ankle; or any penetrating injury to the head, neck, or torso (excluding superficial wounds where the depth of the wound can be determined).

C. In addition to the criteria listed in Subsection B of this section, a "Trauma Alert" shall be called when a condition is identified from any two of the components listed below:

a. Consciousness: The patient exhibits symptoms of amnesia or there is loss of consciousness.
b. Circulation: The carotid or femoral pulse is palpable, but the radial or pedal pulses are not palpable or the systolic blood pressure is less than 90 mmHg.
c. Fracture: The patient reveals signs or symptoms of a single closed, long-bone fracture. Long-bone fractures do not include isolated wrist or ankle fractures.
d. Size: Pediatric trauma patients weighing 11 kilograms or less, or the body length is equivalent to this weight on a pediatric length and weight emergency tape (the equivalent of 33 inches in measurement or less).

D. Where additional local "Trauma Alert" criteria has been approved by the Medical Director of the EMS service and presented as part of the State Trauma Transport Protocols' approval process, the use of local "Trauma Alert" criteria as the basis for calling a "Trauma Alert" shall be documented as required in Chapter 64J-1.014, F.A.C. Local trauma assessment criteria can only be applied after the patient has been assessed as provided in Subsections B and C of this section.

a. The EMT or paramedic shall assess all pediatric trauma patients using the following criteria in the order presented and, if any **ONE** of the following conditions is identified, the patient shall be considered a "Trauma Alert" patient per Pinellas County Local Criteria:

- Signs and symptoms/suspicion of a skull fracture, flail chest and/or pelvic fracture
- Death of another passenger from trauma
- Any ejection (complete or partial) from a motor vehicle
- Major blunt trauma to the head, neck, trunk or pelvis

E. In the event that none of the conditions are identified using the criteria in Subsections B, C, or D of this section in the assessment of the pediatric trauma patient, the EMT or paramedic can call a "Trauma Alert" if, in his or her judgment, the patient's condition warrants such action. Where the EMT's or paramedic's judgment is used as the basis for calling a "Trauma Alert," it shall be documented as required in Chapter 64J-1.014, F.A.C.

ADMINISTRATIVE POLICIES

ADMINISTRATIVE POLICIES

TRAUMA DESTINATION REQUIREMENTS

1. *All trauma alert patients must be transported to a Trauma Center or Pediatric Trauma Center nearest the location of the incident if the incident is within 30 minutes by ground or air transport or within 50 miles by air transport. The medical director shall identify any exceptions to this standard in the EMS provider's or trauma agency's TTPs with explanation and justification. All patients meeting Trauma Alert Criteria shall be transported to the nearest Trauma Center or Pediatric Trauma Center.*

   A. All adult patients meeting the Trauma Alert Criteria as specified above shall be transported to the nearest Trauma Center.

   B. All pediatric patients meeting the Trauma Alert Criteria as specified above shall be transported to the nearest State Approved Pediatric Trauma Center.

2. *All hospitals to which trauma patients are routinely transported must meet state and federal emergency access to care laws and be capable of delivering care commensurate with the patient's medical needs.*

   A. All hospitals to which all trauma patients are routinely transported meet state and federal emergency access to care laws and are capable of delivering care commensurate with the patient's medical needs.

   B. Please reference the Hospital attestation letters included.

3. *If there are situations where the EMS provider's medical director has determined it would be in the best medical interest of the trauma alert patient to be transported to a hospital other than those specified in paragraph (1) above, a list of such situations must be identified in the TTPs.*

   A. In cases where local conditions (weather, traffic, special event, disaster etc.) exist that would make transport to the nearest Trauma Center take longer than transport to another Trauma Center, the patient shall be transported to the Trauma Center able to be reached in the shortest amount of time.

   B. In cases where patient factors (traumatic cardiac arrest, inability to secure the airway, inability to obtain IV/IO access, etc) exist that in the judgment of the attending EMT, Paramedic, or Incident Commander would make transport to the closest initial receiving facility or another Trauma Center in the patients best interest, the patient shall be transported to the most appropriate facility.

   C. Burn Patients shall be transported to a Burn Center. If the patient is suffering from multi-system trauma and transport to the Burn Center would take significantly longer than transport to the nearest trauma center, the patient shall be transported to the nearest Trauma Center.

4. *The EMS provider must submit documentation to the department that all hospitals, trauma centers to which the EMS provider routinely transports have been provided a copy of the TTPs which the EMS provider will follow to determine trauma transport destinations submitted upon initial licensure and after revisions of the TTPs.*

A. Reference included documentation.

5. *A list of trauma centers and hospitals to which the EMS provider routinely transports adult and pediatric trauma alert patients must be identified in the TTPs.*

2015-2017 TRAUMA CENTERS, INITIAL RECEIVING HOSPITALS AND OUT-OF-COUNTY HOSPITALS

Hospital Name	Representative	Title	Address	Phone Number
Level 1 Trauma Centers				
Tampa General Hospital*[1]	James Burkhart	Chief Executive Officer	One Tampa General Circle, Tampa, FL 33606	(813) 251-7000
Level 2 Trauma Centers				
Bayfront Health St. Petersburg**	Kathryn Gillette	Chief Executive Officer	701 Sixth Street South, St. Petersburg, FL 33701	(727) 823-1234
Blake Medical Center[1]	Daniel Friedrich	Chief Executive Officer	2020 – 59 Street West, Bradenton, FL 34209	(941) 792-6611
Regional Medical Center Bayonet Point	Shayne George	Chief Executive Officer	14000 Fivay Road, Hudson, FL 34667-7103	(727) 863-2411
Sarasota Memorial Hospital	David Verinder	Chief Executive Officer	1700 South Tamiami Trail, Sarasota, FL 34239	(941) 917-9000
St. Joseph's Hospital*	Lorraine Lutton	President	301 W. Dr. Martin Luther King Boulevard, Tampa, FL 33607-6387	(813)870-4000
Initial Receiving Facilities				
All Children's Hospital**	Jonathan M. Ellen	President	501 – 6 Avenue South, St. Petersburg, FL 33701	(727) 898-7451
Bardmoor Emergency Center	Kristopher Hoce	President	8839 Bryan Dairy Road, Largo, FL 33777	(727) 462-7100
Bay Pines Veterans Administration Hospital	Suzanne Klinker	Director	10000 Bay Pines Boulevard, St. Petersburg, FL 33744	(727) 398-6661
Florida Hospital North Pinellas	Bruce Bergherm	Chief Executive Officer	1395 South Pinellas Avenue, Tarpon Springs, FL 34689	(727) 942-5000
Largo Medical Center	Anthony Degina	Chief Executive Officer	201 – 14 Street, Largo, FL 33770	(727) 588-5200
Largo Medical Center – Clearwater Emergency Room	Anthony Degina	Chief Executive Officer	2339 Gulf to Bay Boulevard, Clearwater, FL 33765	(727) 588-5200
Largo Medical Center – Indian Rocks Campus	Anthony Degina	Chief Executive Officer	2025 Indian Rocks Road, Largo, FL 33774	(727)588-5200
Mease Countryside Hospital	Lou Galdieri	President	3231 McMullen Booth Road, Safety Harbor, FL 34695	(727) 734-6365
Mease Dunedin Hospital	Lou Galdieri	President	601 Main Street, Dunedin, FL 34698	(727) 733-1111
Morton Plant Hospital	Kristopher Hoce	President	300 Pinellas Street, Clearwater, FL 33756	(727) 462-7100
Northside Hospital	Dia Nichols	Chief Executive Officer	6000 – 49 Street North, St. Petersburg, FL 33709	(727) 521-4411
Palms of Pasadena Hospital	Sharon Hayes	Registered Nurse	1501 Pasadena Avenue	(727) 381-1000
St. Anthony's Hospital	William Ulbricht	President	1200 – 7 Avenue North, St. Petersburg, FL 33705	(727) 825-1086
St. Petersburg General Hospital	Janice Balzano	President and Chief Executive Officer	6500 – 38 Avenue North, St. Petersburg, FL 33710	(727) 384-1414
Out-Of-County Receiving Facilities				
Medical Center of Trinity	Leigh Massengill	Chief Executive Officer	9330 State Road 54, Trinity, FL 34655	(727) 834-4000

* Tampa General Hospital and St. Joseph's Hospital are State Approved Pediatric Trauma Receiving Facilities

** Bayfront Health St. Petersburg and All Children's Hospital operate a joint State Approved Pediatric Trauma Receiving Facility

[1] Tampa General Hospital and Blake Medical Center are Burn Centers

TRANSFER OF PATIENT CARE INFORMATION

1. *The EMS transporting provider must include in the TTPs, requirements and procedures to be followed by EMTs and paramedics for completion of the patient care record as defined under section 64J-2.001(9), F.A.C., and required under section 64J-2.004, F.A.C., and the trauma information as required under section 64J-2.002(5), F.A.C., and the delivery of such information in writing with the trauma patient to a trauma center, or hospital at the time the patient is presented for care.*

   A. The EMS provider responsible for the patient shall ensure that a prehospital trauma alert is issued upon determining that a trauma patient meets the requirements of Rules 64J-2.004 and 64J-2.005, F.A.C.

   B. The words "trauma alert" shall be used when notifying the trauma center, or hospital that EMS is enroute with a trauma alert patient.

   C. The medical director of the EMS provider issuing the trauma alert, or physician at the receiving trauma center, or hospital, are the only people authorized to change the trauma alert status.

   D. The EMS provider issuing the trauma alert shall also provide the trauma center or hospital with information required under subsection 64J-1.1014(5), F.A.C. and the information listed below at the time the patient is transferred to the personnel of the receiving trauma center or hospital:

      a. Time of injury if different from the time of the call
      b. Date of injury if different from day of call
      c. County of injury
      d. County of residence of patient
      e. Cause of injury
      f. Injury Site/type
      g. Trauma alert criteria if met as defined in Rule 64J-2.004 or 64J-2.005, F.A.C. and
      h. Protective devices if motor vehicle crash, bicycle or marine crash

   E. The information listed above shall be documented on the Pinellas County Emergency Medical Services (PCEMS) Patient Care Report of the transporting unit that delivered the patient in accordance with the requirements of Rule 64J-1.014, F.A.C.

ADMINISTRATIVE POLICIES

EMERGENCY INTER-FACILITY TRANSFER PROCEDURES

1. *The EMS provider must have in place, as part of its TTPs, procedures for the rapid emergency inter-facility transfer of a trauma alert patient. The provider must be available within 30 minutes of receiving a call from the requesting hospital to provide inter-facility emergency medical service transfer of a trauma alert patient. The medical director shall identify any exceptions to this standard in the EMS provider's TTPs with explanation and justification. If an EMS provider does not provide inter-facility transfer services that shall be documented in the TTPs.*

Sunstar PARAMEDICS

Interfacility Transport Request Procedure

Call 727-587-2111

Sending Facility - Be Prepared to Provide the Following Information!				
The Name of Your Facility **The Name of the Unit where the Patient is located** **The Room and Bed where the Patient is located**				
State the Urgency of the Transport				
EMERGENCY **Red Lights and Siren Response**		**ASAP (as soon as possible)** **Non-critical - Patient can wait for next available ambulance**		**Scheduled/Routine** **A specific pick-up time is requested**
Additional Patient Information Required				
Patient's Name, Age and Social Security Number **Diagnosis & Reason for Transport** **Adjuncts Necessary for Transport - Reference "Scope of Practice" below** **Isolation or Safety Precautions** **Sending Physician Name** **Destination Facility Name, Unit, Room/Bed** **Receiving Physician Name** **Transport Coordinator/ Primary RN Name and Direct Telephone Number**				
Dispatch (If patient exceeds the scope of a Paramedic Ambulance)				
Critical Care Transport will be dispatched. The Critical Care RN will call for patient report to discuss the patient's stability, potential for advanced interventions (i.e. airway management), adjuncts needed for transport and the estimated time of arrival for the most appropriate ground transport.				
Ground Transport Options	Critical Care Transport Team - CCRN, Critical Care Paramedic and EMT Critical Care Paramedic Ambulance - Critical Care Paramedic and EMT Paramedic Ambulance with Sending Facility Personnel & Adjuncts Paramedic Ambulance - Paramedic and EMT			
Alternative Transport Options	Helicopter - Bayflite (727-893-6010) or Aeromed (800-727-1911)			
	All Children's Transport - Specialized Pediatric and NICU Transfers - Dispatch (727-767-7337) or Office (727-767-4333)			

Revision June 23, 2014

ADMINISTRATIVE POLICIES

Sunstar PARAMEDICS

Interfacility Transport Request Procedure

Call 727-587-2111

Scope Of Practice	
Critical Care Transport	**Critical Care Nurse (CCRN)/Critical Care Paramedic (CCP) and EMT** ***** Any patient with high probability of acute deterioration during transport***** High risk obstetric patients Blood and/or blood products Invasive Monitoring (Arterial-lines, Swan-Ganz catheters, ICP, CVP, etc.) Advanced airway adjuncts or potential for advanced airway management (includes newly inserted chest tubes) Multiple IV medications requiring infusion pump and/or titration Adjuncts to support circulation (transvenous pacemaker, IABP, LVAD, BIVAD, etc.) Mechanical ventilator (invasive/non-invasive modes) Infants less than 28 days and/or less than 5 kg
Critical Care Paramedic Ambulance	**Critical Care Paramedic (CCP) and EMT** ***** Emergency STEMI patient with only one IV medication and are hemodynamically stable (systolic blood pressure greater than 100, heart rate less than 100 without significant dysrhythmias)** Chronic ventilator patient with their own ventilator Arterial Sheaths (not monitored) Antibiotics Chest Tubes (greater than 48 hours) TPN (Total Parenteral Nutrition) Proton Pump Inhibitors (i.e. Protonix, Nexium, etc.) H2 Blockers (i.e. Zantac, Tagamet, etc.) Anticoagulants (i.e. Heparin) Antiplatelets (i.e. Integrilin, Aggrastat, etc.) Vasopressors (i.e. Dobutamine) non-titrating/end of life care only Maintenance IV fluids for a pediatric patient less than one year of age
Paramedic Ambulance with Hospital Staff	Patient requiring care outside the scope of practice of a Paramedic Ambulance. The hospital will provide the appropriate equipment, medication and staff for the transport
Paramedic Ambulance	ACLS (Advanced Cardiac Life Support) Locked infusion pumps (i.e. patient controlled/PCA) Maintenance IV fluids in adults (i.e. 0.9% Sodium Chloride, 0.45% Sodium Chloride, Dextrose 10%, Dextrose 5%, Lactated Ringers, Sodium Bicarbonate - excludes Potassium containing fluids) Other interfacility transfers not meeting criteria listed in other Scope of Practice categories

Revision June 23, 2014

ATTESTATION OF MEDICAL DIRECTOR'S PARTICIPATION, REVIEW AND APPROVAL OF TTP'S

Pinellas County Emergency Medical Services System
12490 Ulmerton Road
Suite #134
Largo, FL 33774
Telephone (727) 582-5750

As the Medical Director of Pinellas County Emergency Medical Services System (comprised of 19 individually licensed providers), I have developed and/or directed the development of the trauma transport protocols presented in this document.

_____
Approval Date

X _____
Print Name
EMS Medical Director

X _____
Dr. Angus Jameson, MD, MPH
Pinellas County EMS Medical Director

Pinellas County EMS Licensed ALS Providers

Provider Name	License Number
City of Clearwater	ALS5204
City of Dunedin	ALS5229
East Lake Tarpon Special Fire Control District	ALS5205
City of Gulfport	ALS5207
City of Largo	ALS5210
Lealman Special Fire Control District	ALS5211
City of Madeira Beach	ALS5212
City of Oldsmar	ALS5230
Palm Harbor Special Fire Control District	ALS5213
Pinellas County EMS DBA Sunstar	ALS5220
City of Pinellas Park	ALS5214
Pinellas Suncoast Special Fire Rescue District	ALS5208
City of Safety Harbor	ALS5215
City of Seminole	ALS5228
City of South Pasadena	ALS5217
City of St. Pete Beach	ALS5218
City of St. Petersburg	ALS5219
City of Tarpon Springs	ALS5221
City of Treasure Island	ALS5222

AD19 Controlled Substance Management

I. CORE PRINCIPLES

To ensure our ability to continue to deliver Controlled Substances to our patients, guard against theft and diversion of these medications and comply with applicable laws and regulations, Pinellas County EMS personnel and agencies shall ensure that all Controlled Substances are:

1. **Stored in PCEMS provided lockboxes with electronic lock and key within a secondary vehicle locked compartment.**
2. **Control and accountability at an individual vial or dosing unit level at all times from acquisition by EMS Central Supply until administration/disposal of waste or expiration/destruction.**
3. **Individually inspected and logged every time the status of a Controlled Substance changes (i.e. Transfer of Control, administered, disposed, damaged or returned expired) using the PCEMS supplied inventory management system and ePCR.**
4. **Administered only as authorized under the PCEMS Medical Operations Manual.**

II. DEFINITIONS

- *Audit/Inspection*—means the process of inspecting individual dosing units, Controlled Substance boxes and/or keys, Controlled Substance vehicle compartments, ePCR records, electronic lock access records, inventory management records, and any other material or data needed to determine the history and status of a Controlled Substance and ensure adherence to the core principles.
- *Change in Status* – means obtaining a replacement Controlled Substance from EMS Central Supply or a Coordinator/Handler; the Transfer of Control from or to a Coordinator/Handler, Paramedic, Vehicle Supply Technician, the administration or partial administration of a Controlled Substance; any loss of control, breakage, return for expiration or complete or partial waste of a Controlled Substance.
- *Control Number* – means a unique identification number assigned by the medical supply inventory management system to each individual Controlled Substance Dosing Unit.
- *Controlled Substance* – means any substance, listed in Title 21 United States Code Chapter 13 Subchapter I Part B Section 812 Schedules of Controlled Substances, Chapter 893, Florida Statutes, or identified by the EMS Medical Director to have characteristics that make the drug or substance a risk to public safety or potential for abuse or diversion.
- *Controlled Substance Coordinator* – means the First Responder agency EMS Coordinator or Ambulance Contractor's Logistics Manager. This individual is responsible for ensuring their agency's compliance with this policy as well as oversight, management, compliance and implementation of all applicable federal, state and local laws, administrative rules and protocols related to Controlled Substances.

- *Controlled Substance Handler* – means an individual identified by the agency Controlled Substance Coordinator and approved by the EMS Medical Director or designee to possess and transport PCEMS Controlled Substances for the purpose of restock of expiring or damaged medications and resupply of used medications.
- *Controlled Substance Lock Box/Key* – means a specific brand, style, and custom labeled container with integrated electronic lock and key provided by PCEMS for the expressed purpose of secure storage and/or transport of Controlled Substances.
- *Controlled Substance Waste* – means the remaining liquid volume of Controlled Substance in a dosing unit when the entire volume of drug is not administered or when the dosing unit is partially administered.
- *Dosing Unit* – means the finished dosage form that contains a drug substance (i.e. vial, carpujet, prefilled syringe, tablet, etc.).
- *Electronic Lock/Key* – means "Cyberlock/Cyberkey" or successor device or product.
- *Electronic Lock/Key Database* – means "CyberAudit-Web" or successor device or product.
- *EMS Central Supply* – is located at 12490 Ulmerton Road in Largo, Florida 33774.
- *Inventory Management System* – means "Operative IQ" or successor device or product.
- *Vehicle Supply Technician* – means an employee of the Ambulance Contractor identified by the Ambulance Logistics Manager and approved by the EMS Medical Director or designee to issue and receive Controlled Substances and Controlled Substance Lockboxes and Keys at EMS Headquarters. Such employee is authorized to complete bulk transfer of multiple Controlled Substance Lock Boxes and Keys without physical inspection to another Vehicle Supply Technician.
- *Locked Vehicle Compartment/Key* – means a permanently constructed locked compartment of a vehicle that has been designated as the secure storage area for the Controlled Substance lock box.
- *Loss of Control* – means any period of time when a Controlled Substance or Controlled Substance Lockbox containing a Controlled Substance or its key is not under direct control of the individual who is documented to have control at that time in the inventory management software.
- *Certified Professional* – means the one (1) individual , as defined in the then current PCEMS Rules and Regulations, excluding Wheelchair Transport Driver and Mental Health Transport Driver , for each Advanced Life Support (ALS) Unit who has accepted the Transfer of Control of the Controlled Substance box and its then current contents; who retains custody of the locked vehicle compartment key and the Controlled Substance box key; who is responsible for the administration or direct oversight of the administration of Controlled Substances; and who is responsible for all documentation related to the change in status of any Controlled Substance Dosing Unit.
- *PCEMS Identification Number* – means the unique number issued to each Certified Professional by Pinellas County Emergency Medical Services that serves as identification.
- *Physical Inspection* – means the process of handling and visually examining each individual Controlled Substance product for missing drug, confirmation the Dosing Unit is not expired, the clear plastic bag is without evidence of disruption, intact exterior drug product packaging (i.e.

ADMINISTRATIVE POLICIES

molded packaging for prefilled syringe), security seal intact , labeling is without evidence of disruption, any visible damage to a stopper and/or vial cover, discoloration and/or incorrect level of the fluid in the Dosing Unit, crack(s) in the Dosing Unit, visibly leaking fluid, moisture in the exterior drug product packaging and/or evidence of potential tampering and/or defect at a minimum.

- *Transfer of Control* – means to convey or cause to move possession from one person to another.

III. LABELING AND PACKAGING

1. Each individual Controlled Substance dosing unit shall be distributed to the system in a heat sealed clear plastic bag or container. Each bag will have a label that reflects the generic pharmaceutical name and the unique assigned Control Number expressed numerically and also represented in a barcode.
2. An individual Controlled Substance Dosing Unit shall remain in the heat sealed clear poly bag until it is to be administered to a patient per current protocol.

IV. INVENTORY

1. The PCEMS BLS/ALS Inspection form or Medical Control Directive reflects the standard authorized inventory of Controlled Substance Dosing Units.
2. Temporary Controlled Substance Lock Boxes may be issued for unusual incidents such as mutual aid responses or disaster shelters.

V. AUTHORIZED ACCESS AND USE

1. All Controlled Substances shall be securely stored and locked in the PCEMS issued Controlled Substance Lock Box.
2. Controlled Substances shall only be administered by on-duty PCEMS Certified Professionals for the provision of patient care and in accordance with the current PCEMS Medical Operations Manual.
3. Controlled Substances shall not be stored or carried in privately operated vehicles or on personal property.
4. The Controlled Substance Lock Box shall remain locked at all times except:

a. During Transfer of Control.
b. When Controlled Substances are actively being used as a part of patient care.
c. Replacing expired, damaged, or recalled Controlled Substances.
d. Receiving re-supply of Controlled Substances.
e. Audit/Inspections per this protocol, request of law enforcement or at the request of the EMS Medical Director or designee.

5. The EMS Medical Director or designee may at any time access, perform audit/inspections, take possession of, or cause to be forensically tested any dosing unit(s) of Controlled Substances or

ADMINISTRATIVE POLICIES

Controlled Substance Lock Box and/or key. Notification to the agency Controlled Substance Coordinator shall be completed upon occurrence.

6. **NO OTHER ACCESS IS AUTHORIZED.**

VI. TRANSFER OF CONTROL

1. Anytime a transfer of control occurs, an inventory and physical inspection of each Controlled Substance unit shall be conducted jointly by the individual transferring control and the individual accepting control in a face-to-face manner.
2. Transfer of Control shall be documented in the Inventory Management System immediately upon occurrence.
3. Until a Transfer of Control and accurate documentation has been completed, the individual transferring control is deemed to still have control.

VII. TRACKING AND DOCUMENTATION

1. The PCEMS Inventory Management System shall be utilized to document and track every change in status of a Controlled Substance.
2. The PCEMS ePCR shall be utilized to document every use and/or waste of a Controlled Substance Dosing Unit during patient care.
3. Individual PIN code access numbers and/or passwords are **NOT** to be shared with anyone under any circumstances, nor shall they be stored in such a manner as to allow anyone else access to or knowledge of the issued individual PIN access code and/or password. Any breach of individual PIN access code and/or password shall be reported to the agency Controlled Substance Coordinator and EMS Medical Director or designee immediately upon discovery.

VIII. CONTROLLED SUBSTANCE LOCK BOX AND KEY– AUTHORIZATION, CUSTODY, CONTROL, MAINTENANCE, AND STORAGE

1. Each agency is authorized:

a. One (1) PCEMS issued Controlled Substance Lock Box with key per EMS Authority authorized ALS First Responder Unit and ALS Ambulance.

b. One (1) PCEMS issued Controlled Substance Lock Box with key per EMS Authority approved supervisory vehicles (i.e. Lieutenant Rescue, Supervisor or District Chief). Such personnel must be authorized Controlled Substance Handlers.

c. One (1) unscheduled PCEMS Controlled Substance Lock Box electronic key for emergent scheduling and deployment.

d. PCEMS Administrative Controlled Substance Lock Box - Issued per the Agency Authorized Controlled Substance Lock Box Assignment Request form.

e. One (1) PCEMS issued Administrative Controlled Substance Key per Controlled Substance Coordinator and Controlled Substance Handler.

2. Controlled Substance Lock Boxes and/or Keys shall be surrendered upon request to the EMS Medical Director or designee, PCEMS Administration, or the agency Controlled Substance Coordinator.

ADMINISTRATIVE POLICIES

3. Agency name and/or Unit ID may be applied to the box and/or key with a label tape, but no other alterations or permanent markings may be made.
4. The Controlled Substance Lock Box shall be stored on the vehicle under double-lock in the designated vehicle compartment (primary lock = lock to area of vehicle, secondary lock = box lock). The vehicle compartment shall be "Substantially Constructed" with 24 hour/day accountability to prevent diversion or tampering with products.
5. The individual Controlled Substance Lock Box electronic key shall be connected, charged and a sync process completed with the current PCEMS electronic lock/key database a minimum of once every twenty four hours. The key voltage should be maintained as close to maximum capacity (4.29 volts) as possible.
6. Each Controlled Substance Electronic Key individually assigned to a Controlled Substance Coordinator or Handler shall be connected, charged and a sync process completed with the current PCEMS electronic lock/key database a minimum of once every seven (7) days. The key voltage should be maintained as close to maximum capacity as possible.
7. The Controlled Substance Lock Box Key & Designated Compartment Key shall be maintained on a lanyard (RED = FIRE, BLUE = AMBULANCE, ORANGE = Administrative) provided by PCEMS.
8. The Administrative Controlled Substance Lock Boxes shall be in the direct control of the Controlled Substance Coordinator or Handler at all times when in use. Administrative Controlled Substance Lock Boxes may be used for the following functions exclusively:
a. Assuming control of dosage units from EMS Central Supply.
b. Distributing dosage units to frontline units.
c. Removing near expiring or damaged dosage units from frontline units.
d. Returning dosage units to EMS Central Supply.
e. Note that Controlled Substances may not be stored in an Administrative Controlled Substance Lock Box at any time.
9. The ALS unit Controlled Substance Box shall be in the direct control of the Certified Professional at all times when in use.
10. If the box is secured in the locked vehicle compartment and the Certified Professional has sole control of the key to the compartment and the Controlled Substance electronic key, the Controlled Substance Lock Box is considered to be in the Certified Professional's direct control.
11. The Certified Professional who has control of the assigned Controlled Substance Lock Box is to have sole possession and control of the Controlled Substance Box Key & Designated Compartment Key at all times.
12. Control of the key(s) shall be transferred to the Certified Professional , Controlled Substance Coordinator or Handler, or Vehicle Supply Technician accepting control of the Controlled Substance Lock Box at the time of Transfer of Control.
13. Administrative keys shall remain in the custody of the assigned Controlled Substance Coordinator or Handler at all times and shall not be shared, transferred, or otherwise allowed to leave the direct control of the individual Controlled Substance Coordinator or Handler.
14. Out-of-Service Vehicles

ADMINISTRATIVE POLICIES

a. Vehicles that are out-of-service (inoperable, not available for current operation, no crew available, not functional) shall have their controlled substance lock box removed and moved to an in-service vehicle with transfer of custody as applicable

IX. CONTROLLED SUBSTANCE USE AND WASTE

1. Every effort should be made to use medications with the earliest expiration date first.
2. Any volume of medication remaining in a partially used Dosing Unit is considered Controlled Substance Waste and shall be disposed of properly.
a. Two Certified Professionals must witness.
3. Under no circumstances shall a Controlled Substance Dosing Unit be transferred to another agency.

X. DAMAGED CONTROLLED SUBSTANCE DOSING UNIT(S)

1. Upon discovery of any part of a Controlled Substance(s) Dosing Unit(s) having an appearance of damage, **and tampering or diversion is not suspected**, the following actions shall occur:
a. The Dosing Unit(s) shall be immediately secured in a Sunstar Medication Bag without additional handling.
b. Immediate notification of the findings, upon discovery, shall be made to the appropriate supervisor per individual agency operating procedures.
c. A Controlled Substance Incident Report shall be completed in the Inventory Management Software by the Certified Professional discovering the damage, detailing the damage and the events surrounding the damaged unit(s).
d. The damaged Dosing Unit and Controlled Substance Incident Report shall be delivered to PCEMS Administration for review by the EMS Medical Director or designee as soon as practical.
2. Upon completion of a review of the information and damaged Dosing Unit(s) by the EMS Medical Director and PCEMS staff, the Controlled Substance Coordinator or designee will be notified to obtain re-supply from EMS Central Supply.

XI. TAMPERING/THEFT/LOSS OF CONTROL:

1. Upon discovery of a Controlled Substance Dosing Unit(s) missing, a loss of control occurrence, or the appearance of tampering, the following immediate actions shall occur:
a. The handling of all Dosing Units in the involved Controlled Substance Lock Box shall cease immediately.
b. Handling of the involved Controlled Substance Lock Box shall be limited.
c. The unit involved in the event shall immediately be placed out of service and all personnel involved shall remain at the location where the event was first discovered until released by law enforcement and the EMS Medical Director or designee.
d. The Controlled Substance Coordinator and law enforcement shall be notified.
e. The EMS Medical Director or designee shall be notified.
f. An incident report of form is to be completed by all personnel involved and forwarded to the EMS Medical Director or designee.

2. The unit involved in the event is to remain out of service until such a time as an investigation can be initiated by law enforcement.
3. DEA Form #106 is to be completed by the agency Controlled Substance Coordinator and submitted to the EMS Medical Director or designee within 12 hours of the occurrence.

XII. AGENCY CONTROLLED SUBSTANCE COORDINATOR SPECIFIC RESPONSIBILITIES

1. No later than January 15th of each year and upon any changes ensure that the following are submitted to the EMS Medical Director or designee for approval:
a. Agency specific written operating procedures for Controlled Substance procurement, storage, handling, dispensing, and disposal as required by Florida 64J-1.021 and in compliance with this policy.
b. A completed Agency Authorized Controlled Substance Coordinator and Handler Request form.
c. A completed Agency Authorized Controlled Substance Lock Box Assignment Request form.
d. A summary of internal audit/inspection activities occurring during the previous calendar year.
2. Ensure Adequate Employee Screening per PCEMS Rules and Regulations.
3. Ensure restock of soon to expire, used, and damaged medications.
a. The Controlled Substance Coordinator may utilize a Controlled Substance Handler to assist in this function.
b. Expiring dosing units:
i. Shall be removed from service within thirty (30) days preceding the individual dosing unit printed expiration date.
ii. Shall be sealed intact in a Sunstar Medication Bag to ensure segregation from active stock and prevent the possibility of an accidental administration. The bag shall have the word “EXPIRED” prominently written on the outside.
iii. Shall be returned to EMS Central Supply upon removal and shall not be stored.
4. Conduct and document the following Controlled Substance Audit/Inspections:
a. Irregularly timed, quarterly, and unannounced Audit/Inspection of at least 25% of the Controlled Substances assigned to the agency.
b. Audit/Inspection documentation shall include the following minimum information:
i. Date and time of the audit, list of Controlled Substances examined with Control Numbers and volume, verification that status in Inventory Management System and ePCR match physical findings and any irregularities found.
5. Make immediate notification, upon discovery, to the Medical Director or designee of the following:
a. Any discrepancies or possible diversion related activities found during audit or routine activities.
b. Any personnel arrests or criminal charges related to Controlled Substances or illicit drugs.
c. Any personnel substance abuse or dependence issues.
d. Any allegations made regarding irregularities in controlled substance handling or administration.

ADMINISTRATIVE POLICIES

XIII. CONTROLLED SUBSTANCE BOX LOCK/KEY FAILURE

1. Electronic lock and key technology is utilized as the method to secure and track access to the Controlled Substance Lock Box. EXCESSIVE MANUAL FORCE WILL DAMAGE THE INTERNAL LOCK COMPONENTS. Reference the lock/key manufacturer instructions for proper operation.
2. The respective agency Controlled Substance Coordinator, EMS Medical Director and PCEMS Administration shall be notified immediately upon the inability to access the controlled substance dosing units within a Controlled Substance Lock Box.

XIIII. PROTOCOL EXCEPTIONS

1. All requests for exceptions to this protocol or authorization for activity involving Controlled Substances outside the scope of this protocol are to be submitted to the EMS Medical Director or designee in writing.
2. A specific medical directive will be issued by the EMS Medical Director and designee for all approved protocol exceptions or authorized activity outside the scope of this protocol on a case by case basis.

REFERENCES:

- Florida Administrative Code 64J-1
- Florida Statute Chapter 401 Medical Telecommunications and Transportation
- Florida Statute Chapter 499 Drug, Cosmetic and Household Products
- Florida Statute Chapter 859 Poisons; Adulterated Drugs
- Florida Statute Chapter 893 Drug Abuse Prevention and Control
- Code of Federal Regulations Chapter 42, Section 483
- US Code Title 21 Food and Drugs, Chapter I Food and Drug Administration, Department of Health and Human Services
- US Code Title 21 Food and Drugs, Chapter II Drug Enforcement Administration, Department of Justice
- US Code Title 21 Food and Drugs, Chapter III Office of National Drug Control Policy
- US Department of Justice Drug Enforcement Administration Office of Diversion Control www.deadiversion.usdoj.gov

ADMINISTRATIVE POLICIES

ADMINISTRATIVE POLICIES

AD20 Philips FR3 AED Clinical Configuration

DEVICE	
Volume	Loud
ECG Display	On
Record Audio	Off
Carry Case Auto-On	Off
Wireless Pin	2490
DEFIBRILLATION	
Shock Series	1
Shock Series Interval	N/A
Advanced Mode Use	Off
Advanced Use Prompt Repeat Rate	N/A
SELF TEST	
Test for Pads	On
Test for Data Card	Off
GENERAL CPR	
Metronome	Off
CPR While Armed	Off
CPR First	Off
No Shock Advised (NSA) Action	NSA CPR
NSA CPR Coaching	Always
NSA Monitor Prompt Repeat Rate	N/A
CPR Option Button	Off
Analyze Option Button	Off
PROTOCOL - SPECIFIC CPR	
Adult CPR First Duration	N/A
Adult Basic CPR Duration	2.0
Adult NSA CPR Duration	2.0
Infant/Child CPR Fist Duration	N/A
Infant/Child Basic CPR Duration	2.0
Infant/Child NSA CPR Duration	2.0

ADMINISTRATIVE POLICIES

CLINICAL STANDARD

CS1 Universal Approach to Patient Care

Goals of Care

- Every patient will be provided a professional, complete and accurate assessment, all indicated treatment and transport to the appropriate facility
- Proceed to the appropriate protocol for the patient's condition
- Approach all patients with a high level of suspicion for injury or illness
- Bring all appropriate equipment to the patient's side
- Transport to the appropriate facility as per the destination protocol
- Provide appropriate and accurate pre-arrival notification and bedside report to the receiving facility
- Provide receiving facility with completed hardcopy patient care report prior to departure

BLS

- Employ "Universal Precautions" infection control measures on every patient
- Obtain baseline and repeat set of vitals (including at a minimum systolic blood pressure, pulse, respiratory rate, GCS measured at least 4 minutes apart)
- Obtain baseline and repeat pain/distress levels (document with vital signs)
- Perform full assessment (history, exam, diagnostic testing) appropriate to the patient's condition and/or complaint
- If the patient has evidence of dyspnea, apply supplemental O2
- Provide ventilation assistance (BVM and airway adjunct) as needed
- Complete appropriate patient care documentation (Reference CS10):
  - Chief Complaint, Past history, medications, allergies
  - Baseline and repeat vital signs and pain/distress levels
  - All assessments and interventions (Reference Quality Measures below)
  - Narrative (Reference CS18)

ALS

- If the patient SpO2 <94% or has evidence of dyspnea apply supplemental O2
- Cardiac monitoring:
  - Continuous cardiac monitoring should occur from initial ECG monitoring until care is complete
  - Continuous cardiac monitoring should not be interrupted for routine patient movement or uploading data (e.g. entering data management mode)
- Interventions as appropriate for patient condition and authorized by protocol or OLMC

OLMC

- Consult Online Medical Control Physician as needed.

CLINICAL STANDARD

CLINICAL STANDARD

PEARLS
• Scene Safety – maintain situational awareness at all times • Determine number of patient's – triage via START/JumpSTART • Call early for additional resources as needed

QUALITY MEASURES
• Two sets of vital signs and at least 1 GCS recorded • SpO2 measured and if <94% was O2 administered • At least one Pain Scale documented if GCS=15 • Chief Complaint documented • Medical history, medications, and allergies of the patient documented

REFERENCES
• Pinellas County EMS Medical Quality Management Plan 2016 V1.0 Effective January 6 2016 • http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CLINICAL STANDARD

CS2 Patient Bill of Rights

Patient's Rights

- **A patient has the right to:**
  - Treatment for any emergency medical condition that will deteriorate from failure to provide treatment.
  - Be provided by the health care provider, information concerning diagnosis, a planned course of treatment, alternatives, risks and prognosis
  - Refuse any treatment, except as otherwise provided by law
  - Be treated with courtesy and respect, with appreciate of his or her individual dignity and with protection of his or her need for privacy
  - Impartial access to medical treatment or accommodations, regardless of race, national origin, religion, handicap or source or payment
  - Know if medical treatment is for purposes of experimental research and to give his or her consent or refusal to participate in such experimental research

Patient's Responsibilities

- **A patient is responsible for:**
  - Providing to the healthcare provider, to the best of his or her knowledge, accurate and complete information about present complaints, past illnesses, hospitalizations, medications and other matters relating to his or her health
  - His or her actions if he or she refuses treatment or does not follow the health care provider's instructions

Pinellas County EMS Patient's Bill of Rights and Responsibilities

- NOTE: The following is adapted from the FL Patient's Bill of Rights and Responsibilities as codified in Florida Statute 381-026. This reiteration of selected portions of the text is not meant to be exhaustive or exclusive, but rather to highlight and reinforce those components with specific applicability to the delivery of prehospital emergency care

CLINICAL STANDARD

CS3 Patient Safety Protocol

CLINICAL STANDARD

We have a duty to provide the safest care possible by:

- Responding to calls for assistance in a safe and timely manner
- Proficiency in the location of all medications and medical supplies on the current vehicle assigned and response bags/equipment
- Being mindful about what you've used from your equipment and restock. To this end, within your best capabilities, maintain a constant state of readiness
- Providing expert, compassionate, and appropriate care as per the current Medical Operations Manual (MOM) and OLMC direction
- Paying special attention to "Safety Alerts" in the MOM
- Maintaining current and progressive, professional knowledge
- Respecting a patient's autonomy, when possible
- Acknowledging, addressing and alleviating a patient's fear and concerns whenever possible

Do the right thing:

- Fulfill your duty to each patient
- Be an advocate for your patients – this means prioritizing their needs above your own – safely of course
- Maintain a patient focused environment
- Lead Clinicians have a responsibility to be receptive to input from supporting clinicians, likewise, supporting clinicians have a responsibility to effectively and appropriately voice their input
- Ultimately, there are many ways to get to the end goal of safe, appropriate and successful patient care in any particular situation. Differences in style should not derail overall progress but safety concerns must be voice and addressed immediately
- Know and use the "8 Rights" to patient drug administration:
  - Right person
  - Right medication
  - Right dose
  - Right time
  - Right route
  - Right documentation
  - Right reason
  - Right response
- Perform Medication Administration Cross-Check (MACC) prior to administration of a medication (Reference CT22)
- If you experience a medication or treatment error, contact OLMC immediately for assistance with further appropriate treatment. Communicate the error to your fellow EMS clinicians and the receiving facility to ensure the best ongoing care for your patient. Ensure the error is documented
- Keep your patient informed. They have the right to make a decision you don't agree with and that might be clinically detrimental to them only if they have completely advised as to why their decision may be averse to their health and have demonstrated decisional capacity

CLINICAL STANDARD

CS4 Definition of a Patient

Adult Patient:

All patients who have themselves requested, or have had requested on their behalf, medical assistance from the Pinellas County EMS System shall be considered patients. Additionally, any person that has a complaint suggestive of injury or illness, has evidence of injury or illness, or experiences a situation or event that may precipitate injury or illness, shall be considered a patient. These criteria shall be applied in the broadest sense and where there is any question or doubt, the person is to be considered a patient.

Pediatric Patient:

For the purposes of clinical treatment protocols, equipment sizing and medication dosing, patients weighing < 37 kg or able to be measured with the pediatric length based dosing tape will be considered pediatric. While a reasonable estimate may be given by age ≤ 14 years old, clinicians must use judgement given that developmental age and weight are increasing mismatched.

For the purposes of Trauma Transport Protocols, patients under the age of 16 years old will be considered pediatric

For the purposes of destination selection in non-trauma patients, patients under the age of 18 years old will be considered pediatric

CLINICAL STANDARD

CS5 Hospital Destination Policy

CLINICAL STANDARD

CLINICAL STANDARD

Patient Status Definitions

RED: Critical or unstable; requiring immediate intervention to preserve life and/or limb or prevent serious disability, including but not limited to "STEMI Alert", "Stroke alert" and "Trauma alert" patients.

YELLOW: Serious; potential for loss of life and/or limb or risk of serious disability if care is not received in a timely manner.

GREEN: Non-Urgent; requiring care in a reasonable amount of time but will likely not suffer adverse effects from a limited delay in definitive care.

BLACK: Obviously dead, triaged as an unsalvageable/expectant patient, or having traumatic injuries incompatible with life.

Hospital Status

Go to http://hs.sunstarems.com for real time hospital status and specialty capabilities (Log on information: user name is user; password is ho$pital).

OPEN: Hospital is on normal operating condition with the availability of all usual Specialty referral service capabilities. See notification procedure below.

DIVERT: Hospital has requested the diversion of all incoming 9-1-1/EMS Ambulance transports. Hospital DIVERT status shall be for a minimum of one (1) hour.

Procedure: Each Hospital shall ensure an up to date listing of Authorized Hospital Personnel allowed to change the Hospital's status is provided to EMS. The listing shall include 24/7 contact information.

To change a Hospital's Status the Authorized Hospital Representative will contact Sunstar Dispatch at 727-587-2102 or via radio in the event of a telephone system failure.

Sunstar Dispatch will update the Hospital Status log and website for all Hospital Status changes reported.

Authorized Hospital Representatives are responsible for checking the EMS designated website to ensure the Hospital's reported status is accurate and reporting when the Hospital is OPEN or SPECIALITY DIVERT services become available.

CLOSED: Hospital has an internal disaster or inability to provide care for any incoming 9-1-1 Ambulance transports. See notification procedure above.

SPECIALTY REFERRAL SERVICES: The Hospital has provided in writing to EMS that the Hospital has one or more of the following Specialty Referral Services:

- Percutaneous Coronary Intervention (PCI)
- Primary or Comprehensive Stroke Center
- Adult Psychiatric / Baker Act
- Pediatric (age 15 or less) Psychiatric/Baker Act
- Pediatric/Neonatal
- Obstetrics
- Adult Trauma Center
- Pediatric Trauma Center
- Burn Trauma Center

SPECIALTY DIVERT: Hospital is OPEN except for the inability to provide one or more of a facility's usual specialty referral service capabilities. See notification procedure above.

EMS BYPASS: EMS System, with the approval of the OLMC Physician, has initiated temporary closure of a Hospital to all 911/EMS Ambulance transports in accordance with the Patient Wait Time/Hospital Bed Delay Protocol.

SYSTEM STATUS MANAGEMENT: If multiple Hospitals in a given geographic area in the County are on Hospital DIVERT, such that honoring requests for Hospital DIVERT would place undue strain on the EMS System, the requesting Hospitals will be notified by Sunstar Dispatch. If no Hospital can return to OPEN status, patients will be distributed to all Hospitals as equitably as possible by the OLMC Physician.

Hospital Destination Policy

The overarching principle of the Pinellas County EMS System Destination Policy is to get the "right patient to the right hospital and facilitate the best possible care and outcome".

- 9-1-1 Patients will be transported to receiving hospitals using the following criteria in rank order:
  - All patients who accessed the Pinellas County EMS System by dialing 9-1-1, or who have an emergency medical condition, will be transported to a Hospital or Freestanding Emergency Department.
  - Category RED patients will be transported emergency (lights and sirens) to the closest appropriate and OPEN Hospital (i.e. Hospital Emergency Room (ER) or Hospital ER with a Specialty Referral Service) for immediate stabilization. To ensure adequate resources

CLINICAL STANDARD

at the patient's side, first responder paramedics will accompany category RED patients to the hospital whenever practicable.

- Category YELLOW patients may be transported to an OPEN Hospital (i.e. Hospital ER or Hospital ER with a Specialty Referral Service) of their choice, if the estimated transport time is < 30 minutes, provided that hospital is an appropriate receiving facility for their condition and the Hospital is OPEN.
- Category GREEN patients may be transported to an OPEN Hospital (i.e. Hospital ER or Hospital ER with a Specialty Referral Service) of their choice if the estimated transport time is < 60 Minutes provided that hospital is an appropriate receiving facility for their condition and the Hospital is OPEN.
- Every effort should be made to honor our Veterans through facilitation of their transport to the U.S. Department of Veterans Affair Hospital provided their condition is stable, the VA Hospital is OPEN, and the patient does not meet criteria for specialty referral services that the VA Hospital does not provide.
- At any time during transport, the attending Clinician may transport to the closest Hospital (OPEN, DIVERT or EMS BYPASS) if, in their clinical judgment, the patient's condition has deteriorated to the point the patient is unmanageable by EMS (i.e. unmanageable airway).
- It is incumbent upon the attending Clinician to explain why a particular Hospital is most appropriate, however, patients have the right to refuse a recommended Hospital provided the patient has "decisional capacity" and is not a Severity RED patient and a refusal is documented in accordance with Protocol CS6.

Freestanding Emergency Departments

Freestanding Emergency Departments (FEDs) provide all services of a standard Hospital Emergency Department, but, do not provide trauma or other Specialty Referral Services. Typically, FEDs are affiliated with a Hospital. It is important to note that patients who require admission after evaluation in FEDs must be transported a second time by EMS. Therefore, while these facilities provide a valuable service in increasing the availability of emergency evaluation and care, we must be selective in which patients we transport to such facilities. We may also be called upon to educate our patients regarding the capabilities of these facilities.

Freestanding Emergency Department (FED) Transport Guideline

Severity GREEN patients may be transported to a FED except in any of the following conditions:

- Patients that requires a Specialty Referral Service
- Pregnant women >20 weeks gestation
- Patients who require physical or chemical restraints.

CLINICAL STANDARD

CLINICAL STANDARD

CLINICAL STANDARD

Patient Wait Time / Hospital Bed Delay Protocol

To ensure patient wait time is minimized and patients are transferred to Hospital personnel in a timely manner, the Pinellas County EMS System established the Patient Wait Time / Hospital Bed Delay Protocol. This is necessary to ensure the highest quality care for our patients, as well as maintain the availability of Ambulance resources to respond to the next patient.

EMS BYPASS will be activated in the following manner:

0 Minutes	Arrival at Hospital
5 Minutes	Patient waiting >5 min without transfer of care, the attending clinician will notify Sunstar Dispatch.
15 Minutes	Patient waiting >15 minutes without transfer of care, Sunstar Dispatch will contact the Hospital ER Charge Nurse.
20 Minutes	Patient waiting >20 minutes without transfer of care, the EMS System will place the Hospital on EMS BYPASS until transfer of care has been accomplished for all patients currently at that facility in the care of EMS clinicians. The OLMC Physician will approve the EMS BYPASS.
30 Minutes	Patient waiting > 30 minutes without transfer of care, the EMS System will place the Hospital on EMS BYPASS for a period of two (2) hours to allow the Hospital to decompress its Emergency Department. The Hospital may request EMS rescind the EMS BYPASS prior to the two hours if the Hospital indicates they can safely resume accepting patients. The OLMC Physician will take the request into consideration and may override the EMS BYPASS prior to two hours.

