



Iowa Emergency Medical Care Clinician Scope of Practice

All EMS Certification Levels

September 1, 2026

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Introduction

The Iowa Emergency Medical Care Clinicians Scope of Practice (September 1, 2026) identifies the knowledge and psychomotor skills necessary for the minimum competence of each specified level of state-certified EMS clinician. Assurance of competency is achieved by completing an EMS educational program and certifying examinations adhering to established national standards. EMS clinicians must be educated and verifiably competent in the minimum cognitive, affective, and psychomotor skills needed to ensure safe and effective practice at that level. Eligibility to practice is dependent on education, state certification, and credentialing by the physician medical director. Certified EMS clinicians at each level are responsible for all knowledge, judgments, and skills at their level and all levels preceding their level.

For the purposes of this document, "scope of practice" is a description of the distinction between certified Iowa EMS clinicians and the lay public. It describes Iowa's authority vested in individuals certified as EMS clinicians. Scope of practice establishes which activities, skills, and procedures would represent illegal activity if performed without certification. In general, the scope of practice focuses on activities regulated by law (for example, starting an intravenous line, administering medication, etc.), including technical skills and procedures that, if done improperly, represent a significant hazard to the patient and, therefore, must be regulated for public protection.

The Iowa Department of Health and Human Services has the statutory authority (Iowa Code Chapter 147A) and responsibility to regulate EMS within Iowa's borders and determine the scope of practice of state-certified EMS clinicians. **The Scope of Practice is to be adhered to by all state-certified EMS clinicians whether they are employed by an authorized state EMS service program or other regulated facility where healthcare is normally provided, such as a hospital or medical clinic.**

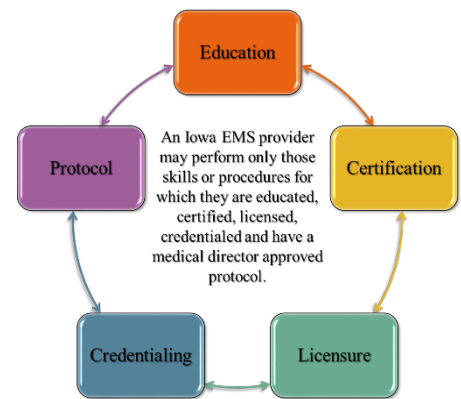
Background

The Iowa Emergency Medical Care Clinician Scope of Practice (September 1, 2026) is based on the National EMS Scope of Practice Model produced by the National Association of State EMS Officials (NASEMSO) with support from the US Department of Transportation, National Highway Traffic Safety Administration (NHTSA), Office of Emergency Medical Services (OEMS). NHTSA released the latest version of the National EMS Scope of Practice Model in February 2019 and Change Notices 1.0 and 2.0 (March 2021). The National EMS Scope of Practice Model is a consensus-based document developed to improve the consistency of EMS personnel licensure levels and

nomenclature among states. The widespread use and adoption of the previous version of the National EMS Scope of Practice Model by most states suggest an accepted national standard.

The Scope of Practice Cycle

The *National EMS Scope of Practice Model* established a framework that states could utilize to determine the range of skills and procedures that an individual possessing a State EMS license or certification would be authorized to do when functioning as an authorized EMS clinician. Utilizing the core framework established by the *National EMS Scope of Practice Model*, Iowa identified education, certification, licensure, credentialing, and protocols as five separate but related activities. Each of these five interrelated activities must be present and active for an EMS clinician to perform the skills or procedures identified within their specific level of Iowa EMS certification. Iowa EMS clinicians have the responsibility to maintain records verifying the completion of all applicable activities.



Interdependent Relationship of Education, Certification, Licensure, Credentialing, and Protocols



Education includes all cognitive, psychomotor, and affective learning domains that individuals have undergone throughout their lives. This includes entry-level education, continuing professional education, and formal and informal learning.



Certification is an external verification of an individual's competencies and typically involves an examination process. While certification exams can be set to any level of proficiency, health care certifying examinations are typically designed to verify that an individual has achieved minimum or entry-level competency to assure safe and effective patient care. The examination process may involve the verification of cognitive, psychomotor, and affective domains. Certifying examinations typically occur following an initial or renewal educational session.

Licensure

Licensure¹ represents legal authority granted to an individual by the State to perform certain restricted activities. The scope of practice represents the legal limits of the licensed individual's performance. States have a variety of mechanisms to define the margins of what an individual is legally permitted to perform. This authority granted by the State is defined as licensure, but some states may use "certification" to describe the same granting of authority to practice for EMS personnel. In these cases, this state authority should not be confused with certification to verify competency, as described in the preceding paragraph.

Credentialing

Credentialing is an ongoing clinical determination that is the responsibility of the service program's physician medical director. The service program's physician medical director may choose to limit an individual's ability to perform specific skills or procedures within the EMS clinician's scope of practice until they have met the credentialing standards. It is the employer's or affiliating organization's responsibility to act on the clinical credentialing status of EMS personnel in making employment and deployment decisions.

Protocol

Protocols are written guidelines that outline EMS clinicians' assessment and treatment options based on the patient's presentation. Protocols for Iowa EMS clinicians are traditionally developed utilizing the most current National Model EMS Clinical Guidelines version. Protocols must be approved by the service program's physician medical director. Iowa EMS clinicians may only perform skills or procedures authorized within the identified level of EMS certification, the level of the service program's authorization, and identified within the service program's written protocol or instructed by appropriate medical direction.

Scope of Practice versus Standard of Care

Scope of practice does not define a standard of care, nor does it define what should be done in a given situation (i.e., it is not a practice guideline or protocol). Scope of practice does define what skills or procedures are legally permitted for some or all of the certified individuals at that identified level, not what must be done to provide patient care.

¹ Iowa uses "Certification" as the authority granted by the State to legally perform EMS, Iowa Code chapter 272C and Iowa Code chapter 147A.

Medical Supervision

EMS physician medical directors are expected to provide appropriate supervision in the interest of public safety and are obligated to revoke or restrict local credentialing as appropriate. An authorized Iowa EMS physician medical director may *limit* the skills or procedures performed by an Iowa Emergency Medical Care Clinician but *cannot* authorize a clinician to perform skills or procedures outside or beyond the clinician's established scope of practice.

Medical Direction

In the event an Iowa EMS clinician encounters a patient care situation that is not covered by their service program's physician medical director-approved protocols, the EMS clinician may request guidance from medical direction. Medical direction, to include direction, advice, or orders, may be provided either verbally or in writing only by the service program's physician medical director, the patient's personal physician, or the referring/receiving facilities' physician, PA, or ARNP. Medical direction may not authorize a clinician to perform skills or procedures outside or beyond the clinician's established scope of practice.

Blood Testing Devices

The use of blood testing devices (e.g., glucometers) by EMS clinicians invokes the federal-level Clinical Laboratory Improvement Amendments (CLIA) to the Public Health Services Act (42 CFR 493, Laboratory Requirements, 2011). Iowa EMS programs utilizing blood testing devices should obtain the appropriate CLIA designation and comply with appropriate requirements.

Patient Assisted Medications

During the revision of the *National EMS Scope of Practice Model* in 2018, the nationwide multi-disciplinary panel reviewed all current practices of EMS clinicians, including assisting patients with taking the patient's own medications. Multiple concerns were expressed with this procedure. The mechanical task of opening medication bottles or providing a drink of water aside, aid or assistance associated with placing a tablet in the patient's mouth, activating an inhaler, or delivering a dose of medication via an auto-injector is an act of medication administration. Administration of any medication requires a thorough understanding of related pharmacology and safe administration practices. Based on the expert panel's recommendation, references to "assist patients in taking their own prescribed medications" have been removed from the scope of practice and

educational standards for all levels of EMS clinician, except in the case of nitroglycerin for chest pain of cardiac origin.

Assisting with a Skill or Procedure Outside of an Individual's Scope of Practice

Multiple situations occur where a higher-level certified EMS clinician performing certain skills or procedures could benefit from the assistance of a lower-level certified EMS clinician. In these situations, a lower-level certified EMS clinician may provide non-invasive assistance to a higher-level certified EMS clinician with skills or procedures normally outside of their identified scope of practice **only** under the following conditions:

- The higher-level certified EMS clinician is operating within the authorized scope of practice, and
- The higher-level certified EMS clinician performs the invasive or key portion(s) of the skill or procedure, which makes the skill within the scope of practice of a higher-level clinician, and
- The assistance of the lower-level certified EMS clinician is in the physical presence and physical supervision of the higher-level certified EMS clinician, and
- The service program's physician medical director has approved the lower-level certified EMS clinician to assist the higher-level certified EMS clinician and established in the service program's protocols what assistance is deemed acceptable

An example of assistance: An EMR or EMT may assist an AEMT or Paramedic with the preparation/assembly of a non-medicated intravenous bag and related hardware while the AEMT or Paramedic inserts an intravenous catheter.