CS6 Refusal of Care

This Clinical Standard describes how a patient may make an informed decision to accept or refuse evaluation, treatment and/or transport

Background:

All patients who themselves, or through a third party, have summoned emergency medical assistance within the Pinellas County EMS system are presumed to have a condition requiring evaluation, treatment and transportation to the closest appropriate hospital emergency department. Patients have the right to refuse part or all of the evaluation, treatment and transport if they have decisional capacity

Definitions:

- "Decisional Capacity" – means a patient that is able to understand their current medical condition, as well as, the risks, benefits and alternatives of the proposed treatment plan and has the legal ability to provide consent (e.g. is not either a minor who has not been emancipated or an adult who is known to have been adjudicated incompetent by a court)
- "Expressed Consent" – exists when a patient (adult or emancipated minor), with decisional capacity, agrees to or requests evaluation, treatment and/or transport
- "Implied Consent" – exists when a patient's current medical condition prevents them from being able to provide expressed consent or when a third party is no present to provide Third Party Consent.
- "Third Party Consent" – means a parent/guardian of a minor, power of attorney, legal guardian of an incompetent adult, law enforcement officer or healthcare surrogate, as appropriate, who may accept or refuse evaluation, treatment and/or transport on behalf of a minor, detained/incarcerated person, or a person determined to be legally incompetent

BLS/ALS:

- Evaluate all patents to the fullest extent indicated if possible and determine if the patient or a third party is the appropriate decision maker.
- If the patient does not appear to have decisional capacity, proceed with evaluation, treatment and transport under implied consent
- If the patient appears to have decisional capacity, they may refuse all or part of the indicated evaluation, treatment recommended destination and/or transport
- If the patient has questionable decisional capacity, administer an EMS Cognitive Evaluation. If the patient passes, they may refuse except as indicated in the EMS Cognitive Evaluation. If the patient falls, proceed under implied consent.
- In cases involving Third Party Consent, ensure the responsible party has decisional capacity prior to allowing decisions to be made on behalf of the patient> Document the third parties' relationship to the patient. If there is doubt as to whether the third party is acting in the patient's best interest (e.g. abuse or neglect) immediately involve law enforcement.

CLINICAL STANDARD

- Documentation for a patient refusing part or all of the evaluation, treatment and transport must include at a minimum:
  - The benefits of allowing care
  - The risks of refusing the proposed care including severe complications or death
  - The alternatives explained and offered to the patient
- Attempt to ensure the patient is left in a safe location

OLMC:

- Contact OLMC if:
  - After passing the EMS Cognitive Evaluation, doubt remains as to a patient's decisional capacity, or if the patient's current medical condition (e.g. hypotension, hypoxia, head injury, etc.) calls into question their decisional capacity despite having passed the EMS Cognitive Evaluation
  - Other unusual situations where the correct course of action is not apparent based on the criteria contained within this standard

Quality Measures:

- Were two sets of vital signs and at least 1 GCS recorded?
- GCS =15?
- Was a Chief Complaint documented?
- Were the Medical History, Medications, and Allergies of the patient documented?
- Witness Signature Obtained
- Narrative >150 Characters
- Free Text "Decisional Capacity" present

CLINICAL STANDARD

CS7 Deceased Persons/Obvious Death/Withholding Resuscitation

Atraumatic Cardiac Arrest:

- Attempt resuscitation for all patients found pulseless and apneic, unless any of the following are present:
  - Signs of irreversible death
  - Rigor mortis
  - Dependent lividity
  - Decomposition
  - A valid Florida Do Not Resuscitate Order (Form 1896) (Reference CS8)
  - Healthcare surrogate or durable power of attorney wishes to have resuscitation efforts withheld
  - When attempts to perform cardiopulmonary resuscitation would place the rescuer(s) at risk of physical injury

Traumatic Cardiac Arrest:

- Attempt resuscitation for all patients found pulseless and apneic unless any of the following are present:
  - Signs of obvious death
  - Injuries incompatible with life (e.g. decapitation, > 90% 3rd degree burns, etc.)
  - Asystole or agonal cardiac rhythm (e.g. PEA < 40 bpm) with ***massive trauma***, blunt or penetrating
  - If suspected arrest time > 10 minutes or circumstances/locations of incident precludes rapid removal to a hospital (e.g. entrapment, inability to rapidly extricate, remote location)

CLINICAL STANDARD

CS8 Honoring DNRO/MOLST/POLST Forms

In situations in which cardiopulmonary resuscitation is being administered (e.g. nursing home staff, family and bystanders), EMS should either ask for their continued delivery of care due to the adequacy of the cardio pulmonary resuscitation being performed or should request their discontinuance of efforts. EMS personnel are to assume continuation of resuscitation while making decisions on whether the patient meets the criteria of this protocol

Florida Do Not Resuscitate Order (DNRO):

The presentation of a Valid Florida DNRO also constitutes objective criteria for withholding cardiopulmonary resuscitation, to include cardiac compressions, endotracheal intubation and/or other advanced airway management, artificial ventilation, defibrillation and related procedures, in the event of a cardiac or respiratory arrest. A DNRO may apply to patients with any type of electrocardiogram (ECG) rhythm, not just those in asystole. The presentation of a valid DNRO does not relieve EMS of the responsibility to provide interventions in the non-arrested patient for comfort care or to alleviate pain. Pain relieving measures may be particularly appropriate in prehospital care of such patients.

Living Will:

DO NOT confuse a DNRO with a Living Will. A Living Will serves an entirely different purpose and should not influence the acute application of resuscitation (e.g. a healthy 20-year-old may have a valid Living Will which does not mean EMS should withhold care if that person is involved in a serious motor vehicle accident or goes into cardiac arrest. However, if this person was later determined to be brain dead, the Living Will would direct ventilators, etc.to be disconnected and that the patient is allowed to die naturally, with comfort measures only)

Medical Orders for Life Sustaining Treatment (MOLST) and Physician Orders for Life Sustaining Treatment (POLST)

A Medical Orders for Life Sustaining Treatment (MOLST) or Physician Orders for Life Sustaining Treatment (POLST) is a physician order that helps provide health care treatment instructions for seriously ill adults nearing death. These documents are for patients who are both seriously ill and have a life expectancy of less than one year. Although not yet officially recognized in Florida, if you see one, consult OLMC for permission to follow patient/family wishes.

A Prehospital DNRO may be considered valid by any of the following methods:

- Method 1 – Florida Prehospital Do Not Resuscitate Order (Form #1896)
  - Information is on the original State of Florida Do Not Resuscitate Order Form #1896 or is a copy on yellow paper of an original Form #1896. This provides the ability the ability to generate their own supply of DNROs
  - Has signatures from the attending physician and the patient, or if the patient is incompetent, their health care surrogate, proxy or guardian

- The DNRO has not been orally withdrawn by the patient, court appointed guardian, patient's health care surrogate or healthcare proxy. Next-of-kin, other family and friends do not have the right to withdraw a valid DNRO unless they are the patient's health care surrogate, proxy or guardian. If in doubt, contact OLMC while resuscitation is initiated
- Patient identity is verified with a legal photo ID (e.g. driver's license, etc.), other legal phot identification or someone on-scene attests to the patient's identity

- Method 2 – DNRO document from a licensed health care facility, licensed Hospice provider or from another State:
  - Document clearly states that it is a DNRO
  - Clearly states that the patient is NOT to be resuscitate in the event of a cardiac or respiratory arrest.
  - An effective date is documented that predates the date the assistance is requested
  - The patient's full legal name is documented (typed or printed)
  - Is signed and dated by the patient, patient's health care surrogate or proxy, or legal guardian if one is appointed.
  - Is signed and dated by at least two witnesses

Honoring a DNRO:

- The following steps must be completed:
  - Determine the identity of the patient with the DNRO through a driver's license, other photo identification or from a witness in the presence of the patient
  - Determine that the DNRO form is fully and properly executed in that it has the required signatures, has been witnessed and has an effective date which predates the date the assistance is requested
  - Documentation is made of the following items in the narrative portion of the EMS patient care report anytime a DNRO is honored:
    - Effective date of the DNRO
    - Information pertaining to witness (name, address, telephone number and relationship to the patient) if one was used to establish patient identification
    - Name of the attending physician who signed the DNRO
    - Name of the patient or other person (surrogate or proxy) who signed the DNRO
    - Whether the patient dies at home or during transportation

Transfer arrangements:

When arrangements are being made to transfer a patient with a DNRO between facilities or from their primary residence to a healthcare facility, the receiving facility shall be contacted and informed of the patients DNRO prior to transport. The receiving facility shall agree to accept the patient if during transport the patient expires and the DNRO is honored. When possible, coordination of the proposed transportation should be made on a recorded transmission, documenting the facilities acceptance and the name of the facilities representative agreeing to the above conditions. During such transport the following guidelines shall be followed:

- Ensure that the original or a copy (Reference Special Notes & Situations) of the prehospital DNRO accompanies the patient. Every attempt should be made to transport a copy of the prehospital DNRO with the patient. The original should remain at the patient's residence

or at the nursing facility they reside. The EMS provider shall relinquish the DNRO form along with the patient to the receiving facility

- If the EMS provider receives a request to transport the patient home or to another health facility for further treatment, the EMS provider shall obtain a valid copy of the DNRO form from the sending of cility prior to the transport.
- Before the transport may occur, OLMC must be consulted in situations where the field clinician finds the family or healthcare facility requesting transport of a patient who has either lost or misplaced the DNRO or verbally requested that the patient not be resuscitated, has not valid DNRO or in which a "copy" of a DNRO is unable to be validated.

Special Notes and Situations:

In situations where it is impossible to copy the document, the original should accompany the patient and be delivered to the receiving facility. IN these situations, it may be beneficial to document in the patient care record where the original DNRO was left and who took custody of it.

- If the original DNRO is transported with the patient, inform either the receiving facility or the family member of the importance of archiving the original and in making additional copies.

A Basic Life Support (BLS) capable unit arriving on the scene before a County Certified Paramedic may honor a valid DNRO if the patient has met either Method #1 or Method #2 outlined within this protocol. The BLS unit may consult with OLMC describing the circumstances and the reason for honoring or discontinuing a resuscitative effort. However, a county certified Paramedic must arrive at the patient and continue the complete documentation of the facts and circumstances in making this decision.

Patient Identification Device – State of Florida Do Not Resuscitate Order Form #1896

The patient identification device is a miniature version of the State of Florida Do Not Resuscitate Order Form #1896 and is incorporated by reference as part of the DNRO form. Use of the patient identification device is voluntary and is intended to provide convenient and portable DNRO which travels with the patient. The device is perforated so that is can be separated from the DNRO form. It can also be hole punched, attached to a chain in some fashion and visibly displayed on the patient. In order to protect this device from hazardous conditions, it should be laminated after completing it. Failure to laminate the device shall NOT be grounds for not honoring a patient's DNRO order, if the device is otherwise properly completed.

In order to not inconvenience patients or waste the current supply of DNRO forms, all previous versions of DH Form 1896 are considered valid.

References:

- http://polst.org/
- http://www.floridahealth.gov/about-the-department-of-health/about-us/patient-rights-and-safety/do-not-resuscitate/index.html
- http://www.floridahealth.gov/licensing-and-regulation/trauma-system/_documents/dnro-form-multi-lingual2004bwyw.pdf

CLINICAL STANDARD

CS9 BLS/ALS/Hazmat Medical Inventory

Date Completed (mm/dd/yyyy)	
Unit ID #	
Completed By: (first and last name)	
EMS ID#	
Comments	

Airway (ALS) - StatPack "Breather"(green) ID#_____

External Cover			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Sprague (adult/pediatric) style stethoscope	1		
Adult BP cuff	1		
Large adult BP cuff	1		
Emesis bags	4		
Penlight	2		
Trauma shears	1		
Left External Pocket			
Adult nasal cannula	4		
Adult non-rebreather mask	2		
Right External Pocket			
Nebutech nebulizer	2		
Adult aerosol mask	1		
Infant mask for bag valve	1		
Child mask for bag valve	1		
Internal Cover			
18 Fr Salem Sump OG tube	2		
60 mL syringe with catheter tip	2		
Size 3 King LTS-D airway	1		
Size 4 King LTS-D airway	1		
Size 5 King LTS-D airway	1		
60 mL luer lock syringe	2		

CLINICAL STANDARD

Internal Main			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
M6 portable oxygen cylinder bracket	1		
Portable oxygen regulator w/2, 4, 6, 8, 10, 12, 15, 20 and 25L flow settings (Western)	1		
CPAP Module	See separate inventory		
BVM Module	See separate inventory		
Intubation Module	See separate inventory		
Internal Main – CPAP Module			
Large adult CPAP setup	1		
Child CPAP setup	1		
T-piece adapter	2		
Internal Main – BVM Module			
Adult BVM resuscitator with adult mask and filter	1		
Adult/pediatric EtCO2 filterline set	1		
OPA 80 mm, 90 mm, 100 mm, 110 mm	1 each		
NPA 26 Fr, 28 Fr, 30 Fr	1 each		
Lubricating jelly	5 unit packs		
Internal Main – Intubation Module			
Large laryngoscope handle - disposable	1		
Penlight laryngoscope handle - disposable	1		
Mac 3 laryngoscope blade	1		
Mac 4 laryngoscope blade	1		
Miller 3 laryngoscope blade	1		
Miller 4 laryngoscope blade	1		
Adult ET tube holder	2		
6.0 ET tube (cuffed with stylet)	1		
7.0 ET tube (cuffed with stylet)	1		
7.5 ET tube (cuffed with stylet)	1		
8.0 ET tube (cuffed with stylet)	1		
8.5 ET tube (cuffed with stylet)	1		
Adult Magill forceps	1		
Pocket Bougie	1		
Scalpel (safety)	2		
Kelly curved forceps	2		
10 mL luer-lock syringe	4		
Lubricating jelly	6 unit packs		

CLINICAL STANDARD

Airway (BLS) - StatPack "Golden Hour"(orange) ID#_____

External Cover			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Sprague (adult/pediatric) style stethoscope	1		
Adult BP cuff	1		
Large adult BP cuff	1		
Trauma shears	1		
Left External Pocket			
Adult nasal cannula	2		
Adult non-rebreather mask	2		
Emesis bag	2		
Penlight	1		
Right External Pocket			
Infant mask for bag valve	1		
Child mask for bag valve	1		
Main Internal Pocket			
M6 portable oxygen cylinder	1		
M6 portable oxygen cylinder bracket	1		
Portable oxygen regulator w/2, 4, 6, 8, 10, 12, 15, 20 and 25L flow settings (Western)	1		
BVM Module	See separate inventory		
Internal Main - BVM Module			
Adult BVM resuscitator with adult mask and filter	1		
OPA 80 mm, 90 mm, 100 mm, 110 mm	1 each		
NPA 26 Fr, 28 Fr, 30 Fr	1 each		
Lubricating jelly	5 unit packs		

CLINICAL STANDARD

CLINICAL STANDARD

Minor Trauma (ALS & BLS) - StatPack "Perfusion"(red) ID#_____

Item Name	Qty Rqd	Qty Present	Exp Date
Top External Pocket			
Sprague (adult/pediatric) style stethoscope	1		
Adult BP cuff	1		
Trauma shears	2		
Bandage shears	1		
Ring cutter	1		
Tweezers	1		
Penlight	1		
Right External Pocket			
Combat gauze	2		
4" emergency trauma dressing (ETD)	2		
CAT tourniquet (orange)	2		
Hyfin compact vented chest seal (2 pack)	1		
10 g – 3.25" decompression needle ***(DECOMPRESSION ONLY)***	2		
Left External Pocket			
1" Band-Aids	10		
2" Band-Aids	10		
Large arm sling	2		
Small arm sling	2		
Triangular bandage	2		
Moldable padded aluminum splint	2		
Petroleum gauze	2		
Main Internal Pocket Flap			
1" silk tape (roll)	2		
3" silk tape (roll)	1		
1" self-adherent tape (roll)	2		
4" elastic bandage	4		
4" roll gauze	6		
Cold pack	3		
Heat pack	1		
Non-sterile 4" x 4" gauze (pack – in storage container)	1		
Multi-trauma dressing	4		
5" x 9" ABD pad	4		
Internal Upper Pocket			
Sterile 4" x 4" gauze (2 per pack)	50 packs		
Sterile water (250 mL - irrigation)	4 bottles		

CLINICAL STANDARD

Drug (ALS) - StatPack "Perfusion"(blue) ID#_____

Top External Pocket			
Diabetic/Toxicology			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Naloxone Kit	See separate inventory		
Oral glucose	2		
Glucagen	1		
Glucometer kit	See separate inventory		
Dextrose 10% in Water – 250 mL	1		
20 gtt (Macro) IV drip set	1		
Naloxone Kit			
Naloxone 2 mg/2 mL prefilled	4		
Mucosal atomization device (MAD)	2		
Glucometer Kit			
Bayer Contour glucometer	1		
Bayer Contour glucometer test strips – bottle (retain bottom of external packaging for quality control testing)	1 bottle		
Lancets	10		
1" Band-Aids	10		
Alcohol prep pads	10		
Left External Pocket			
20 gtt (macro) IV drip set	1		
Tourniquet (loose) – IV start	3		
16 g IV catheter	2		
18 g IV catheter	4		
20 g IV catheter	4		
22 g IV catheter	4		
IV start kit	3		
1000 mL 0.9% Sodium Chloride	1		
10 mL 0.9% Sodium Chloride (prefilled syringe)	3		
Right External Pocket			
20 gtt (macro) IV drip set	1		
25 mm EZIO needle set	2		
45 mm EZIO needle set	2		
EZIO Stabilizer	2		
EZIO driver (with trigger guard)	1		
1000 mL 0.9% Sodium Chloride	1		
1000 mL pressure infusion bag	1		
10 mL 0.9% Sodium Chloride (prefilled syringe)	3		
Main Internal Flap			
Trauma shears	1		
Sharps container – ***single use***	4		

CLINICAL STANDARD

Internal Main Pocket – Upper Level			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Calcium Chloride 1 g/10 mL (prefilled syringe)	2		
Atropine Sulfate 1 mg/10 mL (prefilled syringe)	2		
Sodium Bicarbonate 50 mEq/50 mL (prefilled syringe)	2		
Epinephrine 1:10000 – 1 mg (prefilled syringe)	9		
Lidocaine 100 mg/5 mL (prefilled syringe)	2		
Individual Single Use Sharps Container	2		
Internal Main Pocket – Lower Level			
Infusion Kit	See separate inventory		
Medication Kit	See separate inventory		
Syringe Kit	See separate inventory		
Infusion Kit			
Medication ADD labels	4		
Dextrose 5% in Water – 100 mL	1		
Dopamine 400 mg/250 mL (premixed)	1		
Stat2 Pumpette 60 gtt (micro) IV drip set with flow controller	1		
Magnesium Sulfate 2 g/50 mL (premixed)	2		
Medication Kit			
Ondansetron 4 mg ODT (unit dose)	2		
Ondansetron 4 mg/2 mL (prefilled syringe)	2		
Diphenhydramine 50 mg/2 mL (prefilled syringe)	2		
Epinephrine 1:1000 – 1 mg/mL	2		
Adenosine 6 mg/2 mL	5		
Amiodarone 150 mg/3 mL	4		
Methylprednisolone Sodium Succinate 125 mg/2 mL	2		
Nitroglycerin Aerosol Spray 0.4 mg/spray	1 bottle		
Tetravisc	1 bottle		
Baby Aspirin 81 mg (chewable tablet – unit dose)	8		
Ipratropium Bromide 0.5 mg/2.5 mL (unit dose)	2		
Albuterol Sulfate 2.5 mg/3 mL (unit dose)	4		
Diltiazem 25 mg/5 mL	1		
Norepinephrine	1		

CLINICAL STANDARD

Syringe Kit			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
1 mL Vanishpoint (safety syringe)	4		
3 mL Vanishpoint (safety syringe)	4		
20 mL syringe (luer lock)	2		
10 mL syringe (luer lock)	2		
3 mL syringe (luer lock)	2		
1 mL syringe (luer lock)	2		
Alcohol prep pads	15		
3-way stopcocks	2		
18 g x 1.5" blunt fill needle with filter	6		
External Upper Middle Pocket			
Controlled Substance Kit	See separate inventory		
Controlled Substance Kit			
Controlled substance content shield	1		
Etomidate 40 mg/20 mL	2		
Midazolam 5 mg/1 mL (prefilled syringe)	5		
Fentanyl 100 mcg/2 mL (Carpuject prefilled syringe)	6		
Carpuject Holder ***(single use)***	2		

SSCOR III Suction Unit – Serial #_____

Device			
Shoulder pouch	See separate inventory		
Battery – sealed lead acid Lot #_____	1		
Suction canister – complete set (canister, lid, suction tubing, vacuum tubing – ***CHANGE ALL AFTER EACH USE***)	1		
Yankauer (pre-attached to suction tubing)	1		
Shoulder Pouch			
Yankauer	1		
14 Fr suction catheter	2		
18 Fr suction catheter	2		
6.5 sterile gloves (pair)	1		
7.5 sterile gloves (pair)	1		
8.5 sterile gloves (pair)	1		

CLINICAL STANDARD

CLINICAL STANDARD

Philips MRx Monitor/Defibrillator

Serial #_____ Asset Tag #_____ _____

(inventory looking at the device screen)

Device			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Printer paper- roll (in printer)	1		
Philips MRx screen protector (in place)	1		
Philips MRx black soft case	1		
Philips lithium battery Serial #_____	1		
Philips lithium battery Serial #_____	1		
Left External Pouch			
Chest lead wire set	1		
Limb lead wire set (pre-attached to main monitoring trunk cable)	1		
Main monitoring trunk cable (with appropriate labeling)	1		
Pulse oximeter sensor – boot style (reusable)	1		
Adult long NIBP cuff (semi-disposable – one pre-attached to NIBP hose)	2		
NIBP hose	1		
Left External Pouch – Inside of Lid			
Adult EtCO2 nasal cannula (one per net pocket)	2		
Rear Pouch - Exterior			
ECG monitoring electrodes (5 pack)	6		
Rear Pouch - Interior			
Printer paper – roll	1		
Prep razor (safety)	2		
Philips disposable pulse oximetry sensor	2		
Philips pulse oximetry adapter (for use with disposable pulse oximetry sensor)	1		
70% Isopropyl Alcohol (1 oz. bottle)	2		
Right External Pouch			
QCPR meter	1		
Therapy/QCPR meter cable	1		
Therapy/QCPR meter cable safety cover	1		
QCPR adhesive pads (1 pre-attached to QCPR meter)	5		
Adult/pediatric (> 10 kgs) multi-function hands free therapy pads)	2		
Right External Pouch – Inside of Lid			
Adult/pediatric EtCO2 filterline set	2		
Right Side of Carry Handle			
Pit Crew Clinical Tool (attached to device)	1		

CLINICAL STANDARD

Handtevy Pediatric Kit – ID #_____

Item Name	Qty Rqd	Qty Present	Exp Date
Lid – Exterior (xsmall pocket)			
Handtevy length based tape	1		
Lid – Exterior (small pocket)			
Pediatric aerosol mask	1		
Infant simple Oxygen mask	1		
Pediatric EtCO2 cannula	2		
Pediatric nasal cannula	1		
Child non-rebreather mask	1		
Trauma shears	1		
Lid – Exterior (large pocket)			
OB kit	1		
Personal Infection Control Kit	1		
Bulb syringe	2		
60 mL syringe with catheter tip	1		
6.5 sterile gloves (pair)	1		
7.5 sterile gloves (pair)	1		
8.5 sterile gloves (pair)	1		
Main Bag – Interior Right Side			
Sprague (adult/pediatric) style stethoscope	1		
Pediatric ET tube holder	2		
Pediatric BVM resuscitator with neonate, infant and child masks and filter	1		
Infant (labeled "CHILD") BP cuff	1		
Child (labeled "SMALL ADULT") BP cuff	1		
Main Bag – Interior Bottom			
JumpSTART triage/FACES reference sheet (laminated)	2		
Main Bag – Interior Left			
Moldable padded aluminum splint	1		
Pinellas County Handtevy EMS Medication/Equipment Guidebook – Revision 1.1 05/2015	1		
9 – 13-Year-Old Patient Care Pouch	See separate inventory		
7 – 8 Year Old Patient Care Pouch	See separate inventory		
5 -6 Year Old Patient Care Pouch	See separate inventory		
3 – 4 Year Old Patient Care Pouch	See separate inventory		
2 Year Old Patient Care Pouch	See separate inventory		
1 Year Old Patient Care Pouch	See separate inventory		
Under 1 Year Old Patient Care Pouch	See separate inventory		

CLINICAL STANDARD

Under 1 Year Old Patient Care Pouch			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
2.5 mm ET tube (uncuffed)	1		
3.0 mm ET tube (cuffed)	1		
Miller "0" laryngoscope blade	1		
Miller "1" laryngoscope blade	1		
40 mm OPA	1		
50 mm OPA	1		
12 Fr NPA	1		
14 Fr NPA	1		
6 Fr suction catheter	1		
8 Fr suction catheter	1		
Meconium Stain Aspirator	2		
22 g IV catheter	1		
24 g IV catheter	1		
6 Fr Salem Sump OG tube	1		
Salem Sump anti-reflux valve	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		
1-Year Old Patient Care Pouch			
3.5 mm ET tube (cuffed)	1		
Miller "1" laryngoscope blade	1		
60 mm OPA	1		
16 Fr NPA	1		
18 Fr NPA	1		
10 Fr suction catheter	1		
20 g IV catheter	1		
22 g IV catheter	1		
24 g IV catheter	1		
6 Fr Salem Sump OG tube	1		
Salem Sump anti-reflux valve	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		

CLINICAL STANDARD

2-Year Old Patient Care Pouch			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
4.0 mm ET tube (cuffed)	1		
Miller "2" laryngoscope blade	1		
60 mm OPA	1		
20 Fr NPA	1		
10 Fr suction catheter	1		
18 g IV catheter	1		
20 g IV catheter	1		
22 g IV catheter	1		
6 Fr Salem Sump OG tube	1		
Salem Sump anti-reflux valve	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		
3 – 4 Year Old Patient Care Pouch			
4.5 mm ET tube (cuffed)	1		
Miller "2" laryngoscope blade	1		
60 mm OPA	1		
22 Fr NPA	1		
10 Fr suction catheter	1		
18 g IV catheter	1		
20 g IV catheter	1		
22 g IV catheter	1		
12 Fr Salem Sump OG tube	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		
5 – 6 Year Old Patient Care Pouch			
5.0 mm ET tube	1		
Miller "2" laryngoscope blade	1		
Mac "2" laryngoscope blade	1		
60 mm OPA	1		
80 mm OPA	1		
24 Fr NPA	1		
10 Fr suction catheter	1		
18 g IV catheter	1		
20 g IV catheter	1		
12 Fr Salem Sump OG tube	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		

CLINICAL STANDARD

7 – 8 Year Old Patient Care Pouch			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
5.5 mm ET tube (cuffed)	1		
6.0 mm ET tube (cuffed)	1		
Miller “2” laryngoscope blade	1		
Mac “2” laryngoscope blade	1		
80 mm OPA	1		
26 Fr NPA	1		
10 Fr suction catheter	1		
18 g IV catheter	1		
20 g IV catheter	1		
18 Fr Salem Sump OG tube	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		
9 – 13 Year-Old Patient Care Pouch			
6.0 mm ET tube	1		
7.0 mm ET tube	1		
Miller “3” laryngoscope blade	1		
Mac “3” laryngoscope blade	1		
80 mm OPA	1		
26 Fr NPA	1		
10 Fr suction catheter	1		
12 Fr suction catheter	1		
18 g IV catheter	1		
20 g IV catheter	1		
18 Fr Salem Sump OG tube	1		
10 mL syringe (luer-lock)	1		
Lubricating jelly	3 unit packs		

CLINICAL STANDARD

PPE Respirator (full face) Kit – ID #_____

Pinellas County EMS Storage Bag			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
3M 6000 Series Mask (appropriate size per clinician)	1		
3M 7093 Cartridge Filter (2 per mask)	4 eaches		

PPE Suit Kit – ID #_____

Pinellas County EMS Storage Bag			
Main Interior Pocket			
XXL Tychem suit	2		
XXXL Tychem suit	2		
XXXXL Tychem suit	2		
Side Pocket Interior			
Tychem boot covers (pairs – universal size)	6 pairs		
End Pocket Interior			
Chem tape (roll)	1		

Ballistic Vest Kit – ID #_____

Kit Bag	1		
Rescue Task Force Vest (Level III) MK-II with Side Armor and "Rescue" name patch	1		
Large patient mover (graham mega-mover) – In rear vest back compartment	1		
Vest Front and Rear Rifle Plates (Level III)	1 each		
Vest Utility Pouch (1 – left & 1 – right)	2		
Safety Eyewear (pair – left utility pouch)	1		
Vest Radio Pouch (center)	1		
Batiskin Viper A3 Helmet	1		

Cyanokit

(located on District Chief, Sunstar Supervisor and LR vehicles)

Cyanokit	3		
Dextrose 5% in Water – 100 mL	6		
60 mL luer lock syringe	3		
18 g x 1.5" blunt fill needle with filter	5		

CLINICAL STANDARD

Major Trauma (ALS/BLS First Responder) - 5.11 Bailout Bag (black)
ID#_____

External 3 Front Pockets			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
CAT tourniquet (orange)	2 per pocket		
Right External Pocket			
Combat gauze	2		
5” x 9” ABD pad	4		
Left External Pocket			
1” webbing (10 ft. section)	1		
Main Pocket			
4” emergency trauma dressing (ETD)	4		
Multi-trauma dressing	4		
3” silk tape	1		
Trauma shears	2		
Hyfin compact vented chest seal (2 pack)	2		

CLINICAL STANDARD

Vehicle – Reserve Medical Supplies/Equipment

(all ALS Permitted Units)

Equipment			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Vacuum splint (complete)	1		
Long spine board with four straps	1		
Sager splint	1		
Supplies			
Pediatric BVM resuscitator with child, infant and neonate masks and filter	1		
Adult BVM resuscitator with adult mask and filter	1		
Suction canister with disposable suction and vacuum tubing	1		
Mac “4” laryngoscope blade	1		
Miller “4” laryngoscope blade	1		
6.0 ET tube (cuffed)	1		
7.0 ET tube (cuffed)	1		
7.5 ET tube (cuffed)	1		
8.0 ET tube (cuffed)	1		
8.5 ET tube (cuffed)	1		
Adult (large) CPAP setup	1		
20 gtt (macro) IV drip set	2		
Stat2 Pumpette 60 gtt (micro) IV drip set with flow controller	1		
1 mL luer lock syringe	2		
3 mL luer lock syringe	2		
10 mL luer lock syringe	2		
20 mL luer lock syringe	2		
5% Dextrose in Water – 100 mL bag	1		
10% Dextrose in Water – 250 mL bag	1		
Sodium Bicarbonate 50 mEq/50 mL prefilled syringe	2		
Moldable padded aluminum splint	4		
“D” Oxygen Cylinder – minimum 1000 psi	2		
Infection control kit (per person)	1		
PEP kit	1		
Blood specimen draw kit	2		
OB birthing kit	1		
Large patient mover (graham mega-mover)	1		
Disposable restraints (pairs)	2		
Surgical mask	5		
Blanket – yellow – patient rain cover (disposable)	2		
Blanket – cotton for warmth (disposable)	4		
Clorox hydrogen peroxide cleaner/disinfectant	1 bottle		

CLINICAL STANDARD

Supplies (cont.)			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Tough wipe towels (box)	1		
Infectious linen bags	3		
Biohazard waste plastic bag (RED) with impervious container	1		
Sharps disposal container (vehicle)	1		
Triage ribbon dispenser system (complete)	2		
Triage ribbon dispenser tape (green, red, yellow, black, magenta)	1 roll each color per dispenser		
Triage tags – FL Version – Rev. 5/12 (50 tags/pack)	1 pack		
Nitrile gloves (non-sterile) – appropriate size	Multiple pairs		

CLINICAL STANDARD

Vehicle – Transport Capable

(specific additional items required)

Vehicle			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
IV ceiling holder	2		
Overhead grab rail	1		
Benchseat with three sets of seatbelts – patient compartment			
Installed suction (minimum 300 mmHg vacuum)			
"NO SMOKING" signs	2		
Interior lights, loading lights & exterior flood lights			
Heat and air conditioning with fan			
Sanitation and maintenance			
Word "AMBULANCE" – sides, back and mirror image on front windshield			
Supplies			
EMS Communication Plan – Volume II – September 2013 (paper or electronic)	1		
Disposable pillow	2		
Bed pan	2		
Urinal	2		
Child carseat	1		
Stretcher sheets (fitted and flat)	2 each		
Primary stretcher and 3 straps	1		
Pedi-mate pediatric restraint device	1		
Blanket – Cot quilt (Sunstar ONLY – for warmth)	1		
Poly style limb restraints (wrist and ankle) – reusable	2 pairs		
Poly style limb restraint belts (wrist and ankle) – reusable	2 pairs		
Poly style limb restraint protective liners (wrist and ankle) – disposable	2 pairs		
O2 flowmeter (onboard oxygen) – minimum 2, 4, 6, 8, 10, 12, 15, 20, 25L flow settings	1		
Installed Oxygen (minimum "M" cylinder w/500 psi) & regulator, gauge and wrench	1		

CLINICAL STANDARD

Documentation

Paper Format			
Item Name	**Qty Rqd**	**Qty Present**	**Exp Date**
Blood Alcohol Testing Consent form	2		
PCEMS Patient Care Record/EMS Cognitive Evaluation form	3		
PCEMS Patient Care Record Supplemental/Supplemental Refusal form	3		
Electronic Format – ID #_____			
Panasonic Toughbook with ePCR software (primary patient care documentation)	1		
PCEMS Panasonic Toughbook stylus	2		
Miscellaneous			
Patient Chain of Custody Bags (e.g. medications, personal belongings)	3		
Licensing			
FL Department of Health ALS vehicle permit sticker (on windshield)	1		
Medical Operations Manual – 2017 Version 1 (electronic or hard copy)	1		

Vehicle – Mechanical/Operational – All ALS & BLS Permitted Units

Exhaust system			
Brake, tail and backup lights			
Headlights – high & low beams			
Turn signals – front & rear			
Emergency lighting (all)			
Back-up audible warning			
Siren			
Steering wheel horn			
Windshield wipers			
Tires			
Vehicle free of rust and dents			
Doors open, close & lock properly			
Windows, windshield & rear/side view mirrors intact			
Exterior lettering identifying the name of the licensee and unit number			
Lockable compartment for storage of ALL pharmaceutical items			
Flashlight with batteries	1		
ABC Extinguisher (minimum 5 lbs.) – fully charged, inspected, tagged and secured	2		

CLINICAL STANDARD

Hazardous Materials Unit Specific – ID#_____

Date Completed (mm/dd/yyyy)	
Unit ID #	
Completed By: (first and last name)	
EMS ID#	
Comments	

Medical Supplies/Equipment

Item Name	Qty Rqd	Qty Present	Exp Date
Infant (labeled "CHILD") BP cuff	1		
Child (labeled "SMALL ADULT") BP cuff	1		
Adult BP Cuff	1		
Sprague (adult/pediatric) style stethoscope	1		
6 Fr Salem Sump OG tube	10		
Salem Sump anti-reflux valve	10		
12 Fr Salem Sump OG tube	10		
18 Fr Salem Sump OG tube	10		
60 mL syringe with catheter tip	10		
20 mL syringe (luer lock)	20		
10 mL syringe (luer lock)	20		
3 mL syringe (luer lock)	20		
Emesis basin	10		
Tongue depressors (100 per box)	1 box		
Digital thermometer	10		
Digital thermometer covers	1 box		
Vanishpoint Safety Blood Tube Holder	10		
Blood draw needle	10		
Red Top Plastic Blood Tube	10		
Stat2 Pumpette 60 gtt (micro) IV drip set with flow controller	10		
Morgan Lens	10		
Morgan Lens fluid delivery administration set	10		
Atropine Sulfate 0.4 mg/mL – 20 mL vial	20		
Insta-Char Activated Charcoal – Cherry Flavored 50g	2		

CLINICAL STANDARD

Medical Supplies/Equipment (cont.)

Nithiodote Kit – Sodium Thiosulfate 250 mg/mL (50 mL vial) & Sodium Nitrite 30 mg/mL (10 mL vial)	10		
Pyridoxine HCL 100 mg/mL (2 mL vial)	10		
Thiamine	10		
Methylene Blue 1% - 10 mg/mL (10 mL vial)	5		
Protopam Chloride 1 g vial	20		
Calcium Gluconate 10% (10 mL vial)	20		
Sodium Bicarbonate 8.4% - 1 mEq/mL (50 mL prefilled syringe)	10		
Tetracaine 0.5% - 15 mL bottle	10		
Duodote autoinjector (Pralidoxime & Atropine)	30		
Sterile water for injection 20 mL vial	20		
Lactated Ringers – 1000 mL	1 case		
0.9% Sodium Chloride – 1000 mL	1 case		
0.9% Sodium Chloride – 250 mL	10		
Lubricating jelly – 4 oz. tube	20		
Vegetable oil – 48 oz.	10		

CLINICAL STANDARD

CS10 Patient Care Report and Transfer of Care

CLINICAL STANDARD

This protocol defines the requirements for completing the Pinellas County EMS Patient Care Report either by the electronic Patient Care Reporting System (ePCR) or through paper forms and the transfer of patient records and belongings between EMS clinicians and hospital personnel.

Patient Care Report Completion:

- A Pinellas County Patient Care Report (PCR) must be completed in all the following instances:
  - A BLS or ALS unit responds to a request for emergency or non-emergency medical services
  - A Paramedic obtains a refusal of evaluation from an individual, makes patient contact, assesses a patient, provides treatment and/or transport, or confirms the death of a patient.
  - The first County Certified EMT or Paramedic on the scene is responsible for starting and ensuring the completion of a PCR for each licensed EMS provider agency
  - Provisionally certified Paramedics filling out a PCR must have the County Certified Paramedic Preceptor review and sign the PCR
  - Each agency that arrives to assist in patient care shall complete a PCR documenting any assessment and/or interventions provided by personnel from their agency
  - All pertinent fields in the ePCR or paper PCR shall be completed including all patient demographic information, assessments, treatments and interventions, and required signatures
  - If a BLS or ALS First Responder Unit is cancelled by a Unit from another agency a "cancelled enroute" PCR must be completed
  - If a BLS or ALS First Responder Unit is cancelled by a Unit from the same agency, the Unit being cancelled is not required to complete a PCR
  - An Ambulance Unit must complete a report unless they are canceled for a "closer unit" or a "higher priority call." If an Ambulance Unit is "cancelled on scene" by an ALS First Responder a PCR must be completed

Electronic and Paper Forms Completion:

- All ALS First Responder and Ambulance Units are required to complete an electronic ePCR
- In the rare circumstance that a PCR is not completed immediately after the transfer of care, a PCR must be completed and filed before the EMT or Paramedic ends their shift
- In the event of a computer failure, a paper PCR shall be completed and the tablet or web-based ePCR report shall be completed as soon as the ePCR system is available
- The paper PCR shall be retained to meet records management requirements
- Level 2 Mass Casualty Incidents (> 10 Patients)
  - Triage tape and triage tags will be utilized on scene and during transport.
  - After the mass casualty emergency has been mitigated, ePCR reports shall be completed by ALS First Responder Units to the extent possible. Ambulance Units shall ensure an ePCR record is completed for all transports.

- Any ancillary forms required shall be completed as required by the EMS Authority or EMS Medical Director
- When a paper PCR is utilized, the form's color paper carbon copies shall be distributed as indicated on the report

Transfer of Patient Care – ALS First Responder to Ambulance

- When patient care is transferred from one Unit to another Unit (e.g. ALS First Responder to Ambulance), a verbal report shall be provided including:
  - History of present illness/injury
  - Past medical history/medications/allergies
  - Treatments or interventions performed
  - Proposed plan of care
- Any electronic or paper documentation, available at the time of the transfer of patient care, shall be provided. Including:
  - Uploading ECGs
  - Copying ePCR data to the receiving Unit
  - Providing a copy of any paper forms (i.e. patient transfer forms, face sheets, medication lists, DNR forms, paper EMS forms, etc.)
- Transport shall not be delayed for report completion. ALS First Responders can electronically update and complete their ePCR record after patient transport is initiated.
- For critically ill or injured patients the ePCR tablet shall be utilized for the duration of the call or until the patient is transferred to hospital personnel. At conclusion of the call, the ePCR and ECG data shall be copied to the ALS First Responder or Ambulance to ensure both reports are complete

Transfer of Patient Care – Ambulance to Hospital

- When patient care is transferred from the Ambulance or ALS First Responder to hospital personnel, a verbal report (including the history of present illness/injury, past medical history/medications/allergies, and treatments or interventions performed) shall be provided
- Ambulance units (or an ALS First Responder Unit that transported a patient) shall leave a completed PCR (paper or ePCR) including ECGs and copies of any paper forms (e.g. patient transfer forms, face sheets, medication lists-MAR, DNR forms, etc.) at the hospital for all patients at the time patient care is transferred
- Label all ECGs with the patient's name and date of birth prior to 12 Lead ECG transmission and label all electronic/paper ECGs provided for the patient's medical record
- The only exceptions to ***NOT*** leaving a completed PCR prior to leaving the hospital are as follows:
  - A "Partially Available" Ambulance is needed to respond as the closest unit to an emergency call. After such response, any incomplete PCRs must be completed
    - "Partially Available" means a patient has been transferred to hospital staff with a verbal report and the Ambulance can respond to the next call.
  - A Mass Casualty Incident that has ***NOT*** been mitigated
  - Declared Disaster or EMS Emergency
- When possible, place the patient's belongings and medications in a clear Patient Belongings bag

    - Write the patient's name on the bag and seal it
    - Ensure the patient's medications and belongings are transferred to the hospital staff
- Obtain a signature for receipt of the patient and their belongings from the hospital or facility staff.

CLINICAL STANDARD

CS11 Approach to Mass Casualty Incidents (MCI)

Appropriate medical care when faced with multiple or an overwhelming number of patients

Triage Group:

- The START/JumpSTART triage algorithms will be used whenever the number of patients on scene exceeds the number of responders on scene or when the number of patients at an incident t reasonably may present challenges to routine patient tracking procedures. All system clinicians must be able to rapidly and effectively employ this method
- Although it is preferable to employ state approved standardized triage tags, in the initial sorting it is acceptable to use color coded alternative marking devices
- Prior to initiation of triage procedures:
  - Determine whether the scene is safe for triage personnel to proceed
  - Request additional resources; ALS units, transport units, the mass casualty trailer and law enforcement, if appropriate
  - Consider a chemical/hazmat incident if multiple patients on scene have similar, non-traumatic, complaints, signs & symptoms
- When more than one clinician is required for triage, a triage office will be responsible for determining the total number of patients in each category

Treatment Group:

- Treatment group leader will set up the Red, Yellow, Green and Black treatment areas
- Treatment group leader will ensure a secondary triage of all patients in the treatment areas is conducted and that appropriate state approved triage tags are affixed to each patient
- Treatment group leader will communicate to the transport group leader any transport needs
- Re-triage on ongoing recurrent assessment is mandatory for all patients who remain in the treatment sector > 30 minutes

Transport Group:

- The transport group leader should contact Sunstar Dispatch for assistance in determining transportation destination and to alert the hospital network to initiate disaster plans, as appropriate
- EVERY patient (including those who deny injury) must have at least the following documented by the Transport group leader:
  - Name
  - Age
  - Condition at transport
  - Destination

PEARLS:

- Each patient can be assigned a triage within 60 seconds or less
- The only treatment during START/JumpSTART triage is one manual attempt at opening the airway for adults or 5 rescue breathes for children and placing pressure on a source of major bleeding

CLINICAL STANDARD

CS13 Interfacility Transfers

CLINICAL STANDARD

CLINICAL STANDARD

Pre-Transport

1. Review patient information provided by the communications center.
2. Ensure minimum required equipment is taken to the bed side:
   - Sunstar Only/ Immediate Transfers -- Full ALS gear.
   - Unscheduled Non-Emergency -- Full ALS/BLS Gear
   - Scheduled Non-Emergency – Airway bag
3. Care initiated by the sending facility many need to be continued during transport:
   - Should the patient require care and/or equipment above and beyond the normal scope of practice and training of the responding EMS personnel, the transferring facility shall provide appropriate staff or consider other means of medical transport (BLS Ambulance, ALS Ambulance, Critical Care Paramedic, Critical Care Transport, Air Upgrade)
   - The attending paramedic or EMT has the right to decline a transport if he/she is convinced patient care is outside their scope of practice and training or, alternatively, insist a hospital member accompany them on the transport.
   - If additional staff accompanies the patient, it is the responsibility of the transferring physician to assure their qualifications.
   - Specific written orders for treatments, including medications for ALS transfers and other orders should be obtained from the transferring physician prior to the initiation of the transport.
   - Ordered medications not contained within the EMS system must be supplied by the transferring hospital.
4. The following information should accompany the patient (but not delay the transfer in acute situations):
   - Copies of pertinent hospital records
   - Written orders during transport
   - Any other pertinent information including appropriate transfer documents

During Transport

1. Interventions performed enroute and who performed them will be documented on the patient care report.
2. Paramedics and EMTs are authorized to act according to authorized clinical protocol with the standard of care delineated in the MOMs.
3. EMTs and Paramedics are responsible for adhering to all administrative and clinical standard protocols.
4. The concentration and administration rates of all medications being administered will be documented in the patient care report.
5. If applicable, hospital supplied medications not used during transport must be turned over to staff at the receiving facility with signature confirming receipt.
6. In the event a patient's condition changes or warrants intervention other than as authorized under standing orders or those provided in writing by the transferring Physician, consult with OLMC is required. OLMC may request higher level of transfer, different unit type, or provide further orders. EMTs who contact OMLC should clearly

identify themselves as EMTs and state whether they are on an ALS or BLS transport unit at the beginning of the consult.

7. If patient condition is rapidly deteriorating, the Communications Center should be contacted to determine the closest facility available for diversion. OLMC should be contacted when the potential need for diversion has been determined.

CLINICAL STANDARD

CS14 Mandatory Reporting Requirements

Child Abuse/Abandonment/Neglect:

It is mandatory to report known or suspected child abuse, abandonment or neglect by a parent, legal guardian, caregiver or person responsible for the child's welfare (Reference § 39.201, Fla. Stat. (2016))

Vulnerable Adult Abuse/Neglect/Exploitation

It is mandatory to report known or suspected abuse, neglect or exploitation of vulnerable adults (e.g. elderly, person with diminished mental capacity, etc.) (Reference § 415.1034, Fla. Stat. (2016))

Requirements:

- Fully document the situation and observations in the Patient Care Report
- Notify the Florida Department of Children and Families
  - Refer to Florida Department of Children and Families Abuse Reporting Portal: https://reportabuse.dcf.state.fl.us/
- Notify the appropriate Law Enforcement agency
- Notify receiving hospital personnel

Burns:

Any person who initially treats or is requested to treat a person with second-degree or third-degree burn injuries affecting 10 percent or more of the surface area of his or her body shall immediately report such treatment to the local sheriff's department if:

- The treating person determines that the burns were caused by a flammable substance ***and***
- If the treating person suspects the injury is a result of violence or unlawful activity
  - The report shall state the name and address of the injured person and the extent of his or her injuries.
  - This section not apply to burn injuries received by a member of the armed forces, or by a governmental employee, engaged in the performance of his or her duties.
  - Any person who willfully fails to make the report required by subsection (1) is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.
  - Reference § 877.155, Fla. Stat. (2016))

Requirements:

- Fully document the situation and observations in the patient care report
- Notify the Pinellas County Sheriff's Office

CS15 Online Medical Control (OLMC)

The premise of OLMC consultation, in general, is that certain situations require increased levels of critical decision making and/or weighing of patient specific risk/benefit considerations, must be tracked for quality assurance purposes, pose a medicolegal risk to the EMS system and providers or may benefit from the unique perspective and knowledge of the OLMC staff

OLMC contact shall be established in the following circumstances:

- Contact OLMC any time medical advice is needed
- Case where OLMC options are requested
- When significant differences of opinion regarding patient care occur between the system and healthcare facilities, healthcare providers or law enforcement:
  - In the case of differences between system clinicians:
    - The Paramedics involved will focus on the provision of patient care and timely transport of the patient.
    - Patient safety concerns on scene shall be relayed to the lead Paramedic, who will retain full responsibility for decisions made.
    - The lead Paramedic is expected to heed patient safety concerns raised to ensure we "***do no harm***."
    - Discussion about the situation should occur after the call with the involvement of appropriate supervisor(s).
    - EMS Coordinators are expected to initiate a Quality Assurance Review of any clinical or significant concerns.
  - In the case of differences between the system and other parties:
    - OLMC will mediate discussions via the radio and/or telephone.
    - These situations must be handled as discreetly and professionally as possible and preferably not in the presence of the patient or their family.
- All cases where there is an unsuccessful attempt to facilitate intubation with the use of medications
- Cases where a field response from OLMC is requested
- Cases in which deviation from protocol is requested:
  - Intentional deviation from protocol requires consultation prior to the initiation of the deviation, not merely reporting after the fact
- Cases where there is a request for discontinuation of cardiopulmonary resuscitation (CPR) in the field
- Situations in which a bystander physician or other health care provider wants to participate in patient care or specify a transport destination contrary to protocol
- Cases in which a medication, treatment or transport error or patient injury has occurred
- Cases in which a piece of EMS equipment has malfunctioned or is of concern to the Paramedic:
  - Consultation is required only if the equipment problem may have affected patient care. Otherwise, malfunctions or concerns are to be reported directly to your supervisor or EMS Coordinator
- OLMC authorization is ***MANDATORY*** before leaving one Emergency Department or hospital property to go to another, except where formal interfacility transfer arrangements have been made by the transferring physician.