NOTE: The service program's physician medical director **may not** authorize an EMS clinician to perform skills beyond the clinician's current certification level or scope of practice or independently perform the invasive or key portion(s) of the skill or procedure expressly designated as a skill within the scope of practice higher than the clinician is currently certified.

Physician (MD/DO), Physician Assistant (PA), and Registered Nurse (RN) Exception

A Physician, PA or RN who has completed the exception application and approval process by both the service program's physician medical director and Bureau may serve as a staff member of an authorized Iowa Emergency Medical Service (EMS) program. The Physician Exception, PA Exception or RN Exception will be limited to the skills and procedures of the Iowa Emergency Medical Care Clinician level authorized by the service program's physician medical director and the Bureau as identified on their application.

Scope of Practice

Scope of Practice – Defined parameters of various duties or services that an individual may provide with specific credentials. Whether regulated by rule, statute, or court decision, it represents the limits of services an individual may legally perform.

The following charts and information identify the authorized skills and procedures (*Scope of Practice*) for each certified Iowa Emergency Medical Care Clinician level. Iowa Emergency Medical Care Clinicians may **only** perform skills and procedures authorized within their active Iowa certification level.

Emergency Medical Responders (EMR)

The EMR is an out-of-hospital practitioner whose primary focus is to initiate immediate lifesaving care to patients. EMRs possess the basic knowledge and skills necessary to provide lifesaving interventions while relying on an EMS or public safety agency (or larger scene response) that includes advanced medical personnel. When practicing in less populated areas, EMRs may have a low call volume coupled with being the only care personnel for prolonged periods awaiting the arrival of advanced levels of care. EMRs may assist but cannot be the most advanced medical person caring for a patient during ambulance transport. EMRs are often the first to arrive on the scene. They must quickly assess patient needs, initiate treatment, and request additional resources. EMRs function as part of a comprehensive EMS response, community, health, or public safety system with clinical protocols and medical oversight. EMRs perform basic interventions with minimal equipment to manage life threats and medical and psychological needs with minimal resources until other personnel arrive. EMRs are an essential link within the 9-1-1 and emergency medical services systems. The focused and limited scope of the EMR makes it suitable for employee cross-training in settings where emergency medical care is not the EMR's primary job function. Examples include firefighters, law enforcement, lifeguards, backcountry guides, community responders, industrial workers, and similar jobs. EMRs advocate health and safety practices that may help reduce harm to the public.

This Iowa EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 2005 National Education Standards for the EMR and successfully completed the department's testing requirements at the time of initial certification or completed the FR to EMR transition requirement. Individuals certified at this level have an Iowa EMS certification number identified with the letters "EMR."

Legacy Levels

First Responder (1979) (FR)

This EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 1979 FR national standard curriculum (NSC) and successfully completed the department's testing requirements at the time of initial certification. Individuals certified at this level have an Iowa EMS certification number

identified with the letter "F." Initial certification at this level is no longer available. Clinicians who maintain this legacy level certification must operate within the scope of practice of an EMR and complete the same recertification requirements as the EMR.

First Responder – Defibrillation (FR-D)

This EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 1979 FR national standard curriculum, and the AED supplemental curriculum and successfully completed the department's testing requirements at the time of initial certification. Individuals certified at this level have an Iowa EMS certification number identified with the letter "G." Initial certification is no longer available. Clinicians who maintain this legacy level certification must operate within the scope of practice of an EMR and complete the same recertification requirements as the EMR.

EMR Scope of Practice

Airway/Ventilation/Oxygenation

Skill - Procedure
Airway – oral
Airway – supraglottic
Bag-valve-mask (BVM)
Head tilt-chin lift
Jaw thrust
Mouth-to-barrier
Mouth-to-mask
Mouth-to-mouth
Mouth-to-nose
Mouth-to-stoma
Obstruction – manual dislodgement
Oxygen therapy – nasal cannula
Oxygen therapy – simple mask
Oxygen therapy – non-rebreather mask
Suctioning – upper airway

Cardiovascular/Circulation

Skill - Procedure
Defibrillation – automated/semiautomated
Hemorrhage control – direct pressure, tourniquet, wound packing ²
Mechanical CPR device

² Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill – Procedure
Cervical collar
Manual cervical stabilization
Extremity splinting
Extremity stabilization - manual
Emergency moves for endangered patients

Medication/Administration Routes³

Skill - Procedure
Intramuscular (IM) route - auto-injector for opioid antagonist
Intramuscular (IM) route - auto-injector to self or peer administration for chemical/hazardous material antidote
Intramuscular (IM) route - Limited to auto-injector Epinephrine for anaphylaxis only (Patient's prescribed auto-injector only)
Intranasal route - opioid antagonist that is unit-dosed in a pre-measured syringe

Miscellaneous

Skill – Procedure
Assisted delivery (childbirth)
Eye irrigation

³ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

Emergency Medical Technician (EMT)

The primary focus of the EMT is to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. The EMT is a link from the scene to the emergency health care system. EMTs function as part of a comprehensive EMS response, community, health, or public safety system with defined clinical protocols and medical oversight. EMTs perform interventions with the basic equipment typically found on an ambulance to manage life threats and medical and psychological needs. EMTs are an essential link within the continuum of the emergency care system, from an out-of-hospital response through the delivery of patients to definitive care.

The majority of personnel in the EMS system are licensed at the EMT level. The EMT plays many important roles and possesses the knowledge and skillset to initially manage any emergency until access to a higher level of care is available. In areas where AEMT or Paramedic response is unavailable, the EMT may be the highest level of EMS personnel the patient encounters before reaching a hospital. EMTs advocate health and safety practices that may help reduce harm to the public.

This Iowa EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 2005 National Education Standards for the EMT and successfully completed the department's testing requirements at the time of initial certification, the transition from EMT-I 1985+, or completed the EMT-B to EMT transition requirements. Individuals certified at this level have an Iowa EMS certification number identified with the letters "EMT."

Legacy Levels

Emergency Medical Technician – Defibrillation (EMT-D)

This EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 1984 EMT-A national standard curriculum (NSC) and the AED supplemental curriculum and successfully completed the department's testing requirements at the time of initial certification. Individuals certified at this level have an Iowa EMS certification number identified with the letter "D." Initial certification is no longer available. Clinicians who maintain this legacy level certification must operate within the scope of practice of an EMT and complete the same recertification requirements as the EMT.

EMT Scope of Practice

Airway/Ventilation/Oxygenation

Skill - Procedure
Airway – nasal
Airway – oral
Airway – supraglottic
Bag-valve-mask (BVM)
CPAP
End Tidal CO ₂ (ETCO ₂) – monitoring of non-waveform capnometry
Head tilt-chin lift
Jaw thrust
Mouth-to-barrier
Mouth-to-mask
Mouth-to-mouth
Mouth-to-nose
Mouth-to-stoma
Obstruction – manual dislodgement
Oxygen therapy – humidifier
Oxygen therapy – nasal cannula
Oxygen therapy – non-rebreather mask
Oxygen therapy – partial rebreather mask
Oxygen therapy – simple mask
Oxygen therapy – venturi mask
Pulse oximetry
Suctioning – upper airway
Ventilators - Initiate or maintain use of ventilator <u>without</u> making adjustments to any settings

Cardiovascular/Circulation

Skill - Procedure
Cardiac monitoring, non-interpretive – <u>limited</u> to ECG acquisition/transmission <u>only</u>
Defibrillation – automated/semiautomated
Hemorrhage control – direct pressure, tourniquet, wound packing ⁴
Mechanical CPR device
Telemetric monitoring devices - transmission of clinical/video data

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill – Procedure
Cervical collar
Manual cervical stabilization
Extremity splinting
Extremity stabilization - manual
Emergency moves for endangered patients
Long spine board
Mechanical patient restraint
Seated SMR (e.g., KED, etc.)
Splint – traction

IV Initiation/Monitoring/Fluids

Skill – Procedure
Monitoring of saline or heparin-locked peripheral IV <u>only</u>

⁴ Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

Medication/Administration Routes⁵

Skill - Procedure
Aerosolized/nebulized route - Beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing
Intramuscular (IM) route - Immunizations during a public health emergency ⁶
Intramuscular (IM) route – Limited to auto-injector epinephrine for anaphylaxis only (patient prescribed or service carried auto-injector only)
Intramuscular (IM) route – auto-injector for opioid antagonist
Intramuscular (IM) route – auto-injector to self or peer administration for chemical/hazardous material antidote
Intranasal (IN) route - opioid antagonist that is unit-dosed in a pre-measured syringe
Mucosal/sublingual (SL)/buccal route – Limited to buccal route for Glucose for suspected hypoglycemia only . Limited to sublingual (SL) route for Nitroglycerin for chest pain of suspected ischemic origin only (must utilize the patient's prescribed medication only)
Oral route - Aspirin for chest pain suspected ischemic origin
Oral route - Glucose for suspected hypoglycemia
Oral route - over the counter (OTC) analgesics for pain or fever
Oral route – over the counter (OTC) Diphenhydramine for suspected allergic reaction