CLINICAL STANDARD

- All cases potentially involving law enforcement transporting a patient to a healthcare facility
- All patients not meeting trauma center or local trauma center transport criteria but for whom the clinician feels neurosurgical services may be necessary
- All patients who originally agree to go to the hospital by ambulance, but who later refuse because of receiving information about their potential financial obligations
- All cases in which scene personnel believe that transport to Tampa General Hospital for hand and/or other reimplanatation services may be indicated. The consult must be completed prior to committing to an out of county transport
- All requests for air transport upgrade for trauma patients who do not meet Trauma Alert Criteria.
  - Consult should be performed as early in the call as possible and prior to initiating the air transport upgrade.
  - Air transport status may be requested prior to consult
- As required otherwise in specific interim and/or Emergency Orders or protocols

CLINICAL STANDARD

CS16 Blood Specimen Collection

The purpose of this protocol is to describe the legal authority and proper procedures to be followed when obtaining a blood specimen at the request of a law enforcement officer

Introduction:

- There are several situations in which a County Certified Paramedic or EMS Physician may be called upon to draw blood samples at the request of law enforcement for determination of alcohol or drug levels. The highest priority of EMS, in any case, is to render emergency medical care as needed. ***Blood samples may be drawn only after those needs have been addressed***. Situations may arise where blood sampling must be delayed or deferred to the receiving emergency department to attend to higher medical priorities
- Types of situations in which law enforcement may request blood specimens include the following:
  - An accident scene in which a fatality or potentially fatal injury has occurred
  - Cases of DUI (driving under the influence (of drugs or alcohol)) where an accident is of lesser severity or in which no accident has occurred
  - Cases involving crimes apart from those involving traffic, such as rape, assault, etc. Contact OLMC any time medical advice is needed
- Regardless of the situation, if a blood sample is drawn at the request of law enforcement for determining blood alcohol or drug levels, the following procedure shall be used:

  NOTE: Blood samples requested by law enforcement for DNA testing are not currently approved by the EMS Medical Director

Procedure:

1. A patient care report (PCR) must be initiated for any blood collection requested. The patient is to sign the refusal after the blood collection is completed if not being transported to the hospital
2. Check the "supplemental form" box to indicate a blood sample form is attached
3. Note the following in the "Remarks" section:
   - A Pinellas County Blood Specimen Kit was utilized
   - Betadine (povidone-iodine) solution was used for skin preparation
   - Time of the blood specimen draw
   - If paramedic drawing the specimen sample is different from the one signing the report, that paramedic will sign under the above information
   - A Pinellas County Blood Specimen form was completed
   - The expiration date of the Pinellas County Blood Specimen Kit
4. Log the time of the blood sample as a procedure
5. Pinellas County Blood Specimen Kit Specific Details (Use ONLY the kit provided by Pinellas County EMS per the Federal Needlestick Safety and Prevention Act)
   - Check the kit to ensure it is within date and the "KIT Integrity Seal" is intact
   - Show the kit to the law enforcement officer noting the expiration date and intact "Kit Integrity Seal"

CLINICAL STANDARD

- Show the patient, who is having blood drawn, the kit expiration date and intact "Kit Integrity Seal" in the presence of the law enforcement officer.
- Open the kit in the presence of the patient and the law enforcement officer.
- Use only the contents in the kit, specific to the draw. DO NOT utilize any other medical supplies without first showing the law enforcement officer and patient
- Complete the collection and labeling of the blood samples following the specific "Blood Specimen Collection Instructions" (blue sheet) contained within the kit
- Per the instructions, provide only what is indicated to the law enforcement officer. Discard all other material
- Document all details and actions of the blood collection on the patient care record

6. All blood samples taken shall be surrendered to the requesting law enforcement officer
7. The Paramedic shall:
   - Render emergency medical service or treatment as necessary prior to the drawing of any blood specimens
   - Obtain blood specimens only at the request of a law enforcement officer
   - Obtain a minimum of two samples per person per draw.

Consent:

- § 316.1933 (1)(a), Fla. Stat. (2016)) – Blood test for impairment or intoxication in cases of death or serious bodily injury; right to use reasonable force
- In cases at an accident scene where a fatality or potentially fatal injury has occurred, the law allows for blood collection even if the subject/patient does not consent. Consent and cooperation should be sought, but if the law enforcement officers can adequately restrain the patient (using "reasonable force" if necessary), a County Certified Paramedic or EMS Physician may draw the blood sample in these circumstances. The test shall be performed in a reasonable manner
- Any person who is incapable of refusal by reason of unconsciousness or other mental or physical condition shall be deemed to have not withdrawn his or her consent to such test. A blood test may be administered whether such person is told that his failure to submit to such test will result in the suspension of the person's privilege to operate a motor vehicle in the State of Florida
- In cases where an accident is of lesser severity or in which a DUI violation is suspected without an accident, blood samples may be drawn by a County Certified Paramedic or EMS Physician if the patient gives consent. The subject/patient may not be forced into providing a blood sample in such cases.
- For cases involving crimes other than traffic accidents or DUI, law enforcement officer may bring suspects/patients to fire stations or to ambulances to obtain your assistance in drawing blood specimens. Again, the subject/patient must consent to the procedure. The subject/patient may not be forced into giving a blood sample in such cases
- For cases of blood sampling requiring consent, the Pinellas County EMS Blood Sampling Consent Form shall be utilized. Use of the form is self-explanatory

Additional Information:

- No hospital, clinical laboratory, medical clinic, or similar medical institution or physician, certified Paramedic, registered nurse, licensed practical nurse or other person authorized

by a hospital to draw, or duly licensed clinical laboratory director, supervisor, technologist or technician or the person assisting a law enforcement officer shall incur any civil or criminal liability as a result of the withdrawal or analysis of a blood or urine specimen or chemical test of a person's breathe pursuant to accepted medical standards when requested by a law enforcement officer, regardless of whether or not the subject resisted administration of the test

- § 316.1933 (1)(b), Fla. Stat. (2016) defines the term "serious bodily injury" as an injury to any person, including the driver, which consists of a physical condition that creates a substantial risk of death, serious personal disfigurement or protracted loss of impairment of the function of any bodily member or organ
- § 843.06, Fla. Stat. (2016) Neglect or refusal to aid peace officers.—Whoever, being required in the name of the state by any officer of the Florida Highway Patrol, police officer, beverage enforcement agent, or watchman, neglects or refuses to assist him or her in the execution of his or her office in a criminal case, or in the preservation of the peace, or the apprehending or securing of any person for a breach of the peace, or in case of the rescue or escape of a person arrested upon civil process, shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s.775.083.

CLINICAL STANDARD

CS17 Involuntary Transport Policy

This protocol describes the options available for the involuntary care and transport of patients. There are three legal provisions for EMS to care for patients against their wishes

- Refer to Protocol CS6 for Patient consent, refusal and implied consent
- **Baker Act** – Florida Statutes Chapter 394 allows a law enforcement officer, physician, clinical psychologist or other mental health professional or the Court through an ex parte order to initiate an involuntary examination of a person having mental illness.
- **Neglect** – The law requires such professional, listed above, to determine that without care or treatment, the person is likely to suffer from neglect or refuse to care for himself or herself; such neglect of refusal poses a real and present threat of substantial harm to his or her well-being; and it is not apparent that such harm may be avoided through the help of willing family members or friends of the provision of other services.
- **Potential to Harm Self or Others** – The law requires such professional, listed above, to determine that there is substantial likelihood that without care or treatment the person will cause serious bodily harm to himself or herself or others in the near future, as evident by recent behavior
- **Marchman Act** – Florida Statutes Chapter 397 allows a law enforcement officer to initiate an involuntary admission and protective custody of a person having a substance abuse impairment in a public place and appears to be incapacitated. The officer must have a good faith reason to believe the person is substance abuse impaired and has:
  - Lost the power of self-control with respect to substance abuse ***OR***
  - Has inflicted or threatened or attempted to inflict or unless admitted is likely to inflict physical harm on himself, herself or another ***OR***
  - Is in need of substance abuse services
- **Chapter 401 –** Florida Statutes Section 401.445 allows an EMS Physician to order the involuntary care and transport of a patient who does not have the decisional capacity to make their own healthcare decisions (Reference CS6)

SAFETY ALERT

A fundamental principle in EMS is "crew and patient safety". Law enforcement should be summoned to all involuntary transport situations for protection of both the crew and the patent.

Requirements:

- Assist the law enforcement officer or medical professional by providing appropriate medical assessment, treatment and safe/dignified transport to the appropriate hospital or Baker Act Receiving Facility.
- Refer to Treatment Protocol M3
- For interfacility transports refer to Protocol CS13

CLINICAL STANDARD

CS18 Narrative Documentation

SUBJECTIVE	**What were you told?**
OBJECTIVE	**What did you find? What did you see?**
ASSESSMENT	**What did you think?**
PLAN	**What did you do and who did you tell?**

Rationale:

- The purpose of this narrative format is to:
  - Illustrate your clinical thought process as you cared for your patient
  - Show why that thought process was reasonable
- A series of check boxes and data points as collected in the rest of the PCR is not able to tell a story that shows the reader why they would have done the same under similar circumstances

*****Pinellas County uses a modified S.O.A.P. template for the patient care narrative*****

Examples:

- To assist the clinician in utilizing this template, the following thought process can be applied when completing the patient care narrative:
  1. Start by stating what kind of patient you had (this is the "A" of SOAP)
  2. Then describe the patient specific, complaint specific, pertinent positives and negatives of the ***subjective assessment*** ("S") that support Step #1
  3. Then describe the patient specific, complaint specific, pertinent positives and negatives of the ***objective assessment***("O") that support Step #1
  4. State Step #1 and how Steps #2 and #3 convinced you that Step #1 was the correct assessment. What treatment ("P"), specific to your assessment did you complete? How did the patient respond? What did you tell the person that you ultimately transferred?

PEARLS:

- Poor documentation, in-of-itself, can qualify as legal negligence
- No humorous acronyms or terminology – keep it professional
- If it isn't written, it didn't happen

CLINICAL STANDARD

- For a field assessment of mental capacity, think about documenting whether the patient was alert & oriented to person, place, time, situation – provide specifics on how you were able to ascertain this and couple it with your Glasgow Coma Score
- Use correct spelling – utilize the tablet on-board spell check and/or dictionary

CLINICAL STANDARD

CS19 Special Patient Protocol

Background:

- From time to time, we will encounter a patient who has unusual medical conditions or requires specialized treatment modalities outside our normal operating protocols
- We cannot write protocols for each of these unusual situations into the Medical Operations Manual (MOM)
- It is important to be able to rapidly identify these types of patients and implement the appropriate specialized care

Policy:

- A patient with unusual medical conditions that requires specialized treatment will be issued a Pinellas County EMS "Special Patient Protocols Identification Card". The card will contain patient demographics, background information, standing orders and any applicable drug information.
- The patient will be instructed to carry the card with them at all times and present to EMS clinicians upon initial contact. Any specialized medications needed shall be kept by the patient with the card.
- Upon being presented with such a card and after verifying the patient's identity, Pinellas County EMS Clinicians are authorized to follow the standing orders as printed on the card
- OLMC Physicians retain ultimate discretion in management of all patients and may be contacted for any clinical guidance or questions or as specified on the card.
- This card will have an expiration date and a copy of the card with supporting information will be kept on file. ALS First Responders in areas frequented by such patients (e.g. home, work, school) will be advised when card is issued and provided with a copy of the card. Additionally, CAD Caution Notes will be added to the home address for these patients.

Sample Card (SEE NEXT PAGE)

CLINICAL STANDARD

CLINICAL STANDARD

Pinellas County EMS
Office of the Medical Director

SPECIAL PATIENT PROTOCOL IDENTIFICATION CARD

PT INFORMATION	PROTOCOL
Name: EXAMPLE DOB: 00/00/0000 **Address:** 123 Main St **MEDICAL HX:** HAE **Allergies:** ACE inhibitors, Sulfa **MEDS:** Cinryze, Berinert, Firazyr **Emergency Contact:** Family Member – 727-555-5555 **Special Notes:** PCP/Specialist: Dr. John Smith 727-555-5555	**1. If suspected HAE symptoms, IMMEDIATELY administer 3 separate 10mg (1ml) SubQ injections of Fiazyr separated by at least 2 inches.** **2. Implement ALS care** **3. Contact OLMC and prepare for transport.** **Over for Notes/Drug Info →**

Pinellas County EMS
Office of the Medical Director

SPECIAL PATIENT PROTOCOL IDENTIFICATION CARD

Notes:	Drug info:
1. This patient suffers from Hereditary Angioedema (HAE), a rare disorder that causes frequent, painful, and potentially life-threatening episodes of swelling of the face, tongue, and pharynx. **2. HAE does not respond to normal allergic/anaphylactic treatments.** **3. This patient requires emergent administration of specialty drug not in our normal formulary to reverse her symptoms. The patient carries this drug on her person.** **4. This patient MUST be transported following our administration of her self-carried medication.**	**1.Firazyr** is a plasma kallikrein inhibitor indicated for treatment of acute attacks of hereditary angioedema (HAE). **2. DOSING:** 30mg (3ml), administered subcutaneously in three 10mg (1 ml) injections. Max 60mg/24 hrs. **3.PACKAGING:** Single use glass vial containing 10mg/ml of ecallantide as a solution for injection. **4. WARNINGS AND PRECAUTIONS: Risk for Anaphylaxis. Difficult to distinguish HAE vs anaphylaxis.** Administer only in monitored setting equipped to manage reactions.

CLINICAL STANDARD

CS20 Transport Resource Utilization

ALL patients in the Pinellas County EMS System shall be transported by a Sunstar Ambulance.

The following exceptions allow for the use of local first responder transport capable units or mutual aid ambulances in situations in which there is a delayed arrival of a Sunstar Ambulance:

- **SEVERITY "RED" PATIENT**
- **VOLATILE SCENE**
  - Situations in which remaining on the scene may endanger the EMS crew or the patient
- **REMOVAL FROM ENVIRONMENT**
  - Situations where severe weather is hindering patient care or removal from the environment is the definitive care (e.g. pedestrian struck during a severe storm, heat stroke/exhaustion, lightning strike victim)
- **"CONDITION 5"**
  - Situations in which the 9-1-1 Regional Communications Center has changed the countywide operation status to "Condition 5" due to extreme call volume, severe weather or a mass casualty event
- **EMS EMERGENCY OR DECLARED DISASTER**

Request for Transport:

- OLMC ***MUST*** be contacted prior to loading the patient on the first responder transport unit stretcher except in rare and unusual circumstances. OLMC will advise if transport has been authorized and shall make the final decision regarding the transportation of all patients.

  NOTE: Transfer between First Responder and Sunstar Ambulance stretchers is authorized when patient care and safety is ***NOT*** compromised

Air Transport:

- The following exceptions allow for the use of Air Medical Transport (helicopter ambulance) resources for **SEVERITY "RED" PATIENTS:**
  - When *LOCAL CONDITIONS* (heavy traffic/gridlock, multi-victim/mass-casualty incidents, remote or barrier island) exist and in the judgement of the attending EMT, Paramedic or Incident Commander, would make transport by helicopter ambulance faster than transport by ground ambulance
  - When *SCENE CONDITIONS* (extended extrication, heavy machinery extrication, technical rescue, remote location) exist and in the judgement of the attending of the attending EMT, Paramedic or Incident Commander, would make transport by helicopter ambulance faster than transport by ground ambulance
  - When *PATIENT CONDITIONS* (requirement for burn center, re-implantation surgery or hyperbaric chamber) exist and in the judgement of the attending of the attending EMT, Paramedic or Incident Commander, would make transport by helicopter ambulance faster than transport by ground ambulance

  NOTE: Any other use of air transport services requires prior OLMC authorization

CLINICAL STANDARD

CLINICAL STANDARD

CS21 Medical Operations at Incidents with Ongoing Threats (Active Shooter Response)

Purpose:

The purpose of this Clinical Standard is to describe the appropriate and authorized interventions for operations in the civilian tactical environment. Use of this protocol is restricted to major incidents with ongoing threats (i.e. Active Shooter or similar events).

Background:

Although medical priorities remain the same as in general EMS, the tactical environment requires modifications to protocol, training, and approach to address the following challenges:

- Functioning in a known, suspected, or potentially hostile environment (Hot or Warm Zone)
- Limitations to equipment, assessment, and treatment options due to the ongoing threat environment

The above factors contribute to different risk/benefit considerations than normal EMS operations and dictate alterations in the standards of care by zone.

Clinical Standard by Zones of Care:

Hot Zone: The Hot Zone (Care Under Fire) is defined as any hostile location subject to effective incoming fire or exposed to an active threat without cover or security. The nature of the Hot Zone necessitates severe limitations in patient assessment and care including the following:

- Triage must be based on limited information and by necessity may be completed at a distance assessing for movement or other signs of life
- Cardiac arrest patients in this zone may not be considered viable due to the inability to provide further care
- Formal Spinal Motion Restriction (SMR) is inappropriate in this zone. When feasible, attempt to move the patient along the body's long axis during extraction attempts
- Care in this situation should be **limited** to extraction to cover, followed by control of life-threatening external hemorrhage and application of vented chest seal if practical

NOTE: Severe external hemorrhage control should be accomplished utilizing tourniquets or wound packing with hemostatic gauze/ETD as the first line treatment modality in both the Hot and Warm Zones. Reference CP16 and CP24

Warm Zone: The Warm Zone (Tactical Field Care) is defined as a potentially hostile location with the benefit of cover or security. The Casualty Collection Point may be located in the warm zone. The nature of the Warm Zone necessitates limitations in patient assessment and care including the following:

- Triage assessment using standard START categories may be attempted.
- Cardiac arrest patients may still not be considered viable candidates for resuscitation efforts based upon available resources.
- Care in this situation should be **focused** on control of external hemorrhage, management of penetrating chest trauma and tension pneumothorax, and basic airway maneuvers.
- Other limited ALS interventions may be possible dependent upon level of threat and available resources but are not required.

NOTE: Severe external hemorrhage control should be accomplished utilizing tourniquets or wound packing with hemostatic gauze/ETD as the first line treatment modality in both the Hot and Warm Zones. Reference CP16 and CP24

Cold Zone: The Cold Zone (Evacuation Care) is defined as a location not subject to immediate threat. The transport sector ambulance loading point and treatment areas as needed may be located in the cold zone. Care in this situation should include care per **normal** protocols and initiation of transport with or without transfer of care to other providers.

CLINICAL STANDARD

A1 Foreign Body Airway Obstruction

AIRWAY

AIRWAY

Goals of Care

- Rapidly intervene to relieve severe or complete airway obstructions.

BLS

- Have suction readily available
- Mild/partial obstruction:
  - ***DO NOT interfere.*** Monitor the patient for signs of worsening or severe/complete foreign body airway obstruction
  - Allow the patient to clear their airway by coughing
  - Reassure the patient and allow for position of comfort
- Severe/complete obstruction:
  - If responsive:
    - Perform abdominal thrusts until object is expelled or becomes unresponsive
      - Use chest thrusts if obese patient (unable to encircle the patient's abdomen)
      - Use chest thrusts if patient in late stage pregnancy
  - If unresponsive:
    - Start Compression Performance Resuscitation (Reference CP4)
    - Check and remove any visible foreign body in the airway each time the airway is opened during Compression Performance Resuscitation
    - ***DO NOT perform blind finger sweeps***

ALS

- If unresponsive:
  1. Perform direct laryngoscopy:
     a. Attempt to remove foreign body at or above cords with Magill forceps
     b. If unable to visualize foreign body (e.g. below cords), perform endotracheal intubation (Reference CP1)
  2. If still unable to ventilate after above maneuvers:
     a. Deflate balloon, attempt to push the obstruction deeper with the endotracheal tube, then retract endotracheal tube to original position, inflate balloon and attempt ventilation
  3. If all prior interventions unsuccessful, perform cricothyrotomy (Reference CP6)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS
• Signs of foreign body airway obstruction include an acute onset of respiratory distress with coughing, gagging, stridor or wheezing • A severe obstruction develops when a cough becomes silent, respiratory effort increases and is accompanied by stridor or unresponsiveness • ***DO NOT delay transport for multiple intubation attempts*** • Transport to the closest hospital is mandatory for an unmanageable/uncontrolled airway (Reference CS5)

QUALITY MEASURES
1. Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

A I R W A Y

A I R W A Y

A2 Asthma/Chronic Obstructive Pulmonary Disease (COPD)

AIRWAY

AIRWAY

Goals of Care

- Recognize and treat obstructive respiratory pathophysiology in an aggressive and safe manner.

BLS

- Allow the patient to assume position of comfort
- Assist patient with their own medication, as needed (e.g. Albuterol, Metered Dose Inhaler (MDI), Epinephrine Auto-injector)
- Provide ventilation assistance (BVM with adjunct) if in respiratory failure

ALS

- Aerosol therapy:
  - Albuterol 2.5 mg mixed with Ipratropium 0.5 mg. May repeat x 1 ***followed by***
  - Albuterol 2.5 mg, repeat as needed
- Administer Methylprednisolone Sodium Succinate 125 mg slow IVP
- Monitor EtCO2 and SpO2
- Assess cardiac rhythm and treat dysrhythmias (Reference C2, C3)
- Obtain 12-lead ECG
- If no improvement with initial aerosol treatment, may initiate CPAP (Reference CP5) and continue aerosol therapy via T-piece.
- If patient does not improve or is **in extremis at patient contact:**
  - Epinephrine 0.3 mg of 1:1000 intramuscular in the mid-anterolateral thigh, may repeat once in 3-5 minutes if needed.

- Consider Epinephrine Drip if no improvement (OLMC Required – Reference CT7)
- If patient progresses to respiratory failure, provide ventilation assistance (BVM and adjunct) followed by airway management (Reference CP1) and continue aerosol therapy via T-piece

OLMC

- Additional doses of Epinephrine 1:1000
- Epinephrine Drip (Reference CT7)
- Magnesium Sulfate 2 grams IV over 10 minutes (recommended only in severe patients after exhausting all other available interventions without improvement)

PEARLS
• Asthma is a deadly disease • Patients with a history of being intubated in the past may deteriorate rapidly • A silent chest = pre-respiratory arrest • Think of tension pneumothorax if patient decompensates after intubation/CPAP

QUALITY MEASURES
1. Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/index.asp

AIRWAY

AIRWAY

A3 Tracheostomy Emergencies

Goals of Care
• Recognize and mitigate tracheostomy tube obstruction, displacement, or another malfunction.

BLS
• If the ventilator-dependent patient is in respiratory distress and the cause is not easily determined and corrected, remove the patient from the ventilator and begin BVM ventilation • Encourage coughing to attempt to clear a tracheostomy tube obstruction • Have suction readily available

ALS
• If suspected obstruction of tracheostomy, instill 1 – 3 mL of 0.9% Sodium Chloride or Sterile Water into the tracheostomy tube and suction as needed • If unable to clear obstruction, unable to ventilate effectively, the caretaker is familiar with tracheostomy changes and has a spare tube, assist with the removal and replacement of the tube with a new one (same size or smaller). ***DO NOT FORCE TUBE*** • If a replacement tracheostomy tube is unavailable and the patient is unable to be ventilated, insert an endotracheal tube of similar size in the stoma, assist ventilations, and hold manual stabilization of tube until arrival at hospital. • If unable to insert endotracheal tube, ventilate with bag-valve-mask (BVM) over stoma or over patient's mouth while covering the stoma • May transport patient on home ventilator if caretaker/family member can accompany the patient during transport to assist with operation of the ventilator

OLMC
• Consult OLMC Physician as needed

A I R W A Y

A I R W A Y

PEARLS

- Type of ventilator alarms:

Low pressure or apnea	May be caused by a loose or disconnected circuit or an air leak. Maybe result in inadequate ventilation
Low power	Caused by depleted battery
High pressure	Can be caused by a plugged or obstructed airway or circuit tubing by coughing or by bronchospasm
Setting error	Is caused by ventilator settings outside the capability of the equipment
Power switchover	Occurs when the unit switches from AC power to the internal battery for power

- Signs of tracheostomy tube obstruction:
  - Excess secretions
  - No chest wall movement
  - Cyanosis
  - Accessory muscle use
  - No chest rise with bag-valve ventilation

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

AIRWAY

A4 Carbon Monoxide (CO) Exposure/Toxicity

AIRWAY

Goals of Care

- Rapid identification of patients at risk for CO exposure and appropriate initiation of displacement therapy with high flow O2.

BLS

- Avoid exposure to EMS personnel

- Move patient(s) to fresh air immediately
- Consider need for environmental monitoring (call early for additional resources)
- Administer O2, minimum 15 L via NRBM
- Provide ventilation assistance with BVM and airway adjunct as needed
- Note and inform hospital personnel of any environmental CO reading levels obtained at the scene
- Assess for signs and symptoms of exposure:

Mild	Headache, Nausea, Vomiting, Fatigue
Severe	Altered Mental Status, Respiratory Distress/Arrest

ALS

- If severe exposure symptoms:
  - Establish IV access
  - Provide airway management as needed (Reference CP1)
  - Assess cardiac rhythm and treat dysthymias (Reference C2, C3)
  - Provide seizure control as needed (Reference M14)
- For patients not requiring ventilation assistance, continue displacement therapy via:
  - Initiation of CPAP (Reference CP5), ***or***
  - Oxygen 15 L via NRBM, if CPAP contraindicated or not tolerated

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS
• Remember Carbon Monoxide (CO) is produced from incomplete combustion and is odorless, tasteless, and colorless • A meter is required for the detection of Carbon Monoxide (CO) • **Do not rely on SpO2 readings (CO will cause false readings)**

Quality Measures
• Pending

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf • www.lhmhealthcare.com

A I R W A Y

A I R W A Y

A5 Cyanide Poisoning – Smoke Inhalation

AIRWAY

AIRWAY

Goals of Care

- Recognition of potential cyanide exposure and rapid implementation of treatment.

BLS

- Avoid exposure to EMS personnel
- Provide appropriate decontamination of the patient to prevent secondary contamination
- Move patient(s) to fresh air immediately
- Consider need for environmental monitoring
- Administer O2 minimum 15 L via NRBM
- Assess for risk of exposure and signs of Cyanide poisoning:

Exposure	Fire or Smoke in an enclosed space, Industrial use of Cyanide, Report or suspicion if intentional exposure
Manifestations of Acute Cyanide Poisoning	Anxiety, headache, confusion, tachypnea, lethargy, agitation, bradypnea, seizures, coma

ALS

- Establish IV access (2 lines required)
- If symptomatic or in cardiac arrest
  - Initiate airway management or CPR as needed (Reference CP1, CP4)
  - Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
  - For SBP < 90, bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL
  - May initiate vasopressor support if no response to fluid bolus (Reference C4)
  - Administer a Cyanokit 5 grams IV over 15 minutes
    - Draw blood samples prior to administration unless in cardiac arrest
    - Use dedicated IV site for Cyanokit

OLMC

- Consult OLMC Physician as needed

PEARLS
• Cyanide is a product of the combustion of materials commonly found in household furnishings and should be **strongly** considered in all symptomatic patients with significant smoke exposure (e.g. rescued civilians or firefighters) • It is important to remember that exposure to Cyanide and Carbon Monoxide (CO) are two separate clinical entities. An exposure can occur to either individually or to both combined. ***DO NOT FALL INTO THE TRAP OF ADMINSTERING A CYANOKIT TO AN ISOLATED CARBON MONOXIDE EXPOSURE***

QUALITY MEASURES
• Pending

REFERENCES
• https://emergency.cdc.gov/agent/cyanide/basics/facts.asp • http://www.medscape.org/viewarticle/559849 The Role of Cyanide in Smoke Inhalation: New Treatment for a Silent Killer 2008 • http://www.cyanideinsight.com/first-responders/the-big-three-signs

A I R W A Y

A I R W A Y

C1 Suspected Acute Coronary Syndromes (ACS)

CARDIAC

Goals of Care

- Identify patients who may be experiencing ACS, initiate appropriate initial medical therapy and hospital pre-notification, and provide rapid transport to definitive care.

BLS

- If no ALS available, assist patient with self-administration of Aspirin by mouth (if not previously taken):
  - Four 81 mg Chewable Baby Aspirin **or**
  - One 325 mg Aspirin tablet

ALS

- Assess cardiac rhythm and treat dysrhythmias (Reference C2, C3)
- Obtain 12-lead ECG
  - Declare STEMI Alert, or PreACT STEMI Alert as indicated, transmit ECG, and notify receiving hospital (Reference CT16):

STEMI ALERT	PreACT STEMI Alert	
Anginal Equivalent	Anginal Equivalent	No DNR Order
ST segment elevation > 1 mm in 2 or more contiguous leads	ST segment elevation > 2 mm in 2 or more contiguous leads	No significant arrhythmia
	Heart rate < 130	No paced rhythm
	Patient age 30 to 90	
	Patient able to give consent	
	Pain < 24 hours	
	QRS complex < 0.12 mm (Okay if RBBB)	
	PARAMEDIC CONFIDENT IN STEMI IMPRESSION AND AGREE WITH APPROPRIATE CANDIDACY	

Transmit 12 Lead ECG to receiving facility for all STEMI and PreACT STEMI Alerts (must include patient name and date of birth prior to transmission)

Initiate emergency transport early for STEMI and PreACT STEMI Alerts

CARDIAC

- Administer Aspirin 324 mg (four 81 mg Chewable Baby Aspirin) if not already taken
- Establish IV access
- Administer Nitroglycerin 0.4 mg sublingual every 3 – 5 minutes until chest pain/anginal equivalent resolves
  - Contraindications
    - SBP < 90 mmHg
    - Recent use of Erectile Dysfunction Medications:

Taken within 12 hours	**Stendra (Avanafil)**
Taken within 24 hours	Levitra (Vardenafil), Staxyn (Vardenafil), Viagra (Sildenafil)
Taken within 48 hours	Cialis (Tadalafil)

- If SBP < 90 mmHg:
  - Administer fluid bolus, 500 mL 0.9% Sodium Chloride. May repeat to maximum 2L.
  - If evidence of cardiogenic shock (e.g. SBP < 80 mmHg, pulmonary edema, etc.) (Reference C4).
- If unable to achieve symptom relief with Nitroglycerine in suspected ACS, may initiate pain management with Fentanyl as needed (Reference M13)
- If chest pain/discomfort not suspected to be possibly associated with ACS (e.g. traumatic chest pain, etc.) (Reference M13)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Anginal equivalents include difficulty breathing, syncope, palpitations, unexplained nausea, fatigue, unease, diaphoresis, unexplained jaw, arm, epigastric, or shoulder pain
- Maintain a high index of suspicion in the geriatric population as their complaints are often vague and nonspecific
- Evidence of an inferior wall myocardial infarction should prompt caution in the administration of nitrates but should not necessarily preclude their use.
  - Clinicians should ensure intravenous access with intravenous fluids running prior to the administration of nitrates, and ***may*** consider performing right sided electrocardiogram (ECG) to assess for ST segment elevation in V4R in inferior MI.

CARDIAC

QUALITY MEASURES
1. 12-Lead ECG Performed 2. 12-Lead ECG transmitted if STEMI Alert 3. NTG Administered if not allergic or SBP < 90 4. ASA administered if not allergic 5. Final pain score less than initial pain score

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf • Pinellas County EMS Medical Quality Management Plan 2016 v 1.0 Effective January 6, 2016

CARDIAC

C2 Bradycardia

CARDIAC

Goals of Care

- Identification and treatment of bradydysrhythmias.

BLS

- Obtain baseline and repeat vital signs
- If patient has evidence of dyspnea, apply supplemental O2
- Shock position as required

ALS

- Establish IV access
- Assess cardiac rhythm and treat as follows:

Stable – Asymptomatic	Stable – Symptomatic	Unstable (e.g. hypotension, altered mental status)
Obtain 12 lead ECG to assess for ischemia or other abnormalities	SBP < 90, bolus 0.9% Sodium Chloride to max of 2L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL	Initiate Transcutaneous Pacing (Reference CP18) **and** May give Atropine 0.5 mg while preparing to pace but **DO NOT DELAY PACING!**
Consider underlying causes	Obtain 12 lead ECG to assess for ischemia or other abnormalities	Midazolam 2.5 mg IV or 5 mg intranasal as requested for sedation as patient condition permits. May repeat one time after 5 minutes as needed

OLMC

- Dopamine infusion 5 – 20 mcg/kg/min (Reference CT19)
- Norepinephrine infusion 1 – 10 mcg/min (reference CT15)
- Epinephrine infusion 2 – 10 mcg/min (Reference CT7)
- Additional sedation

PEARLS
• 12 lead ECG should be completed early to rule out an acute myocardial infarction (AMI), but it should not delay treatment if the patient is unstable • Generally, do not administer Atropine in the presence of acute coronary ischemia or an AMI. An Atropine mediated increase in heart rate may worsen ischemia or increase the size of an infarct • Atropine may be attempted in Mobitz Type 2 or third degree AV block with a new wide QRS complex in the absence of an AMI/ischemia • Consider a lower dose of Midazolam (e.g. ½ dose) in patients > 60 years old or < 60 kg

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

C A R D I A C

C A R D I A C

C3 Tachycardia (Wide/Narrow)

CARDIAC

Goals of Care

- Identification and treatment of tachydysrhythmias.

BLS

- Shock position as required

ALS

- Consider underlying causes
- Establish IV access
- Determine stability/instability: Unstable = persistent tachyarrhythmia causing hypotension (SBP < 90 mm Hg), acutely altered mental status, signs of shock, chest discomfort, acute heart failure
- Assess cardiac rhythm and treat as follows:

Stable - Wide	
Vagal Maneuvers (excluding Carotid Massage)	
Regular - Monomorphic	Amiodarone 150 mg Infusion over minimum of 10 minutes. Repeat if tachycardia re-occurs
Irregular	Amiodarone 150 mg Infusion over minimum of 10 minutes. Repeat if tachycardia re-occurs
Irregular - Torsades	Magnesium Sulfate 2 grams IV over a minimum of 10 minutes

Stable - Narrow	
Vagal Maneuvers (excluding carotid Massage)/Fluid Challenge	
Regular	1. Adenosine 6 mg Rapid IV Push 2. Adenosine 12 mg Rapid IV Push 3. If no change: Diltiazem 0.25 mg/kg slow IV push to a max. single 20 mg dose
Regular - Hx of atrial fibrillation	Diltiazem 0.25 mg/kg slow IV push to a max. single 20 mg dose
Irregular	Diltiazem 0.25 mg/kg slow IV push to a max. single 20 mg dose

Unstable - Wide or Narrow		
Pre-medicate with Midazolam 2.5-5 mg IV, if patient condition permits. May repeat one time in 5 minutes if needed		
Narrow or Wide Regular	100J, 120J, 150J, 170J	Synchronized
Narrow Irregular	120J, 150J, 170J	Synchronized
Wide Irregular or Polymorphic	150J	Unsynchronized

CARDIAC

CARDIAC

OLMC
• Additional sedation

PEARLS
• You must quickly determine whether the patient's tachycardia is primary (that is producing hemodynamic instability due to the rate) or secondary (that is tachycardia produced as the result of an underlying process such as dehydration, fever, pain, anxiety, drugs, etc.) • Primary tachycardia rates are generally over 150/minute • Secondary tachycardia rates are usually but not always lower • Ventricular rates < 150/minute usually do not cause signs or symptoms • DO NOT delay immediate cardioversion for the acquisition of the twelve lead or sedation if the patient is unstable • Keys to management o Determine if pulses are present o If pulses are present, is the patient stable, borderline unstable or obviously unstable o Provide treatment based on the patient's condition and rhythm. It may be best to monitor the patient versus treat the patient if they are minimally symptomatic

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CARDIAC

C4 Cardiogenic Shock

CARDIAC

Goals of Care
• Rapidly identify and aggressively treat cardiogenic shock.

BLS
• Shock position as required

ALS
• Establish IV access • Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3) • For SBP < 90, bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL • Dopamine infusion 5 – 20 mcg/kg/min. Start at 5 mcg/kg/min and titrate to achieve SBP > 90 mmHg. (Reference CT19) • Obtain 12-lead ECG

OLMC
• Norepinephrine infusion 1 – 10 mcg/min (reference CT15) • Consult OLMC Physician as needed

PEARLS
• Destination should be closest PCI facility

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CARDIAC

C5 Medical Cardiac Arrest

CARDIAC

Goals of Care

- Provide high quality, evidence based, resuscitation focusing on maximizing perfusion and correction of reversible causes of medical cardiac arrest.

BLS

- Establish Compression Performance Resuscitation procedure (Reference CP4)
- If downtime > four (4) minutes without adequate bystander CPR, perform two (2) minutes of Compression Performance Resuscitation prior to initiating rhythm assessment with AED/Philips MRx
- If downtime < four (4) minutes or adequate bystander CPR is being performed upon arrival, start/continue compression performance resuscitation and immediately initiate rhythm assessment with AED/Philips MRx and shock if indicated
- Continue Compression Performance Resuscitation and reassess rhythm every two (2) minutes and defibrillate when indicated by AED/Philips MRx

ALS

- Secure airway and establish vascular access per Compression Performance Resuscitation procedure (Reference CP4)
- Defibrillate with Philips MRx at 150_J as indicated for ventricular fibrillation or pulseless ventricular tachycardia
- Administer medications as indicated:
  - Asystole/Pulseless Electrical Activity:
    - Epinephrine 1 mg IV/IO every 3 – 5 minutes
  - Ventricular Fibrillation/Pulseless Ventricular Tachycardia:
    - Epinephrine 1 mg IV/IO every 3 – 5 minutes
    - If refractory, administer Amiodarone 300 mg IV/IO, then 150 mg IV/IO in 3 – 5 minutes ***OR***
    - If Torsade's de Pointes, administer Magnesium Sulfate 2 grams IV/IO
- Monitor the progress of resuscitation using EtCO2
- Address potential reversible causes:
  - Suspected hyperkalemia – Sodium Bicarbonate 8.4% (100 mEq) and Calcium Chloride (1 gram) IV/IO (flush IV between meds)
  - Hypoglycemia – Dextrose 10% 25 grams IV/IO, repeat once in 3-5 min if no effect
  - Opioid overdose – Naloxone 2 mg IV/IO, repeat once in 3-5 min if no effect
  - Suspected Cyanide exposure – Cyanokit 5 grams IV/IO rapid IVP (Reference A5)
  - Suspected tension pneumothorax – Perform needle thoracostomy (Reference CP10)

CARDIAC

CARDIAC

OLMC

- Consult for unusual circumstances or other specific treatment requests (e.g. Lidocaine, additional Naloxone, etc.)
- Consult for defibrillation vector change: in cases of refractory V-fib (e.g. remains in V-fib despite antiarrhythmic drug therapy and at least 3 defibrillation attempts) clinicians may consider placing a second set of pads in an alternate position (e.g. Anterior/Posterior vs. Apex/Sternum), switching monitor to new pads, and attempting further defibrillation via new pads.
- Consult for cessation of resuscitation efforts after **minimum 20 minutes of EMS resuscitation attempts** without any response (e.g. no rhythm changes, no increase in ETCO2, etc.)

PEARLS

- Reversible causes of cardiac arrest:

H's					
Hypoxia	Hypovolemia	Hypothermia	Hydrogen Ion (Acidosis)	Hypo/ Hyperkalemia	Hypoglycemia

T's				
Tension Pneumothorax	Tamponade (cardiac)	Thrombosis (coronary/pulmonary)	Toxins	Trauma

- Hyperkalemia should be suspected in patients with renal failure/dialysis or diabetes, and those who take potassium sparing diuretics or potassium supplementation medications.
- New synthetic opiates may require higher doses of naloxone.

QUALITY MEASURES

1. Compressions initiated within 1 minute
2. Extraglottic Airway utilized
3. ETCO2 monitored
4. ETCO2 < 35 if not transported
5. OLMC contacted if not transported
6. ROSC obtained (Tracking only)

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- http://circ.ahajournals.org/content/132/18_suppl_2.toc
- Pinellas County EMS Medical Quality Management Plan 2016 v 1.0 Effective January 6, 2016

C6 Congestive Heart Failure/Pulmonary Edema

CARDIAC

Goals of Care

- Rapidly intervene to reverse acute pulmonary edema.

BLS

- Allow patient to assume position of comfort
- Assist with one dose of patient's own prescription Nitroglycerin, if available and SBP > 120 mmHg

ALS

- Establish IV access
- Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
- Administer Nitroglycerin continuously every 3 – 5 minutes based on patient's SBP:
  - SBP > 90 mmHg – Nitroglycerin 0.4 mg SL
  - SBP > 120 mmHg – Nitroglycerin 0.8 mg SL
  - SBP > 160 mmHg – Nitroglycerin 1.2 mg SL
    - Contraindications
      - SBP < 90 mmHg (Reference C4)
      - Recent use of Erectile Dysfunction Medications:

Taken within 12 hours	**Stendra (Avanafil)**
Taken within 24 hours	Levitra (Vardenafil), Staxyn (Vardenafil), Viagra (Sildenafil)
Taken within 48 hours	Cialis (Tadalafil)

- Initiate CPAP unless contraindicated (Reference CP5)
- Obtain 12-lead ECG

OLMC

- Consult OLMC Physician as needed

PEARLS

- Consider alternate causes of abnormal lung sounds (Pneumonia, COPD etc) if clinical picture not fully consistent with CHF
- Be vigilant in identifying and treating what is causing the heart failure exacerbation (e.g. AMI, PE, etc.)

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

C7 Post Medical Cardiac Arrest Care

CARDIAC

Goals of Care

- Aggressively manage post-arrest cardiogenic shock and ensure transport to appropriate receiving hospital.

BLS

- Assess post-ROSC vital signs and mental status
- Initiate CPR if pulses lost again (Reference CP4)
- Assist ventilations with BVM if needed -- **Avoid Hyperventilation!**
- Transport patient to a PCI capable facility

ALS

- Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
- Obtain 12-Lead ECG and declare STEMI Alert if indicated (Reference C1)
- If SBP< 90mmHg:
    - Bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL **AND**
    - Dopamine infusion 5 – 20 mcg/kg/min. Start at 5 mcg/kg/min and titrate to achieve SBP > 90 mmHg. (Reference CT19)
- If patient with RONF and apparent discomfort from airway or fighting ventilations, may administer Midazolam 2.5 mg IV/IO and Fentanyl 100 mcg IV/IO. May repeat once in 5 minutes if needed.

OLMC

- Additional doses of sedation/pain management
- Norepinephrine infusion 1 – 10 mcg/min (reference CT15)

PEARLS

- Aggressive post cardiac care is essential to ensure continued perfusion of vital organs and to maximize outcomes.

QUALITY MEASURES

- Pending

REFERENCES

- Pending

CARDIAC

M1 Abdominal Pain/Nausea & Vomiting

MEDICAL

Goals of Care

- Manage symptoms, search for and appropriately treat underlying or alternate causes (e.g. pregnancy complications, cardiac, trauma, etc.)

BLS

- Assess vital signs including pain using the numeric scale or the Wong-Baker Faces scale
- Allow patient to assume position of comfort unless spinal motion restriction is required

ALS

- Establish intravenous access
- Obtain 12-Lead ECG if epigastric pain or concern for cardiac etiology
- If nauseated and/or vomiting, administer:
  - Antiemetic
    - Ondansetron 4 mg intramuscular or slow intravenous push (IVP) over at least two (2) minutes ***or***
    - Ondansetron Oral Dissolving Tablet 4 mg orally
    - May repeat either option once in 15 minutes as needed
  - Fluid Bolus
    - 500 mL 0.9% Sodium Chloride for dehydration/symptom control
    - Refer to T1 for fluid resuscitation/BP goals if SBP < 90 or internal hemorrhage/GI bleeding is suspected
- Initiate pain management for **ACUTE** onset abdominal pain (Reference M13)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Consider potential underlying causes for nausea/vomiting such as acute coronary syndrome, head trauma, bowel obstruction, pregnancy, drug side effects, etc.
- Consider the potential of gastrointestinal bleeding and assess for presence of hematemesis, coffee ground emesis, rectal bleeding, suspected pregnancy, rectal trauma, or recent abdominal trauma
- Many of the potential side effects of Ondansetron are related to rapid administration of the injectable format of Ondansetron.

Quality Measures

1. Pending

MEDICAL

References
• http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M2 Allergic Reactions and Anaphylaxis

MEDCAL

Goals of Care

- Reverse allergic reactions and provide early and aggressive treatment of anaphylaxis.

BLS

- Assess for presence and extent of skin changes (rash, hives, swelling etc)
- Assess for signs of severe reaction/anaphylaxis:
  - Mucosal – severe swelling of lips, tongue, or throat
  - Respiratory—severe wheezing, stridor, or respiratory distress
  - Cardiovascular—SBP < 90 mmHg, severe tachycardia, change in mental status
- If severe symptoms and Epinephrine Auto-injector is available, may administer.
- Provide ventilation assistance with BVM and airway adjunct if needed

ALS

- If severe symptoms/anaphylaxis immediately initiate:
  - Epinephrine 0.3 mg of 1:1000 intramuscular in the mid-anterolateral thigh, may repeat once in 3 – 5 minutes, if needed.
  - Administer 0.9% Sodium Chloride 500 mL, repeat to max 2 L if no evidence of pulmonary edema.
- Diphenhydramine 50 mg IV/IO or intramuscular
- Methylprednisolone Sodium Succinate 125 mg IVP
- Albuterol 2.5 mg nebulized for wheezing/shortness of breath, may repeat once.
- Obtain 12-lead ECG after any Epinephrine administration
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Additional doses of intramuscular Epinephrine 1:1000 (1 mg/mL)
- Epinephrine infusion 1 - 4 mcg/min

PEARLS

- Epinephrine should be the first treatment in patients with severe symptoms/anaphylaxis (e.g. prior to Diphenhydramine and Methylprednisolone Sodium Succinate)

Quality Measures

- Pending

References

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

M3 Behavioral Emergencies

MEDICAL

MEDICAL

Goals of Care

- Ensure the safety of both the patient and responders.

BLS

- Request law enforcement if needed and not already dispatched
- Obtain baseline and repeat vital signs and assess mental status
- If unable to safely obtain vital signs assess airway, breathing, circulation from a distance
- Attempt to verbally de-escalate the patient (see PEARLS below)
- If necessary for safety and you have adequate personnel, place patient in soft or hard restraints, using the minimal amount of force possible
  - Check and document distal pulse, motor, and sensation (PMS) before, immediately after, and every 10 minutes in any restrained limb
  - ***DO NOT*** restrain a patient in the prone position
- Assess for and address any underlying medical/traumatic conditions (Diabetes, Hypoxia, ETOH, narcotics, head injury, etc.)

ALS

- Establish IV access if able to do so safely
- For uncooperative **and potentially violent** patients who are not able to be verbally de-escalated or otherwise safely restrained:
  - Midazolam 2.5 mg IV/IM, may repeat once after 5 minutes if needed.

    OR
  - Midazolam 5 mg (2.5 mg per nare) intranasal, may repeat once after 5 minutes if needed.
- For **actively violent patients who pose an <u>immediate</u> threat** to responders or themselves, who are not able to be verbally de-escalated or otherwise safely restrained:
  - Midazolam 5 mg IV/IM, may repeat once after 5 minutes if needed.

    OR
  - Midazolam 10 mg (5 mg per nare) intranasal. May give an additional 5mg (2.5mg per nare) after 5 minutes if needed.

SAFETY ALERT

Use caution and consider lower dose of Midazolam in a patient with evidence of alcohol or other drug ingestion. Be prepared to provide active airway management when utilizing large doses of Midazolam.

- It's mandatory to frequently assess and document patient's vital signs including ETC02 and SPO2 as well as cardiac rhythm any time chemical restraints are employed.
- Obtain 12-Lead ECG
- Assess and treat cardiac dysrhythmias (Reference C2, C3)
- Obtain blood glucose measurement (Reference M5)
- Consider possibility of poisoning/overdose (Reference M12), head trauma (Reference T1), hypoxia and other underlying causes of behavior change/altered mental status

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Chemical sedation should only be used to facilitate patient and crew safety. Every effort should be made to use verbal de-escalation and simple restraint prior to employing chemical sedation.
- Verbal de-escalation techniques should include explanation of the current situation to the patient, treatment plan and outcome for compliance versus noncompliance using a professional demeanor
- IV/IN is preferred over IM for chemical sedation due to shorter time of onset.
- Any increase in EtCO2 > 45 or decrease in SpO2 < 94% should prompt concern for over sedation and respiratory depression. Clinicians should be prepared to aggressively intervene.

Quality Measures

- Pending

References

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- https://www.acep.org/clinical---practice-management/clinical-policy--critical-issues-in-the-diagnosis-and-management-of-the-adult-psychiatric-patient-in-the-emergency-department

M4 Cerebral Vascular Accidents (CVA)

MEDICAL

Goals of Care

- Recognize patients potentially experiencing a CVA, gather critical history, and rapidly transport to appropriate receiving facility.