⁵ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

⁶ Medical directors should ensure appropriate clinical experience, education and documented credentialing, including the separate skills of medication preparation, medication dilution, filling a syringe from a multi-dose vial, and changing the needle on a syringe.

Miscellaneous

Skill – Procedure
Assisted delivery (childbirth)
Assisted complicated delivery (childbirth)
Blood glucose monitor - glucometry
Eye irrigation
Specimen collection via nasal swab ⁷

⁷ Medical directors should ensure appropriate clinical experience to obtain an acceptable specimen to minimize inaccurate results.

Advanced Emergency Medical Technician (AEMT)

The AEMT is a health care professional whose primary focus is to respond to, assess, and triage non-urgent, urgent, and emergent requests for medical care. AEMTs apply basic and focused advanced knowledge and skills necessary to provide patient care, medical transportation and facilitate access to a higher level of care when needed. The additional preparation beyond EMT prepares an AEMT to improve patient care in common emergency conditions for which reasonably safe, targeted, and evidence-based interventions exist. Interventions within the AEMT scope of practice may carry more risk than interventions authorized for the EMR/EMT levels if not performed correctly.

With proper supervision, AEMTs may serve as patient care team members in a hospital or health care setting to the full extent of their education, certification, licensure, and credentialing. In a community setting, an AEMT might visit patients at home and report observations to supervising clinicians to help manage a patient's care. With medical oversight, AEMTs function as part of a comprehensive EMS response, community, health, or public safety system. AEMTs perform interventions with the basic and advanced equipment typically found in an ambulance. AEMTs function as an important link from the scene to the health care system. In areas where Paramedic response is unavailable, the AEMT may be the highest level of EMS personnel the patient encounters before reaching a hospital. AEMTs advocate health and safety practices that may help reduce harm to the public.

This Iowa EMS clinician level identifies individuals who successfully completed a program of training that used, as a minimum, the 2005 National Education Standards for the AEMT and successfully completed the department's testing requirements at the time of initial certification. Individuals certified at this level have an Iowa EMS certification number identified with the letters "AEMT."

AEMT Scope of Practice

Airway/Ventilation/Oxygenation

Skill - Procedure
Airway – nasal
Airway – oral
Airway – supraglottic
Bag-valve-mask (BVM)
CPAP
End Tidal CO ₂ (ETCO ₂) – monitoring and interpretation of waveform capnography
End Tidal CO ₂ (ETCO ₂) – monitoring of non-waveform capnometry
Head tilt-chin lift
Jaw thrust
Mouth-to-barrier
Mouth-to-mask
Mouth-to-mouth
Mouth-to-nose
Mouth-to-stoma
Obstruction – manual dislodgement
Oxygen therapy – humidifier
Oxygen therapy – nasal cannula
Oxygen therapy – simple mask
Oxygen therapy – partial rebreather mask
Oxygen therapy – non-rebreather mask
Oxygen therapy – Venturi mask
Pulse oximetry
Suctioning – tracheobronchial of an intubated patient
Suctioning – upper airway

Ventilators - Adjust ventilator setting of rate, tidal volume, and inspiratory time setting **only**

Cardiovascular/Circulation

Skill - Procedure
Cardiac monitoring, non-interpretive – <u>limited</u> to ECG acquisition/transmission <u>only</u>
Defibrillation – automated/semiautomated
Hemorrhage control – direct pressure, tourniquet, wound packing ⁸
Mechanical CPR device
Telemetric monitoring devices - transmission of clinical/video data

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill – Procedure
Cervical collar
Manual cervical stabilization
Extremity splinting
Extremity stabilization - manual
Emergency moves for endangered patients
Long spine board
Mechanical patient restraint
Seated SMR (e.g., KED, etc.)
Splint – traction

⁸ Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

IV Initiation/Monitoring/Fluids

Skill – Procedure
Intraosseous initiation – adult or pediatric
Intravenous access – peripheral
Intravenous initiation – peripheral
Initiation/maintenance/monitoring – non-medicated IV ⁹
Monitoring of saline or heparin-locked peripheral IV