BLS

- Obtain baseline and repeat vital signs
- Determine and document (expressed as the specific hour and minutes) the exact "**TIME OF ONSET**" (e.g. last known normal)
- Document name and phone number of person who witnessed event
- Initiate Cincinnati Stroke Assessment (FAST) and MEND exam (Reference CT20)
- If the patient has evidence of dyspnea apply supplemental O2 (avoid unnecessary O2 in the stroke patient)
- Provide ventilation assistance with BVM and airway adjunct if needed

ALS

- Determine capillary blood glucose level to rule out hypoglycemia as cause of symptoms
- Declare "Stroke Alert" if:
  - Positive FAST or MEND exam and onset within the last 4.5 hours
- Initiate rapid transport to closest open stroke center
- If suspected intracranial hemorrhage:
  - Elevate head of bed 30 degrees
  - Reference T1 for further care/resuscitation goals
- Enroute:
  - Establish IV access (2 preferred)
  - Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
  - Obtain 12-Lead ECG (if able)

OLMC

- Consult OLMC Physician as needed

PEARLS

- Signs of intracranial hemorrhage (ICH): vomiting, unequal pupils, seizure at onset, unresponsive/generalized neurologic changes
  - Subarachnoid (aka classic "blown aneurysm")—sudden onset worst headache of life after exertion (sex, lifting weights) or unresponsive
- Avoid interventions that may decrease cerebral perfusion(e.g. lower blood pressure) or increase metabolic rate (e.g. unnecessary supplemental oxygen, glucose, or warming) in the setting of a suspected stroke as these will increase ischemia

MEDICAL

Quality Measures
• Pending

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M5 Diabetic Emergencies

MEDICAL

Goals of Care

- Rapidly reverse hypoglycemia and provide supportive care to patients experiencing diabetic emergencies.

BLS

- Obtain baseline and repeat vital signs and assess mental status
- If patient is a known diabetic, conscious and able to protect their own airway, administer 15g Oral Glucose or if available, a high sugar drink (e.g. non-diet soda, Gatorade, Powerade, juice, etc.)
- Apply supplemental oxygen if evidence of dyspnea
- Provide ventilation assistance with BVM and airway adjunct if needed
- If suspected hypoglycemia and patient has an insulin pump, turn it off or disconnect it
- Assess for and treat possible underlying conditions (Hypoxia, overdose, head injury, etc.)

ALS

- Establish IV access
- Determine capillary blood glucose level
- If hypoglycemia (<60 mg/dL) or symptomatic:
  - 15 g Oral Glucose if conscious and able to protect their own airway ***or***
  - 25 g glucose (250 mL of D10W) IV ***or***
  - 1 mg of Glucagon intramuscular, if unable to complete either above option
  - Repeat capillary blood glucose level 5 - 10 minutes after treatment and if still < 60 mg/dL or symptomatic, repeat treatment once
- If hyperglycemia (> 300 mg/dL):
  - 0.9% Sodium Chloride 500 mL, may repeat once if no sign of pulmonary edema.
- Assess for and treat possible underlying conditions (e.g. hypoxia, overdose, head injury, etc.)
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Requests for utilization of IO access

PEARLS

- If in doubt, it is safer to assume hypoglycemia rather than hyperglycemia
- Do not let the presence of alcohol ingestion confuse the clinical picture. Alcoholics frequently develop hypoglycemia
- Use caution obtaining refusal for transport if the patient is taking long acting hypoglycemic agent (e.g. Lantus, Glyburide (Diabeta))

MEDICAL

Quality Measures
1. Pending

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M6 Drowning/Near Drowning/Submersion

MEDICAL

MEDICAL

Goals of Care

- Rapidly intervene to remove patient from hazard and minimize impact.

BLS

- Consider Spinal Motion Restriction (Reference CT17)
- Remove wet clothing and keep warm
- Administer O2 minimum 15 L via NRBM
- Suction as needed
- Provide ventilation assistance using BVM and airway adjunct if needed

ALS

- Obtain IV Access
- If bronchospasm:
  - Aerosol therapy
    - Albuterol 2.5 mg and Ipratropium 0.5 mg, may repeat x 1
    - Albuterol 2.5 mg, repeat as needed
- If rales, decreased Sp02, significant dyspnea initiate CPAP (Reference CP5)
  - May continue aerosol therapy with T-piece
- If respiratory failure, perform endotracheal intubation (Reference CP1)
  - May continue aerosol therapy with T-piece
  - Do not delay ventilation and oxygenation for suctioning of foam
- Assess and treat cardiac dysrhythmias (Reference C2, C3)
- Obtain 12-lead ECG if able

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- The long spine board currently in the system will float, but will not support a patient
- Be prepared to turn an immobilized patient due to the high occurrence of vomiting
- Drowning alone doesn't meet defined trauma alert criteria

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

M7 Heat Emergency

MEDICAL

MEDICAL

Goals of Care

- Remove patient from environment then initiate cooling and appropriate supportive care.

BLS

- Move patient into an area with shade, air conditioning, air movement, etc.
- Remove excessive clothing
- If no altered mental status:
  - Provide oral fluids (e.g. cool water, Gatorade, Pedialyte, etc.) if patient able to tolerate
- If altered mental status (heat stroke):
  - Begin rapid cooling, but avoid inducing shivering
  - Apply ice packs to neck, armpits, and groin
  - May cover patient(s) with cool wet sheets
- Provide ventilation assistance with BVM and airway adjunct as needed

ALS

- Establish IV access
- If nauseated/vomiting:
  - Ondansetron 4 mg IV/IO slow push (2+ minutes) ***OR***
  - Ondansetron 4 mg ODT p.o.
  - May repeat once in 15 minutes as needed
- If hypotensive, tachycardic, or altered mental status (heat stroke):
  - Bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL
- Monitor for seizures and treat per protocol (Reference M14)
- Assess and treat cardiac dysrhythmias as needed (Reference C2, C3)
- Obtain 12-lead ECG
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- If the patient starts to shiver, the cooling process should be slowed, as shivering will increase the core temperature of the body
- Tricyclic antidepressants, Phenothiazine's, Anticholinergic medications, Alcohol, Cocaine, Ecstasy, Amphetamines, and Salicylates may elevate body temperatures
- Heat Stroke is a neurological event and rapid assessment; treatment and transport is essential for good patient outcome

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M8 Cold Emergency

Goals of Care

- Remove patient from environment then initiate warming and appropriate supportive care.

BLS

- Remove the patient from the cold environment.
- Remove wet clothing and gently dry the skin by patting, not rubbing, with dry towels.
- Initiate rewarming with blankets on top of and underneath the patient; insulate the patient from the ground, backboard/scoop, or stretcher. Apply hot packs in the axilla and groin.

- Minimize movement during transport and consider transport to a burn center if evidence of frostbite

ALS

- Establish IV access
- If hypotensive, tachycardic, or altered mental status:
  - Bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL
- Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
- Obtain 12-lead ECG
- Consider pain management for frostbite if needed (Reference M13)
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Peripheral IV access may be difficult to establish in a hypothermic patient; IO is acceptable for patients in extremis
- Extended exposure to a patient's environment (e.g. water, air, and ground/floor) even in normal temperatures can cause the loss of body heat
- Elderly patients often have less subcutaneous fat for insulation or may be taking medications that inhibit the body's ability to withstand temperature extremes
- Alcohol or drug use can increase the risk of cold-related emergencies

M10 Preeclampsia/Eclampsia

MEDICAL

MEDICAL

Goals of Care

- Early recognition and treatment of preeclampsia/eclampsia in pregnant and post-partum patients.

BLS

- Obtain baseline and repeat vital signs and assess mental status
- Provide supplemental O2 regardless of dyspnea/hypoxia
- Obtain as complete a history as possible (see PEARLS below)
- If seizure protect from environment (Reference M14)
- Assist ventilations with BVM and airway adjunct, as needed
- Initiate early transport to hospital (left lateral recumbent position)

ALS

- Establish IV access
- Monitor respiratory status (with SpO2 and ETCO2) closely
- If SBP < 90 mmHg:
    - Administer 0.9% Sodium Chloride 500 mL and repeat to max 20mg/kg if no signs of pulmonary edema
- If signs of pre-eclampsia: (hypertension, headache, vision changes, right upper quadrant abdominal pain, peripheral edema, dark urine)
    - Transport to closest obstetrical receiving facility
- If seizure (eclampsia):
    - Magnesium Sulfate 4 g IV over 10 minutes
    - Benzodiazepine
        - Midazolam 2.5 mg IV/IO, repeat every 5 minutes to max 10 mg if seizure continues ***or***
        - Midazolam 5 mg intranasal (IV/IO preferred for additional doses due to need for Magnesium)
    - Transport to closest facility if seizure not controlled

- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Consult OLMC for initiation of Magnesium Sulfate prior to seizing patients presenting with severe hypertension and other signs of pre-eclampsia

PEARLS

• Pre-eclampsia/eclampsia (seizures)
  o Disease of unknown origin
  o Usually occurs after the 20th week of gestation
  o May occur up to two weeks' post-partum
• Consider other underlying etiology such as hypoglycemia, drug overdose, head injury or fever/infection

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M11 Obstetrical Emergencies

MEDICAL

MEDICAL

Goals of Care

- Early recognition and management of obstetrical emergencies.

BLS

- Anticipate need for body substance isolation precautions.
- Obtain appropriate history including gravidity, parity, length of gestation, estimated date of delivery, prior C-sections/complications, prenatal care, maternal medical history, and any indication of "High-Risk" classification by physician.
- Assess for presence of contractions, length of time between contractions, presence/absence of membrane rupture, and presence/absence of vaginal bleeding.
- Visual inspection of perineum is mandatory if contractions are present and regular in an obviously pregnant female to determine if delivery is imminent (i.e. crowning). If delivery is imminent, prepare for and assist with delivery per clinical procedure (Reference CP19)
- If in active labor, but not crowning, initiate rapid transport to closest obstetrical receiving hospital.

Abnormal Presentation / Emergencies:

- **Prolapsed Umbilical Cord**
  - Elevate patient's hips, place in shock (Trendelenberg) or knee-chest position in order to relieve pressure on the cord, and do not encourage pushing during contractions
  - Elevate the presenting fetal part to relieve pressure on the cord using a gloved hand inserted into the vagina.
  - Do not attempt to reposition the cord. The cord may spontaneously retract, depending on the degree of prolapse, but should never be manually replaced/pushed back in because severe compression may occur.
  - The cord should be gently wrapped in moist gauze
  - Maintain hand position and expedite transport—**prolapsed cord is an emergency**!
- **Breech Presentation**
  - Place patient in knee-chest position
  - Expedite transport
- **Failure of baby to deliver fully:**
  - Hyperflex hips, apply mild suprapubic pressure
  - Trial push with patient in all 4's position
  - If not delivered in 1-2 min with above, Expedite transport to closest OB receiving hospital.

ALS

- Initiate IV 0.9% Sodium Chloride (KVO). If systolic blood pressure is less than 100, administer 250 mL bolus and titrate to patient's hemodynamic status.

OLMC

- Consult OLMC Physician as needed

PEARLS
• Primary role for EMS is to determine whether the delivery will occur on scene. • Digital vaginal exams are NOT to be performed unless providing a critical intervention during the birthing process as listed above. • Patients with history of multiple births will typically progress quicker through labor. • If presenting part is an extremity, anticipate difficult delivery and expedite transport.

Quality Measures
• Pending

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

MEDICAL

MEDICAL

M12 Poisoning and Overdose

Goals of Care
• Recognize common toxidromes and withdrawal syndromes and initiate appropriate care.

BLS
• Search for causes and/or clues at the scene • Avoid exposure to EMS personnel and consider fire/hazmat response as indicated • Obtain baseline and repeat vital signs and assess mental status • If evidence of dyspnea or altered mental status provide supplemental O2 • Consider behavioral/psychiatric issue or seizure as alternate cause of symptoms (Reference M3, M14) • Provide ventilation assistance with BVM and airway adjunct if needed • Ensure receiving hospital is notified if decontamination will be required

ALS

- Establish IV access
- If SBP < 90 mmHg, significant tachycardia, altered mental status, or hyperthermia:
  - 0.9% Sodium Chloride 500 mL, repeat to goal of SBP > 90 if no evidence of pulmonary edema
- Measure blood glucose level and treat as needed (Reference M5)
- Evaluate for toxidrome or withdrawal/medication reaction syndrome and treat as needed (Reference CT21):
  - Sympathomimetic: Supportive care, if agitated/violent Reference M3
  - Opiate/Sedative (not in cardiac arrest):
    - Naloxone 0.4 mg IV, may repeat to maximum 4 mg, as needed **OR**
    - Naloxone 2 mg intranasal, may repeat one time in 3 minutes as needed
  - Cholinergic:
    - Atropine 2 mg IV, repeat every 2 minutes until secretions dry
    - Consult OLMC for NAAK (Duodote kit) authorization
    - If seizing Reference M14
  - Anticholinergic: Supportive care, if agitated/violent (Reference M3)
  - Opiate/benzodiazepine/alcohol withdrawal
    - If HR >120 or SBP > 140 mmHg, may give Midazolam 2.5 mg IV may repeat once after 5 minutes if needed
  - Acute dystonic reaction (psychiatric/nausea meds)
    - Diphenhydramine 50 mg IV
    - Midazolam 2.5 mg IV, may repeat once after 5 minutes if needed
  - Oleoresin Capsicum (OC)/Pepper Spray
    - Remove contaminated clothing/contact lenses and flush copiously

- Assess and treat cardiac dysrhythmias as needed (reference C2, C3)
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Organophosphates:
  - Authorization to use Duodote kits
- Anticholinergics (with widened QRS):
  - Diphenhydramine and other antihistamines = Sodium Bicarbonate 1 mEq/kg IV
- Miscellaneous:
  - Tricyclic antidepressants (with widened QRS) = Sodium Bicarbonate 1 mEq/kg IV.

PEARLS

- None

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- www.rightdiagnosis.com/c/chemical_poisoning_pepper_spray

MEDICAL

M13 Acute Pain Management

MEDICAL

Goals of Care

- Provide reasonable and safe pain management.

BLS

- Obtain baseline and repeat vital signs including pain scores (may use the Wong-Baker Faces scale for patients unable to give a number)
- Allow patient to assume position of comfort unless spinal motion restriction or splinting is required
- Treat specific injuries as needed with splinting/immobilization/cold pack (Reference T1)
- Refer to appropriate protocol for underlying cause

ALS

- Establish IV access
- Monitor EtCO2 and SpO2
- Administer Fentanyl:
  - 1 mcg/kg IV or IO to a maximum single dose of 100 mcg. May repeat every 10 minutes to a maximum combined total dose of 3 mcg/kg
  - 1 mcg/kg intranasal to a maximum single dose of 100 mcg (max 1 mL per nare/side). May repeat every 5 minutes to a maximum combined total dose of 3 mcg/kg
- If nauseated and/or vomiting because of an opioid administration, administer:
  - Ondansetron 4 mg slow IVP over at least two (2) minutes or IM ***or***
  - Ondansetron ODT 4 mg orally
  - May repeat either option once in 15 minutes as needed
- Refer to appropriate protocol for underlying cause

OLMC

- Consult OLMC Physician as needed

PEARLS

- The objective of pain management is not the complete removal of pain, but rather to make the pain tolerable
- Respiratory depression and apnea can occur without warning. This is more frequent in the geriatric population. Clinicians should consider reducing their initial dose to 0.5 mcg/kg maximum 50 mcg for elderly or frail patients.
- Note that the maximum Fentanyl intranasal single dose is limited to 100 mcg or 1 mL per side and the dose is not doubled as in other intranasal medications due to limitations on the amount of fluid able to be absorbed across mucosa at one time. Frequency of dosing is increased to every 5 minutes to ensure adequate pain management when using the

intranasal route. OLMC consult is still required for cumulative doses > 3 mcg/kg.
- The co-administration of opioids and benzodiazepines should be avoided as it increases the risk of adverse events (e.g. respiratory depression)

QUALITY MEASURES

1. Pain scores recorded before and after administration of medication
2. EtCO2 documented after each dose
3. OLMC contacted if > 3 mcg/kg dose
4. Benzodiazepine not administered with opiate unless for intubation
5. Waste documented appropriately

REFERENCES

- http://www.teleflex.com/en/usa/productAreas/ems/documents/AN_ATM_MAD-Nasal-Usage_Guide_AI_2012-1528.pdf
- http://wongbakerfaces.org/
- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm518110.htm

MEDICAL

MEDICAL

M14 Seizures

MEDICAL

Goals of Care

- Protect actively seizing patients, address reversible causes, and control seizure activity.

BLS

- Obtain baseline and repeat vital signs and assess mental status
- If seizing:
  - Protect patient from injury if actively seizing
  - Provide supplemental Oxygen at 15L via non-rebreather mask
  - May assist with administration of patient's own seizure medication (e.g. Diastat)
- If post-ictal:
  - Provide supplemental Oxygen at 15L via non-rebreather mask
  - Suction as needed
  - Consider need for Spinal Motion Restriction (Reference CP8, CT17)
- Assist ventilations with (BVM) device and airway adjunct if needed
- Consider hypoglycemia as reversible cause of seizure (Reference M5)
- Consider trauma as cause of seizure (Reference T1)

ALS

- Initiate IV access if able to do so rapidly (if delay give first dose intranasal!)
- If actively seizing:
  - Midazolam 2.5 mg IV/IO, repeat every 5 minutes to max 10mg if seizure continues or
  - Midazolam 5 mg intranasal, repeat once in 5 minutes if seizure continues

- Safety alert—SpO2 and ETCO2 monitoring mandatory after midazolam
- Measure blood glucose level and treat as needed (Reference M5)
- Consider other causes of seizure (trauma, overdose/withdrawal, eclampsia, etc.) (Reference T1, M12, M10)
- Perform endotracheal intubation as needed (Reference CT1)

OLMC

- Additional Midazolam doses
- Administration of medication for atypical seizures

PEARLS

- Request Law Enforcement for any patient who was driving prior to a seizure

QUALITY MEASURES

1. Pain scores recorded before and after administration of medication
2. EtCO2 documented after each dose
3. OLMC contacted if > 3 mcg/kg dose
4. Benzodiazepine not administered with opiate unless for intubation
5. Waste documented appropriately

REFERENCES

- http://www.teleflex.com/en/usa/productAreas/ems/documents/AN_ATM_MAD-Nasal-Usage_Guide_AI_2012-1528.pdf
- http://wongbakerfaces.org/
- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm518110.htm

MEDICAL

M16 Suspected Sepsis

MEDICAL

MEDICAL

Goals of Care

- Early recognition and aggressive treatment of suspected sepsis.

BLS

- Place in shock position if SBP < 90 mmHg
- Provide ventilation assistance with BVM and airway adjunct as needed
- Assess for and document suspicion/evidence of infection

ALS

- Evaluate for evidence of physiologic response to infection:
  - HR > 100
  - RR > 20 or EtCO2 ≤ 30
  - SBP < 90 or capillary refill > 4 seconds or mottled skin
  - Decreased Mental Status/acute confusion or GCS ≤ 12
- If suspected infection and ≥ 2 of above, declare Sepsis Alert, notify receiving hospital, and initiate early emergency transport
- Establish intravenous access and initiate fluid resuscitation
  - Initial bolus 500 mL 0.9% Sodium Chloride
  - If no evidence of pulmonary edema and above criteria have not improved, continue repeat 500 mL boluses until arrival at hospital or a maximum of 20 mL/kg reached
- If SBP remains < 90 mmHg after initial 500 mL bolus, add vasopressor support (Reference CT15):
  - Initiate Norepinephrine at 1 mcg/min
    - Mix 4 mg Norepinephrine in 1 L 0.9% Sodium Chloride, start at 15 drops per minute using the Stat 2 Pumpette 60 gtt set
    - Norepinephrine may only be administered via 18 Gauge or larger IV in the Antecubital Fossa or IO.

  - Titrate by 1mcg/min every 1 minute to SBP > 90 or max rate of 10 mcg/min
- Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
- Obtain 12-lead ECG
- Measure and treat blood glucose level as needed (Reference M5)

OLMC

- Consult OLMC Physician as needed

PEARLS

- Changes in respiratory rate/depth and mental status will be the first physiologic signs visible with occult shock.
- EMS clinicians can have the greatest impact on the mortality of septic patients by focusing on early recognition and aggressive resuscitation, and by notifying our hospital partners of the suspicion of sepsis.
- IMPORTANT — IF YOU SUSPECT IV INFILTRATED WITH NOREPINEPHRINE:
    - RELAY THE FOLLOWING TO THE RECEIVING HOSPITAL: Antidote for Extravasation Ischemia: To prevent sloughing and necrosis in areas in which extravasation has taken place, the area should be infiltrated as soon as possible with 10 mL to 15 mL of saline solution containing from 5 mg to 10 mg of Regitine® (brand of Phentolamine), an adrenergic blocking agent. A syringe with a fine hypodermic needle should be used, with the solution being infiltrated liberally throughout the area, which is easily identified by its cold, hard, and pallid appearance. Sympathetic blockade with Phentolamine causes immediate and conspicuous local hyperemic changes if the area is infiltrated within 12 hours. Therefore, Phentolamine should be given as soon as possible after the extravasation is noted.

Quality Measures

1. Pending

References

- https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=c4de72a8-2a75-4984-ce90-e4870226dc12
- http://www.cdc.gov/sepsis/clinicaltools/index.html
- https://www.acep.org/DART/
- http://survivingsepsis.org/Guidelines/Documents/Hemodynamic%20Support%20Table.pdf

MEDICAL

T1 General Trauma Care

TRAUMA

Goals of Care

- Accurate assessment, appropriate stabilization, and rapid transport to definitive care

BLS

- Perform Primary Trauma Assessment (ABCDE) and implement initial treatments as needed:
  - Open Airway (BLS maneuvers), provide oxygen and assist ventilations at 12 breaths per minute with bag-valve-mask (BVM) device and appropriate airway adjunct
  - Control hemorrhage with direct pressure followed by appropriate device or procedure when indicated – Reference CP16 and CP24
  - Seal chest wounds – Reference CP23
  - Assess neurologic function and implement SMR as indicated – Reference CP8
  - Expose patient and protect from environment
- Assess trauma transport criteria, Declare "Trauma Alert" if indicated - Reference CT12

Initiate rapid transport to appropriate facility – Reference CS5 and CS20

- Perform Secondary Trauma Assessment (head-to-toe physical exam on exposed skin)
- Implement additional appropriate stabilizing care – Reference T5, T9 – T11
  - Stabilize impaled objects in place – DO NOT REMOVE
  - Stabilize Flail Chest Segments
  - Dress wounds - Moist Sterile for Eviscerations, Dry and clean for Burns
  - Amputated body parts – Moist sterile inner packaging, ice/cold pack outer packaging
- Splint Fractures and Dislocations and document distal motor function, circulation, and sensation before and after; Elevate and apply cold packs when practical

ALS

- Except in cases of delayed transport (e.g. entrapment), the only ALS interventions allowed prior to transport are CP1 Airway Management if BLS maneuvers fail, and CP10 Needle Thoracostomy as part of a paramedic level Primary Trauma Assessment and Treatment
- Maintain ETCO2 of 35-45 mmHg. (Hyperventilation to 30-35 mmHg allowed ONLY with signs of ACTIVE herniation – see PEARLS next page)
- Establish IV/IO Access and initiate Fluid Resuscitation with 0.9% Sodium Chloride in 500 mL increments to target and maximum as indicated:
  - Major/Multi-System Trauma – systolic blood pressure (SBP) greater than or equal to 90 mmHg or palpable radial pulse (maximum of 2 L)
  - Major Head Injury - SBP greater than or equal to 110 mmHg (maximum of 2 L)
  - Burns – Bolus 20 mL/kg (maximum of 2L)
- Implement appropriate pain management – Reference M13

TRAUMA

- Assess patient for underlying or co-morbid medical conditions
- Repeat Primary Trauma Assessment (ABCDE) after treatments and frequently during transport

OLMC

- Consult Online Medical Control Physician as needed and for:
  - Replant services – Reference CS15
  - Crush and Compartment Syndrome management

PEARLS

- Treatment Strategy Considerations:
  - In major trauma, excess use of fluids may increase bleeding. However, patients with major head injuries/traumatic brain injuries (TBI) require a higher SBP to support cerebral perfusion and burn patients require replacement of massive fluid losses; Be sure to follow guideline
  - In TBI, single short episodes of SBP less than 90 mmHg, SaO2 less than 90 %, and ETCO2 less than 35 mmHg all independently increase mortality. Consider using an Extraglottic airway device to avoid apneic time associated with endotracheal intubation and be diligent to avoid hyperventilation except with signs of active herniation and then only to a goal of 30 mmHg.
  - Signs of active herniation include rapid decrease in level of consciousness leading to coma, development of unequal pupils or non-reactive pupils, onset of seizure or posturing, and deteriorating vital signs consistent with Cushing's Response
  - Prevent hypothermia. Trauma patients who become hypothermic have increased mortality
- Refer to CS 21 for alterations in standard of care during Major Incidents with Ongoing Threats (e.g. Active Shooter Response)

Quality Measures

1. Scene Time less than 10 minutes (Sunstar) or Trauma Alert time less than 5 min (FD)
2. Oxygen delivered
3. IV Established
4. Trauma Alert Called if Indicated
5. SMR employed (Track/Trend only)

References

- National Association of Emergency Medical Technicians, Pre-hospital Trauma Life Support Committee. American College of Surgeons, Committee on Trauma. (2016). PHTLS: Prehospital Trauma Life Support (8th ed.). Burlington, MA: Jones & Bartlett Learning.
- Committee for Tactical Emergency Casualty Care. (June, 2015). Tactical Emergency Casualty Care (TECC) Guidelines. Retrieved 6/28/2016 from http://www.c-tecc.org/images/content/TECC_Guidelines_-_JUNE_2015_update.pdf

T2 Traumatic Cardiac Arrest

TRAUMA

Goals of Care

- Quality CPR, treat reversible causes, and rapid transport to nearest hospital ER

BLS

- Perform Primary Trauma Assessment (ABCDE) and implement initial treatments as needed:
  - Open Airway (BLS maneuvers), provide oxygen and assist ventilations at 12 breaths per minute with bag-valve-mask (BVM) device and appropriate airway adjunct
  - Initiate chest compressions
  - Control hemorrhage with direct pressure followed by appropriate device or procedure when indicated – Reference CP16 and CP24
  - Seal chest wounds – Reference CP23
  - Implement SMR as indicated – Reference CP8
  - Expose patient and protect from environment
- Declare "Trauma Alert" - Reference CT12

Initiate rapid transport to closest facility – Reference CS5 and CS20

- Notify Receiving Facility as soon as possible

ALS

- Ensure airway control – Reference CP1 and CP6
- Perform bilateral Needle Thoracostomy if any evidence of chest trauma – Reference CP10
- Establish IV/IO Access and initiate Fluid Resuscitation with 2 L - 0.9% Sodium Chloride
- Assess patient for underlying or co-morbid medical conditions and initiate appropriate pharmacologic and electrical ACLS treatment as per C5
- Repeat Primary Trauma Assessment (ABCDE) after treatments and frequently during transport

OLMC

- Consult Online Medical Control Physician as needed

TRAUMA

PEARLS
• Resuscitation must be attempted in all cases unless the patient is confirmed pulseless and apneic on arrival (i.e. no signs of life) **and** meets the specific criteria listed in CS7 • EMS Providers may elect to perform resuscitative efforts on trauma arrest patients for a variety of reasons, including scene safety concerns, even though the patient meets criteria for withholding resuscitative efforts • ACLS is secondary to addressing reversible causes in traumatic arrest • A Traumatic Cardiac Arrest patient should be transported to a hospital based ER. • Refer to CS 21 for alterations in standard of care during Major Incidents with Ongoing Threats (e.g. Active Shooter Response)

TRAUMA

T3 Electrocution/Lightning Strike

TRAUMA

Goals of Care

- Rapidly assess and intervene to resuscitate victims of electrocution and understand that these patients often survive initial cardiac arrest.

BLS

- If in cardiac arrest, initiate CPR (Reference C5)
- Assess neurologic function and implement SMR as indicated (Reference CP8)
- Manage burn injuries as needed (Reference T10)

ALS

- If in cardiac arrest provide cardiac arrest care (Reference C5)
- If in cardiac arrest **or** evidence of significant electrical burns, initiate fluid resuscitation
  - 500 mL 0.9% Normal Saline bolus
  - If no evidence of pulmonary edema, repeat to max of 2 L
- If ***NOT*** in cardiac arrest:
  - Establish IV access
  - Assess for and treat cardiac dysrhythmias (Reference C2, C3)
  - Obtain 12-Lead ECG
  - Provide seizure control as needed (Reference M14)
  - Provide Pain Management as needed (Reference M13)
  - Perform Airway Management as indicated (Reference CP1)
  - Consider need for Trauma Center and/or Burn Center (Reference CT12 and T10)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Lightning strike victims found in cardiac arrest should be considered among our most salvageable patients and every effort should be made at resuscitation!
  - Although burn injuries in lightning patients often look severe, there may be very little internal damage due to current conduction superficially along wet skin and clothes.
  - Electrical shock may cause tetany, seizure, or muscle paralysis including of the diaphragm and pupils. Evidence of respiratory effort and pupillary response are unreliable!
- Large electrical burns may cause electrolyte disturbances such as hyperkalemia.

Quality Measures

- Pending

References

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

T4 Eye Injury

TRAUMA

Goals of Care

- Accurate assessment of ocular trauma, prevention of further injury, and safe pain management.

BLS

- Collect information regarding mechanism of injury or type of exposure
- Assess for pain, loss of vision and eye muscle function (side-to-side and up-and-down eye motion)
- Encourage and assist patient to remove contact lenses if possible
- If surface foreign body or chemical exposure is suspected, initiate continuous irrigation with Sterile Water
- If impaled object is present, DO NOT remove it. Secure as noted. Transport patient in upright position if possible
  - Place roll gauze on either side of impaled object to stabilize the object
  - Shape an aluminum splint in the shape of a cone over impaled object without touching the impaled object, but rest upon the roll gauze
  - Secure in place with wrapping of gauze
  - ***DO NOT*** secure bandage over the top of the splint
  - Patch/bandage the uninjured eye to reduce eye movement

ALS

- Tetracaine 0.5% - 1 - 2 drops to affected eye. May repeat one time in 5-10 minutes

- Begin irrigation immediately for exposure to foreign substance with 0.9% Sodium Chloride using 1 to 2 liters. (May use nasal cannula on bridge of nose)
- Establish IV access
- Provide further pain management as needed (Reference M13)

OLMC

- Consult Online Medical Control Physician as needed

PEARLS

- The over use of Tetracaine can cause severe corneal damage and/or blindness. Do not allow patient to keep the bottle.

QUALITY MEASURES

- Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

TRAUMA

TRAUMA

T5 Bites and Stings

Goals of Care

- Recognize specific types of envenomation and provided appropriate supportive care and pain management.

BLS

- Stingray:
  - Control any active bleeding with pressure over wound
  - Apply hot pack to wound, or if available submerge injured extremity in hot water
  - Assess for remnants of barb remaining in wound (DO NOT remove)
  - Clean and dress wound appropriately

- Jellyfish/Man-o-War:
  - AVOID SELF-CONTAMINATION
  - Remove stinging cells by scraping with rigid edge (i.e. credit card)
  - Rinse thoroughly with seawater or 0.9% Sodium Chloride IV fluid
  - Apply copious amounts of rubbing alcohol

- Snakebites:
  - Attempt to identify species of snake (DO NOT attempt to capture/kill)
  - Remove all constricting clothing/jewelry from affected extremity
  - Mark area of envenomation to track progression
  - Maintain affected extremity at or below level of heart
  - Splint affected extremity in neutral position

- Insect Stings:
  - Attempt to identify species of insect, if possible
  - Remove visible stinger via rigid edge (e.g. credit card). DO NOT use tweezers/forceps
  - Apply icepack to injury site

ALS

- Monitor for and treat signs of allergic reaction/anaphylaxis (Reference M2)
- Consider need for pain management (Reference M13)

OLMC

- Consult Online Medical Control Physician if needed.

TRAUMA

PEARLS

- Stingray:
  - Consider adding soap or ammonia to hot water, if available
- Jellyfish/Man-o-War or Insect Stings:
  - Consider applying paste of baking soda or flour and water to wound site, if available
- Snakebites:
  - Do not apply tourniquet or use cold pack
  - If snake is dead/destroyed prior to EMS arrival, transport snake with patient in a closed container, or take a photo of snake

QUALITY MEASURES

- Pending

REFERENCES

- http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

TRAUMA

T6 Burns

Goals of Care

- Assessment of type and extent of burn, initiation of fluid resuscitation and pain management, and transport to appropriate receiving facility.

BLS

- Ensure burning process is stopped
  - Thermal--Remove any sources of heat or burning clothes and cool the area
  - Chemical burns –
    - Consider Hazmat Team consult or response
    - If able to do so safely, brush off chemical and flush copiously with water
- Cover the burns with a clean dry dressing and keep the patient warm
- Monitor the patient's airway closely and provide ventilation assistance with BVM and airway adjunct as needed
- Assess burn extent and determine appropriate destination:
  - For a 2nd and/or 3rd degree burn with a total body surface area (TBSA) greater than 15%, along with multi system trauma, declare trauma alert and transport to the closest trauma center unless the Burn Center at Tampa General Hospital is closer or equal distance by ground or air
  - Any 2nd and/or 3rd degree burns to high risk areas, such as the face/airway, hands, feet, perineum or circumferential burns to the chest or extremities, transport to the Burn Center at Tampa General Hospital
  - For an isolated 2nd and/or 3rd degree burn with a total body surface area (TBSA) greater than 15%, declare trauma alert and transport to the Burn Center at Tampa General Hospital
- Evaluate for blast injury or other associated trauma (Reference T1)

ALS

- Establish IV access
- Monitor respiratory status closely with SpO2 and ETCO2
- Perform endotracheal intubation as needed (Reference CP1)
  - Be prepared for immediate airway intervention if there are signs of airway burn and/or edema
- 0.9% normal saline 500mL, repeat to 20 mL/kg (max 2 liters) if no evidence of pulmonary edema
- Provide appropriate pain management (Reference M13)
- Consider Cyanokit treatment (Reference A5)
- Consider CO treatment (Reference A4)
- Evaluate and treat cardiac dysrhythmias (Reference C2 C3)
- Obtain 12-lead ECG

OLMC
• Consult Online Medical Control Physician if needed.

PEARLS
• None

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

TRAUMA

TRAUMA

T7 Barotrauma/Diving Injuries

Goals of Care
• Recognize possible barotrauma/diving injuries and initiate appropriate care.

BLS

• Obtain baseline and repeat vital signs and assess mental status
• Administer O2, 15 L via non-rebreather mask
• Provide ventilation assistance with BVM and airway adjunct as needed.
• Obtain and document a thorough dive history
  o Maximum depth and length of dives
  o Number of dives in the last 48 hours
  o Any air travel in last 24 hours
  o Type of compressed air (Oxygen, Helium, Nitrogen, Argon)
  o Was there a rapid ascent or any other emergencies under water
• Assess for and treat other traumatic injuries (Reference T1)
• Remove wet clothes, keep the patient warm

ALS
• Establish IV access • Monitor respiratory status closely with SpO2 and EtCO2, ensure high flow O2 • Perform endotracheal intubation as needed (Reference CP1) • 0.9% Sodium Chloride 500 mL, repeat to 20 mL/kg (max 2 liters) if no evidence of pulmonary edema • Provide appropriate pain management (Reference M13) • Evaluate and treat cardiac dysrhythmias (Reference C2, C3) • Obtain 12-lead ECG (concern for gas embolism in coronary artery→MI) • Aspirin 324 mg by mouth • Treat nausea and vomiting as needed (Reference M1)

OLMC
• Consult Online Medical Control Physician if needed.

TRAUMA

TRAUMA

TRAUMA

PEARLS

- Signs and symptoms can occur during dive and up to 48 hours afterwards
- Barotrauma
  - Pneumothorax, Mediastinal Emphysema – pain, dyspnea, decreased of absent lung sounds. Breath holding on ascent, even for 6 – 10 feet may cause.
  - Ears - ruptured ear drum, vertigo, ringing in the ears (tinnitus), partial deafness, nausea/vomiting
- Decompression sickness
  - "The bends " Gas embolisms – symptoms depend on location of bubble blocking blood flow (joint pain, headache, vision change, stroke, PE, MI)
- Bring the patients diving gear if possible
- May contact DAN (Divers Alert Network) 919-684-9111 in consultation with OLMC-Regional hyperbaric chambers:
  - Florida Hospital in Orlando (1-800-824-0085)
  - Lee Memorial Hospital in Ft Myers (239-343-0454)
    - Note: Lee Memorial is emergent use but for stable, non-intubated, and patients not on drips

QUALITY MEASURES

1. Pending

REFERENCES

- http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

TRAUMA

P1 Universal Approach to Patient Care

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Every patient will be provided a professional, complete and accurate assessment, all indicated treatment and transport to the appropriate facility
- Proceed to the appropriate protocol for the patient's condition
- Approach all patients with a high level of suspicion for injury or illness
- Bring all appropriate equipment to the patient's side
- Transport to the appropriate facility as per the destination protocol
- Provide appropriate and accurate pre-arrival notification and bedside report to the receiving facility
- Provide receiving facility with completed hardcopy patient care report prior to departure

BLS

- Bring all equipment that you anticipate needing (e.g. suction, Handtevy Pediatric Bag, etc.)
- Employ "Universal Precautions" infection control measures on every patient
- Use the Handtevy Pediatric length based tape for age/weight estimation unless caregivers can provide a recent accurate age/weight
- Obtain baseline and repeat set of vitals (including at a minimum systolic blood pressure, pulse, respiratory rate, GCS measured at least 4 minutes apart)
- Obtain baseline and repeat pain/distress levels (document with vital signs)
- Perform full assessment (history, exam, diagnostic testing) appropriate to the patient's condition and/or complaint
- If the patient has evidence of dyspnea, apply supplemental O2
- Provide ventilation assistance (BVM and airway adjunct) as needed
- An appropriate patient restraint device MUST be used (i.e. PEDIMATE, car seat), for all patients who are not transported in SMR. Patients are not to be transported in the arms of a caregiver!!
- Complete appropriate patient care documentation (Reference CS10):
  - Chief Complaint, Past history, medications, allergies
  - Baseline and repeat vital signs and pain/distress levels
  - All assessments and interventions (Reference Quality Measures below)
  - Narrative (Reference CS18)

ALS

- If the patient SpO2 <94% or has evidence of dyspnea apply supplemental O2
- Cardiac monitoring:
  - Continuous cardiac monitoring should occur from initial ECG monitoring until care is complete
  - Continuous cardiac monitoring should not be interrupted for routine patient movement or uploading data (e.g. entering data management mode)
- IV or IO access should be established in all patients that are unstable, potentially unstable or require IV medication administration

PEDIATRIC SPECIFIC

- All medications, fluids and electrical therapy shall be dosed according to the current version of the Pinellas County EMS Handtevy Medication Guidebook.
- All medical equipment will be sized according to the established Pinellas County EMS Handtevy Pediatric Bag inventory.
- Intubation should be attempted only when bag-valve-mask (BVM) device ventilation with airway adjuncts is ineffective
- Interventions as appropriate for patient condition and authorized by protocol or OLMC

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Vital signs include heart rate, respiratory rate, central capillary refill time (chest or abdomen) for a pediatric patient
- Every effort should be made to obtain a blood pressure in a patient less than 3 years old, even though it may be difficult. It may be deferred to avoid further agitation of the patient.
- Scene Safety – maintain situational awareness at all times
- Determine number of patient's – triage via START/JumpSTART
- Call early for additional resources as needed

QUALITY MEASURES

- Two sets of vital signs and at least 1 GCS recorded
- SpO2 measured and if <94% was O2 administered
- At least one Pain Scale documented if GCS=15
- Chief Complaint documented
- Medical history, medications, and allergies of the patient documented

REFERENCES

- Pinellas County EMS Medical Quality Management Plan 2016 V1.0 Effective January 6 2016
- http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

P2 Altered Mental Status

PEDIATRIC SPECIFIC

Goals of Care

- Recognize altered mental status in the pediatric patient, provide appropriate stabilizing/supportive care, and search for potential underlying causes.

BLS

- Maintain cervical spine if trauma is known or suspected and immobilize per protocol (Reference P17, CP8, CT17)
- Administer Oxygen (O2) minimum 15 L via non-rebreather mask
- Assist ventilations with bag-valve-mask (BVM) device and appropriate airway adjunct, if indicated
- If patient's temperature is high or low and is at risk for heat or cold exposure refer to hypothermia or hyperthermia protocols (Reference P10, P11)

ALS

- Assess for and treat cardiac dysrhythmias (reference P6, P16)
- Determine capillary blood glucose level and treat according to diabetic emergencies protocol (Reference P8)
- Establish intravenous or intraosseous access (intraosseous ONLY if vital signs are unstable, medications or fluids need to be administered, and intravenous access is unable to be established)
- If SBP < minimum for age per Handtevy, evidence of poor capillary refill, or other signs of shock, administer 0.9% Sodium Chloride bolus IV, may repeat once if needed.
- Administer Naloxone for patients with suspected opioid overdose and are unable to protect their own airway and/or has ineffective respirations. May repeat in 3 - 5 minutes if respiratory depression continues
- Consider advanced airway ONLY if patient is unable to protect his own airway and immediately reversible causes have been treated (hypoglycemia, narcotic ingestion, dehydration, seizure management) and ventilations with a bag-valve-mask (BVM) are ineffective

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Altered mental status is an abnormal state in which the child is less alert and interactive than is normal for the patient. It can range from irritability to total unresponsiveness. The caregiver's concern may be vague. Listening to the caregiver's opinion about alteration from a child's norm is key to your assessment
- Accidental ingestion of household products, medication, or a foreign body is very common in young children (especially when they are in a non-child proofed environment). Always consider an accidental ingestion in a pediatric patient with unexplained altered mental status
- Use Naloxone cautiously in an infant patient with a history of maternal drug addiction

QUALITY MEASURES
• Pending

REFERENCES
• http://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

P3 Allergic Reactions and Anaphylaxis

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Reverse allergic reactions and provide early and aggressive treatment of anaphylaxis.

BLS

- Assess for presence and extent of skin changes (rash, hives, swelling etc)
- Assess for signs of severe reaction/anaphylaxis:
  - Mucosal – severe swelling of lips, tongue, or throat
  - Respiratory—severe wheezing, stridor, or respiratory distress
  - Cardiovascular—SBP < 90 mmHg, severe tachycardia, change in mental status
- If severe symptoms and Epinephrine Auto-injector is available, may administer.
- Provide ventilation assistance with BVM and airway adjunct if needed

ALS

- If severe symptoms/anaphylaxis immediately initiate:
  - Epinephrine 1:1000 intramuscular in the mid-anterolateral thigh, may repeat once in 3 – 5 minutes, if needed.
  - Administer 0.9% Sodium Chloride, may repeat once if needed and no evidence of pulmonary edema.
- Diphenhydramine IV/IO or intramuscular
- Methylprednisolone Sodium Succinate IVP
- Albuterol nebulized for wheezing/shortness of breath, may repeat once.
- Obtain 12-lead ECG after any Epinephrine administration
- Perform endotracheal intubation as needed (Reference CP1)

OLMC

- Additional doses of intramuscular Epinephrine 1:1000 (1 mg/mL)
- Epinephrine infusion 1 - 4 mcg/min

PEARLS

- Epinephrine should be the first treatment in patients with severe symptoms/anaphylaxis (e.g. prior to Diphenhydramine and Methylprednisolone Sodium Succinate)

Quality Measures

- Pending

References

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

P4 Apparent Life Threatening Event (ALTE)

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Recognize the presence and significance of an ALTE and search for potential underlying causes.

BLS

- Obtain and document a full history including gestational age and problems during pregnancy/delivery
- Perform full head to toe assessment on bare skin
- Treat any identifiable conditions
- Transport to most appropriate facility

ALS

- Assess for and treat cardiac dysrhythmias (Reference P6, P16)
- Monitor pulse oximetry
- Determine capillary blood glucose level and treat according to diabetic emergencies Protocol (Reference P8)
- Search for any abnormal history/exam findings that may reveal underlying cause of episode
- Refer to appropriate protocol with any findings

OLMC

- Consult OLMC Physician as needed

PEARLS

- ALTE is SERIOUS!
  - 50% of infants with ALTE are found to have an underlying medical condition
  - 1 in 10 infants with ALTE require ICU admission
  - 7% of infants that die of SIDS have a history of ALTE
- Apparent Life Threatening Event (ALTE) is defined as an episode that is frightening to the observer that is characterized by some combination of apnea, color change, marked change in muscle tone, choking, or gagging. Recovery occurs only after stimulation or resuscitation
- Most times the infant's exam and vital signs are normal upon EMS arrival
- Occurs in infants under 1 year of age, but is most common in infants 10 - 12 weeks of age

Quality Measures

- Pending

References

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

P5 Asthma

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Recognize and treat obstructive respiratory pathophysiology in an aggressive and safe manner.

BLS

- Allow the patient to assume position of comfort
- Administer supplemental oxygen
- Assist patient with their own medication, as needed (e.g. Albuterol, Metered Dose Inhaler (MDI), Epinephrine Auto-injector)
- Provide ventilation assistance (BVM with adjunct) if in respiratory failure

ALS

- Aerosol therapy:
  - Albuterol mixed with Ipratropium. May repeat x 1 ***followed by***
  - Albuterol, repeat as needed/continuously
- Administer Methylprednisolone Sodium Succinate slow IVP
- Monitor EtCO2 and SpO2
- Assess cardiac rhythm and treat dysrhythmias (Reference P6, P16)
- Obtain 12-lead ECG
- If no improvement with initial aerosol treatment, may initiate CPAP (Reference CP5) and continue aerosol therapy via T-piece.
- If patient does not improve or is **in extremis at patient contact:**
  - Epinephrine 1:1000 intramuscular in the mid-anterolateral thigh, may repeat once in 3-5 minutes if needed.
- Consider Epinephrine Drip if no improvement (OLMC Required – Reference CT7)
- If patient progresses to respiratory failure, provide ventilation assistance (BVM and adjunct) followed by airway management (Reference CP1) and continue aerosol therapy via T-piece

OLMC

- Additional doses of Epinephrine 1:1000
- Epinephrine Drip (Reference CT7)
- Magnesium Sulfate 2 grams IV over 10 minutes (recommended only in severe patients after exhausting all other available interventions without improvement)

PEDIATRIC SPECIFIC

PEARLS

- Asthma is a deadly disease
- A pediatric patient can tolerate an elevated high heart rate. Do Not let a high heart rate deter you from administering Albuterol
- Do Not attempt invasive airway procedures unless the patient is in respiratory arrest
- Patients with a history of being intubated in the past may deteriorate rapidly
- A silent chest = pre-respiratory arrest
- Remember that our Albuterol is not magic. If the patient has reliably had one or more
- Albuterol treatments (including a properly administered MDI) at home, add adjunct therapies at EMS contact.
- Think of tension pneumothorax if patient decompensates after intubation/CPAP

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/index.asp

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

P6 Bradycardia

Goals of Care

- Recognize and treat primary and secondary bradycardias.

BLS

- If patient has evidence of dyspnea, apply supplemental O2
- Shock position as required
- Begin cardiopulmonary resuscitation if heart rate is < 60 for patient < one (1) year old with poor perfusion, despite adequate oxygenation and ventilation

ALS

- Establish IV/IO access
- Assess cardiac rhythm
- Treat reversible causes (e.g. hypoxia, overdose, etc.) per protocol
- Epinephrine 1:10000 IV/IO. Repeat every 3 -5 minutes as needed.
- Atropine IV/IO if primary AV block, increased vagal tone, or cholinergic drug toxicity (e.g. organophosphates)
- Obtain 12-lead ECG, if it does not delay therapy
- Pace patients with 3rd degree AV block

OLMC

- Consideration for the administration of Sodium Bicarbonate, Calcium Chloride, Dopamine or Norepinephrine to treat reversible causes.

PEARLS

- A pediatric patient is heart rate dependent for their cardiac output because they are
- unable to adjust their stroke volume like an adult patient
- Reversible causes of Bradycardia
  - Hypoxia
  - Hydrogen Ions (acidosis)
  - Hyperkalemia
  - Hypothermia
  - Hypokalemia
  - Hypoglycemia
  - Hypovolemia
  - Toxins/poisons/drugs

QUALITY MEASURES

- Pending

REFERENCES

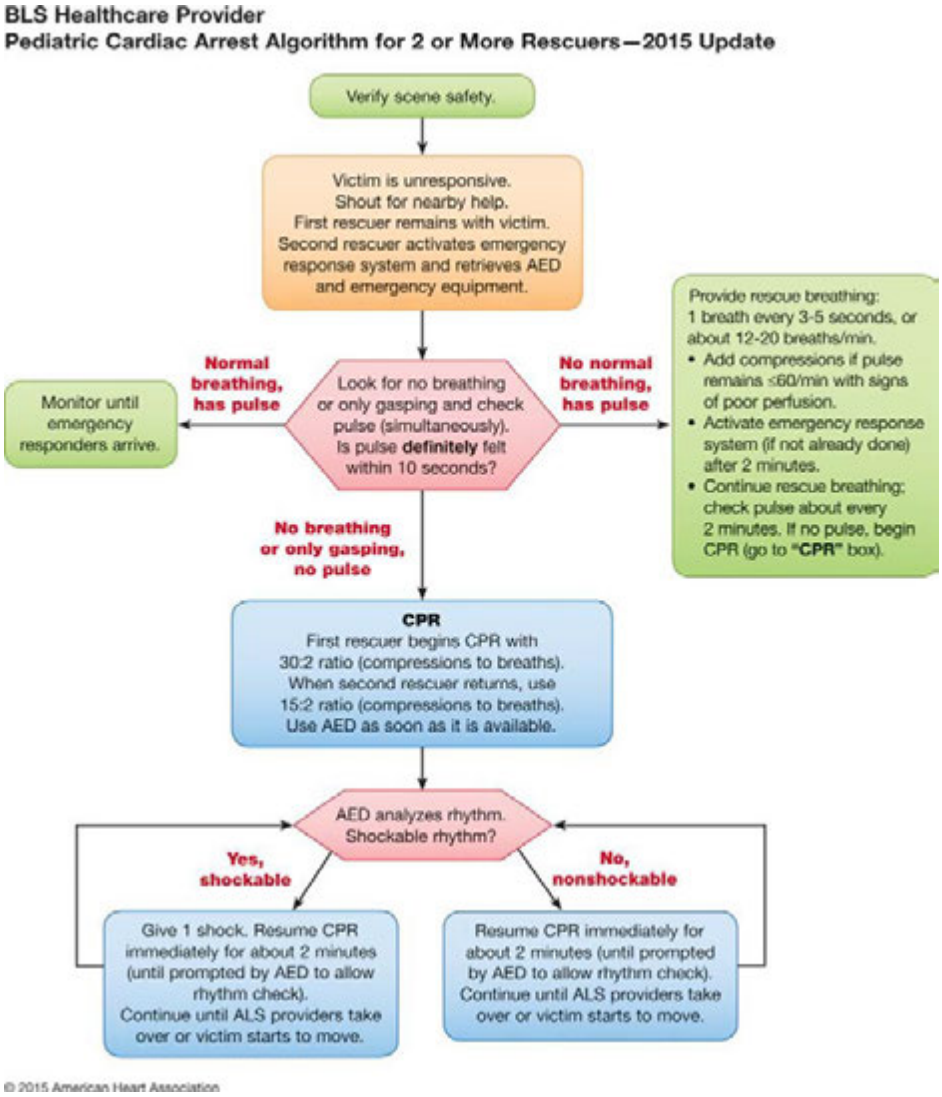
- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/index.asp

P7 Medical Cardiac Arrest (Pediatrics)

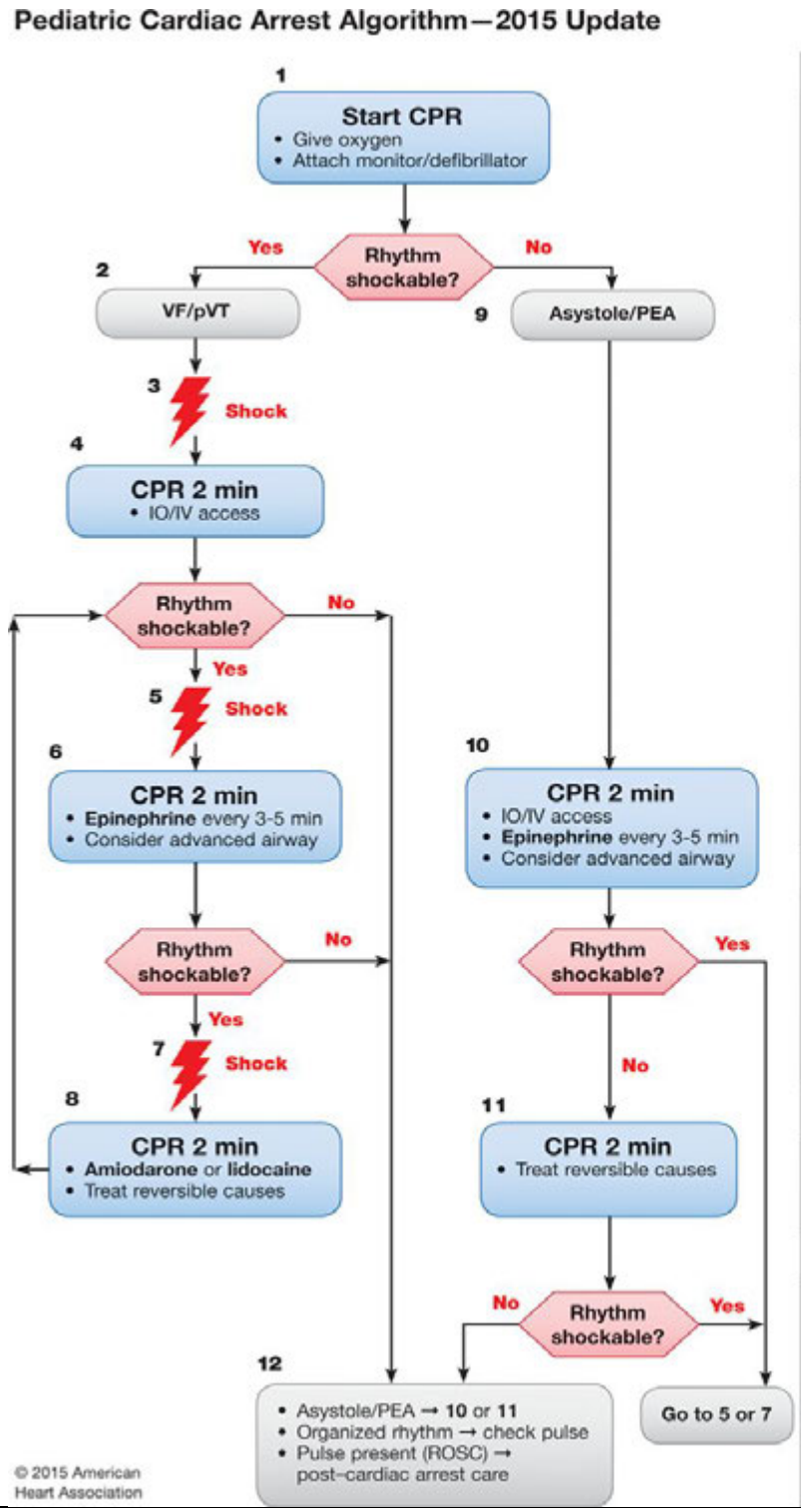
Goals of Care

-

BLS



ALS



OLMC

- Consideration for the administration of Sodium Bicarbonate, Calcium Chloride, Dopamine or Norepinephrine to treat reversible causes.

PEDIATRIC SPECIFIC

PEARLS
• If there are signs of puberty refer to adult cardiac arrest protocol • Hand bore intraosseous (NO DRILL) on children < one (1) year of age • For refractory VF/VT, escalate energy settings to 10 j/Kg after first 3 shocks. • Patients with renal disease/on dialysis should have hyperkalemia considered as a reversible cause.

QUALITY MEASURES
• Pending

REFERENCES
• http://circ.ahajournals.org/content/132/18_suppl_2/S519/tab-figures-data • http://circ.ahajournals.org/content/132/18_suppl_2/S526/tab-figures-data

PEDIATRIC SPECIFIC

P8 Diabetic Emergencies

PEDIATRIC SPECIFIC

Goals of Care

- Rapidly reverse hypoglycemia and provide supportive care to patients experiencing diabetic emergencies.

BLS

- If patient is a known diabetic, conscious and able to protect their own airway and is age appropriate to follow simple directions, administer 15g Oral Glucose or if available, a high sugar drink (e.g. non-diet soda, Gatorade, Powerade, juice, etc.)
- Provide ventilation assistance with BVM and airway adjunct if needed
- If suspected hypoglycemia and patient has an insulin pump, turn it off or disconnect it
- Assess for and treat possible underlying conditions (Hypoxia, overdose, head injury, etc.)

ALS

- Establish IV access
- Determine capillary blood glucose level
- If hypoglycemia (< 45 mg/dL for a neonate or < 60 mg/dL for a patient < 12 years of age) or symptomatic:
  - Oral Glucose if conscious and able to protect their own airway ***or***
  - Dextrose 10% IV ***or***
  - Glucagon intramuscular, if unable to complete either above option
  - Repeat capillary blood glucose level 5 - 10 minutes after treatment and if still < 45 mg/dL for a neonate or < 60 mg/dL for a patient < 12 years of age or symptomatic, repeat treatment once
- If hyperglycemia (> 300 mg/dL):
  - Single 0.9% Sodium Chloride bolus IV
- Assess for and treat possible underlying conditions (e.g. hypoxia, overdose, head injury, etc.)
- Perform endotracheal intubation as needed (Reference CP21)

OLMC

- Requests for utilization of IO access

PEARLS

- A neonate born to a diabetic mother is at extremely high risk for hypoglycemia immediately after birth
- A pediatric patient in diabetic ketoacidosis is a neuro patient. He is at high risk for cerebral edema and herniation. DO NOT allow parents to administer insulin because a rapid drop in blood glucose can cause permanent brain damage or death

PEDIATRIC SPECIFIC

Quality Measures
• Pending

References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

P9 Drowning/Near Drowning/Submersion

Goals of Care

- Rapidly intervene to remove patient from hazard and minimize impact.

BLS

- Consider Spinal Motion Restriction (Reference CP8, CT17)
- Remove wet clothing and keep warm
- Administer O2 minimum 15 L via NRBM
- Suction as needed
- Provide ventilation assistance using BVM and airway adjunct if needed

ALS

- Obtain IV Access
- If bronchospasm Reference P5
- If rales, decreased Sp02, significant dyspnea initiate CPAP (Reference CP5)
  - May continue aerosol therapy with T-piece
- Consider advanced airway only if unable to ventilate effectively with bag-valve-mask (BVM) device
- If respiratory failure, perform endotracheal intubation (Reference CP1)
  - May continue aerosol therapy with T-piece
  - Do not delay ventilation and oxygenation for suctioning of foam
- Place an orogastric tube in a patient who requires assisted ventilations
- Assess and treat cardiac dysrhythmias (Reference P6, P16)
- Obtain 12-lead ECG if able

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- The long spine board currently in the system will float, but will not support a patient
- Be prepared to turn an immobilized patient due to the high occurrence of vomiting
- Drowning alone doesn't meet defined trauma alert criteria
- If return of spontaneous circulation (ROSC) is achieved, transport to a pediatric specialty facility

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

P10 Cold Emergency

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Remove patient from environment then initiate warming and appropriate supportive care.

BLS

- Remove the patient from the cold environment.
- Remove wet clothing and gently dry the skin by patting, not rubbing, with dry towels.
- Initiate rewarming with blankets on top of and underneath the patient; insulate the patient from the ground, backboard/scoop, or stretcher. Apply hot packs in the axilla and groin.

- Minimize movement during transport and consider transport to a burn center if evidence of frostbite

ALS

- Establish IV access
- Determine capillary blood glucose level
- If hypotensive, tachycardic, or altered mental status:
  - Bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL
- Assess cardiac rhythm and treat dysrhythmias as needed (Reference C2, C3)
- Obtain 12-lead ECG
- Consider pain management for frostbite if needed (Reference M13)
- Perform endotracheal intubation as needed (Reference CP1)
- DO NOT pronounce a hypothermic patient deceased. Always transport to the hospital

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- Peripheral IV access may be difficult to establish in a hypothermic patient; IO is acceptable for patients in extremis
- Extended exposure to a patient's environment (e.g. water, air, and ground/floor) even in normal temperatures can cause the loss of body heat
- Hypothermia is an emergency resulting from exposure to cold temperatures. It most often occurs in association with submersions (even in Florida), but may be the result of prolonged exposure to a cold ambient environment.
- Neonates often cannot mount the immune response to be febrile when they have an infection. A low temperature can often be a sign of sepsis.
- Aggressive rewarming in the field can do more harm than good. Hypothermia can be protective of brain function and rapid rewarming can induce arrhythmias
- Hypothermia can cause bradycardia by slowing the sinus node pacemaker or slowing the conduction through the AV node.
- Shivering can increase glucose consumption and lead to hypoglycemia.

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

P11 Hyperthermia/Fever

PEDIATRIC SPECIFIC

Goals of Care

- Remove patient from environment then initiate cooling and appropriate supportive care.

BLS

- Move patient into an area with shade, air conditioning, air movement, etc.
- Remove excessive clothing
- If no altered mental status:
  - Provide oral fluids (e.g. cool water, Gatorade, Pedialyte, etc.) if patient able to tolerate
- If altered mental status (heat stroke):
  - Begin rapid cooling, but avoid inducing shivering
  - Apply ice packs to neck, armpits, and groin
  - May cover patient(s) with cool wet sheets
- Provide ventilation assistance with BVM and airway adjunct as needed

ALS

- Establish IV access
- If nauseated/vomiting:
  - Ondansetron IV/IO slow push (2+ minutes) ***OR***
  - Ondansetron ODT p.o.
  - May repeat once in 15 minutes as needed
- If hypotensive, tachycardic, or altered mental status (heat stroke):
  - Bolus 0.9% Sodium Chloride to max of 2 L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each bolus
- Monitor for seizures and treat per protocol (Reference P15)
- Assess and treat cardiac dysrhythmias as needed (Reference P6, P16)
- Obtain 12-lead ECG
- Perform endotracheal intubation as needed (Reference CP21)

OLMC

- Consult Online Medical Control Physician as needed.

PEARLS

- If the patient starts to shiver, the cooling process should be slowed, as shivering will increase the core temperature of the body
- Heat Stroke is a neurological event and rapid assessment; treatment and transport is essential for good patient outcome
- Fever (temperature greater than 100.4 F or 38 C) is a sign of infection or inflammation rather than a problem itself. It is one way the body fights illness. Fever can make a child

with a minor illness appear worse than they actually are and they will have marked improvement of symptoms once their temperature decreases.

- Due to their immature immune system, neonates are often unable to isolate their infections and they quickly become systemic. Any neonate less than 30 days old with a fever should be transported.
- A pediatric patient can run high a fever (greater than 104 F or 40 C) in response to either a bacterial or viral infection. It can signify something as minor as a cold, or as serious as pneumonia, meningitis, or sepsis.
- A temperature less than 106 F, by itself has not been found to be harmful.
- An increased temperature causes an increased metabolic rate, causing an increased respiratory rate, increased heart rate, increased cardiac output, higher glucose and oxygen utilization.
- Hypoglycemia, hypoxia or dehydration can be caused as a result.
- A patient with an increased core temperature may feel cool to the touch due to the vasoconstriction at the level of the skin. Assess skin temperature in the axillae, forehead, and back of the neck.
- Shivering is caused by muscle contractions and can further increase the patient's temperature.

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

P12 Neonatal Resuscitation

PEDIATRIC SPECIFIC

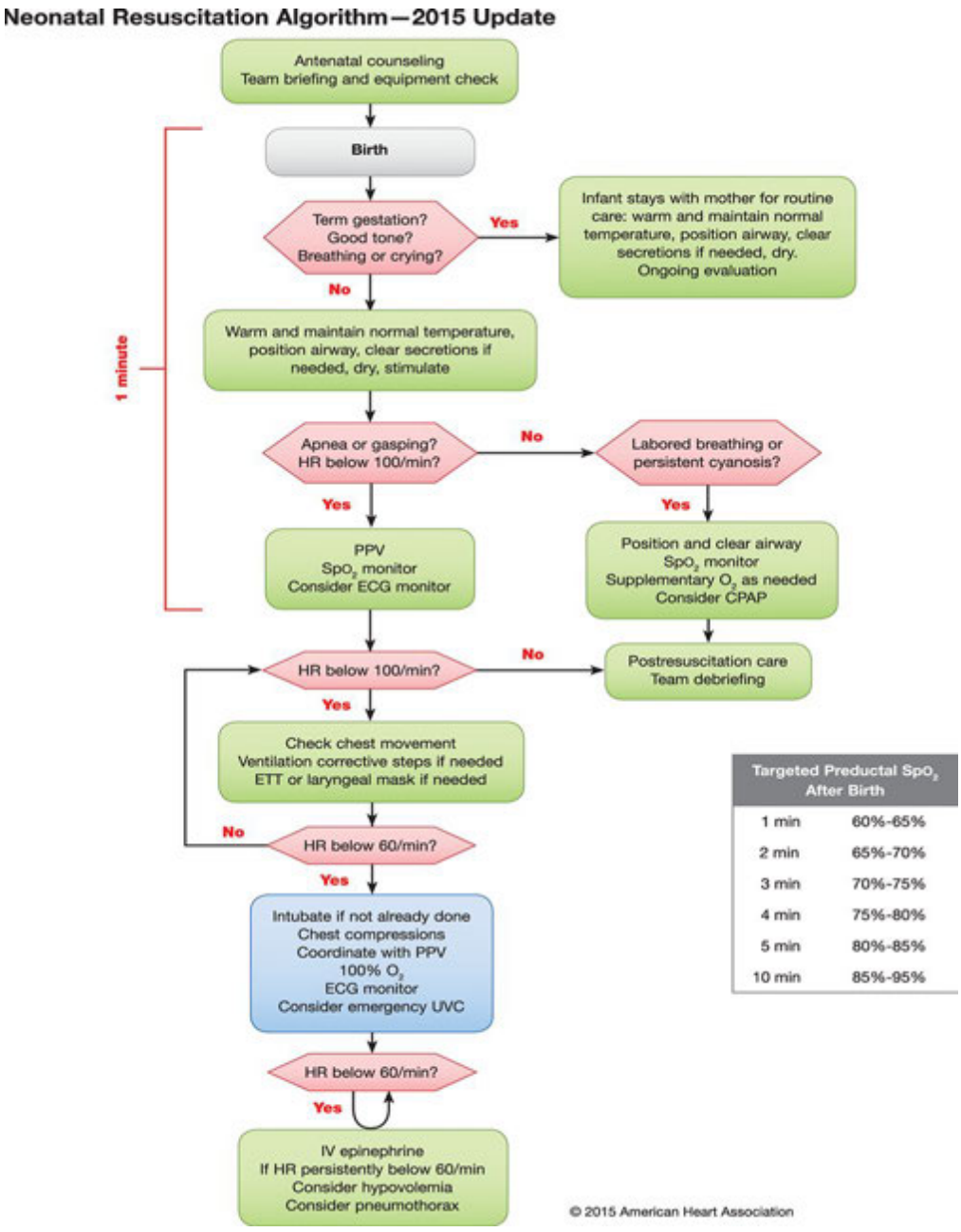
Goals of Care

- Perform agrresive neonatal resuscitation in accordance with 2015 guidelines

BLS

- Stimulate, position and warm

ALS



PEDIATRIC SPECIFIC

OLMC
• Consult Online Medical Control Physician as needed.

PEARLS
• None

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf • http://circ.ahajournals.org/content/132/18_suppl_2/S543 • https://www2.aap.org/NRP/docs/15535_NRP%20Guidelines%20Flyer_English_FINAL.pdf

PEDIATRIC SPECIFIC

P13 Acute Pain Management

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Provide reasonable and safe pain management.

BLS

- Obtain baseline and repeat vital signs including pain scores (may use the Wong-Baker Faces scale for patients unable to give a number)
- Allow patient to assume position of comfort unless spinal motion restriction or splinting is required
- Treat specific injuries as needed with splinting/immobilization/cold pack (Reference P17)
- Refer to appropriate protocol for underlying cause

ALS

- Establish IV access
- Monitor EtCO2 and SpO2
- Administer Fentanyl:
  - IV or IO to a maximum single dose of 100 mcg. May repeat every 10 minutes to a maximum combined total dose of 3 mcg/kg
  - Intranasal to a maximum single dose of 100 mcg (max 1 mL per nare/side). May repeat every 5 minutes to a maximum combined total dose of 3 mcg/kg
- If nauseated and/or vomiting because of an opioid administration, administer:
  - Ondansetron slow IVP over at least two (2) minutes or IM ***or***
  - Ondansetron ODT
  - May repeat either option once in 15 minutes as needed
- Refer to appropriate protocol for underlying cause

OLMC

- Consult OLMC Physician as needed

PEARLS

- The objective of pain management is not the complete removal of pain, but rather to make the pain tolerable
- Note that the maximum Fentanyl intranasal single dose is limited to 100 mcg or 1 mL per side and the dose is not doubled as in other intranasal medications due to limitations on the amount of fluid able to be absorbed across mucosa at one time. Frequency of dosing is increased to every 5 minutes to ensure adequate pain management when using the intranasal route. OLMC consult is still required for cumulative doses > 3 mcg/kg.
- The co-administration of opioids and benzodiazepines should be avoided as it increases the risk of adverse events (e.g. respiratory depression)

PEDIATRIC SPECIFIC

QUALITY MEASURES
1. Pain scores recorded before and after administration of medication 2. EtCO2 documented after each dose 3. OLMC contacted if > 3 mcg/kg dose 4. Benzodiazepine not administered with opiate unless for intubation

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

P14 Post Medical Cardiac Arrest Care

Goals of Care

- Aggressively manage post-arrest cardiogenic shock and ensure transport to appropriate receiving hospital.

BLS

- Assess post-ROSC vital signs and mental status
- Initiate CPR if pulses lost again (Reference CP4)
- Assist ventilations with BVM if needed -- **Avoid Hyperventilation!**
- Transport patient to a pediatric receiving facility

ALS

- Assess cardiac rhythm and treat dysrhythmias as needed (Reference P6, P16)
- Obtain 12-Lead ECG
- If SBP< 90 mmHg:
  - 0.9% Sodium Chloride
  - Dopamine infusion - titrate to achieve SBP > 90 mmHg
- If patient with RONF and apparent discomfort from airway or fighting ventilations, may administer Midazolam IV/IO and Fentanyl IV/IO. May repeat once in 5 minutes if needed.

OLMC

- Additional doses of sedation/pain management
- Norepinephrine infusion 1 – 10 mcg/min (reference CT15)

PEARLS

- Aggressive post cardiac care is essential to ensure continued perfusion of vital organs and to maximize outcomes.

QUALITY MEASURES

- Pending

REFERENCES

- Pending

PEDIATRIC SPECIFIC

P15 Seizures

PEDIATRIC SPECIFIC

Goals of Care

- Protect actively seizing patients, address reversible causes, and control seizure activity.

BLS

- Obtain baseline and repeat vital signs and assess mental status
- If seizing:
  - Protect patient from injury if actively seizing
  - Provide supplemental Oxygen at 15L via non-rebreather mask
  - May assist with administration of patient's own seizure medication (e.g. Diastat)
- If post-ictal:
  - Provide supplemental Oxygen at 15L via non-rebreather mask
  - Suction as needed
  - Consider need for Spinal Motion Restriction (Reference CP8, CT17)
- Assist ventilations with (BVM) device and airway adjunct if needed
- Consider hypoglycemia as reversible cause of seizure (Reference P8)
- Consider trauma as cause of seizure (Reference P17)

ALS

- Initial pharmaceutical treatment:
  - Midazolam intranasal (no more than 1 mL of medication per nare)
  - May repeat once with continued or repeat seizure activity

- Measure blood glucose level and treat as needed (Reference P8)
- Additional pharmaceutical treatment:
  - Administer Midazolam IV/IM – may repeat once with continued or repeat seizure activity
- Perform endotracheal intubation as needed (Reference CT1)

OLMC

- Additional Midazolam doses
- Pharmaceutical treatment above stated dosing in the Pinellas County EMS Handtevy Medication Guidebook
- Administration of medication for atypical seizures

PEARLS

- Intubating a seizing patient is extremely difficult and the complication rates are high

PEDIATRIC SPECIFIC

QUALITY MEASURES
1. Pending

REFERENCES
• http://www.teleflex.com/en/usa/productAreas/ems/documents/AN_ATM_MAD-Nasal-Usage_Guide_AI_2012-1528.pdf • http://wongbakerfaces.org/ • https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf • http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm518110.htm

PEDIATRIC SPECIFIC

P16 Tachycardia (Wide/Narrow)

PEDIATRIC SPECIFIC

Goals of Care

- Identification and treatment of tachydysrhythmias.

BLS

- Shock position as required

ALS

- Consider underlying causes
- Establish IV access
- Determine stability/instability: Unstable = persistent tachyarrhythmia causing hypotension (SBP < 90 mm Hg), acutely altered mental status, signs of shock, chest discomfort, acute heart failure
- Assess cardiac rhythm and treat as follows:
  - Stable (narrow or wide rhythm)
    - Administer 0.9% Sodium Chloride bolus intravenously or intraosseously
    - If HR ≥ 220 for infants or ≥ 180 for children:
      - Vagal Manueuvers
      - Adenosine rapid intravenous push
      - Adenosine rapid intravenous push
      - Amiodarone intravenously over 20 minutes
  - Unstable (narrow or wide rhythm)
    - May sedate with Midazolam IV
    - Synchronized cardioversion. May repeat until cardioversion is successful and rhythm corrects.

OLMC

- Consult OLMC Physician as needed

PEARLS

- You must quickly determine whether the patient's tachycardia is primary (that is producing hemodynamic instability due to the rate) or secondary (that is tachycardia produced as the result of an underlying process such as dehydration, fever, pain, anxiety, drugs, etc.)
- Primary tachycardia rates are generally over 150/minute
- Secondary tachycardia rates are usually but not always lower
- Ventricular rates < 150/minute usually do not cause signs or symptoms
- DO NOT delay immediate cardioversion for the acquisition of the twelve lead or sedation if the patient is unstable
- Keys to management

- Determine if pulses are present
- If pulses are present, is the patient stable, borderline unstable or obviously unstable
- Provide treatment based on the patient's condition and rhythm. It may be best to monitor the patient versus treat the patient if they are minimally symptomatic

- Unstable:
  - Poor systemic perfusion
  - Respiratory distress or respiratory failure
  - Acutely altered mental status
  - Hypotension
- Signs and symptoms of SVT
  - History of vague or nonspecific symptoms
  - P waves are absent or abnormal
  - Heart rate does not vary with activity or stimulation
- Vagal Maneuvers
  - Place a bag of ice over the upper half of the infant's face (without obstructing the airway)
  - If the child can follow commands have them attempt to blow the plunger of a syringe at you

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

P17 General Trauma Care

Goals of Care

- Accurate assessment, appropriate stabilization, and rapid transport to definitive care.

BLS

- Perform Primary Trauma Assessment (ABCDE) and implement initial treatments as needed:
  - Open Airway (BLS maneuvers), provide oxygen and assist ventilations with bag-valve-mask (BVM) device and appropriate airway adjunct
  - Control hemorrhage with direct pressure followed by appropriate device or procedure when indicated – Reference CP16 (if older child) and CP24
  - Seal chest wounds – Reference CP23
  - Assess neurologic function and implement SMR as indicated – Reference CP8/CT17
  - Expose patient and protect from environment
- If patient is in cardiac arrest, transport immediately to the closest facility
- Assess trauma transport criteria, Declare "Trauma Alert" if indicated - Reference CT13

Initiate rapid transport to appropriate facility – Reference CS5 and CS20

- Perform Secondary Trauma Assessment (head-to-toe physical exam on exposed skin)
- Implement additional appropriate stabilizing care – Reference T5, T9 – T11
  - Stabilize impaled objects in place – DO NOT REMOVE
  - Stabilize Flail Chest Segments
  - Dress wounds - Moist Sterile for Eviscerations, Dry and clean for Burns
  - Amputated body parts – Moist sterile inner packaging, ice/cold pack outer packaging
- Splint Fractures and Dislocations and document distal motor function, circulation, and sensation before and after; Elevate and apply cold packs when practical

ALS

- Maintain ETCO2 of 35-45 mmHg. (Hyperventilation to 30-35 mmHg allowed ONLY with signs of ACTIVE herniation – see PEARLS next page)
- Intubate only if unable to provide adequate ventilation/oxygenation with bag-valve-mask (BVM) device and airway adjuncts
- Decompress tension pneumothorax if indicated (Reference CP10)
- Establish intravenous/intraosseous access for altered mental status, signs of poor perfusion, need for intravenous/intraosseous medications
- Initiate Fluid Resuscitation with 0.9% Sodium Chloride Bolus if SBP < Handtevy minimum for age or if signs of poor perfusion. May repeat twice as needed.

PEDIATRIC SPECIFIC

- Implement appropriate pain management (Reference P13)
- Repeat Primary Trauma Assessment (ABCDE) after treatments and frequently during transport
- Specific injuries may be treated as in Adult Protocols T5, T9 - T11 (adjust dosing for peds)

OLMC

- Consult OLMC Physician as needed

PEARLS

- All pediatric patients require a complete head to toe assessment as they are not reliable historians
- Ensure that you keep the patient warm
- Sager Splints will fit a patient 4 years old to adult. For patients younger than 4 years of age requiring traction, manual traction will need to be held
- ***DO NOT*** administer pain medication to a patient with head injury, suspected head injury, poor perfusion or altered mental status
- All patients with an altered mental status have a head injury until proven otherwise
- Non-accidental trauma (child-abuse) should be suspected with all patients that have traumatic injuries that do not match the story of the mechanism do not match the story of the mechanism of injury. Document all details including what the caregivers state happened in quotation and a complete physical exam including details of all bruises and marks. Every healthcare provider that suspects child abuse is required by law to file a report with the Florida Department of Children and Families Abuse Hotline at (1-800-962-2873)
- Refer to CS21 for alterations in standard of care during Major Incidents with Ongoing Threats (e.g. Active Shooter Response)

QUALITY MEASURES

- Pending

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

P18 Foreign Body Airway Obstruction

PEDIATRIC SPECIFIC

PEDIATRIC SPECIFIC

Goals of Care

- Rapidly intervene to relieve severe or complete airway obstructions

BLS

- Have suction readily available
- Mild / partial obstruction:
  - ***DO NOT interfere.*** Monitor the patient for signs of worsening or severe/complete foreign body airway obstruction
  - Allow the patient to clear the airway by coughing
  - Reassure the patient and allow for position of comfort
- Severe/complete obstruction:
  - If responsive:
    - Conscious Child - Perform abdominal thrusts until the object is expelled or becomes unresponsive
    - Infant - Deliver repeated cycles of 5 back blows (slaps) then 5 chest compressions until the object is expelled or becomes unresponsive
  - If unresponsive:
    - Start cardiopulmonary resuscitation - after 30 chest compressions, open the airway. If a foreign body is visible, remove it.
    - ***DO NOT perform blind finger sweeps***

ALS

- If unresponsive:
  1. Perform direct laryngoscopy:
     a. Attempt to remove foreign body at or above cords with Magill forceps
     b. If unable to visualize foreign body (e.g. below cords), perform endotracheal intubation (Reference CP1)
  2. If still unable to ventilate after above maneuvers:
     a. Deflate balloon, attempt to push the obstruction deeper with the endotracheal tube, then retract endotracheal tube to original position, inflate balloon and attempt ventilation
  3. If all prior interventions unsuccessful, perform cricothyrotomy (Reference CP6)

OLMC

- Consult OLMC Physician as needed

PEDIATRIC SPECIFIC

PEARLS
• Signs of foreign body airway obstruction include an acute onset of respiratory distress with coughing, gagging, stridor or wheezing • Sudden onset of respiratory distress in the absence of fever or other respiratory symptoms suggests foreign body airway obstruction rather than an infectious cause of respiratory distress, such as croup • A severe obstruction develops when a cough becomes silent, respiratory effort increases and is accompanied by stridor or unresponsiveness • ***DO NOT delay transport for multiple intubation attempts*** • Transport to the closest hospital is mandatory for an unmanageable/uncontrolled airway (Reference CS5)

QUALITY MEASURES
• Pending

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

PEDIATRIC SPECIFIC

CP1 Adult Airway Management and Advanced Airway Placement

NOTES
Because of the uncontrolled environments encountered in prehospital care and the fact that all of our airways are "Crash Airways" every attempt at prehospital airway management should be considered a "Difficult Airway". Success in management is predicted on an algorithmic approach focused on preparedness and thinking several steps ahead. The six (6) steps below outline this approach and are followed by the specifics of the individual procedures Prehospital adult airway management will be approached in the following stepwise fashion always being prepared to rapidly move to the next step if unsuccessful: 1. All patients requiring ventilation assistance will be bag-valve-mask (BVM) and airway adjunct (OPA/NPA) until choice of advanced airway device is made and preparations for placement are completed 2. Patients in cardiac arrest or in whom endotracheal intubation is anticipated to be especially difficult will have the King airway device employed primarily 3. Other patients may receive a maximum of 2 total attempts at endotracheal intubation, with facilitated medication, if indicated 4. If Step #2 or #3 is unsuccessful, the alternate may be attempted 5. If both Step #2 and Step #3 are unsuccessful, bag-valve-mask (BVM) ventilations should be employed as a temporizing measure until arrival at the hospital 6. If endotracheal intubation, King airway placement and bag-valve-mask (BVM) ventilations are all unsuccessful, emergency cricothyrotomy (Reference CP6) will be performed as a last resort.

EQUIPMENT
• Bag-valve-mask device • Appropriately sized OPA & NPA • Approrpiately sized EtCO2 filterline set • Suction • Lubrication gel • Appropriately sized King LTD-S • 60 mL Luer Lock Syringe • 18 Fr OG Tube and 60 mL Catheter Tip Syringe (Reference CP7) • Laryngoscope handle • Appropriately sized laryngoscope blade • Appropriately sized endotracheal tube • 10 mL Syringe • Bougie • Scalpel • Kelly Curved Forceps

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP1.1 Bag-Valve-Mask Ventilation

INDICATIONS
• Respiratory insufficiency/failure/arrest • Pre-oxygenation prior to advanced airway placement attempt

CONTRAINDICATIONS
• None

CAUTIONS
• Effective seal may be difficult in patients with facial abnormalities, beards, lack of teeth, and facial trauma

PROCEDURE
1. Assemble equipment per manufacturer's instructions and connect to Oxygen source 2. Attach EtCO2 filterline set between mask and bag-valve device (ALS ONLY) 3. Place NPA/OPA if patient tolerates and not contraindicated (NPA in head/facial trauma) 4. Utilizing 2-person technique whenever possible, ventilate at a baseline rate of 12 – 16 breaths per minute. 5. Adjust ventilation rate to achieve adequate SpO2 and EtCO2 of 35 – 45 mmH_2O (ALS ONLY)

COMPLICATIONS
• Inability to maintain adequate seal • Inappropriate hyperventilation • Gastric distention • Hypotension and/or pneumothorax resulting from positive pressure ventilation

CP1.2 King Airway Placement (ALS ONLY)

INDICATIONS
• Cardiac arrest • Respiratory insufficiency/failure/arrest

CONTRAINDICATIONS
• Known esophageal disease (varices) • Caustic substance ingestion • Height < four (4) feet

CAUTIONS
• May be difficult or ineffective in patients with significant head/neck face structure abnormalities or trauma causing instability of the face or oropharynx

PROCEDURE
1. Choose appropriate size device, assemble equipment per manufacturer's directions, test balloon and lubricate 2. Grasp jaw and tongue and lift anteriorly 3. Place device from corner of mouth with device rotated 45 – 90 degrees laterally 4. Insert device and advance along the posterior tongue while rotating back to midline until hub is at lip/gum line 5. Inflate balloon with up to 60 mL air to achieve seal 6. Attach EtCO2 between tube and bag-valve device 7. Begin ventilations while gently retracting tube until it seats and ventilations are easy. If air leaking is still noted, instill up to an additional 20 mL air into balloon 8. Secure with tape or appropriately sized commercial tube holder device 9. Ventilate at a baseline rate of 12 – 16 breaths per minute. Adjust ventilation to maintain adequate SpO2 and EtCO2 of 35 – 45 mmH_2O

COMPLICATIONS
• Failure to insert device to appropriate depth prior to inflating balloon may cause it to not seat properly • The device may inadvertently enter the trachea, in a very small percentage of patients, instead of the esophagus and will be ineffective • Multiple placement attempts, to forceful manipulation or over-inflation of the balloon may cause trauma to the oropharynx, esophagus or trachea • Hypotension and/or pneumothorax resulting from positive pressure ventilation

CP 1.3 Endotracheal Intubation

INDICATIONS
• Respiratory insufficiency/failure/arrest

CONTRAINDICATIONS
• None

CAUTIONS
• May be difficult in patients with facial/neck trauma, blood or other secretions in the airway • Difficulty with patients who lack teeth • Limited mobility or congenital malformation of the neck or jaw • Patients with beards and/or excess soft tissue of the face and neck

CLINICAL PROCEDURE

PROCEDURE

1. Assemble all needed equipment within reach of operator and test endotracheal tube cuff
2. Pre-oxygenate the patient
3. Perform direct laryngoscopy and pass endotracheal tube so the cuff is just distal to the vocal cords.
   - Maximum of 15 seconds per attempt
   - Maximum of 2 total combined attempts by all clinicians
4. Inflate endotracheal tube cuff, attach EtCO2 filterline set and ventilate to check for bilateral breath sounds, quiet epigastrium and confirm placement with EtCO2
5. If suspected mainstem intubation (diminished sounds unilaterally), retract 1 – 2 cm and reassess
6. Secure endotracheal tube with commercial tube holder device
7. Ventilate at a baseline rate of 12 – 16 breaths per minute. Adjust ventilation to maintain adequate SpO2 and EtCO2 of 35 – 45 mmH_2O

COMPLICATIONS

- Inability to place tube
- Esophageal placement
- Mainstem placement
- Unrecognized displacement
- Hypotension and/or pneumothorax resulting from positive pressure ventilation

CP 1.4 Medication Facilitated Intubation

INDICATIONS

- Respiratory insufficiency/failure/arrest requiring airway management in patients with retained consciousness, gag reflex or jaw clenching

CONTRAINDICATIONS

- Allergic or adverse reaction history to any of the medications

CAUTIONS

SAFETY ALERT

EXTREME CAUTION should be exercised prior to attempting facilitated intubation to avoid administering in patients in whom airway management is anticipated to be particularly difficult

CLINICAL PROCEDURE

PROCEDURE

1. Prepare all equipment as per "CP1.3 Endotracheal Intubation"
2. Ensure patent IV/IO access and prepare medications
3. Fentanyl 2 mcg/kg IVP followed by Etomidate 0.3 mg/kg SLOW IVP (over > 20 seconds)
4. Perform "CP1.3 Endotracheal Intubation" as listed above
5. Following confirmation of successful intubation, Midazolam 2.5 mg, may repeat one time

COMPLICATIONS

- Adverse reactions to medications (e.g. trismus due to rapid administration of etomidate)
- Ineffectiveness of medications
- Sedation with failure to secure airway

QUALITY MEASURES

- Ventilation assistance provided
- Single airway type used
- Confirmation of placement with EtCO2
- Airway re-confirmed
- Multiple EtCO2 values

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- Pinellas County EMS Medical Quality Management Plan 2016 v 1.0 Effective January 6, 2016

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP2 Auto-injector Use

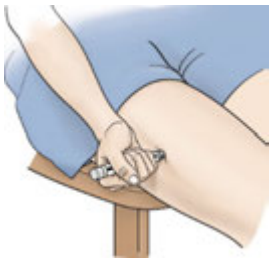
Epinephrine Auto-injector (e.g. Epi-pen, Epi-pen Jr.)

INDICATIONS
• Anaphylaxis • Anaphylactic Shock • Life threatening bronchospasm

CONTRAINDICATIONS
• None

CAUTIONS
• Caution in patients suspected of coronary disease as may precipitate ACS. • Avoid accidental self-administration

PROCEDURE
1. Expose skin and cleanse if possible 2. Grasp age appropriate auto injector without covering end with fingers and remove safety cap 3. Press tip firmly against patient's outer thigh until device fires holding on skin 10 seconds after firing to ensure full delivery of medication



COMPLICATIONS
• Bleeding • Infection • Adverse medication reaction

Nerve Agent Antidotes (Duodote Auto-injector)

INDICATIONS
• Treatment of poisoning by organophosphorus nerve agents as well as organophosphorus insecticides

CONTRAINDICATIONS
• None

CLINICAL PROCEDURE

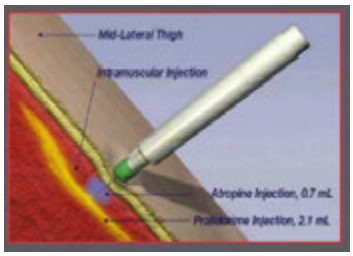
CLINICAL PROCEDURE

CAUTIONS

- Individuals should not rely solely upon Atropine and Pralidoxime to provide complete protection from chemical nerve agents and insecticide poisoning

PROCEDURE

1. The injection site is the mid-outer thigh area
2. Swing and firmly push GREEN TIP straight down (at a 90-degree angle) against mid-outer thigh. Continue to push firmly until you feel the auto-injector trigger
3. Hold in place firmly against the injection site for 10 seconds
4. Remove the Duodote from the thigh. Inspect the GREEN TIP; if the needle is visible, then the injection was successful
5. If the needle is not visible, make sure the Gray Safety Release is removed and repeat the preceding steps
6. Keep used auto-injectors with the patient so others will be aware of how many injections were administered



COMPLICATIONS

- Bleeding
- Infection
- Adverse medication reaction

NOTES

- You can inject through clothing, but make sure that pockets are empty
- Injector needle may not penetrate bunker gear
- Give injections into a large muscle mass area such as the outer thigh or buttocks

REFERENCES

- http://www.meridianmeds.com/products/duodote

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP3 Continuous Waveform Capnography

INDICATIONS

- Continuous waveform capnography use is ***mandatory*** in:
  - Advanced airway placement (endotracheal tube or King airway)
    - Continuous waveform capnography is the only acceptable method of confirmation for endotracheal tube placement
  - Altered mental status
  - Sedating medication administration
- Continuous waveform capnography is highly recommended in:
  - BVM ventilations
  - Multiple doses of opiate analgesics
  - Patient experiencing respiratory distress (e.g. asthma, COPD, etc.)

CONTRAINDICATIONS

- None

CAUTIONS

- There is a moisture sensitive filter in the sensor tubing that is designed to occlude the tubing to prevent secretions from entering the pump in the Philips MRx. The sensor may need to be periodically changed out due to occlusion even in the absence of copious secretions

PROCEDURE

1. Attach adult/pediatric EtCO2 filterline set between advanced airway device (endotracheal tube or King) and bag-valve device or ventilator circuit and connect to the monitor
2. If no advanced airway, may use appropriate EtCO2 nasal cannula
3. Continuously monitor capnometry (numeric value) and capnography (waveform)

COMPLICATIONS

- None

NOTES

- ***Failure to continuously monitor and appropriately interpret data may result in misplacement or unrecognized displacement of advanced airways and respiratory compromise in patients receiving sedating medications and is grounds for immediate clinical suspension***

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CP4 Compression Performance Resuscitation

CLINICAL PROCEDURE

Indications
• Atraumatic adult cardiac arrest

Contraindications
• Functioning LVAD

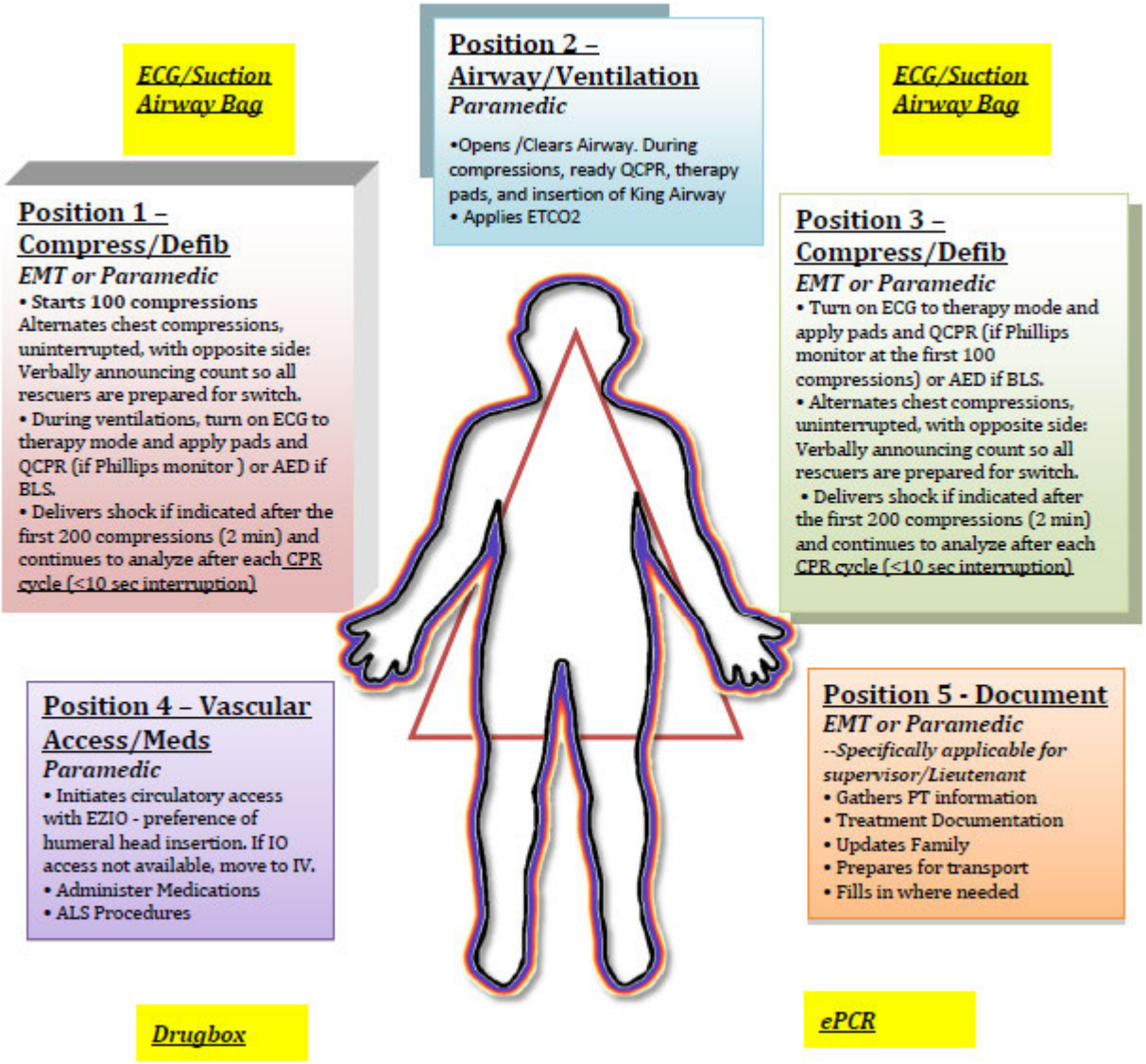
Cautions
• Requires adequate room to work around the patient

Procedure
• To ensure the best possible resuscitation, follow the choreography of the Compression Performance Resuscitation (see figure next page) • Use the Philips MRx with Q-CPR meter whenever possible

Complications
• Skin tear from Q-CPR meter use

Notes
• Team approach to minimize interruption of compressions resulting in at least a < 10 second break (< 5 seconds is optimal) during every cycle. • If personnel need rotation out of a position and appropriate personnel are on scene, it may be done as long as there is no interruption in cardiopulmonary resuscitation • Any additional personnel may be added into available positions as the situation dictates as long as it does not interfere with the “triangle” positions that have the greatest impact on patient outcome. • “ROSC” is intended to represent a brief (approximately > 30 seconds) restoration of spontaneous circulation that provides evidence of more than an occasional gasp, occasional fleeting palpable pulse or arterial waveform

CLINICAL PROCEDURE



References
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf • http://circ.ahajournals.org/content/132/18_suppl_2

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP5 Continuous Positive Airway Pressure (CPAP)

INDICATIONS
• Congestive heart failure (CHF)/Acute pulmonary edema • Reactive airway disease (Asthma/COPD) • Drowning/near drowning • Selected toxic inhalations

CONTRAINDICATIONS
• Hypotension (SBP < 90 mmHg) • Altered mental status • Respiratory arrest/respiratory rate < 8 • Suspected or known pneumothorax • Tracheostomy/cricothyrotomy • Vomiting

CAUTIONS
• None

PROCEDURE
• Assemble device according to manufacturer's instructions and connect to Oxygen source • Explain procedure to the patient and encourage them to work with the mask • Place the delivery device over the mouth and nose and secure the mask with provided straps and ensure no air leaks • Begin at 5 cmH_2O and titrate by 2.5 cmH_2O pressure every 3 – 5 minutes to maximum 10 cmH_2O pressure as patient tolerates and symptoms require • Monitoring for worsening respiratory status and decreasing mental status continuously and document vital signs at least every five minutes

COMPLICATIONS
• Pneumothorax • Hypotension • Apnea • Inability to tolerate

NOTES
• CPAP therapy needs to be continuous and shouldn't be removed except for medication administration (e.g. Nitroglycerin) or unless the patient can't tolerate the mask or experiences continued or worsening respiratory failure or other complication.

CLINICAL PROCEDURE

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP6 Adult Surgical Cricothyrotomy Airway Access

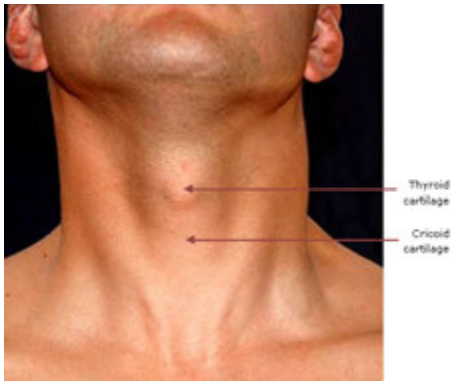
INDICATIONS
• Age ≥ 10 • Respiratory insufficiency/failure/arrest with inability to adequately provide oxygenation or ventilation by bag-valve-mask (BVM), endotracheal tube or extraglottic airway device

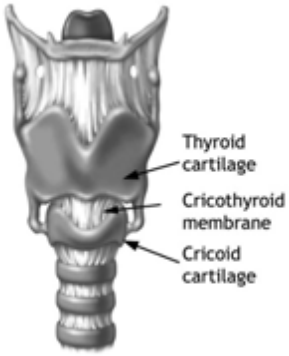
CONTRAINDICATIONS
• Age < 10 • Inability to find landmarks

CAUTIONS
• Anticipate difficulty with excess soft tissue and previous scarring to neck

PROCEDURE

- Prep area with alcohol preps and chlorprep or betadine (if available)
- Grasp larynx with thumb and middle finger to stabilize the thyroid cartilage and locate laryngeal prominence (point of the Adam's apply). Slide finger downward to locate the cricothyroid membrane





- Make 3 cm vertical midline incision overlying the cricothyroid membrane
- Locate the cricothyroid membrane with index finger and make transverse incision through the cricothyroid membrane the width of the cricothyroid space
- Insert a curved Kelly clamp through the incised membrane and remove scalpel
- Dilate the space using the curved Kelly clamp and insert 6.0 mm endotracheal tube directly inferiorly through the incision until just past the balloon and inflate cuff
- Manually stabilize tube and begin ventilations at baseline rate of 12-16 breaths per minute. Adjust ventilate rate to achieve adequate Oxygen (O2) saturation and EtCO2 35-45 mmHg
- May secure the endotracheal tube using tape, but manual stabilization should be maintained until transfer of care at the receiving facility

CLINICAL PROCEDURE

COMPLICATIONS
• Inability to find landmarks • Bleeding • Paratracheal tracking of the endotracheal tube • Subcutaneous emphysema

NOTES
• None

REFERENCES
• https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CLINICAL PROCEDURE

CP7 Orogastric Tube Insertion

CLINICAL PROCEDURE

CLINICAL PROCEDURE

INDICATIONS
• Gastric decompression and emptying in pediatric and adult patients receiving assisted ventilation • Remove gastric distention of air and to minimize change of aspiration

CONTRAINDICATIONS
• Awake patient • Patient with intact gag reflex • Caustic ingestions • History of esophageal structures, varices and/or other esophageal disease • Adult patient without an advanced airway in place

CAUTIONS
• None

PROCEDURE
• ***NASAL GASTRIC TUBE INSERTION IS NOT PERMITTED*** • Choose appropriate size tube: o 6 Fr – Infants/pediatrics 3 kg – 15 kg o 12 Fr – Pediatrics 16 kg – 25 kg o 18 Fr > 25 kg • Measure the tube from the corner of the mouth to the earlobe and then to the point midway between the patient's navel and tip of the sternum • For the King LTS-D gastric lumen access o Lubricate the gastric tube prior to inserting into the gastric access lumen • For an endotracheal tube o Lubricate the gastric tube prior to inserting and slowly advance the tube into the oropharynx next to the endotracheal tube until the appropriate depth is obtainer • For the non-intubated Pediatric patient o An OPA should be in place. Measure and insert the OGT as previously described. Secure to side of the mouth with tape. • If there is resistance, rotate and retract the tube slightly and try again. Keep insertion time to no greater than 10 seconds • Keeping the patient's head and neck in a neutral position will facilitate passage of the OGT • Once inserted, draw 5 – 20 mL of air (dependent on patient size) into a 60 mL catheter tip syringe and quickly inject the bolus of air into the stomach while auscultating with a stethoscope. If the tube is in the stomach, a gurgling should be audible. If the tube is in the esophagus or trachea, the air sounds will be absent or muffled

- Once placement is confirmed, attach orogastric tube to suction tubing. Place to low, non-continuous suction to facilitate evacuation of stomach contents. Discontinue suction when there is no further return of stomach contents
- Secure the OGT to the endotracheal tube/King Airway with tape

COMPLICATIONS

- Bleeding
- Inadvertent tracheal placement

NOTES

- None

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CLINICAL PROCEDURE

CP8 Spinal Care

CLINICAL PROCEDURE

INDICATIONS
• Patient complains of midline neck or spine pain • Any midline neck or spinal tenderness with palpation • Any abnormal mental status (including extreme agitation) or neurologic deficit • Any evidence of alcohol or drug intoxication • Another severe or painful distracting injury is present • Torticollis in children • A communication barrier that prevents accurate assessment

CONTRAINDICATIONS
• Inability to perform without causing further injury to patient (e.g. unsafe environment requiring rapid extrication)

CAUTIONS
• SMR is not a benign procedure and may cause significant discomfort and potentially physiologic compromise. ***It should be applied only when necessary*** • Airway assessment and management takes priority over SMR in patients with isolated penetrating trauma to the neck

PROCEDURE

- Maintain manual stabilization while determining if patient meets criteria for SMR (Reference CT17)
- If extrication may be required
    - From a vehicle:
        1. After placing a cervical collar, if indicated, children in a booster seat and adults should be allowed to self-extricate.
        2. For infants and toddlers already strapped in a car seat with a built-in harness, extricate the child while strapped in his/her car seat
    - Other situations requiring extrication:
        1. A padded long board may be used for extrication, using the lift and slide (rather than a logroll) technique
    - Helmet removal:
        1. If a football helmet needs to be removed, it is recommended to remove the face mask followed by manual removal (rather than the use of automated devices) of the helmet while keeping the neck immobilized.
        2. Occipital padding should be applied, as needed, with the patient in a supine position, in order to maintain neutral cervical spine positioning (e.g. when wearing shoulder pads)

CLINICAL PROCEDURE

- Patients should not routinely be transported on long boards, unless the clinical situation warrants long board use. An example of this may be facilitation of immobilization of multiple extremity injuries or an unstable patient where removal of a board will delay transport and/or other treatment priorities. In these rare situations, long boards should be padded or have a vacuum mattress applied to minimize secondary injury to the patient

COMPLICATIONS

- Increased pain
- Pressure ulcers
- Respiratory compromise

NOTES

- Be aware of potential airway compromise or aspiration in immobilized patient with nausea/vomiting, or with facial/oral bleeding
- Excessively tight immobilization straps can limit chest excursion and cause hypoventilation
- Prolonged immobilization on spine board can lead to ischemic pressure injuries to skin
- Prolonged immobilization on spine board can be very uncomfortable for a patient
- Children are abdominal breathers, so immobilization straps should go across chest and pelvis and not across the abdomen, when possible

REFERENCES

- Hoffman JR, Wolfson AB, Todd K, Mower WR. (1998). "Selective cervical spine radiography in blunt trauma: methodology of the National Emergency X-Radiography Utilization Study (NEXUS)." Ann Emerg Med. 32 (4): 461–9. doi:10.1016/s0196-0644(98)70176-3. PMID 9774931
- "EMS Spinal Precautions and the Use of the Long Backboard" http://www.naemsp.org/pages/position-statements.aspx
- "EMS Spinal Precautions and the Use of the Long Backboard—Resource Document to the Position Statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma. http://www.naemsp.org/pages/position-statements.aspx
- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP9 Intraosseous Access

INDICATIONS
• Primary vascular access for a patient in cardiac arrest • Inability to obtain peripheral intravenous access in other category **RED** patients (Adult and Pediatric) requiring urgent intravenous access.

CONTRAINDICATIONS
• Fracture in targeted bone • Excessive tissue or absence of adequate anatomical landmarks • Infection at area of insertion site • Previous significant orthopedic procedure at site (e.g. prosthetic limb/joint) • IO access in targeted bone within past 48 hours

CAUTIONS
• None

PROCEDURE
• Determine landmarks for approved sites (proximal tibial plateau, proximal humeral head and distal tibia just proximal to medial malleolus) per manufacturer provided diagrams and choose appropriate needle size • Prep area well with alcohol preps and chlorprep or betadine (if available) • Insert needle using EZ-IO (device per manufacturer's instructions) • Confirm placement with aspiration of bone marrow, flush and then secure with the EZ-IO Stabilizer device • Infuse fluids and medications as needed • In conscious patients, may administer 2% Lidocaine (adults 30 mg & pediatrics 0.5 mg/kg to a max dose of 30 mg) via slow intraosseous push to control infusion related pain • Write time of placement and operator name on provided band and affix to limb where intraosseous placed

COMPLICATIONS
• Improper placement may cause injury to the bone • Bleeding • Extravasation of fluids and medications • Necrosis • Loss of limb

NOTES
• None

CLINICAL PROCEDURE

REFERENCES
• http://www.arrowezio.com/

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP10 Needle Thoracostomy

INDICATIONS
• Suspected pneumothorax with severe respiratory distress, hypotension or cardiovascular collapse • Traumatic cardiac arrest with chest or abdominal injury

CONTRAINDICATIONS
• Simple pneumothorax

CAUTIONS
• None

PROCEDURE
• Expose entire chest and identify landmarks • Prep area well with alcohol preps and chlorprep or betadine (if available) • Insert 10 gauge 3.25-inch decompression needle into one of the following: o 2nd intercostal space, mid-clavicular o 5th intercostal space, mid-axillary • Remove needle leaving angiocath in place • Notify receiving facility of needle thoracostomy • Reassess patient and interventions frequently (minimum every 5 minutes)

COMPLICATIONS
• Inability to find landmarks • Bleeding • Failure to penetrate the pleural cavity • Clogging of needle by blood or soft tissue • Subcutaneous emphysema

NOTES
• None

REFERENCES
• https://www.narescue.com/ars-for-needle-decompression-3-25-in

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP11 Physical Restraints

INDICATIONS
• **Soft restraints** are appropriate for non-violent patients who require restraint from interfering with therapy (e.g. pulling lines, tubes, etc.) • **Hard restraints** are appropriate for patients that are violent and pose a threat to responders or themselves when verbal de-escalation is ineffective and chemical sedation is not feasible

CONTRAINDICATIONS
• None

CAUTIONS
• Physical restraints are potentially dangerous and should be used only when other methods (verbal de-escalation, chemical sedation) are not effective or feasible

PROCEDURE

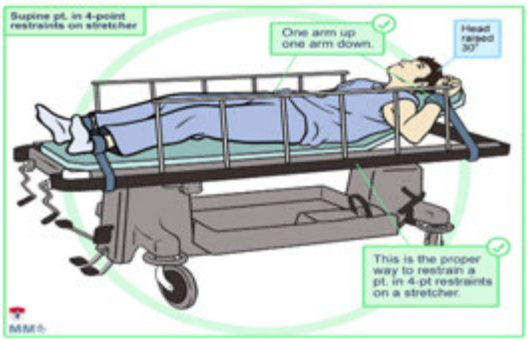
- Verbal de-escalation should be attempted prior to moving to chemical/physical restraints
- Choose the appropriate level of physical restraint:
  - Soft restraints – appropriate for non-violent patients who require restraint from interfering with therapy (e.g. pulling lines, tubes, etc.)
  - Hard restraints (with appropriate sized liner) – appropriate for patients who pose a danger to themselves or responders
- Obtain law enforcement assistance for physical restraint, whenever possible
- Apply restraints following the manufacturer's instructions
- Position patients in the supine position. **NEVER RESTRAIN A PATIENTS IN THE PRONE POSITION**

- A patient may be placed on backboard or stretcher to facilitate transfer
  - Strap Placement:
    - Ambulance Stretcher
      - Chest strap under the arms high on the chest
      - Leg strap immediately above the knees

CLINICAL PROCEDURE

- Backboard (when utilized) straps
  - Chest straps across the chest (in the form of an "X")
  - Abdominal strap on the hips (not abdomen – in the form of an "X")
  - Leg strap immediately above the knees

- Secure hands/feet - Stretcher
  - Dominate hand (if known) tied to stretcher above head (same side)
  - Non-dominant hand tied down to their side to the stretcher (same side)
  - Secure ankles individually to each side of the stretcher (right ankle to the right side of the stretcher and left ankle to the left side of the stretcher



- If the patient is spitting, a surgical mask or N95 mask may be used to block secretions. If the patient receives any chemical sedation, a non-rebreather mask at 10 – 15 Lpm should be utilized
- Monitor the airway to prevent aspiration. Have suction readily available and be prepared to roll the patient!!
- Assess distal neurovascular function and document a minimum of every 5 minutes

CCOMPLICATIONS

- Physical injury to patient or responders
- Failure to recognize deteriorating respiratory, neurologic and cardiovascular status
- Extremity injury

NOTES

- Keep the exit between yourself and the patient so that you may safely and quickly exit, if needed
- Never attempt to subdue a violent or combative patient by yourself
- Request law enforcement for a violent and severely combative patient
- Any patient restrained by law enforcement in a prone position ***SHALL IMMEDIATELY BE PLACED IN A SUPINE POSITION*** upon EMS access to the patient. Provide an initial and ongoing assessment for signs and symptoms of positional asphyxia

CLINICAL PROCEDURE

- Law Enforcement restraints

SAFETY ALERT

If Law Enforcement places a patient in custody and/or handcuffs (metal or plastic) a patient to the stretcher for transport, an Officer **MUST** accompany the patient in the transport unit

  - ***If the officer does not want to ride in, an OLMC contact shall be made***

REFERENCES
• http://i2.wp.com/emcrit.org/wp-content/uploads/2011/11/how-to-restrain.jpg

CLINICAL PROCEDURE

CP12 Patient Restraint for Transport

CLINICAL PROCEDURE

CLINICAL PROCEDURE

INDICATIONS
• All patients being transported shall be secured utilizing an appropriate restraint device

CONTRAINDICATIONS
• None

CAUTIONS
• It is imperative that patients are restrained with approved devices applied per the manufacturers recommendations. Be mindful that access to a patient's airway should never be compromised by the restraint. • At no time should an infant or child be transported in the lap of a parent or guardian 

PROCEDURE
• For children weighing less than 10 pounds, the "Infant/Child Safety Seat" should be utilized, secured to the stretcher • For children weighing 10 to 40 pounds, the Pedi-mate should be utilized secured to the stretcher • A pediatric immobilization device should be used for all pediatric trauma patients • A patient weighing greater than 40 pounds should be secured to the main stretcher utilizing provided stretcher straps • Adult trauma patients will be placed in an Immobilization Device as per CP8 and secured to the stretcher or bench seat

COMPLICATIONS
• Caution when securing patients that proper positioning and alignment is maintained to promote good circulation and decrease injury

NOTES
• For the interfacility transport of infants less than 28 days of age and/or weighing 5 kg or less, CCT should be utilized for neonatal care and transport with an isolette or another specialized device

REFERENCES
•

CP13 Troubleshooting and Emergency Access of Indwelling Catheters

CLINICAL PROCEDURE

INDICATIONS
• Displacement, fracture or bleeding from catheter

CONTRAINDICATIONS
• Medication ports ***MAY NOT*** be accessed

CAUTIONS
• There are several types of indwelling catheters that may be encountered. Clinicians may not access a particular catheter unless they are confident on the type and function of each of the ports.

PROCEDURE

- Troubleshooting
  - If catheter is completely out or there is bleeding from the site, apply direct pressure to the site
  - If catheter is partially out, secure in place and cover with sterile dressing
  - Assess for signs and symptoms of embolus, thrombus or internal bleeding (chest pain, cyanosis, dyspnea, shock)
  - If the catheter is broken in half, with or without bleeding, clamp end of remaining tube with curved Kelly forceps
  - If suspected embolus, thrombus, internal bleeding or air embolus
    - Clamp the line and position patient on left side

- Emergency Access (Paramedic and RN ONLY – See CT8)
  - Make sure clamp is closed, remove end cap and replace with the extension and cap from the IV Start Kit
  - Identify hub to accessed
  - Cleanse the hub well with alcohol preps x 2 and chlorprep or betadine (if available)
  - Connect syringe and draw back 10 mL of blood waste
  - Flush with 0.9% Sodium Chloride to ensure patent line
    - If unable to draw back and flush, DO NOT USE the line
  - Attach 0.9% Sodium Chloride IV fluid ensuring the IV tubing set is primed well
  - Administer medications and fluids as needed

CLINICAL PROCEDURE

COMPLICATIONS
• Infection • Bleeding • Embolization of catheter fragments • Blood clots • Air embolism

NOTES
•

REFERENCES
•

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP14 Troubleshooting Implanted Medical Devices

INDICATIONS
• Acute harm being caused by an implanted medical device due to malfunction or change in patient's condition

CONTRAINDICATIONS
• Unknown type of device

CAUTIONS
• Clinicians should not attempt any manipulation or intervention to any device that they have not positively identified and determined to be causing acute harm to the patient

PROCEDURE

- Identify type of device
  - AICD (automatic implanted cardiac defibrillator)
    - If in consultation with OLMC, you have identified that the patient's AICD is misfiring or causing a dysrhythmia and you have access to the patient's magnet, deactivate the ICD by locating the pulse generator (the large box like structure of the ICD) and place the donut magnet over the generator
    - You may or may not hear a high-pitched tone from the generator, depending on the brand of the ICD
    - Secure the magnet in place with adhesive tape
    - The magnet will inhibit further arrhythmia detection and treatment by the ICD
  - LVAD (left ventricular assist device)
    - Gather information
      - Is patient's complaint related to the device?
      - What type of device is it (color coded tag on control unit on belt)?
      - Are there any experts on scene?
      - What is the battery status?
      - Is there a hand pump?
      - What hospital do they go to?
        → Tampa General VAD Coordinator 24 Emergency 866-844-8237. If you do not hear back from after paging twice, call the hospital operator 813-844-7000 and ask for the VAD Coordinator
    - Contact OLMC – they have a comprehensive, brand specific troubleshooting guide that will assist you in your care
    - Bring all the patient's equipment to the hospital
    - Remember you may not have a palpable pulse but should hear a whirring sound

CLINICAL PROCEDURE

- Standard diagnostic measurements will be unreliable (blood pressure, SpO2, heart rate, etc.)
- NEVER remove both batteries at the same time!!
- ***DO NOT PERFORM CARDIOPULMONARY RESUSCITATION (CPR)*** *on unresponsive and pulseless LVAD patients unless you "cannot" hear the whirring sound on auscultation of the chest as CPR may cause dislodgement of the device and immediate death*

o VNS (Vagus Nerve Stimulator)
- Clinicians caring for patients in status epilepticus who have a VNS and are not responding to standard medications may assist the family or caretaker to activate/increase the settings of the VNS by passing the patient's control magnet closely over the chest area where the VNS device is implanted every 3 minutes to a maximum of 3 times
- Remember that VNS stimulators may cause abnormalities on ECG monitoring and 12 leads

o Insulin Pump
- Clinicians caring for patients who are profoundly hypoglycemic may temporarily pause or disable the pump until the patient has been treated as per protocol

o Patient Controlled Analgesia Pump (PCA)
- PCA pumps encountered in the outpatient setting are most often locked. Troubleshooting will likely be limited to the IV access site

COMPLICATIONS

- Interfering with implanted medical devices is inherently dangerous and should only be attempted if the device is clearly causing acute harm. OLMC consultation should be sought in nearly all cases.

NOTES

- None

REFERENCES

- http://www.mylvad.com/content/ems

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP15 Synchronized Cardioversion

Indications
• Unstable tachydysrhythmias

Contraindications
• Hazardous environments (e.g. standing water, fire/ignition hazards, etc.)

Cautions
• **Failure to SYNC may result in "R on T syndrome" and induce asystole**

Procedure
• Philips MRx o With the therapy knob in the monitor position, press the sync button located beside the therapy knob. A sync message appears in the upper right corner of Wave Sector 1 o Confirm that the sync marker appears with each R-wave o Turn the therapy knob to the desired energy level setting o Press the charge button on the MRx, wait until the charge has reached the energy level selected and you will hear a continuous charge done tone. o To disarm the defibrillator, press (Disarm). If desired, you may increase or decrease the selected energy level after pressing the charge button by moving the therapy knob to the desired setting o The defibrillator charges to the modified energy level automatically. Wait until the current charge reaches THE SLECTED ENERGY LEVEL BEFORE PROCEEDING/. o Make sure no one is touching the patient or anything connected to the patient. Call out clearly and loudly "Stay Clear!" Check again to be sure o Press and hold the shock button on the MRx The shock will be delivered when the next r-wave is detected.

Complications
• Pain • Burns • Arrhythmias

Notes
• It is important to continue to hold the Shock button until the shock is delivered. The defibrillator shocks with the next detected R-wave

References
• http://incenter.medical.philips.com/doclib/enc/fetch/2000/4504/577242/577243/577245/577817/577818/HeartStart_MRx_IFU_for_T%26F_software_versions_(ENG).pdf%3Fnodeid%3D9929206%26vernum%3D1

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP16 CAT Tourniquet

INDICATIONS
• Control of life threatening external hemorrhage when standard methods such as direct pressure are inadequate

CONTRAINDICATIONS
• Inability to place proximal to wound

CAUTIONS
• Incorrectly placed tourniquets may increase venous bleeding • Do not place over a joint

PROCEDURE
1. Apply tourniquet proximal to wound according to manufacturer's instructions. Avoid placing over joints. 2. Tighten tourniquet until bleeding stops. 3. Apply second tourniquet proximal to first (directly adjacent) if needed. 4. Note the time and date of application on the tourniquet or patient's skin near the tourniquet. 5. Monitor for recurrent hemorrhage. 6. Provide analgesia after application when possible. 7. Tourniquets should only be removed by the receiving facility, once properly placed.

COMPLICATIONS
• Pain • Even when properly applied may cause nerve and vascular damage as well as tissue loss

NOTES
• Tourniquets may be used as first line treatment in: o Traumatic Cardiac Arrest o During incidents with ongoing threats – Reference CS21 o When other standard methods of hemorrhage control are not feasible

REFERENCES
• https://www.narescue.com/combat-application-tourniquet-c-a-t

CLINICAL PROCEDURE

CP18 Transcutaneous Pacing (TCP)

INDICATIONS
• Unstable bradycardia

CONTRAINDICATIONS
• Hazardous environments (e.g. standing water, fire/ignition hazards, etc.)

CAUTIONS
• Although TCP is a painful procedure, initiation of pacing must not be delayed for analgesia in the unstable patient

Demand Mode (default) – Philips MRx

PROCEDURE
1. Apply monitoring electrodes 2. Press the ***LEAD SELECT*** button to select the best lead with an easily detectable R-wave 3. Apply hands free multifunction pads 4. Turn the therapy knob to the ***PACER*** position 5. Verify that the white R-wave markers appear above or on the electrocardiogram (ECG) waveform 6. Press ***PACER RATE*** and increase the rate to 60 bpm initially 7. Press ***PACER OUTPUT*** and increase the output to 60 milliamps initially 8. Press ***START PACING***. The message ***PACING*** appears 9. Rapidly increase energy in increments of 10 milliamps until electrical capture is attained 10. Increase the output until cardiac capture occurs

Fixed Mode – Philips MRx

PROCEDURE
1. Apply hands free multifunction pads 2. Change the pacer mode to Fixed Mode 3. Turn the therapy knob to the ***PACER*** position 4. Press ***PACER RATE*** and increase the rate to 60 bpm initially 5. Press ***PACER OUTPUT*** and increase the output to 60 milliamps initially 6. Press ***START PACING***. The message ***PACING*** appears 7. Rapidly increase energy in increments of 10 milliamps until electrical capture is attained 8. Increase the output until cardiac capture occurs

COMPLICATIONS
• Pain • Burns • Failure to achieve or maintain electrical and mechanical capture

CLINICAL PROCEDURE

NOTES
• Spontaneous beats may be present which are not associated with the delivery of paced pulses • Demand Mode - If the patient's heart rate is above the pacer rate, paced pulses are not delivered therefore pacing markers do not appear • A pulse oximeter can be useful for confirming capture (by comparing the pulse rate measured by the pulse oximeter to set pacing rate) and perfusion

REFERENCES
• http://incenter.medical.philips.com/doclib/enc/fetch/2000/4504/577242/577243/577245/577817/577818/HeartStart_MRx_IFU_for_T%26F_software_versions_(ENG).pdf%3Fnodeid%3D9929206%26vernum%3D1

CLINICAL PROCEDURE

CP19 Normal Childbirth Procedure

CLINICAL PROCEDURE

INDICATIONS
• Imminent or in progress out of hospital delivery

CONTRAINDICATIONS
• None

CAUTIONS
• None

PROCEDURE

- Normal Childbirth Procedure:
  - Position patient supine, knees drawn up and buttocks elevated
  - Use sterile or aseptic technique
  - Coach patient to breathe deeply between contractions and to PUSH with contractions
  - Upon crowning, control the head with gentle pressure and support during delivery. If the cord is looped (nuchal) around the neck, gently slip it over the newborns head. If unable to do so, clamp and cut the cord
  - Suction mouth then the nose of the newborn as soon as possible
  - With gentle pressure, guide the infant's head downward to deliver the anterior shoulder and then upward to release the posterior shoulder
  - Upon delivery, hold the newborn firmly in head dependent position to facilitate drainage of secretions.
  - Clear the airway of any secretions with sterile gauze and repeat suction of the mouth and then the nose, if needed
  - Apply two clamps to umbilical cord after it stops pulsating.
    - Place the first one approximately 10 inches from the infant and the second one 2 – 3 inches proximal to the first clamp (7 – 8 inches from the newborns abdomen).
  - Cut the cord between the clamps and check for umbilical cord bleeding. If there is evidence of bleeding, apply additional clamps as needed
  - Dry infant and wrap in warm, dry blankets. Place cap to cover the newborns head
  - Allow the mother to hold the newborn if no signs and symptoms of distress prior to transport
  - Document the newborns gender, time of birth and geographical location
  - If resuscitation is required, Reference P12
- Delivery of the Placenta (Do Not Delay Transport)
  - As the placenta delivers, encourage the mother to push with contractions
  - Never "pull on" the umbilical cord to assist with placenta delivery
  - Place the placenta in a plastic bag or container and transport with the mother

CLINICAL PROCEDURE

COMPLICATIONS
•

NOTES
• Ensure use of appropriate PPE

REFERENCES
•

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP20 Pediatric Needle Cricothyrotomy Procedure

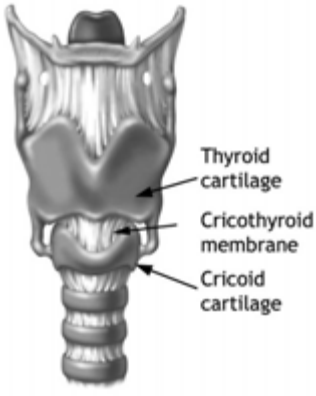
INDICATIONS

• Pediatric patient up to the age of 10 years' old
• Inability to adequately ventilate with an established airway of other means (e.g. bag-valve-mask device with adjunct, endotracheal tube) due to:
  o Severe oral or facia trauma
  o Airway obstruction unable to be cleared by other techniques

CONTRAINDICATIONS
• Neck tumor that obstructs the ability to identify anatomical landmarks • Inability to identify anatomical landmarks

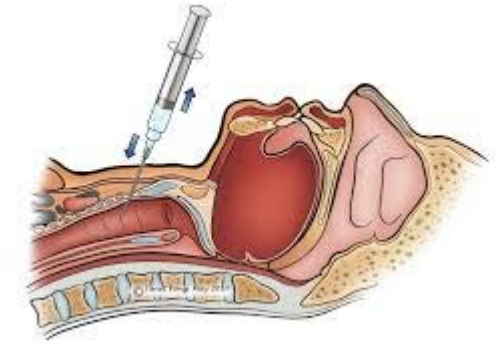
CAUTIONS
• This is a rescue procedure ONLY

EQUIPMENT
• Alcohol prep pads • Chlorprep or betadine (if available) • 14 gauge – 1-inch IV catheter • 10 mL syringe • 3.0 mm Endotracheal tube • Pediatric bag-valve-mask (BVM)

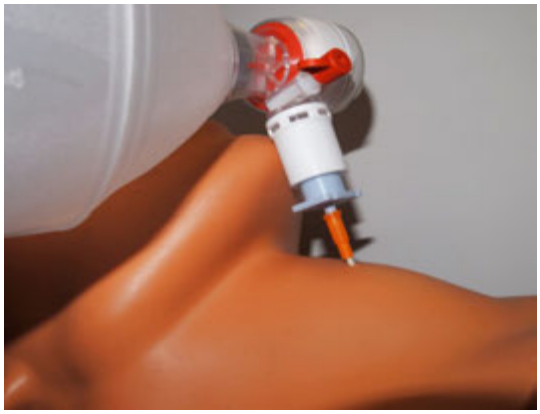
PROCEDURE
• Position patient in a supine position. Slightly hyperextend neck (without suspicion of a c-spine injury) • Secure larynx laterally between the thumb and forefinger • Identify the cricothyroid membrane utilizing anatomical landmarks    • Prep area well with alcohol preps and chlorprep or betadine (if available) • Insert the 14-gauge IV catheter t a 45-degree angle caudally (towards feet)

CLINICAL PROCEDURE

- Pull back on syringe while inserting the catheter. Once you are able to freely pull back air, you are in the trachea



- Once placement in the trachea is confirmed, advance the plastic cannula along the needle into the trachea until the hub rests against the neck
- Carefully remove the IV needle while maintaining the catheter securely in place
- Attach the 15 mm adapter (removed from the 3.0 endotracheal tube) to the IV catheter hub



- Ventilate at a baseline rate of 12 – 16 breaths per minute
- Adjust the ventilation rate to achieve an SpO2 greater than 94% and EtCO2 of 35- 45 mmHg. Ensure adequate time for exhalation
- Secure the catheter by the best method available, recognizing that this method may be by direct control with hands on the device

COMPLICATIONS
• Inability to identify anatomical landmarks • Tracheal perforation • Bleeding • Inability to access the trachea

CLINICAL PROCEDURE

NOTES
• A skill required in less than 1% of all pediatric patients

References
• https://www.vdh.virginia.gov/OEMS/Files_Page/symposium/2012Presentations/ALS-309.pdf • http://www.orangecountyfl.net/emsref/EMSrefMainMenu/ProcedureManual/AirwayProcedures.aspx • http://www.orangecountyfl.net/emsref/EMSrefMainMenu/ProcedureManual/AirwayProcedures.aspx

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP21 Pediatric Airway Management and Advanced Airway Placement

BACKGROUND

Because of the uncontrolled environments encountered in prehospital care and the fact that all of our airways are "Crash Airways" every attempt at prehospital airway management should be considered a "Difficult Airway". Success in management is predicted on an algorithmic approach focused on preparedness and thinking several steps ahead.

Pediatric prehospital airway management is particularly anxiety inducing and requires an organized stepwise approach. It is important to remember that research has demonstrated that outcomes are equivalent in pediatric patients managed with either prehospital BVM or ETI. Pediatric facilitated intubation is not to be performed except in exceptional circumstances and after OLMC consultation.

Prehospital pediatric airway management will be approached in the following stepwise fashion:

1. All pediatric patients requiring ventilatory assistance will be primarily managed with appropriate positioning, bag-valve-mask (BVM) and airway adjunct (OPA/NPA) when such a device is not contraindicated.
2. Clinicians may attempt endotracheal intubation with a cuffed (***Do Not Inflate***) endotracheal tube, if bag-valve-mask (BVM) is inadequate to maintain ventilation and/or oxygenation. Equipment size will be determined by the patient's length, not the weight.
3. No more than two (2) total attempts at direct laryngoscopy may be performed.
4. Needle cricothyrotomy (Reference CP20) shall be performed as a last resort on the pediatric patient whose airway is unable to be managed using any other means.
5. Pediatric patients who are receiving positive pressure ventilation (bag-valve-mask [BVM] or intubated) should have an orogastric tube placed (Reference CP7) to decompress the stomach and facilitate ventilation, unless contraindicated

EQUIPMENT

- Handtevy pediatric bag
- Bay-valve-mask device
- Appropriately sized OPA & NPA
- Approrpiately sized EtCO2 filterline set
- Suction
- Lubrication gel
- Apppropriately sized OG Tube
- Laryngoscope handle
- Appropriately sized laryngoscope blade
- Appropriately sized endotracheal tube
- 10 mL Syringe
- Needle cricothyrotomy kit

CLINICAL PROCEDURE

CLINICAL PROCEDURE

CP1.1 Pediatric Bag Valve Mask Ventilation

INDICATIONS
• Respiratory insufficiency/failure/arrest • Pre-oxygenation prior to advanced airway placement attempt

CONTRAINDICATIONS
• None

CAUTIONS
• Effective seal is crucial and may be difficult in pediatric patients • Facial trauma may further complicate

PROCEDURE
1. Assemble equipment per manufacturer's instructions and connect to Oxygen source 2. Attach EtCO2 filterline set (appropriate size) between mask and bag-valve device (ALS Only) 3. Position patient in a "sniffing position" (place a folded sheet under the scapulae < 2 years old or under the occiput > 2 years old) 4. Place NPA/OPA if patient tolerates and not contraindicated (e.g. No NPA in head/facial trauma) 5. Utilizing 2-person technique whenever possible, ventilate at a baseline rate of 12 – 16 breaths per minute 6. Adjust ventilation rate to achieve adequate SpO2 and EtCO2 of 35 – 45 mmH_2O (ALS Only)

COMPLICATIONS
• Inability to maintain adequate seal • Inappropriate hyperventilation • Gastric distention • Hypotension and/or pneumothorax resulting from positive pressure ventilation

CP1.2 Pediatric Endotracheal Intubation

INDICATIONS
• Respiratory insufficiency/failure/arrest

CONTRAINDICATIONS
• Ability to effectively manage with bag-valve-mask ventilation

CAUTIONS
• Endotracheal intubation in children will alter hemodynamic status • May be difficult with facial/neck trauma, blood or other secretions in the airway • Limited mobility or congenital malformation of the neck or jaw

PROCEDURE
1. Assemble all needed equipment within reach of operator and test endotracheal tube cuff 2. Pre-oxygenate the patient 3. Choose appropriately sized equipment using the Pinellas County Handtevy Medication and Equipment Guidebook 4. Perform direct laryngoscopy and pass endotracheal tube so the cuff is just distal to the vocal cords. o Maximum of 15 seconds per attempt o Maximum of 2 total combined attempts by all clinicians 5. ***DO NOT*** inflate the cuff 6. Attach EtCO2 filterline set and ventilate to check for bilateral breath sounds, quiet epigastrium, and confirm placement with EtCO2 7. Secure endotracheal tube with commercial tube holder device (if appropriately sized) 8. Ventilate at a baseline rate of 12 – 16 breaths per minute. Adjust ventilation to maintain adequate SpO2 and EtCO2 of 35 – 45 mmH_2O

COMPLICATIONS
• Inability to place tube • Esophageal placement • Unrecognized displacement • Hypotension and/or pneumothorax resulting from positive pressure ventilation

CP1.3 Pediatric Facilitated Intubation

INDICATIONS
• Respiratory insufficiency/failure/arrest requiring airway management in patients with retained consciousness, gag reflex or jaw clenching

CONTRAINDICATIONS
• Allergic or adverse reaction history to any of the medications

CAUTIONS

- ***OLMC consult is mandatory prior to attempting facilitated intubation***

PROCEDURE

1. Prepare all equipment as per "CP1.2 Pediatric Endotracheal Intubation"
2. Ensure patent IV/IO access and prepare medications
3. Fentanyl 2 mcg/kg IVP followed by Etomidate 0.3 mg/kg SLOW IVP (over > 20 seconds)
4. Perform "CP1.2 Pediatric Endotracheal Intubation" as listed above
5. Following confirmation of successful intubation, Midazolam, may repeat one time

COMPLICATIONS

- Adverse reactions to medications (e.g. trismus due to rapid administration of etomidate)
- Ineffectiveness of medications
- Sedation with failure to secure airway

QUALITY MEASURES

- Ventilation assistance provided
- Single airway type used
- Confirmation of placement with EtCO2
- Airway re-confirmed
- Multiple EtCO2 values

NOTES

- ***OLMC CONSULT IS MANDATORY PRIOR TO ATTEMPTING FACILITATED INTUBATION***
- Prehospital pediatric facilitated intubation is generally not indicated and should only be considered in exceptional circumstances in consultation with the OLMC physician
- Extreme caution should be exercised prior to attempting facilitated intubation to avoid administration in patients who airway management is anticipated to be particularly difficult

REFERENCES

- https://www.nasemso.org/Projects/ModelEMSClinicalGuidelines/documents/National-Model-EMS-Clinical-Guidelines-Aug2016.pdf
- Pinellas County EMS Medical Quality Management Plan 2016 v 1.0 Effective January 6, 2016

CP22 Traction Splint

CLINICAL PROCEDURE

CLINICAL PROCEDURE

INDICATIONS

- Treatment of unilateral proximal third and mid-shaft femoral fractures
- Pain relief

CONTRAINDICATIONS

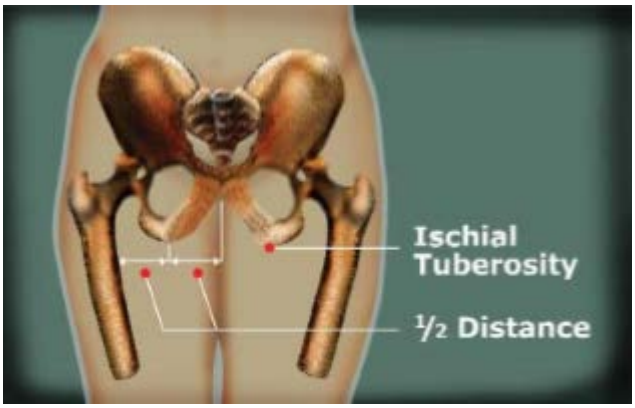
- Pelvic fracture
- Distal femur or supracondylar fractures
- Compound or open fractures of the femur
- Fractures of the ankle and foot

CAUTIONS

- None

PROCEDURE

- Position the Sager S301 between the patient's legs resting the ischial perineal cushion (the saddle) against the ischial tuberosity, with the shortest end of the articulating base towards the ground
- The pulley wheel should be on the same side and towards the injured limb
- Apply the abductor bridle (thigh strap) around the upper thigh on the injured limb
- Push the ischial perineal cushion gently down at the same time pulling the thigh strap laterally under the patient's thigh
- Tighten the thigh strap lightly
- Lift the spring coil to extend the inner shaft until the pulley (traction) wheel is adjacent to the patient's heels.
- Note the absence or presence of distal pulses. Check for sensation
- Position the malleolar harness (ankle harness) beneath the heel(s) and just above the ankle
- Fold down the number of comfort cushions needed to engage all of the ankle above the medial and lateral malleoli
- Using the attached hook and loop straps, wrap the ankle harness around the ankle too secure snugly
- Pull control tabs on the ankle harness to shorten the ankle sling, pulling it up against the sole of the foot



- Extend the splint shaft to achieve the amount of traction desired while observing the amount registered on the traction scale (use 10% of the patient's weight per fractured femur up to 7 kg (15 pounds))
- At the hollow of the knees, gently slide the large elastic leg cravat through and upwards to the thigh repeating with the smaller cravats to minimize lower and mid-limb movement
- Adjust the thigh strap at the upper thigh making sure it is not too tight but snug and secure, then firmly secure the elastic leg cravats
- Apply the pedal pinion around the feet to prevent rotation
- Note the presence or absence of distal pulses. Check for sensation.

Sager® Emergency Traction Splints have six (6) basic components consisting of;

COMPLICATIONS

- Inadequate or excessive traction
- Improper positioning
- Increased pain (rare)
- Neurovascular compromise

NOTES

- None

References

- http://www.sagersplints.com/pdf/SEFRS-InstructorsManual.pdf

CP23 Hyfin Vent Compact Chest Seal

CLINICAL PROCEDURE

CLINICAL PROCEDURE

INDICATIONS
• Penetrating wounds to the chest

CONTRAINDICATIONS
• None

CAUTIONS
• Anticipate difficulty with excess blood, skin moisture, or debris

PROCEDURE
1. Clean and dry the wound as practical 2. Remove one vented chest seal from release liner 3. Place firmly over wound, centered, with adhesive side down 4. Apply light direct pressure to assure occlusive seal 5. Repeat with second dressing if a second wound (e.g. exit wound) is present

COMPLICATIONS
• Improper placement may contribute to the development of tension pneumothorax

REFERENCES
• https://www.narescue.com/hyfin-vent-compact-chest-seal-twin-pack

CLINICAL PROCEDURE

CP24 Wound Packing with QuikClot® Combat Gauze and Emergency Trauma Dressing (ETD)

Indications
• Control of life threatening external hemorrhage in areas where proximal tourniquet application is not possible (e.g. junctional wounds) and standard methods such as direct pressure are inadequate.

Contraindications
• None

Cautions
• Hemorrhage control using external hemostatic dressings may be difficult at non-compressible sites • Avoid hemostatic dressing contact with eyes

Procedure
1. Expose wound, remove excess pooled blood from around wound while preserving any clots already in the wound if possible. 2. Locate source of bleeding and pack hemostatic gauze into wound tightly and directly onto bleeding source. Use as much gauze as needed to stem blood flow. Remainder of roll can be used on top of wound or to fill wound cavity. 3. Apply manual direct pressure for 3 – 5 minutes or until bleeding stops. 4. Leave gauze in place. Place the pad of the ETD dressing over wound and wrap tightly to create a pressure dressing. Secure as directed. 5. Consider pain management.

Complications
• Failure to adequately control hemorrhage • Pain

Notes
• Wound packing may be used as first line treatment in: o Traumatic Cardiac Arrest o During incidents with ongoing threats – Reference CS21 o When other standard methods of hemorrhage control are not feasible • QuikClot® Combat Gauze causes rapid, localized coagulation and the formation of a stable blood clot in a variety of wounds. It does not absorb into the body and is safe to leave in the wound until further medical care is available. QuikClot® Combat Gauze does not produce any heat and controls bleeding faster than conventional methods.

References
• https://www.narescue.com/combat-gauze-z-fold-hemostatic • https://www.narescue.com/responder-emergency-trauma-dressings

CLINICAL PROCEDURE

CP25 Vector Change Defibrillations

INDICATIONS

• Refractory ventricular fibrillation
  o Has already received 3+ shocks
  o Has already received antiarrythmic drug therapy
• ***OLMC Authorization Required***

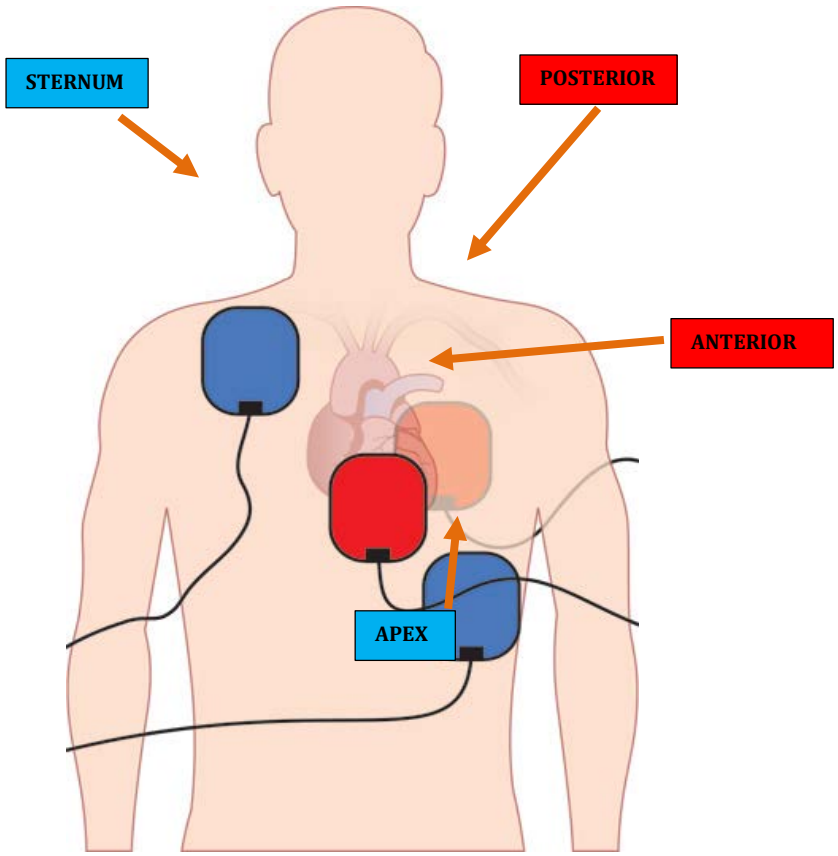
CONTRAINDICATIONS
• Hazardous environments (e.g. standing water, fire/ignition hazards, etc.)

CAUTIONS
• Ensure minimal interruption to compressions

PROCEDURE

SAFETY ALERT
OLMC AUTHORIZATION REQUIRED

- Apply a second set of Phillips Hands Free Pads in the alternate position (e.g. anterior-posterior vs. Apex-Sternum) from the initial pads during the next pulse check.



CLINICAL PROCEDURE

- Switch MRX to the new set of pads after CPR resumes.
- At the next indicated shock, perfrom standard defibrillation using the new pads.
- Continue the remainder of the resuscitation with the new pads.

COMPLICATIONS
• Asystole

NOTES
• Pending

REFERENCES
• Pending

CLINICAL PROCEDURE

F1 Adenosine

Trade Name	Adenocard, Adenoscan	
Class(es)	Antiarrhythmic	
Action(s)	Slows conduction through AV & SA nodes. Can interrupt the reentry pathways through AV node	
Indication(s)	Convert PSVT and PSVT with accessory bypass tracts (Wolff-Parkinson-White Syndrome) to sinus rhythm	
Contraindication(s)	Hypersensitivity to the drug, AV block, preexisting 2nf/3rd degree heart block or sick sinus rhythm without pacemaker	
Precaution(s)	Asthmatics, unstable angina, stenotic valve disease, hypovolemia, hepatic and renal failure	
Pharmacokinetics	**Onset:** 20 – 30 seconds	**Duration:** N/A
Routes of Administration	IV	
Technique for Administration	Rapid bolus over 1 – 2 seconds. Administer as proximally as possible & follow with raid 0.9% Sodium Chloride flush	
PEARLS	• Prior to administration – advise patient this will make you feel strange • Start ECG printer just prior to IV administration • Continue printing during IV administration through post administration (10 secs.) • Adverse effects are generally self-limiting • At time of conversion to normal sinus rhythm, PVCs, PACs, sinus bradycardia and sinus tachycardia in addition to various degrees of AV block could be seen on the ECG. Usually only last a few seconds and resolve without intervention	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F2 Albuterol Sulfate

Trade Name	Accuneb, Novosalmol, ProAir HFA, Proventil, Proventil HFA, ReliOn Ventolin HFA, Ventolin, Ventolin HFA, VoSpire ER	
Class(es)	Bronchodilator (respiratory smooth muscle relaxant); Beta-adrenergic agonist	
Action(s)	Selective beta2-adrenergic agonist that acts prominently on smooth muscles of the trachea, bronchi, uterus and vascular supply to skeletal muscles. Inhibits histamine release. Produces bronchodilation by relaxing smooth muscles of the bronchial tree	
Indication(s)	Relieve bronchospasm associated with acute/chronic asthma, bronchitis or other reversible obstructive airway disease	
Contraindication(s)	Albuterol or Levalbuterol hypersensitivity; congenital long QT syndrome	
Precaution(s)	Cardiovascular disease, hypertension, older adults, history of seizures	
Pharmacokinetics	**Onset:** 5 – 15 minutes	**Duration:** 3 – 6 hours
Routes of Administration	Inhalation	
Technique for Administration	N/A	
PEARLS	• Continuous one on one coaching with the patient will improve effectiveness of the medication	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F3 Amiodarone Hydrochloride

Trade Name	Cordarone, Nexterone, Pacerone	
Class(es)	Class III anti-arrhythmic	
Action(s)	Acts directly on all cardiac tissues by prolonging duration of action potential and refractory period. Slows conduction time through the AV node and can interrupt the re-entry pathways through the AV node. Has anti-anginal and anti-adrenergic properties	
Indication(s)	Amiodarone injection is an antiarrhythmic agent indicated for initiation of treatment of frequently recurring ventricular fibrillation (VF) and hemodynamically unstable ventricular tachycardia (VT) in patient's refractory to other therapy	
Contraindication(s)	Known hypersensitivity to any of the components of amiodarone, including iodine, cardiogenic shock, marked sinus bradycardia, second- or third-degree atrio-ventricular (AV) block unless a functioning pacemaker is available.	
Precaution(s)	Hypotension, bradycardia and AV block, proarrhythmia	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	IV	
Technique for Administration	N/A	
PEARLS	• Monitor BP carefully during infusion and slow the infusion if significant hypotension occurs • Bradycardia should be treated by slowing the infusion or discontinuing it if necessary • Monitor heart rate, rhythm and BP until drug response has stabilized	
Y-Site Compatibility	Aminophylline, amoxicillin, atenolol, digoxin, heparin, levofloxacin, magnesium sulfate, sodium bicarbonate	
Interactions	• Significantly decreases digoxin levels, enhances pharmacological effects and toxicities of disopyramide, procainamide, quinidine, flecanide, lidocaine, verapamil, diltiazem • Fentanyl may cause bradycardia or hypotension	
Reference	Pending	

FORMULARY

F4 Aspirin

Trade Name	Alka-Seltzer, A.S.A., Bayer, Bayer Children's, Ecotrin, St. Joseph's	
Class(es)	Salicylate, antipyretic, antiplatelet	
Action(s)	Produces analgesia, anti-inflammatory and anti-pyretic effects and reduces platelet aggregation	
Indication(s)	Acute coronary syndrome	
Contraindication(s)	Hypersensitivity to salicylates; sensitivity to other NSAIDs; acute bronchospasm; head trauma, increased intracranial pressure; intracranial bleeding; chronic urticaria; acute GI ulceration, bleeding or other problems; pregnancy; lactation	
Precaution(s)	Immunosuppressed individuals; asthma; GI disease; anemia	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	Oral	
Technique for Administration	N/A	
PEARLS	Bleeding time is prolonged 3 – 8 days (life of exposed platelets) following a single 325 mg dose of aspirin	
Y-Site Compatibility	N/A	
Interactions	Anticoagulants increase the risk of bleeding	
Reference	Pending	

FORMULARY

F5 Atropine

Trade Name	N/A	
Class(es)	Anticholinergic; muscarinic; antiarrhythmic	
Action(s)	Selectively blocks all muscarinic responses to acetylcholine (ach), whether excitatory or inhibitory. Antisecretory action (vagolytic effect) suppresses sweating, lacrimation, salivation & secretions from the nose, mouth, pharynx and bronchi. Block vagal impulse to heart with resulting decrease in AV conduction time, increase in heart rate and cardiac output & shortened PR interval. Produces mydriasis.	
Indication(s)	Symptomatic bradycardia, organophosphate poisoning	
Contraindication(s)	Tachycardia secondary to cardiac insufficiency; acute hemorrhage; acute MI	
Precaution(s)	Myocardial infarction, hypertension, hypotension, coronary artery disease, CHF, tachyarrhythmia, older adults	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	IV, IM	
Technique for Administration	N/A	
PEARLS	• Heart rate is a sensitive indicator of the patient's response to Atropine • Be alert to changes in quality, rate and rhythm of the heart rate, respirations, changes in blood pressure and temperature • Initial paradoxical bradycardia following IV Atropine usually lasts only 1 – 2 minutes. It most likely occurs when administered slow via the IV route (over more than a minute) or when small doses (less than 0.5 mg are used	
Y-Site Compatibility	N/A	
Interactions	Procainamide, antihistamines	
Reference	Pending	

FORMULARY

F6 Calcium Chloride

Trade Name	N/A	
Class(es)	Electrolyte	
Action(s)	Effective cardiac stabilizer under conditions of hyperkalemia or resuscitation. Rapidly and effectively restores serum calcium levels in acute hypocalcemia. Ionizes readily & provides excess chloride ions that promote acidosis and temporary (1-2 days) diuresis secondary to excretion of sodium.	
Indication(s)	Hyperkalemia, hypocalcemia	
Contraindication(s)	Ventricular fibrillation, hypercalcemia, digitalis toxicity	
Precaution(s)	Digitalized patients; cardiac arrhythmias, dehydration, diarrhea, respiratory acidosis, myocardial infarction, hypertension, hypotension, coronary artery disease, CHF, tachyarrhythmias, older adults	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	IV	
Technique for Administration	N/A	
PEARLS	• Monitor ECG and vital signs • Intravenous administration may be accompanied by cutaneous burning sensation and peripheral vasodilation, with moderate fall in blood pressure	
Y-Site Compatibility	Propofol, sodium bicarbonate	
Interactions	Other electrolytes	
Reference	Pending	

FORMULARY

F7 Dextrose

Trade Name	Dextrose 5%, Dextrose 10%	
Class(es)	N/A	
Action(s)	N/A	
Indication(s)	Hypoglycemia, solution for IV medication drip	
Contraindication(s)	May be contraindicated in patients with known allergy to corn or corn products.	
Precaution(s)	Multiple doses of Dextrose injections may result in significant hypokalemia	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	IV	
Technique for Administration	• DO NOT use plastic containers in series connections • Pressurizing intravenous solutions contained in flexible plastic containers to increase flow rates can result in air embolism if the residual air in the container is not fully evacuated prior to administration • Use of a vented intravenous administration set with the vent open could result in air embolism	
PEARLS	N/A	
Y-Site Compatibility	Dextrose should not be administered simultaneously with blood through the same administration set because of the possibility of pseudoagglutination or hemolysis	
Interactions	N/A	
Reference	Pending	

FORMULARY

F8 Norepinephrine

Trade Name	Levophed
Class(es)	Sympathomimetic
Action(s)	functions as a peripheral vasoconstrictor (alpha-adrenergic action) and as an inotropic stimulator of the heart and dilator of coronary arteries (beta-adrenergic action).
Indication(s)	For blood pressure control in certain acute hypotensive states (e.g., pheochromocytomectomy, sympathectomy, poliomyelitis, spinal anesthesia, myocardial infarction, septicemia, blood transfusion, and drug reactions). As an adjunct in the treatment of cardiac arrest and profound hypotension.
Contraindication(s)	LEVOPHED should not be given to patients who are hypotensive from blood volume deficits except as an emergency measure to maintain coronary and cerebral artery perfusion until blood volume replacement therapy can be completed. If LEVOPHED is continuously administered to maintain blood pressure in the absence of blood volume replacement, the following may occur: severe peripheral and visceral vasoconstriction, decreased renal perfusion and urine output, poor systemic blood flow despite "normal" blood pressure, tissue hypoxia, and lactate acidosis. LEVOPHED should also not be given to patients with mesenteric or peripheral vascular thrombosis (because of the risk of increasing ischemia and extending the area of infarction) unless, in the opinion of the attending physician, the administration of LEVOPHED is necessary as a life-saving procedure. Cyclopropane and halothane anesthetics increase cardiac autonomic irritability and therefore seem to sensitize the myocardium to the action of intravenously administered epinephrine or norepinephrine. Hence, the use of LEVOPHED during cyclopropane and halothane anesthesia is generally considered contraindicated because of the risk of producing ventricular tachycardia or fibrillation. The same type of cardiac arrhythmias may result from the use of LEVOPHED in patients with profound hypoxia or hypercarbia.
Precaution(s)	**Avoid Hypertension**: Because of the potency of LEVOPHED and because of varying response to pressor substances, the possibility always exists that dangerously high blood pressure may be produced with overdoses of this pressor agent. It is desirable, therefore, to record the blood pressure every two minutes from the time administration is

FORMULARY

	started until the desired blood pressure is obtained, then every five minutes if administration is to be continued. The rate of flow must be watched constantly, and the patient should never be left unattended while receiving LEVOPHED. Headache may be a symptom of hypertension due to overdosage.	
Pharmacokinetics	**Onset:** Rapid	**Duration:** 1-2 minutes
Routes of Administration	IV	
Technique for Administration	**Site of Infusion**: Whenever possible, infusions of LEVOPHED should be given into a large vein, particularly an antecubital vein because, when administered into this vein, the risk of necrosis of the overlying skin from prolonged vasoconstriction is apparently very slight. Some authors have indicated that the femoral vein is also an acceptable route of administration. A catheter tie-in technique should be avoided, if possible, since the obstruction to blood flow around the tubing may cause stasis and increased local concentration of the drug. Occlusive vascular diseases (for example, atherosclerosis, arteriosclerosis, diabetic endarteritis, Buerger's disease) are more likely to occur in the lower than in the upper extremity. Therefore, one should avoid the veins of the leg in elderly patients or in those suffering from such disorders. Gangrene has been reported in a lower extremity when infusions of LEVOPHED were given in an ankle vein. **Extravasation**: The infusion site should be checked frequently for free flow. Care should be taken to avoid extravasation of LEVOPHED into the tissues, as local necrosis might ensue due to the vasoconstrictive action of the drug. Blanching along the course of the infused vein, sometimes without obvious extravasation, has been attributed to vasa vasorum constriction with increased permeability of the vein wall, permitting some leakage. This also may progress on rare occasions to superficial slough, particularly during infusion into leg veins in elderly patients or in those suffering from obliterative vascular disease. Hence, if blanching occurs, consideration should be given to the advisability of changing the infusion site at intervals to allow the effects of local vasoconstriction to subside.	
PEARLS	An IV drip chamber or other suitable metering device is essential to permit an accurate estimation of the rate of flow in drops per minute. After observing the response to an initial dose of 2 mL to 3 mL (from 8 mcg to 12 mcg of base) per minute, adjust the rate of flow to establish and maintain a low normal blood pressure (usually 80 mm Hg to 100 mm Hg systolic) sufficient to maintain the circulation to vital organs. In previously hypertensive patients, it is recommended that the blood pressure should be raised no higher than 40 mm Hg below the	

FORMULARY

	preexisting systolic pressure. The average maintenance dose ranges from 0.5 mL to 1 mL per minute (from 2 mcg to 4 mcg of base).
Y-Site Compatibility	N/A
Interactions	N/A
Reference	Pending

FORMULARY

F9 Diltiazem

Trade Name	Cardizem	
Class(es)	Calcium channel blocking agent, antiarrhythmic, antihypertensive	
Action(s)	Inhibits calcium ion influx into vascular smooth muscle and myocardium, relaxing smooth muscle, decreasing peripheral vascular resistance, dilating coronary arteries and prolonging AV node refractory period	
Indication(s)	Atrial fibrillation, atrial flutter, supraventricular tachycardia	
Contraindication(s)	Known hypersensitivity to the drug; sick sinus syndrome (unless pacemaker is in place and firing); acute MI; severe hypotension (systolic BP < 90 or diastolic < 60); bleeding aneurysm	
Precaution(s)	SA node dysfunction, sick sinus syndrome with functioning pacemaker, right ventricular dysfunction, CHF, severe bradycardia, conduction abnormalities, older adults, pregnancy	
Pharmacokinetics	**Onset:** N/A	**Duration:** 2 – 3 hours
Routes of Administration	IV	
Technique for Administration	Give undiluted	
PEARLS	• Give as a bolus dose over 2 minutes • Pinellas County EMS utilizes a lower max dose than may be referenced	
Y-Site Compatibility	Aminophylline, diazepam, Methylprednisolone, sodium bicarbonate	
Interactions	Furosemide	
Reference	Pending	

FORMULARY

F10 Diphenhydramine Hydrochloride

Trade Name	Allerdryl, Benadryl, Benadryl Dye-Free, Sleep Eze 3	
Class(es)	Antihistamine	
Action(s)	Non-selectively antagonizes central and peripheral histamine H1 receptors; suppresses the medullary cough center (antitussive); possesses anticholinergic properties, resulting in antidyskinetic, antiemetic and sedative effects	
Indication(s)	Hives, rashes and itching related to allergic conditions	
Contraindication(s)	Hypersensitivity to antihistamines of similar structure; lower respiratory tract symptoms	
Precaution(s)	Asthma; COPD; convulsive disorders; hypertension; cardiovascular disease; older adults; infants and young children	
Pharmacokinetics	**Onset:** 15 – 30 minutes	**Duration:** 4 – 7 hours
Routes of Administration	Intravenous, intramuscular, oral	
Technique for Administration	• Intravenous administration – give at a rate of 25 mg or fraction there of over one minute • Intramuscular administration – give deep into large muscle mass • Avoid perivascular or subcutaneous injections because of irritating effects	
PEARLS	Monitor for adverse reactions	
Y-Site Compatibility	Aminophylline, ampicillan	
Interactions	Alcohol, CNS depressants	
Reference	Pending	

FORMULARY

F11 Dopamine Hydrochloride

Trade Name	N/A	
Class(es)	Alpha and beta adrenergic agonist; inotropic	
Action(s)	Stimulates alpha and beta-1 adrenergic and dopaminergic receptors; produces inotropic, chronotropic, renal/splanchnic vasodilatory (at low doses), and pressor (at high doses) effects	
Indication(s)	Correct hemodynamic imbalance in shock syndrome due to MI (cardiogenic shock), trauma, septic shock, CHF	
Contraindication(s)	Hypersensitivity to drug. Uncorrected tachyarrhythmias or ventricular fibrillation	
Precaution(s)	CAD, cold injury, acute MI, arterial embolism, children less than 2	
Pharmacokinetics	**Onset:** < 5 minutes	**Duration:** < 10 minutes
Routes of Administration	Intravenous	
Technique for Administration	• Monitor infusion continuously for free flow • Avoid extravasation which can result in tissue sloughing and gangrene • Use a large vein of the antecubital fossa • Protect from light	
PEARLS	N/A	
Y-Site Compatibility	N/A	
Interactions	Beta blockers antagonize cardiac effects, alpha blockers antagonize peripheral vasoconstriction	
Reference	Pending	

FORMULARY

F12 Epinephrine

Trade Name	Adrenaline, EpiPen, Adrenaclick, Twinject	
Class(es)	Alpha and beta adrenergic agonist; cardiac stimulant; vasopressor	
Action(s)	Stimulates alpha and beta adrenergic receptors (sympathomimetic)	
Indication(s)	Restore cardiac rhythm in cardiac arrest; anaphylactic reactions; acute asthma attack; temporary relief of bronchospasm, mucosal congestion	
Contraindication(s)	Hypersensitivity to drug; hemorrhagic, traumatic or cardiogenic shock; arrhythmias	
Precaution(s)	Older adults; hypertension; diabetes mellitus	
Pharmacokinetics	**Onset:** 3 - 5 minutes	**Duration:** N\A
Routes of Administration	Intravenous, subcutaneous, intramuscular	
Technique for Administration	• Protect from exposure to light at all times • DO NOT remove ampule or vial from carton until ready to use	
PEARLS	N/A	
Y-Site Compatibility	N/A	
Interactions	May increase hypotension in circulatory collapse or hypotension caused by phenothiazines. Additive toxicities with other sympathomimetics	
Reference	Pending	

FORMULARY

FORMULARY

F13 Etomidate

Trade Name	Amidate	
Class(es)	Ultrashort-acting non-barbiturate hypnotic	
Action(s)	Induces sedation and amnesia	
Indication(s)	Induction of general anesthesia for facilitation of airway management	
Contraindication(s)	Hypersensitivity to drug	
Precaution(s)	Older adults; hypertension; diabetes mellitus	
Pharmacokinetics	**Onset:** within 60 seconds	**Duration:** N\A
Routes of Administration	Intravenous	
Technique for Administration	• Intravenous administration – inject over a period of 30 – 60 seconds • Inject into large forearm vein	
PEARLS	Handled in the same manner as all controlled substances	
Y-Site Compatibility	Vecuronium	
Interactions	N/A	
Reference	Pending	

FORMULARY

F14 Fentanyl Citrate

Trade Name	Sublimaze	
Class(es)	Analgesic; opiate agonist	
Action(s)	Synthetic, potent agonist analgesic that causes analgesia and sedation.	
Indication(s)	Short acting analgesia for pain and sedation	
Contraindication(s)	N/A	
Precaution(s)	Head injuries, older adults, angina, hypotension, bradyarrhythmias	
Pharmacokinetics	**Onset:** Immediate intravenous, 7 – 15 minutes intramuscular	**Duration:** 30 – 60 minutes intravenous, 1 – 2 hours intramuscular
Routes of Administration	Intravenous, intranasal, intramuscular	
Technique for Administration	• l Monitor vital signs and observe patient for signs of skeletal and thoracic muscle (depressed respirations) rigidity and weakness	
PEARLS	DEA Class II Controlled Substance	
Y-Site Compatibility	N/A	
Interactions	Alcohol and other CNS depressants potentiate effects	
Reference	Pending	

FORMULARY

F15 Glucagon Hydrochloride

Trade Name	Glucagen	
Class(es)	Antihypoglycemic	
Action(s)	Increases blood glucose secondary to gluconeogenesis, which is the breakdown of glycogen to glucose in the liver. Action in hypoglycemia relies on presence of adequate liver glycogen stores.	
Indication(s)	Hypoglycemia with the inability to obtain vascular access	
Contraindication(s)	Hypersensitivity to glucagon or protein compounds; depleted glycogen stores in liver	
Precaution(s)	Cardiac disease; malnutrition; children	
Pharmacokinetics	**Onset:** 5 – 20 minutes	**Duration:** 1 – 1.5 hours
Routes of Administration	Intravenous, intranasal, intramuscular	
Technique for Administration	Intravenous administration – give over 1 minute	
PEARLS	• Patient usually awakens from (diabetic) hypoglycemic coma 5 – 20 minutes after glucagon injection. • Give PO carbohydrate as soon as possible after patient regains consciousness	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F16 Hydroxocobalamin

Trade Name	Cyanokit	
Class(es)	Antidote	
Action(s)	Binds cyanide to form nontoxic cyanocobalamin that is then excreted in urine	
Indication(s)	Treatment of known or suspected cyanide poisoning	
Contraindication(s)	None	
Precaution(s)	Known anaphylactic reactions to Hydroxocobalamin or cyanocobalamin	
Pharmacokinetics	**Onset:** 5 – 20 minutes	**Duration:** 1 – 1.5 hours
Routes of Administration	Intravenous	
Technique for Administration	• Draw one complete PEP kit while setting up to administer Hydroxocobalamin • Following the addition of the diluent to the lyophilized powder, the vial should be repeatedly inverted and rocked, NOT SHAKEN, for at least 60 seconds prior to infusion. • Intravenous administration – give initial dose over 15 minutes • Cyanokit requires a dedicated intravenous line for administration	
PEARLS	• The recommended diluent is 0.9% Sodium Chloride l Lactated Ringers or Dextrose 5% in Water have also been found to be compatible l Give PO carbohydrate as soon as possible after patient regains consciousness	
Y-Site Compatibility	Sodium Nitrite, Sodium Thiosulfate, blood products	
Interactions	N/A	
Reference	Pending	

FORMULARY

F17 Ipratropium Bromide

Trade Name	Atrovent	
Class(es)	Anticholinergic; antimuscarinic; bronchodilator	
Action(s)	Bronchodilation by inhibiting acetylcholine at its receptor sites, thereby blocking bronchoconstriction. Also abolishes vagally mediated reflex bronchospasm triggered by such non-specific agents as cigarette smoke, inert dusts, cold air, and a range of inflammatory mediators.	
Indication(s)	Adjunct to Albuterol in asthma/COPD	
Contraindication(s)	Hypersensitivity to Atropine	
Precaution(s)	Pregnancy	
Pharmacokinetics	**Onset:** N/A	**Duration:** 4 – 6 hours
Routes of Administration	Inhalation	
Technique for Administration	N/A	
PEARLS	N/A	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F18 Lidocaine Hydrochloride

Trade Name	N/A	
Class(es)	Class IB antiarrhythmic; local anesthetic	
Action(s)	Exerts antiarrhythmic action by suppressing automaticity in His-Purkinje system. It decreases pain through a reversible nerve conduction blockade.	
Indication(s)	Ventricular dysrhythmias; analgesia prior to infusion of fluids via intraosseus needle in conscious patient	
Contraindication(s)	History of hypersensitivity to amide-type local anesthetics, supraventricular arrhythmias; severe degrees of sinoatrial, atrio-ventricular and intraventricular heart block.	
Precaution(s)	CHF, marked hypoxia, respiratory depression, hypovolemia, shock	
Pharmacokinetics	**Onset:** 45 – 90 seconds	**Duration:** 10 – 20 minutes
Routes of Administration	Inhalation, intraosseous	
Technique for Administration	N/A	
PEARLS	Monitor blood pressure and ECG constantly; assess respiratory and neurologic status frequently to avoid potential overdosage and toxicity.	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F19 Magnesium Sulfate

Trade Name	N/A	
Class(es)	Electrolyte	
Action(s)	Smooth muscle relaxant and anticonvulsant in labor and delivery and cardiac disorders.	
Indication(s)	Control seizures in toxemia of pregnancy, epilepsy; Prophylaxis and treatment of hypomagnesemia; Severe acute asthma	
Contraindication(s)	Myocardial damage; AV heart block; cardiac arrest except for certain arrhythmias; hypermagnesemia	
Precaution(s)	Acute MI; pregnancy	
Pharmacokinetics	**Onset:** 1 hour intramuscular	**Duration:** 30 minutes intravenous
Routes of Administration	Intravenous, intramuscular	
Technique for Administration	N/A	
PEARLS	• Observe constantly when administered IV • Check blood pressure and pulse every 10-15 minutes or more often if indicated • Monitor respiratory rate close	
Y-Site Compatibility	Amiodarone, ciprofloxacin, haloperidol	
Interactions	Sodium bicarbonate, neuromuscular blocking agents add to respiratory depression and apnea	
Reference	Pending	

FORMULARY

F20 Methylprednisolone Sodium Succinate

Trade Name	Solu-Medrol	
Class(es)	Glucocorticoid	
Action(s)	Anti-inflammatory, immune-suppressant	
Indication(s)	Asthma/COPD (chronic inflammatory conditions); Acute allergic/anaphylactic reactions	
Contraindication(s)	Hypersensitivity to corticosteroid drugs	
Precaution(s)	GI ulceration or disease; hypertension; CHF; diabetes	
Pharmacokinetics	**Onset:** N/A	**Duration:** N/A
Routes of Administration	Intravenous, intramuscular	
Technique for Administration	Intramuscular administration - deep into a large muscle mass (not deltoid) l Give each intravenous dose over 2 – 3 minute	
PEARLS	N/A	
Y-Site Compatibility	Amiodarone, ciprofloxacin, haloperidol	
Interactions	Furosemide, Thiazide diuretics increase potassium loss	
Reference	Pending	

FORMULARY

F21 Midazolam Hydrochloride

Trade Name	Versed	
Class(es)	benzodiazepine; anticonvulsant; anxiolytic	
Action(s)	Produces CNS depression resulting in sedation, hypnosis, skeletal muscle relaxation and anticonvulsant activity dependent on the dosage.	
Indication(s)	Sedative, impair memory, induce hypnosis	
Contraindication(s)	Intolerance to benzodiazepines; shock; coma; acute alcohol intoxication; status asthmaticus; pregnancy	
Precaution(s)	COPD, cardiac disease, dementia, psychosis, CHF, bipolar disorder, older adults	
Pharmacokinetics	**Onset:** 1 – 5 minutes IV, 5 – 15 minutes IM	**Duration:** < 2 hours IV, 1 – 6 hours IM
Routes of Administration	Intravenous, intramuscular, intranasal	
Technique for Administration	• Intramuscular administration - deep into a large muscle mass (not deltoid) • Intranasal administration – 1 mL max volume of drug per nare	
PEARLS	DEA Class IV Controlled Substance	
Y-Site Compatibility	Amoxicillin, bumetanide, furosemide, dexamethasone, sodium bicarbonate, thiopental	
Interactions	Lactated ringers, pentobarbital, prochlorperazine	
Reference	Pending	

FORMULARY

F23 Naloxone Hydrochloride

Trade Name	Narcan	
Class(es)	Opiate antagonist	
Action(s)	Competitively inhibits opiate receptors	
Indication(s)	Narcotic overdose	
Contraindication(s)	Hypersensitivity to naloxone, naltrexone, nalmefene	
Precaution(s)	Known or suspected narcotic dependence; brain tumor; head trauma; increased ICP; seizure disorders; pregnancy	
Pharmacokinetics	**Onset:** 2 minutes	**Duration:** 45 minutes
Routes of Administration	Intravenous, intramuscular, intranasal	
Technique for Administration	N/A	
PEARLS	• May precipitate opiate withdrawl if administered to a patient who is opiate dependent • Effects of Naloxone usually diminish 20 – 40 minutes after administration	
Y-Site Compatibility	N/A	
Interactions	Reverses analgesic effects of narcotic (opiate) agonists and narcotic (opiate) agonist-antagonist	
Reference	Pending	

FORMULARY

F24 Nitroglycerin Aerosol

Trade Name	NitroMist, Nitrostat	
Class(es)	Nitrate vasodilator	
Action(s)	Vasodilator which has effects on both arteries and veins	
Indication(s)	Angina, CHF, acute coronary syndrome	
Contraindication(s)	Hypersensitivity to drug, severe anemia, increased ICP, hypovolemia	
Precaution(s)	Pregnancy	
Pharmacokinetics	**Onset:** 2 minutes	**Duration:** 30 minutes
Routes of Administration	Sublingual	
Technique for Administration	• Bottle requires an initial priming of 10 sprays. The bottle will then stay primed for 6 weeks. If not used in 6 weeks, it can be re-primed with 2 sprays • Do Not shake the bottle • Spray can be released onto or under the tongue • When the liquid reaches the bottom of the hole on the side of the bottle, the remaining doses will have less than the label content	
PEARLS	• Monitor patient closely for change in consciousness and for dysrhythmias • Approximately 50% of all patients experience mild to severe headaches following Nitroglycerin • Supervise ambulation – postural hypotension is possible • Check patient for transdermal patch or ointment in place prior to starting Nitroglycerin	
Y-Site Compatibility	N/A	
Interactions	Antihypertensive agents compound hypotensive effects; vasodilating effects may be enhanced by sildenafil, vardenafil or tadalafil	
Reference	Pending	

FORMULARY

F25 Ondansetron

Trade Name	Zofran, Zofran ODT, Zuplenz, Ondansetron ODT	
Class(es)	5-HT3 Antagonist, Antiemetic	
Action(s)	Prevents nausea and vomiting	
Indication(s)	Nausea and / or vomiting	
Contraindication(s)	Hypersensitivity to Ondansetron	
Precaution(s)	QT prolongation or pregnancy, concomitant use of apomorphine	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	Intravenous, intramuscular, oral	
Technique for Administration	• Do NOT push orally disintegrating tablet through blister foil. Peel foil back and remove tablet. Tablets will disintegrate with/without liquid l Peel open the paper of the outer packaging that displays the product information to access the syringe. Do NOT pop the syringe through l Intravenous administration – give dose over 2 – 5 minutes l Assure that the needleless luer access device is securely attached before beginning the injection	
PEARLS	• Monitor cardiovascular status, especially in patients with a history of coronary artery disease.	
Y-Site Compatibility	Acyclovir, allopurinol, aminophylline, furosemide, lorazepam, methylprednisolone, sodium bicarbonate, TPN.	
Interactions	Rifampin	
Reference	Pending	

FORMULARY

F26 Oral Glucose

Trade Name	Glutose, Insta-Glucose, Level Life Fast Acting Glucose Gel	
Class(es)	Monosaccharide carbohydrate	
Action(s)	Provides an oral source of glucose rapidly utilized for cellular metabolism	
Indication(s)	Conscious patient with signs and/or symptoms of hypoglycemia	
Contraindication(s)	Inability to swallow (aspiration risk), altered level of consciousness	
Precaution(s)	Cannot be absorbed sublingually or buccally	
Pharmacokinetics	**Onset:** within 10 minutes	**Duration:** Unavailable
Routes of Administration	Oral	
Technique for Administration	N/A	
PEARLS	N/A	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

F27 Sodium Bicarbonate 8.4%

Trade Name	N/A	
Class(es)	Fluid and electrolyte balance agent	
Action(s)	Short-acting, potent systemic antacid; rapidly neutralizes systemic acidosis	
Indication(s)	Systemic alkalinizer to correct metabolic acidosis	
Contraindication(s)	Hypocalcemia, metabolic alkalosis, respiratory alkalosis, vomiting, diuresis	
Precaution(s)	Pregnancy, hypertension, renal disease, hyperkalemia, older adults	
Pharmacokinetics	**Onset:** 15 minutes	**Duration:** 1 – 2 hours
Routes of Administration	IV	
Technique for Administration	N/A	
PEARLS	Do NOT use Sodium Bicarbonate as an antacid	
Y-Site Compatibility	Allopurinol, Amiodarone, Calcium chloride, Diltiazem, Ciprofloxacin, Lidocaine, Midazolam, Ondansetron, Verapamil	
Interactions	N/A	
Reference	Pending	

FORMULARY

F28 Sodium Chloride (0.9% IV Fluid) for Injection

Trade Name	N/A	
Class(es)	Electrolyte	
Action(s)	N/A	
Indication(s)	Source of water and electrolytes	
Contraindication(s)	N/A	
Precaution(s)	CHF	
Pharmacokinetics	**Onset:** Unavailable	**Duration:** Unavailable
Routes of Administration	IV	
Technique for Administration	• Do not use plastic containers in series connections • Do not pressurize intravenous fluids contained in plastic containers	
PEARLS	N/A	
Y-Site Compatibility	Reference compatibility of each specific medication	
Interactions	Reference compatibility of each specific medication	
Reference	Pending	

FORMULARY

F29 Tetracaine Hydrochloride Ophthalmic Solution

Trade Name	TetraVisc, Pontocaine	
Class(es)	Local anesthetic	
Action(s)	Alpha-adrenergic agonist that causes intense vasoconstriction	
Indication(s)	Surface anesthesia of the eye	
Contraindication(s)	Hypersensitivity to Tetracaine, Procaine, Chloroprocaine or Cocaine; debilitated patients; infection at application or injection site	
Precaution(s)	Shock, children younger than 16 years old, cardiac disease	
Pharmacokinetics	**Onset:** 1 minute	**Duration:** 15 – 30 minutes
Routes of Administration	Topical	
Technique for Administration	• Do Not use solution if it contains crystals or if it is cloudy or discolored • Protection of the eye from rubbing during anesthesia is very important. The surface of the eye is insensitive and can be scratched without a patient feeling it • Discard unused portion	
PEARLS	N/A	
Y-Site Compatibility	N/A	
Interactions	N/A	
Reference	Pending	

FORMULARY

CT1 EMS Cognitive Evaluation

Administer and document the EMS Cognitive Evaluation as indicated

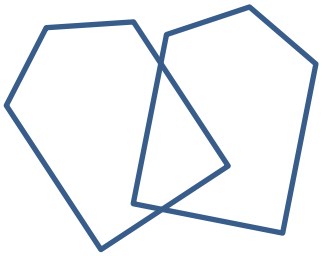
Minimum Passing Score = 23

Maximum Score = 29

CLINICAL TOOL

CLINICAL TOOL

Question or Task	Points
1. What is the Year? Season? Month? Day of Week? Patient's Birthday?	5
2. Where are we? Street? City? State? Country?	5
3. The evaluator will name three objects. Repeat the name of the three objects three times. Ask the patient to repeat the name of the three objects after 3 seconds	3
4. Begin with the number 100 and ask the patient to count backwards by five for at least five numbers (e.g. 100, 95, 90, 85, 80)	5
5. Ask the patient to repeat the names of the three objects from Question #3	3
6. Show the patient a pen and a watch. Ask the patient to name them.	2
7. Ask the patient to repeat "no ifs ands or buts"	1
8. Ask the patient to follow a three stage command (e.g. "take this paper in your right hand, hold it and then place it on the floor/ground")	2
9. Ask the patient to read and do the following: "RAISE YOUR RIGHT HAND"	1
10. Ask the patient to write any complete sentence	1
11. Ask the patient to copy the design below:	1



Total Score _____

CT2 Heat Emergency Clinical Findings

Heat Emergency Clinical Findings			
Problem	**Cause**	**Core Temperature**	**Clinical Findings**
Heat Cramps	Dehydration, Electrolyte imbalances	99 - 101.3 °F	Most common in children and athletes. Severe localized cramps in abdomen or extremities. Normal vital signs. Usually occur suddenly during or after strenuous physical activities
Heat Exhaustion	Inadequate fluid intake and excessive fluid loss	99 - 104 °F	Fatigue, weakness, anxiety, intense headaches, profuse sweating, nausea, vomiting and decreased urine output
Heat Stroke	Inadequate fluid intake and excessive fluid loss	99 - 104 °F	Altered mental status, decreased level of consciousness - skin color, temperature and moisture are not reliable findings - increased pulse and respirations, hypotension

CLINICAL TOOL

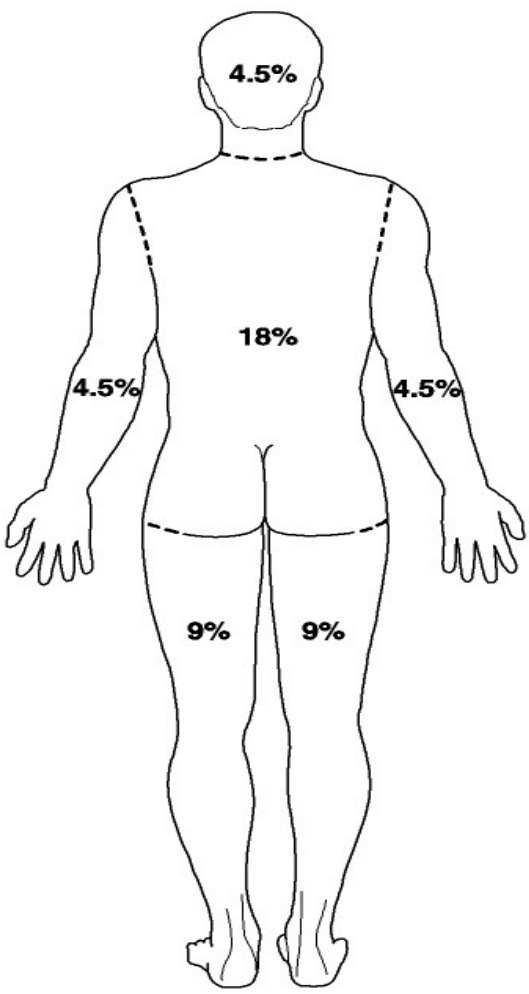
CT3 Heat Emergency Clinical Findings

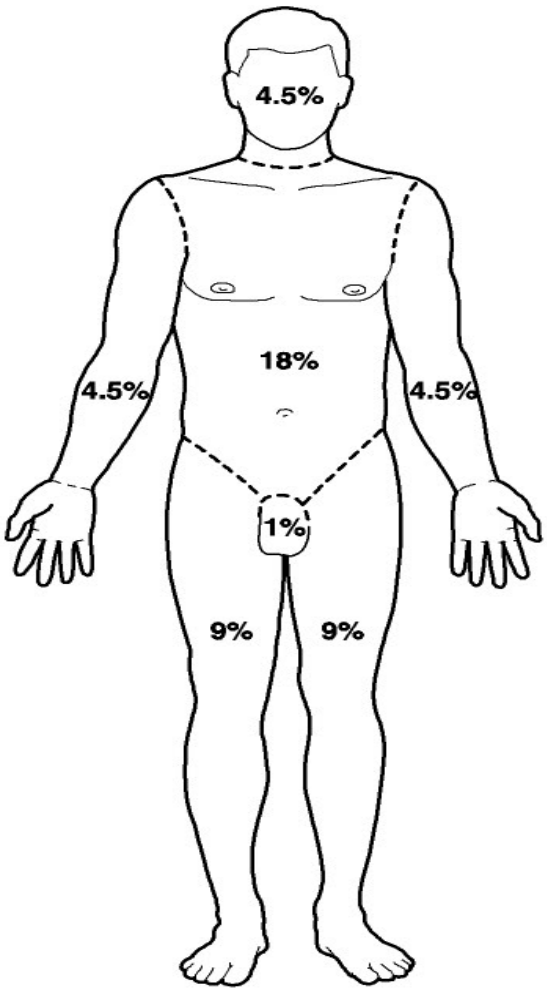
Cold Emergency Clinical Findings		
Severity	**Temperature**	**Clinical Findings**
Mild	> 93 Degrees F	Shivering, impaired judgement, tachycardia and hypertension may be present
Moderate	86 - 93 Degrees F	Consciousness clouded to stuporous, shivering stops, blood pressure becomes difficult to obtain
Severe	<86 Degrees F	Bradycardia, hypotension and slow respirations, arrhythmias may develop, consciousness is lost

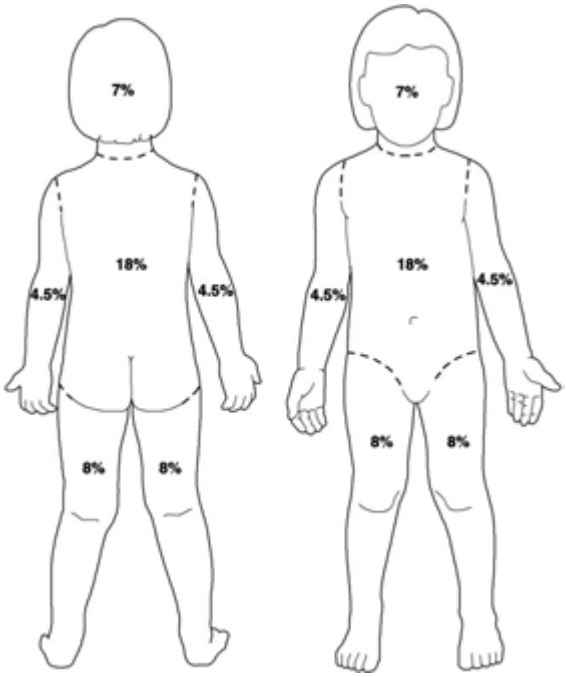
CLINICAL TOOL

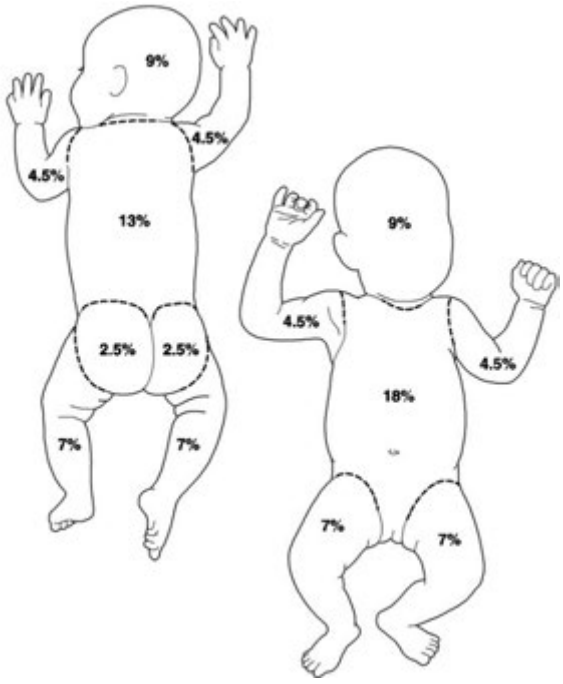
CLINICAL TOOL

CT4 Burns – Rule of 9's









CLINICAL TOOL

CLINICAL TOOL

CLINICAL TOOL

CT5 Pediatric Asthma Exacerbation Symptoms

Symptoms/Signs of Severe Asthma Exacerbations

- Breathlessness while at rest or stops infants from feeding
- Cannot lie down
- Unable to complete sentences or phrases in between breaths
- Agitated or irritable
- Respiratory rate > 30 in children or > 60 in infants
- Use of accessory muscles and suprasternal retractions
- Loud inspiratory and expiratory wheezes
- Tachycardia

CLINICAL TOOL

CLINICAL TOOL

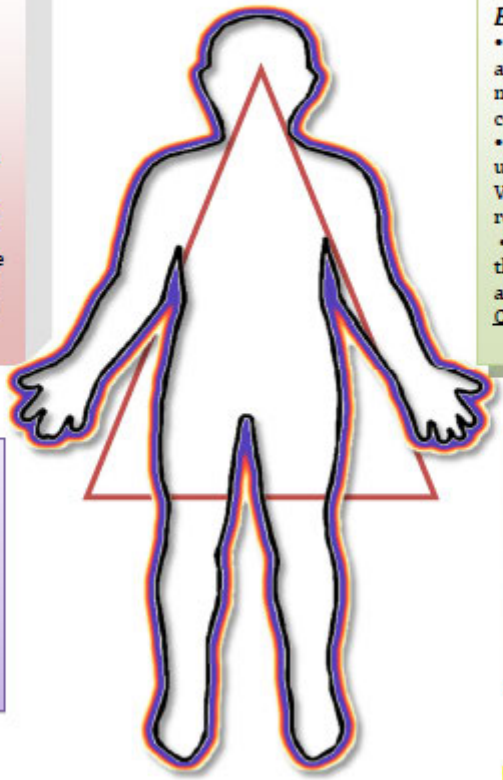
CT6 Cardiac Arrest Pit Crew Model

ECG/Suction
Airway Bag

Position 2 – Airway/Ventilation
Paramedic
- Opens /Clears Airway. During compressions, ready QCPR, therapy pads, and insertion of King Airway
- Applies ETCO2

ECG/Suction
Airway Bag

Position 1 – Compress/Defib
EMT or Paramedic
- Starts 100 compressions Alternates chest compressions, uninterrupted, with opposite side: Verbally announcing count so all rescuers are prepared for switch.
- During ventilations, turn on ECG to therapy mode and apply pads and QCPR (if Phillips monitor) or AED if BLS.
- Delivers shock if indicated after the first 200 compressions (2 min) and continues to analyze after each CPR cycle (<10 sec interruption)



Position 3 – Compress/Defib
EMT or Paramedic
- Turn on ECG to therapy mode and apply pads and QCPR (if Phillips monitor at the first 100 compressions) or AED if BLS.
- Alternates chest compressions, uninterrupted, with opposite side: Verbally announcing count so all rescuers are prepared for switch.
- Delivers shock if indicated after the first 200 compressions (2 min) and continues to analyze after each CPR cycle (<10 sec interruption)

Position 4 – Vascular Access/Meds
Paramedic
- Initiates circulatory access with EZIO - preference of humeral head insertion. If IO access not available, move to IV.
- Administer Medications
- ALS Procedures

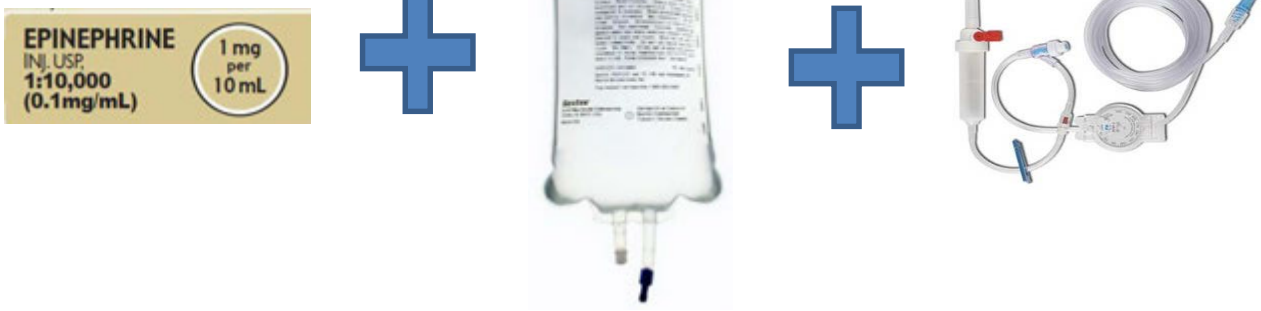
Position 5 - Document
EMT or Paramedic
--Specifically applicable for supervisor/Lieutenant
- Gathers PT information
- Treatment Documentation
- Updates Family
- Prepares for transport
- Fills in where needed

Drugbox

ePCR

CLINICAL TOOL

CT7 Epinephrine Infusion



MEDICATION ADDED

PATIENT NAME: Susan B. Anthony

DATE: 01/01/2017 TIME: 1645

DRUG NAME AND AMOUNT OF DRUG ADDED:
Epinephrine 1 mg

UNIT ID#/CLINICIAN EMS ID#:
E29/SS434 #050758

PINELLAS COUNTY EMERGENCY MEDICAL SERVICES

EPINEPHRINE INFUSION (1 mcg/mL)		
Mix 1 mg of Epinephrine 1:10000 in a 1000 mL Bag 0.9% Sodium Chloride		
mcg/min	**gtt/min**	**Set Dial to (mL/hr)**
1	60	60
2	120	120
3	180	180
4	240	240
5	300	300

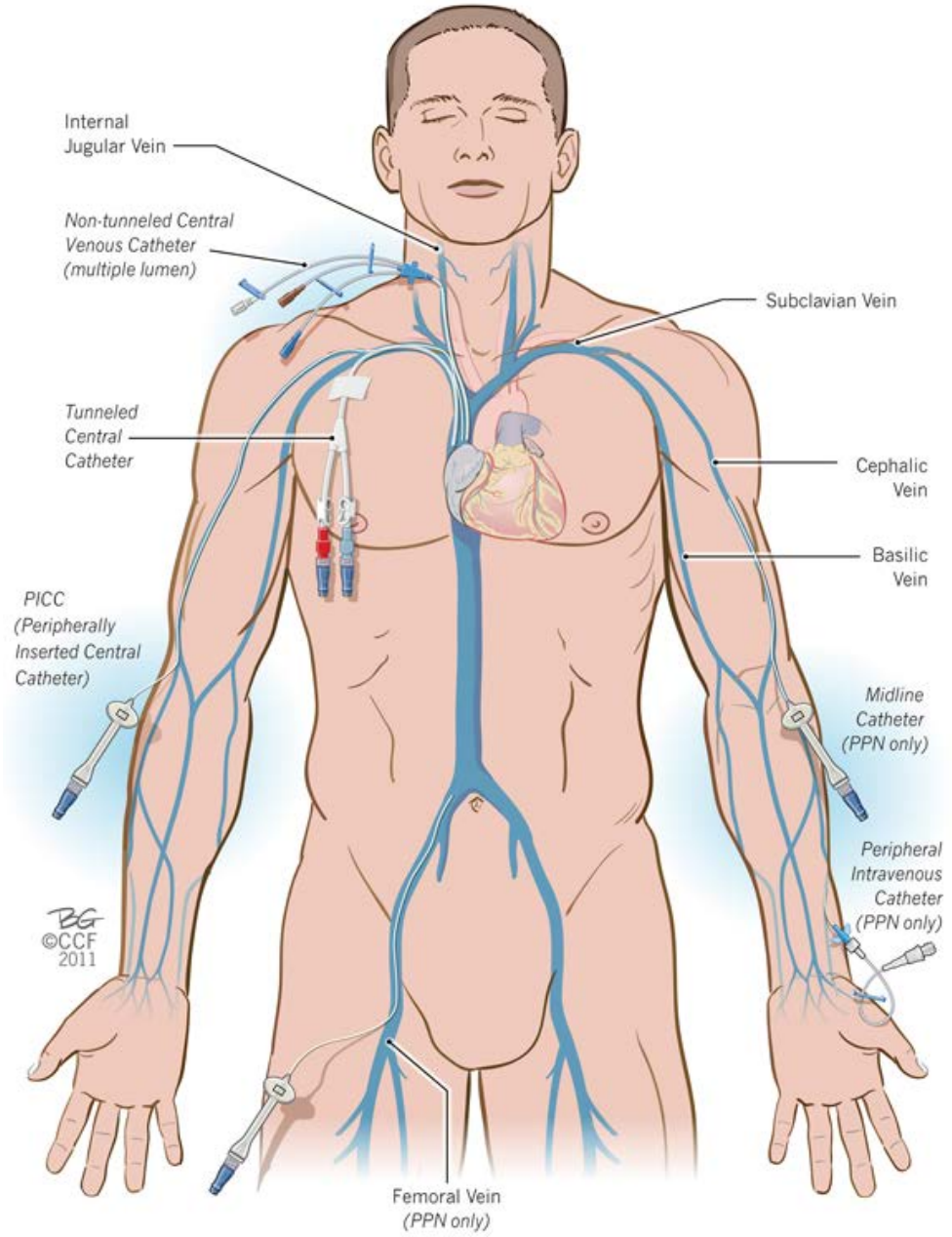
CLINICAL TOOL

CLINICAL TOOL

CT8 Indwelling Catheters

SAFETY ALERT

- Misconception: If the catheter end is blue "it's venous" and if the end is red "its arterial" – ***NOT TRUE!***
- The starting point for all central lines may differ, but they end up (for the most part) in the same place (SVC or IVC)
- Some will be heparinized. Withdraw 10 mL of blood prior to use to avoid inadvertent heparin boluses.



http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/gastroenterology/principles-of-nutrition-support/images/figure-2.jpg

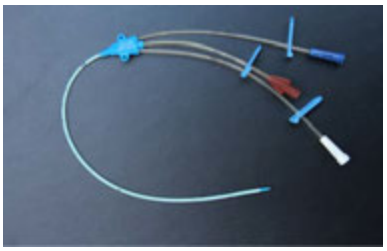
CLINICAL TOOL

CLINICAL TOOL

CLINICAL TOOL

CLINICAL TOOL

Triple lumen central line

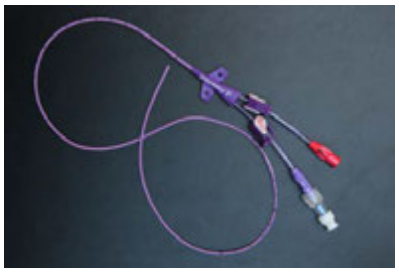


- This one is placed in the internal jugular but longer version may be found in the subclavian vein
- The distal end lives in the SVC (superior vena cava) like all central lines

Dialysis tunnel catheter

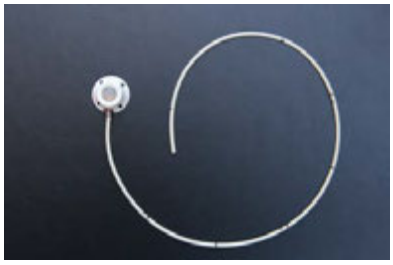
- Inserted into the internal jugular and tunneled under the skin (in the chest) for long term use in dialysis. You may find the same catheter (not tunneled) for temporary use but for us all will be the same
- The distal end lives in the SVC (superior vena cava) like all central lines

PICC line (peripherally inserted central catheter)



- Placed in the upper arm and used for in home antibiotics, etc.
- The distal end lives in the SVC (superior vena cava) like all central lines

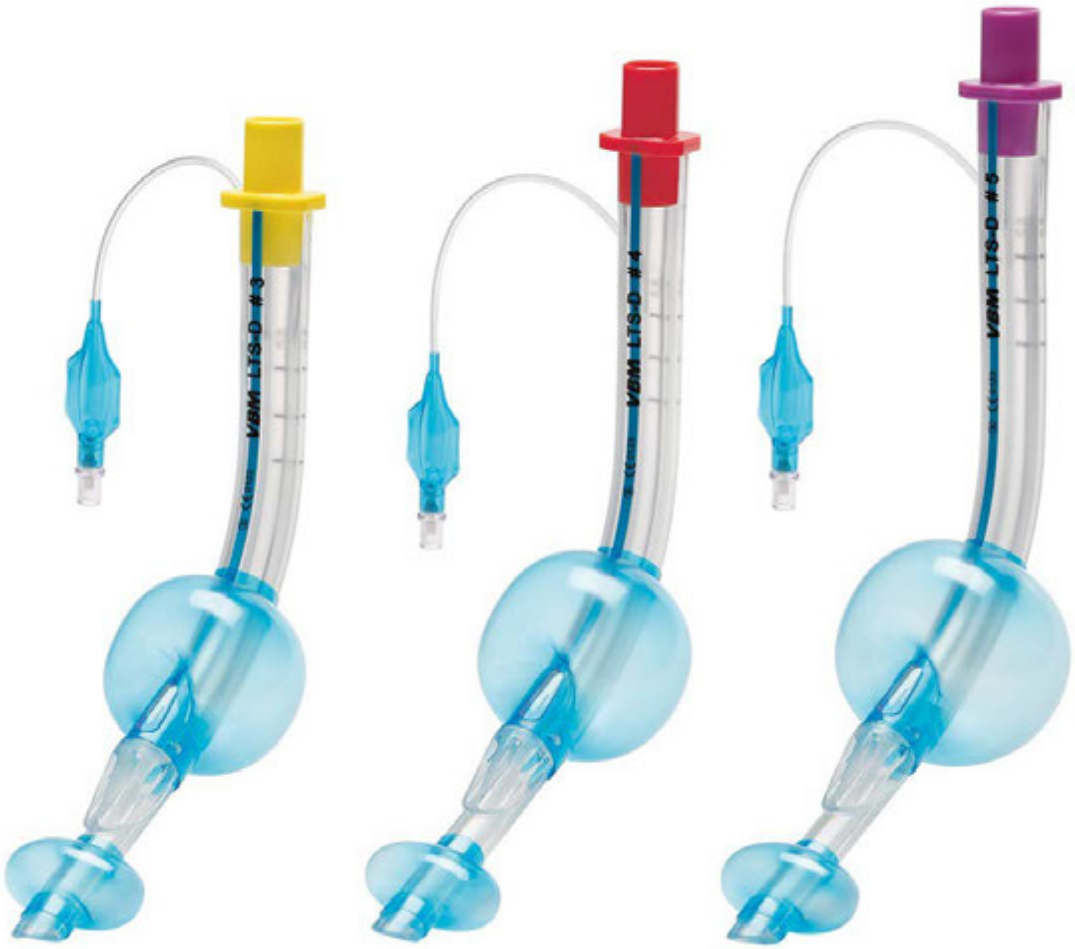
Port



- Port placement is usually in the anterior upper chest but may be in the arm
- The distal end lives in the SVC (superior vena cava) like all central lines
- ***NO EMS USE***

CT9 King Airway Sizing

King Airway			
Tube Size	Size 3	Size 4	Size 5
Patient	4 – 5 ft.	5 – 6 ft.	6 – 7 ft.
Cuff Volume	40 – 55 mL	50 – 70 mL	60 – 80 mL



CLINICAL TOOL

CLINICAL TOOL

CT11 Cyanokit

CLINICAL TOOL

CLINICAL TOOL

Cyanide poisoning in smoke-inhalation victims should be suspected if the following manifestations are present

- ✓ Exposure to fire or smoke in an enclosed area
- ✓ Soot around mouth, nose, or back of mouth
- ✓ Altered mental status (eg, confusion, disorientation)

Complete Starting Dose: 5 g

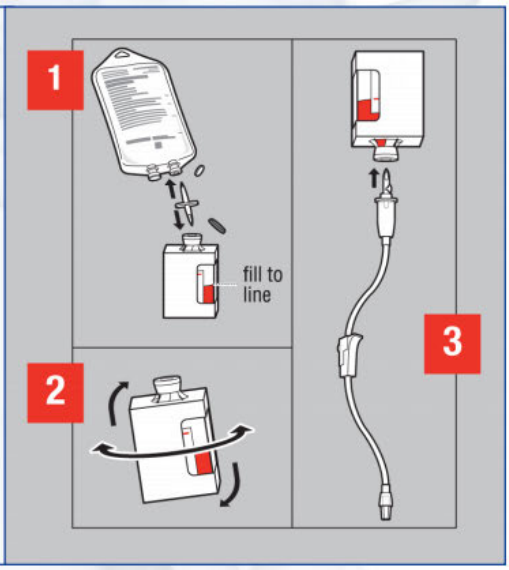
1 **Reconstitute:** Place the vial in an upright position. Add 200 mL of 0.9% Sodium Chloride injection* to the vial using the transfer spike. **Fill to the line.**

*0.9% Sodium Chloride injection is the recommended diluent (diluent not included in the kit). Lactated Ringers injection and 5% Dextrose injection have also been found to be compatible with hydroxocobalamin and may be used if 0.9% Sodium Chloride is not readily available

2 **Mix:** The vial should be repeatedly inverted or rocked, not shaken, for at least **60 seconds** prior to infusion.

- CYANOKIT solutions should be visually inspected for particulate matter and color prior to administration
  - Discard solution if particulate matter is present or solution is not dark red

3 **Infuse Vial:** Use vented intravenous tubing, hang and infuse over **15 minutes.**



CT12 Adult Trauma Scorecard

CLINICAL TOOL

ADULT (age equal to or greater than 16) TRAUMA SCORECARD METHODOLOGY	
Any ONE Criteria = Red Trauma Alert	
Active airway assistance beyond the administration of oxygen	Amputation proximal to the wrist or ankle
Lack of radial pulse with sustained heart rate greater than 120	Any penetrating injury to the head, neck or torso (excluding superficial wounds where the depth of the wound can be determined)
Systolic BP less than 90 mmHg	Signs & symptoms two or more long bone fracture sites (humerus, [radius/ulna], femur, [tibia/fibula])
GCS score Best Motor Response equal to or less than 4	GCS score equal to or less than 12 (excluding patients whose normal GCS Score is equal to or less than 12 as established by patient's medical history or preexisting medical condition when known)
Exhibits the presence of paralysis	Signs & symptoms/suspicion of skull fracture, flail chest and/or pelvic fracture**
Suspected spinal cord injury	Major blunt trauma to head, neck, torso or pelvis**
Loss of sensation	Any ejection (complete or partial) from a motor vehicle (***including*** moped, motorcycle, all-terrain vehicle, watercraft)**
2nd or 3rd degree burns equal to or greater than 15% TBSA	Death of another passenger from trauma**

Any TWO Criteria = Blue Trauma Alert	
Respiratory rate equal to or greater than 30	Gunshot wound to an extremity of the body
Sustained heart rate equal to or greater than 120	Signs & symptoms of a single long bone fracture from a MVC
GCS Best Motor Response equals 5	Signs & symptoms of a single long bone fracture from fall equal to or greater than 10 feet
Soft tissue loss from major degloving injury	Age equal to or greater than 55 years old
Major flap avulsion greater than 5 inches	Patient impacted steering wheel causing steering wheel deformity

Paramedic Intuition = "Trauma Alert" (must document basis for declaration on PCR)

Trauma Center Transport Local Criteria = "NON-Trauma Alert"	
Extended extrication time	Moderate – heavy damage without passenger restraints
Rapid deceleration with heavy damage	Falls greater than 15 feet
Passenger space invasion greater than 1 foot	

** = Local Medical Director Trauma Alert Criteria

CLINICAL TOOL

CT13 Pediatric Trauma Scorecard

PEDIATRIC (age less than 16) TRAUMA SCORECARD METHODOLOGY	
Any ONE Criteria = Red Trauma Alert	
In order to maintain optimal ventilation, the patient is intubated or breathing is maintained through such measures as manual jaw thrust, continuous suctioning or use of other adjuncts to assist ventilatory efforts	Multiple fracture sites or dislocations (except for isolated wrist or ankle fractures or dislocations)
Exhibits altered mental status including drowsiness, lethargy, inability to follow commands, unresponsiveness to voice, totally unresponsive or coma	Major soft tissue disruption including major degloving injury or major flap avulsions
Presence of paralysis	2nd or 3rd degree burns equal to or greater than 10% TBSA
Loss of sensation	Amputation at or above the Wrist or Ankle
Suspected spinal cord injury	Any penetrating injury to the head, neck or torso (excluding superficial wounds where the depth of the wound can be determined)
Faint or non-palpable carotid or femoral pulse	Major blunt trauma to head, neck, torso or pelvis**
Systolic BP less than 50 mmHg	Signs & symptoms/suspicion of skull fracture, flail chest and/or pelvic fracture**
Evidence of open long bone (humerus, [radius/ulna], femur, [tibia/fibula]) fracture	Any ejection (complete or partial) from a motor vehicle (***including*** moped, motorcycle, all-terrain vehicle, watercraft)**
Death of another passenger from trauma**	

Any TWO Criteria = Blue Trauma Alert	
Symptoms of amnesia exhibited	Weight equal to or less than 11 kilograms or the body length is equivalent to this weight on the Handtevy Tape (the equivalent of 33 inches in measurement or less)
Loss of consciousness	Signs & symptoms of a single closed long bone fracture. Excludes isolated wrist or ankle fractures
Palpable carotid or femoral pulse but the radial or pedal pulses are not palpable	Signs & symptoms single long bone fracture from a fall equal to or greater than 10 feet
Systolic BP less than 90 mmHg	

Paramedic Intuition = "Trauma Alert" (must document basis for declaration on PCR)	
Trauma Center Transport Local Criteria = "NON-Trauma Alert"	
Extended extrication time	Moderate – heavy damage without passenger restraints
Rapid deceleration with heavy damage	Child less than 16 years old struck by a vehicle
Passenger space invasion greater than 1 foot	Falls greater than 15 feet or twice the patient's height

** = Local Medical Director Trauma Alert Criteria

CLINICAL TOOL

CLINICAL TOOL

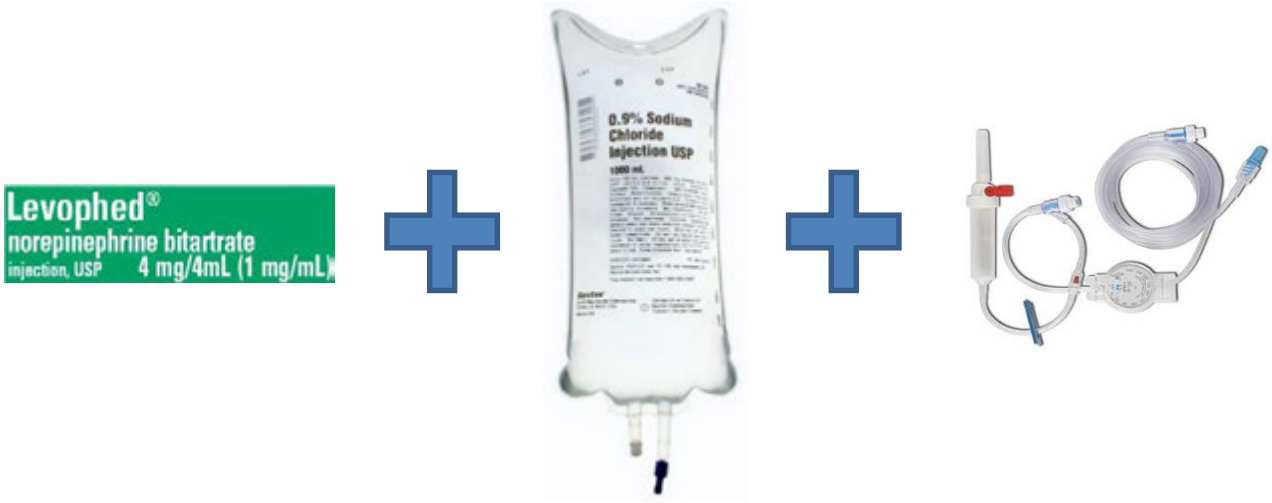
CT14 Apgar Score

	0 Points	1 Point	2 Points	Points Total
Activity (muscle tone)	Absent	Arms and Legs Flexed	Active Movement	
Pulse	Absent	Below 100 BPM	Over 100 BPM	
Grimace (reflex irritability)	Flaccid	Some Flexion of Extremities	Active Motion (sneeze, cough, pull away)	
Appearance (skin color)	Blue, Pale	Body Pink, Extremities Blue	Completely Pink	
Respiration	Absent	Slow, Irregular	Vigorous Cry	

Severely Depressed 0 - 3
Moderately Depressed 4 - 6
Excellent Condition 7 - 10

CLINICAL TOOL

CT15 Norepinephrine Administration



MEDICATION ADDED

PATIENT NAME: Susan B. Anthony

DATE: 01/01/2017 TIME: 1645

DRUG NAME AND AMOUNT OF DRUG ADDED: Norepinephrine 4 mg

UNIT ID#/CLINICIAN EMS ID#: E29/SS434 #050758

PINELLAS COUNTY EMERGENCY MEDICAL SERVICES

NOREPINEPHRINE INFUSION (4 mcg/mL)		
Mix 4 mg of Norepinephrine in a 1000 mL bag 0.9% Sodium Chloride		
mcg/min	**gtt/min**	**Set Dial to (mL/hr)**
1	15	15
2	30	30
3	45	45
4	60	60
5	75	75
6	90	90
7	105	105
8	120	120
9	135	135
10	150	150

CLINICAL TOOL

CLINICAL TOOL

CT16 STEMI Alert and PreACT STEMI Alert Criteria

CLINICAL TOOL

CLINICAL TOOL

Anginal Equivalent

STEMI Alert

- ST Segment Elevation > 1 mm in 2 or more contiguous leads

PreACT Alert

1. Must meet all of these criteria
   - ST Segment Elevation > 2 mm in 2 or more contiguous leads
   - Heart Rate < 130
   - Patient age 30 to 90
   - Patient able to give consent
   - Pain < 24 hours
   - QRS complex < 0.12 mm (OK if RBBB pattern)
2. Must NOT have any the following criteria
   - No DNR order
   - No paced rhythm
   - No significant arrhythmia
3. PARAMEDIC CONFIDENT IN STEMI IMPRESSION AND AGREE WITH APPROPRIATE

Transmit 12 Lead ECG to receiving facility for all STEMI and PreACT STEMI Alerts (must include patient name and date of birth to transmission)

Initiate emergency transport early for STEMI and PreACT STEMI Alerts

CT17 Spinal Care

CLINICAL TOOL

CLINICAL TOOL

Initial Patient Contact
Assess for Signs of Blunt Trauma or Mechanism

- Symptoms of neck or back pain
- Extremity weakness or numbness even if resolved
- MOI - Fall from standing or sitting with evidence of striking head
- MOI - Sports Injuries
- MOI - Victim Thrown
- MOI - Lightning or electrical injury
- MOI - Swimming or diving
- Other where MOI does not exclude spinal injury

Altered Mental Status
Manually restrict spinal movement

Spine/Pain-Tenderness or anatomic deformity of neck or back

YES

NO

Altered Mental Status less than 15 GCS

YES

NO

Signs of intoxication with alcohol or drugs

YES

NO

Patient distracted by painful injury

YES

NO

Neuro deficit after trauma (S & S of extremity weakness or numbness)

YES

NO

NO COLLAR OR SPINEBOARD NECESSARY

1. RESTRICT SPINAL MOTION
Apply Rigid Collar
a) If Ambulatory allow patient to move to stretcher with minimal spinal motion into seated position then laid back gently.

OR

b) If Non-Ambulatory use backboard/scoop stretcher to move patient to stretcher with minimal motion.
(CID may be used to restrict spinal motion)

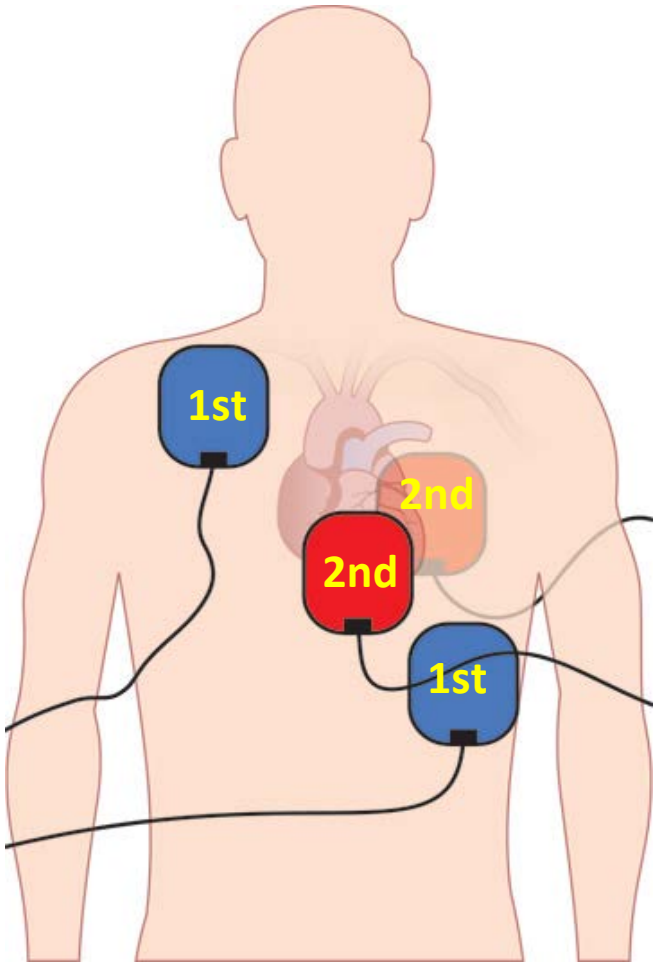
2. Transport on stretcher mattress only without backboard if ambulatory or if device can be removed with minimal motion.

CT18 Vector Change Defibrillation

WARNING

This procedure can only be done with two sets of Philips Hands Free Pads and a MRx device

1. First set of pads is placed in standard apex-sternum orientation
2. Second set of pads is placed in an anterior posterior positioning



3. First shock is done with apex-sternum placed pads
4. Immediately switch the MRx Therapy Cable to the Anterior-posterior placed pads to provide the next shock

CLINICAL TOOL

CT19 Dopamine Infusion

ADULT DOPAMINE INFUSION											
1600 mcg/mL - 400 mg/250 mL											
A		Patient Weight in KG									
		40	50	60	70	80	90	100	110	120	130	140
		DRIP RATE - DROPS PER MINUTE WITH 60 gtt/mL IV SET										
Dose	5 mcg	8	9	11	13	15	17	19	21	23	24	26
	10 mcg	15	19	23	26	30	34	38	41	45	49	53
	15 mcg	23	28	34	39	45	51	56	62	68	73	79
	20 mcg	30	38	45	53	60	68	75	83	90	98	105

CLINICAL TOOL

CLINICAL TOOL

CT20 Cincinnati Prehospital Stroke Assessment/MEND Exam

Cincinnati Prehospital Stroke Scale		
Sign of Stroke	**Patient Activity**	**Interpretation**
Facial Droop	Have the patient look up at you, smile, and show his/her teeth	**Normal:** Symmetry to both sides
		Abnormal: One side of the face droops or does not move symmetrically
Arm Drift	Have patient lift arms up and hold them out with eyes closed for 10 seconds	**Normal:** Symmetrical movement in both arms
		Abnormal: One arm drifts down or asymmetrical movement of the arms
Abnormal Speech	Have the patient say "You can't teach and old dog new tricks"	**Normal:** The correct words are used and no slurring of words is noted
		Abnormal: The words are slurred; the wrong words are used or the patient is aphasic

CLINICAL TOOL

CLINICAL TOOL

MEND EXAM			
Perform enroute if time permits		**Check if Abnormal**	
Mental Status	Level of Consciousness (AVPU)		
	Speech (repeat "You can't teach an old dog new tricks")		
	Questions (age, month)		
	Commands (close, open eyes)		
Cranial Nerves	Facial Droop (show teeth or smile)	**R**	**L**
	Visual Fields (four quadrants)	**R**	**L**
	Horizontal gaze (side to side)	**R**	**L**
Limbs	Motor – Arm Drift (close eyes and hold out both arms)	**R**	**L**
	Motor – Leg Drift (open eyes and lift each leg separately)	**R**	**L**
	Sensory – Arm and leg (close eyes and touch, pinch)	**R**	**L**
	Coordination – Arm and leg (finger to nose, heel to shin)	**R**	**L**

CLINICAL TOOL

CT21 Toxidromes

Class	Signs and Symptoms	Agents	Treatment
Sympatho-mimetics	• Agitation • Seizures • Mydriasis • Tachycardia • Hypertension • Diaphoresis • Pallor • Cool Skin • Fever	• Albuterol • Terbutaline • Amphetamines • Cocaine • Methamphetamines • PCP • Theophylline • Caffeine • Catecholamines • Ketamine	1. Supportive care 2. **Uncooperative/potentially violent:** • Midazolam 2.5 mg IV/IM, may repeat once after 5 minutes if needed 3. **Agitated/violent:** • Midazolam 5 mg IV/IM, may repeat once after 5 minutes, if needed **or** • 10 mg (5 mg per nare) intranasal. May give an additional 5 mg (2.5 mg per nare) after 5 minutes if needed
Cholinergics	(DUMBBELS) - Diarrhea, Urination, Miosis, Bradycardia, Bronchorrhea, Emesis, Lacrimation, Salivation	• Organo-phosphates • Pesticides • Carbamates • Nerve Agents	1. Atropine 2 mg IV Q 2 min until secretions dry 2. Contact OLMC for DuoDote utilization 3. If Seizing Reference M14
Opioids	• Respiratory Depression • Coma • Miosis • Bradycardia • Hypotension • Constipation	• Morphine • Methadone • Codeine	1. Naloxone 0.4 mg IV, may repeat to maximum 4 mg, as needed ***OR*** 2. Naloxone 2 mg intranasal, may repeat one time in 3 minutes, as needed
Anticholinergics	Agitation, Delirium, Coma, Mydriasis, Dry Mouth, Flushed Skin, Tachycardia, Hypertension, Fever, Urinary Retention, "MAD AS A HATTER, BLIND AS A BAT, RED AS A BEET"	• Antihistamines • Atropine • Carbamazepine • Cyclic Antidepressants • Jimson Weed • Oxybutynin • Phenothiazines • Scopolamine	1. Supportive care 2. **Uncooperative/potentially violent:** • Midazolam 2.5 mg IV/IM, may repeat once after 5 minutes if needed 3. **Agitated/violent:** • Midazolam 5 mg IV/IM, may repeat once after 5 minutes, if needed **or** • 10 mg (5 mg per nare) intranasal. May give an additional 5 mg (2.5 mg per nare) after 5 minutes if needed

CLINICAL TOOL

CLINICAL TOOL

SPECIFIC WITHDRAWL/MEDICATION REACTIONS			
Acute Withdrawal (opiate, alcohol, Benzodiazepines)	**Sympathetic Storm:** Shakiness, Chills, Tremors, Anxiety, Stress, Depression, Volatile, Mood Swings, Sweating, Pale, Tachycardia, Seizures, Confusion, Psychosis	Withdrawal from: Opiate, Alcohol, Benzodiazepines	1. Supportive care 2. Midazolam 2.5 mg IV/IM, may repeat once after 5 minutes, if needed
Acute Dystonic	Involuntary Muscle Contractions - begin in a single area such as foot, hand or neck. May worsen with stress, fatigue or anxiety	Antipsychotics, antiemetics, and antidepressants most common/ Alcohol and cocaine increase risk.	1. Diphenhydramine 50 mg IV/IM 2. Midazolam 2.5 mg IV/IM, may repeat once after 5 minutes.
Oleoresin Capsicum (OC)/Pepper Spray	Tingling skin, burning skin, skin redness, skin swelling, skin blistering, burning throat, dry cough, wheezing, shortness of breath, gasping, gagging, inability to breath, laryngospasm, laryngeal paralysis, sneezing, nasal irritation, runny nose, eye swelling, eye burning, eye stinging, eye inflammation, tearing, gastrointestinal burning, temporary blindness	Pepper spray	1. Remove contaminated clothing/contact lenses 2. Flush copiously

CLINICAL TOOL

CT22 Bradycardia

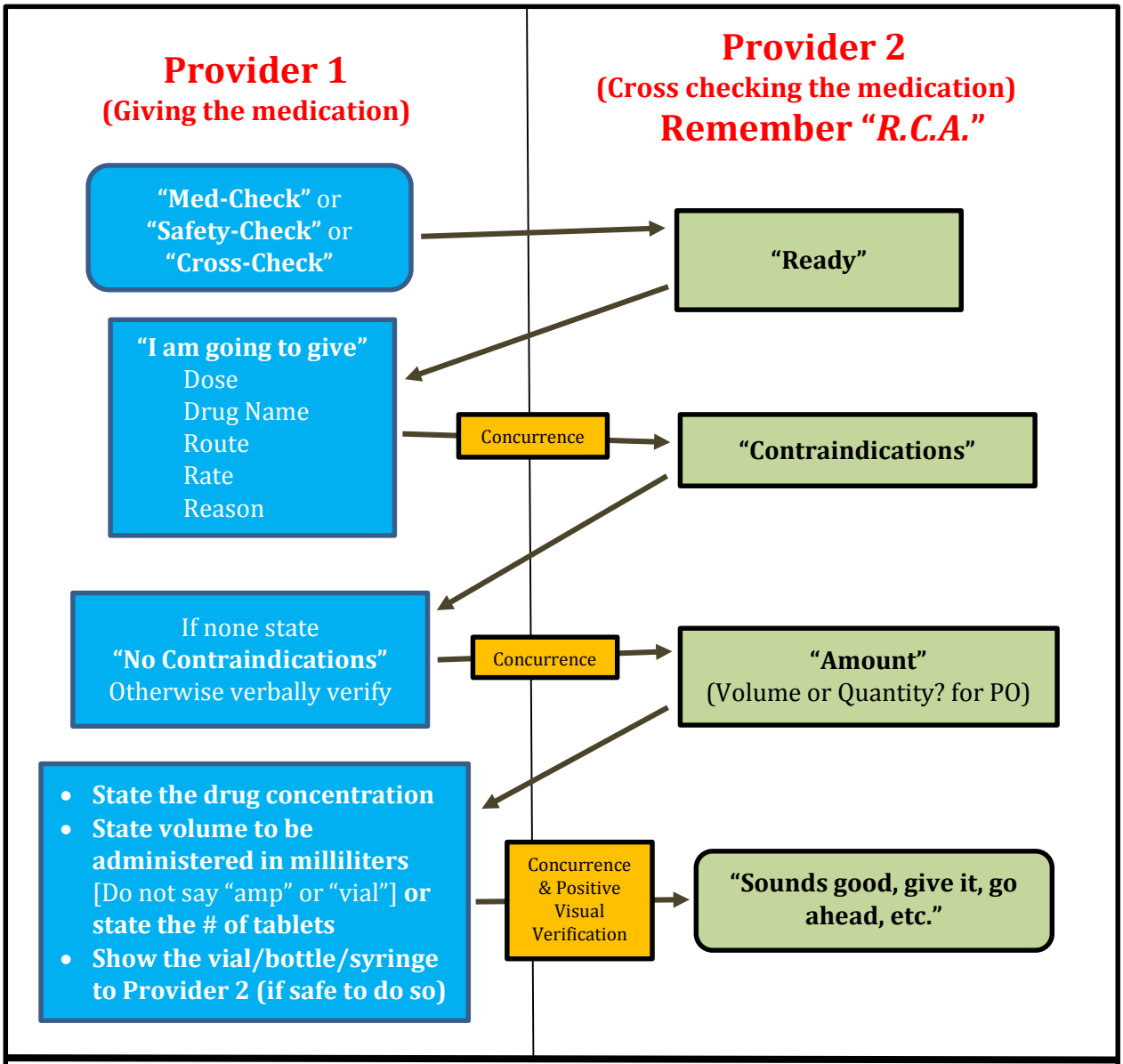
Stable – Asymptomatic	Stable – Symptomatic	Unstable (e.g. hypotension, altered mental status)
Obtain 12 lead ECG to assess for ischemia or other abnormalities	SBP < 90, bolus 0.9% Sodium Chloride to max of 2L (or 20 mL/kg if < 100 kg) assessing for adverse effects (e.g. pulmonary edema) after each 500 mL	Initiate Transcutaneous Pacing (Reference CP18) **and** May give Atropine 0.5 mg while preparing to pace but **DO NOT DELAY PACING!**
Consider underlying causes	Obtain 12 lead ECG to assess for ischemia or other abnormalities	Midazolam 2.5 mg IV or 5 mg intranasal as requested for sedation as patient condition permits. May repeat one time after 5 minutes as needed

CLINICAL TOOL

CT23 Medication Administration Cross-Check

CLINICAL TOOL

CLINICAL TOOL



- "Contraindications" include: 1) verification of appropriate VS, 2) known patient allergies, and 3) expiration date.
- If a discrepancy, disagreement, or need for clarification is encountered at any step in the process, it must be resolved prior to continuing the cross-check
- Essentially only Provider 2 can authorize the administration of the medication.
- The MACC must be completed prior to administration of any medication
- If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider 1.
- Avoid ambiguous statements or confirmations like "okay"

RED RULE of Medication Administration
(A duty to Avoid Causing UNJUSTIFIABLE Harm)
NEVER give the contents of a syringe that is not labeled or without visualizing the vial or ampule from which it was immediately drawn

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/30/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Woodruff-Sawyer & Co. 717 17th Street, Suite 1540 Denver CO 80202	CONTACT NAME: PHONE (A/C, No, Ext): 800-675-4467 FAX (A/C, No): E-MAIL ADDRESS: envisioncertrequest@wsandco.com
INSURED ENVIHEA-01 EMCARE, INC. 6363 S. Fiddlers Green Circle, 14th Floor GREENWOOD VILLAGE, CO 80111	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Lexington Insurance Company — 19437 INSURER B : Continental Casualty Company — 20443 INSURER C : ACE American Insurance Company — 22667 INSURER D : ACE Fire Underwriters Insurance Com — 20702 INSURER E : Indemnity Insurance Company of Nort — 43575 INSURER F : Lloyds of London - Beazley

COVERAGES **CERTIFICATE NUMBER:** 1764837375 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY	Y	Y	HAZ40320740894	3/31/2017	3/31/2018	EACH OCCURRENCE	$2,750,000
	☐ CLAIMS-MADE ☒ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$100,000
	X SIR						MED EXP (Any one person)	$10,000
	☐ 250,000						PERSONAL & ADV INJURY	$2,750,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$5,000,000
	X POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$2,750,000
	OTHER:							$
C C C	AUTOMOBILE LIABILITY			ISAH0905473A ISAH09054741 ISAH09054753	3/31/2017 3/31/2017 3/31/2017	3/31/2018 3/31/2018 3/31/2018	COMBINED SINGLE LIMIT (Ea accident)	$10,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
A F	X UMBRELLA LIAB X OCCUR		Y	6796605 80% W1B173170201 20%	3/31/2017 3/31/2017	3/31/2018 3/31/2018	EACH OCCURRENCE	$10,000,000
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$10,000,000
	☐ DED ☐ RETENTION $							$
C C E D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		Y	WCUC49112877 WLRC49112841 WLRC49112853 SCFC49112865	3/31/2017 3/31/2017 3/31/2017 3/31/2017	3/31/2018 3/31/2018 3/31/2018 3/31/2017	X PER STATUTE ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N/A (Mandatory in NH)						E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000
A F	Medical Professional Liability (Claims Made)			6796605 80% W1B173170201 20%	3/31/2017 3/31/2017	3/31/2018 3/31/2018	EA OCC/GEN AGG SIR	10,000,000 3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

*$1,000,000 SIR APPLIES TO EXCESS WC POLICY NO. WCU C49112877
PINELLAS COUNTY EMERGENCY MEDICAL SERVICES AUTHORITY IS NAMED AS ADDITIONAL INSURED ON THE GENERAL LIABILITY AND AUTO LIABILITY POLICIES AS REQUIRED BY WRITTEN CONTRACT. EVIDENCE OF INSURANCE FOR PHYSICIANS: DONNA DOOLEY, DO, AMANDA FEUSNER-HILDAGO, MD, JIM HILLMAN, MD, ANGUS JAMESON, MD, MICHAEL LOZANO, MD, AHN VU NGUYEN, MD, MICHAEL SORE, MD, NASR RAMY, MD, AND MARSHALL FRANK, DO, JULIANA LEFEBRE, DO, RACHEL SEMMONS, MD

CERTIFICATE HOLDER

Pinellas County
c/o Ebix RCS
151 N. Lyon Ave., Ref. # 96-Z367804
Hemet CA 92543-8010

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Craig Rue

Appendix D

HIPAA BUSINESS ASSOCIATE AGREEMENT

This Agreement ("Agreement") is entered into by and between _____, ("Business Associate") and Pinellas County and the Pinellas County Emergency Medical Services Authority, d/b/a SUNSTAR EMS ("Covered Entity").

RECITALS

WHEREAS, Business Associate performs functions, activities, or services for, or on behalf of Covered Entity, and Business Associate receives, has access to or creates Health Information in order to perform such functions, activities or services;

WHEREAS, Covered Entity is subject to the Administrative Simplification requirements of the Health Insurance Portability and Accountability Act of 1996, as amended, and regulations promulgated thereunder ("HIPAA"), including but not limited to, the Standards for Privacy of Individually Identifiable Health Information and the Security Standards for the Protection of Electronic Protected Health Information found at 45 Code of Federal Regulations Parts 160, 162 and 164;

WHEREAS, the Health Information Technology for Economic and Clinical Health Act ("HITECH"), part of the American Recovery and Reinvestment Act of 2009 ("ARRA"), amended provisions of HIPAA widening the scope of privacy and security protections available under HIPAA, increases the potential for legal liability and provides for more enforcement; and

WHEREAS, HIPAA requires Covered Entity to enter into a contract with Business Associate to provide for the protection of the privacy and security of Health Information, and HIPAA prohibits the disclosure to or use of Health Information by Business Associate if such a contract is not in place; and

WHEREAS, on March 26, 2013, the Department of Health and Human Services ("HHS") HIPAA Omnibus Final Rule became effective, modifying the requirements for Business Associates and Business Associates Agreements.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing which are hereby acknowledged and incorporated herein, and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties agree as follows:

ARTICLE I
DEFINITIONS

1.1 Catch-all definition: The following terms used in this Agreement shall have the same meaning as those terms in the HIPAA Rules: Breach, Data Aggregation, Designated Record Set, Disclosure, Health Care Operations, Individual, Minimum Necessary, Notice of Privacy Practices, Protected Health Information, Required By Law, Secretary, Security Incident, Subcontractor, Unsecured Protected Health Information, and Use.

1.2 "Business Associate" shall generally have the same meaning as the term "business associate" at 45 CFR 160.103, and in reference to the party to this agreement, shall mean [Insert Name of Business Associate].

1.3 "Covered Entity" shall generally have the same meaning as the term "covered entity" at 45 CFR 160.103, and in reference to the party to this agreement, shall mean Pinellas County and the Pinellas County Emergency Medical Services Authority, d/b/a SUNSTAR EMS.

1.4 "HIPAA Rules" shall mean the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164.

1.5 "Privacy Regulations" means the Standards for Privacy of Covered Individually Identifiable Health Information, 45 Code of Federal Regulations Parts 160 and 164, promulgated under HIPAA.

1.6 "Services" means the services provided by Business Associate pursuant to the Underlying Agreement(s), or if no such agreement(s) are in effect, the services Business Associate performs with respect to the Covered Entity.

1.7 "Underlying Agreement" means the _____ Agreement executed by the Covered Entity and Business Associate, if any.

ARTICLE II
OBLIGATIONS AND ACTIVITIES OF BUSINESS ASSOCIATE

2.1 Business Associate agrees to:

- 2.1.1 Not Use or Disclose Protected Health Information other than as permitted or required by the Agreement or as required by law;
- 2.1.2 Use appropriate safeguards, and comply with Subpart C of 45 CFR Part 164 with respect to electronic Protected Health Information, to prevent use or disclosure of Protected Health Information other than as provided for by the Agreement;
- 2.1.3 Report to Covered Entity any Use or Disclosure of Protected Health Information not provided for by the Agreement of which it becomes aware, including breaches of unsecured Protected Health Information as required at 45 CFR 164.410, and any security incident of which it becomes aware;
  - 2.1.3.1 The initial report shall be made by telephone call to the Covered Entity within forty-eight (48) hours from the time the Business Associate becomes aware of the non-permitted Use or Disclosure, followed by a written report to covered Entity no later than five (5) calendar days from the date the Business Associate becomes aware of the non-permitted Use or Disclosure; and
  - 2.1.3.2 Business Associate will handle breach notifications to individuals, the HHS Office for Civil Rights (OCR), and potentially the media, on

behalf of the Covered Entity only when so directed by the Covered Entity or required by law.

2.1.4 In accordance with 45 CFR 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, ensure that any subcontractors that create, receive, maintain, or transmit protected health information on behalf of the Business Associate agree to the same restrictions, conditions, and requirements that apply to the Business Associate with respect to such information;

2.1.5 Make available protected health information in a designated record set to the Covered Entity as necessary to satisfy Covered Entity's obligations under 45 CFR 164.524;

2.1.5.1 Requests received by the Business Associate directly from an individual seeking access to protected health information in a designated record set will be forwarded to the Covered Entity within two (2) business days to allow the Covered Entity to process the request.

2.1.6 Make any amendment(s) to protected health information in a designated record set as directed or agreed to by the covered entity pursuant to 45 CFR 164.526, or take other measures as necessary to satisfy covered entity's obligations under 45 CFR 164.526;

2.1.6.1 Requests for amendment that the Business Associate receives directly from the individual will be forwarded to the Covered Entity within two (2) business days to allow the Covered Entity to process the request.

2.1.6.2 Business Associate shall to incorporate any amendments to the information in the designated record set within two (2) business days.

2.1.7 Maintain and make available the information required to provide an accounting of disclosures to the Covered Entity within two (2) business days, as necessary to satisfy Covered Entity's obligations under 45 CFR 164.528 regardless of whether the business associate received the request for an accounting of disclosures directly from the individual, or the Covered Entity made the Business Associate aware of such a request received by the Covered Entity;

2.1.7.1 For each Disclosure that requires an accounting, Business Associate shall track the information required by the Privacy Regulations, and shall securely maintain the information for six (6) years from the date of the Disclosure.

2.1.8 To the extent the business associate is to carry out one or more of covered entity's obligation(s) under Subpart E of 45 CFR Part 164, comply with the requirements of Subpart E that apply to the covered entity in the performance of such obligation(s); and

2.1.9 Make its internal practices, books, and records available to the Secretary for purposes of determining compliance with the HIPAA Rules.

2.2 Initial Effective Date of Performance. The obligations created under this Agreement shall become effective immediately upon execution of this Agreement or the agreement to which it is appended.

2.3 Permitted Uses and Disclosures of Protected Health Information.

2.3 Business Associate may only:

2.3.1.1 Use and Disclose Protected Health Information as necessary to perform Services for, or on behalf of Covered Entity **_____ (insert description of services)** in accordance with the Underlying Agreement;

2.3.1.2 Use Protected Health Information to create aggregated or de-identified information (in accordance with the requirements of the Privacy Regulations);

2.3.1.3 Use or Disclose Protected Health Information (including aggregated or de-identified information) as otherwise directed by Covered Entity consistent with covered entity's minimum necessary policies and procedures, provided that Covered Entity shall not request Business Associate to Use or Disclose Protected Health Information in a manner that would not be permissible if done by Covered Entity;

2.3.1.4 Use or Disclose Protected Health Information as required by law;

2.3.1.5 Business Associate shall not Use Health Information for any other purpose, except that if necessary, Business Associate may Use Health Information for the proper management and administration of Business Associate or to carry out its legal responsibilities; provided that any Use or Disclosure described herein will not violate the Privacy Regulations or Florida law if done by Covered Entity.

2.3.1.6 Except as otherwise limited in this Agreement, Business Associate may Disclose Health Information for the proper management and administration of the Business Associate, provided that with respect to any such Disclosure either (a) the Disclosure is required by law (within the meaning of the Privacy Regulations) or (b) the Disclosure would not otherwise violate Florida law and Business Associate obtains reasonable written assurances from the person to whom the information is to be Disclosed that such person will hold the information in confidence and will not Use or further Disclose such information except as required by law or for the purpose(s) for which it was Disclosed by Business Associate to such person, and that such person will notify Business Associate of any instances of which it is aware in which the confidentiality of the information has been breached.

2.4 Adequate Safeguards for Health Information. Business Associate warrants that it shall implement and maintain appropriate safeguards to prevent the Use or Disclosure of Health Information in any manner other than as permitted by this Agreement.

2.5 Mitigation. Business Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to Business Associate of a Use or Disclosure of Health Information by Business Associate in violation of the requirements of this Agreement.

ARTICLE III
OBLIGATIONS OF COVERED ENTITY

3.1 Privacy Notice. Covered Entity shall notify Business Associate of any limitation(s) in Covered Entity's notice of privacy practices to the extent such limitation(s) may affect Business Associate's Use or Disclosure of Health Information.

ARTICLE IV
TERM AND TERMINATION

4.1 Term. Subject to the provisions of Sections 4.2 and 4.3, the term of this Agreement shall be the term of the Underlying Agreement(s).

4.2 Termination for Cause. Upon Covered Entity's knowledge of a material breach of this Agreement by the Business Associate, Covered Entity shall either:

a. notify Business Associate of the breach in writing, and provide an opportunity to cure the breach or end the violation within ten (10) business days of such notification; provided that if Business Associate fails to cure the breach or end the violation within such time period to the satisfaction of Covered Entity, Covered Entity shall have the right to immediately terminate this Agreement and the Underlying Agreement(s) upon written notice to Business Associate;

b. upon written notice to Business Associate, immediately terminate this Agreement and the Underlying Agreement(s) if Covered Entity determines that such breach cannot be cured; or

c. if Covered Entity determines that neither termination nor cure is feasible, the Covered Entity shall report the violation to the Secretary.

4.3 Termination for Breach of Section 5.2. Covered Entity may terminate the Underlying Agreement(s) and this Agreement upon thirty (30) days written notice in the event (a) Business Associate does not promptly enter into negotiations to amend this Agreement when requested by Covered Entity pursuant to Section 5.2 or (b) Business Associate does not enter into an amendment to this Agreement providing assurances regarding the safeguarding of Health Information that the Covered Entity, in its sole discretion, deems sufficient to satisfy the standards and requirements of HIPAA.

4.4 Disposition of Health Information Upon Termination or Expiration. Upon termination or expiration of this Agreement, Business Associate shall either return or destroy, in Covered Entity's sole discretion and in accordance with any instructions by Covered Entity, all Protected Health Information in the possession or control of Business Associate and its agents and subcontractors. In such event, Business Associate shall retain no copies of such Protected Health Information. However, if the Business Associate determines that neither return nor destruction of Protected Health Information is feasible, Business Associate shall notify Covered Entity of the conditions that make return or destruction infeasible, and may retain Protected Health Information provided that Business Associate (a) continues to comply with the provisions

of this Agreement for as long as it retains Protected Health Information, and (b) further limits Uses and Disclosures of Protected Health Information to those purposes that make the return or destruction of Protected Health Information infeasible.

4.5 Survival. The obligations of Business Associate under this Article IV shall survive the termination of this Agreement.

ARTICLE V
MISCELLANEOUS

5.1 Indemnification. Notwithstanding anything to the contrary in the Underlying Agreement(s), at Business Associate's expense, Business Associate agrees to indemnify, defend and hold harmless Covered Entity and Covered Entity's employees, directors, officers, subcontractors or agents (the "Indemnities") against all damages, losses, lost profits, fines, penalties, costs or expenses (including reasonable attorneys' fees) and all liability to third parties arising from any breach of this Agreement by Business Associate or its employees, directors, officers, subcontractors, agents or other members of Business Associate's workforce. Business Associate's obligation to indemnify the Indemnitees shall survive the expiration or termination of this Agreement for any reason.

5.2 Amendment to Comply with Law. The parties acknowledge that state and federal laws relating to electronic data security and privacy are rapidly evolving and that amendment of this Agreement may be required to provide for procedures to ensure compliance with such developments. The parties specifically agree to take such action as is necessary to implement the standards and requirements of HIPAA and other applicable laws relating to the security or confidentiality of Health Information. The parties understand and agree that Covered Entity must receive satisfactory written assurance from Business Associate that Business Associate will adequately safeguard all Health Information that it receives or creates on behalf of Covered Entity. Upon Covered Entity's request, Business Associate agrees to promptly enter into negotiations with Covered Entity, concerning the terms of any amendment to this Agreement embodying written assurances consistent with the standards and requirements of HIPAA or other applicable laws.

5.3 Relationship to Underlying Agreement(s) Provisions. In the event that a provision of this Agreement is contrary to a provision of an Underlying Agreement(s), the provision of this Agreement shall control. Otherwise, this Agreement shall be construed under, and in accordance with, the terms of such Underlying Agreement(s), and shall be considered an amendment of and supplement to such Underlying Agreement(s).

5.4 Modification of Agreement. No alteration, amendment, or modification of the terms of this Agreement shall be valid or effective unless in writing and signed by Business Associate and Covered Entity.

5.5 Non-Waiver. A failure of any party to enforce at any time any term, provision or condition of this Agreement, or to exercise any right or option herein, shall in no way operate as a waiver thereof, nor shall any single or partial exercise preclude any other right or option herein.

In no way whatsoever shall a waiver of any term, provision or condition of this Agreement be valid unless in writing, signed by the waiving party, and only to the extent set forth in such writing.

5.6 Agreement Drafted By All Parties. This Agreement is the result of arm's length negotiations between the parties and shall be construed to have been drafted by all parties such that any ambiguities in this Agreement shall not be construed against either party.

5.7 Severability. If any provision of this Agreement is found to be invalid or unenforceable by any court, such provision shall be ineffective only to the extent that it is in contravention of applicable laws without invalidating the remaining provisions hereof.

5.8 Section Headings. The section headings contained herein are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

5.9 No Third Party Beneficiaries. There are no third party beneficiaries to this Agreement.

5.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and will become effective and binding upon the parties as of the effective date at such time as all the signatories hereto have signed a counterpart of this Agreement.

5.11 Notices. Any notices required or permitted to be given hereunder by either party to the other shall be given in writing: (1) by personal delivery; (2) by electronic facsimile with confirmation sent by United States first class registered or certified mail, postage prepaid, return receipt requested; (3) by bonded courier or by a nationally recognized overnight delivery service; or (4) by United States first class registered or certified mail, postage prepaid, return receipt requested, in each case, addressed to:

If to Business Associate: ????

If to Covered Entity: Pinellas County EMSA
c/o Pinellas County Public Safety Services
Attn: HIPAA Compliance Officer
12490 Ulmerton Road
Largo, FL 33774-2700

or to such other addresses as the parties may request in writing by notice given pursuant to this Section 5.12. Notices shall be deemed received on the earliest of personal delivery; upon delivery by electronic facsimile with confirmation from the transmitting machine that the transmission was completed; twenty-four (24) hours following deposit with a bonded courier or overnight delivery service; or seventy-two (72) hours following deposit in the U.S. Mail as required herein.

5.12 Applicable Law and Venue. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Florida (without regard to principles of conflicts of laws). The parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the state courts located in Pinellas County, Florida or federal court (if permitted by law and a party elects to file an action in federal court) in the Tampa Division of the Middle District of Florida. This choice of venue is intended by the parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this Section 5.12. Each party waives any right it may have to assert the doctrine of *forum non conveniens* or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this Section 5.12.

5.13 Interpretation. Any ambiguity in this Agreement shall be resolved to permit Covered Entity to comply with the Privacy Regulations.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date stated above.

COVERED ENTITY	**BUSINESS ASSOCIATE**
By:_____	By:_____
Print Name:_____	Print Name:_____
Title:_____	Title:_____
Dated:_____	Dated:_____

Approved as to form subject to proper execution

By: _____
Office of the County Attorney