Medication/Administration Routes¹⁰

Skill - Procedure
Aerosolized/nebulized route - Beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing
Inhaled route - patient-administered nitrous oxide
Intramuscular (IM) route - Immunizations
Intramuscular (IM) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intranasal (IN) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intraosseous (IO) route - Dextrose
Intraosseous (IO) route - Epinephrine during cardiac arrest <u>only</u>
Intraosseous (IO) route - Glucagon
Intraosseous (IO) route - Ondansetron
Intraosseous (IO) route - Opioid antagonist
Intraosseous (IO) route - Pain analgesia

⁹ AEMT's are restricted to the following isotonic crystalloid solutions; Normal Saline 0.9% (NS 0.9%), Lactated Ringers (LR), Dextrose 5% in water (D5W), and Dextrose 10% in water (D10W) infusions..

¹⁰ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

Intravenous (IV) route - Dextrose
Intravenous (IV) route - Epinephrine during cardiac arrest <u>only</u>
Intravenous (IV) route - Glucagon
Intravenous (IV) route - Ondansetron
Intravenous (IV) route - Opioid antagonist
Intravenous (IV) route - Pain analgesia
Mucosal/sublingual (SL)/buccal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Oral route – Glucose for suspected hypoglycemia
Oral route - Aspirin for chest pain suspected ischemic origin
Oral route – over the counter (OTC) Diphenhydramine for suspected allergic reaction
Oral route – Ondansetron for nausea
Oral route - over the counter (OTC) analgesics for pain or fever
Subcutaneous (SC) route – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.

Miscellaneous

Skill – Procedure
Assisted delivery (childbirth)
Assisted complicated delivery (childbirth)
Blood glucose monitor - glucometry
Blood sampling – venous
Eye irrigation
Specimen collection via nasal swab ¹¹

¹¹ Medical directors should ensure appropriate clinical experience to obtain an acceptable specimen in order to minimize inaccurate results.

Paramedic (PM)

The Paramedic is a health care professional whose primary focus is to respond to, assess, and triage emergent, urgent, and non-urgent requests for medical care, apply basic and advanced knowledge and skills necessary to determine patient physiologic, psychological, and psychosocial needs, administer medications, provide medical screening examinations, medication reconciliation, interpret and use diagnostic findings to implement treatment, provide complex patient care, and facilitate referrals or access to a higher level of care when the needs of the patient exceed the capability level of the Paramedic. Paramedics often serve as patient care team members in a hospital or other health care setting to the full extent of their education, certification, licensure, credentialing, and scope of practice. Paramedics may work in community settings where they take on additional responsibilities, monitoring and evaluating the needs of at-risk patients and intervening to mitigate conditions that could lead to poor outcomes. Paramedics help educate patients and the public in preventing or managing medical, health, psychological, and safety issues. Paramedics function as part of a comprehensive EMS response, community, health, or public safety system with advanced clinical protocols and medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found on an ambulance, including using diagnostic equipment approved by an agency's physician medical director.

Paramedics may provide specialized inter-facility care during transport and are an important link in the health care continuum. Paramedics commonly facilitate medical decisions at an emergency scene and during transport. Paramedics work in various specialty care settings, including but not limited to ground and air ambulances and occupational, hospital, and community settings. Academic preparation enables paramedics to use a wide range of pharmacology, airway, and monitoring devices as well as to utilize critical thinking skills to make complex judgments such as the need for transport from a field site, alternate destination decisions, the level of personnel appropriate for transporting a patient, and similar judgments. Due to the complexity of the Paramedic scope of practice and the required integration of knowledge and skills, many training programs are moving towards advanced training at the associate's degree or higher level.

This Iowa EMS clinician level identifies individuals who have successfully completed a program of training that used, as a minimum, the 2005 National Education Standards for the Paramedic and successfully completed the department's testing requirements at the time of initial certification or completed the EMT-P to Paramedic transition requirements and successfully completed the department's testing requirements at the time of transition. Individuals certified at this level have an Iowa EMS certification number identified with the letters "PM" or "PARA."

Paramedic Scope of Practice

Airway/Ventilation/Oxygenation

Skill - Procedure
Airway – nasal
Airway – oral
Airway – supraglottic
Bag-valve-mask (BVM)
BiPAP/CPAP
Chest decompression – needle
Chest tube – monitoring/management
Chest tube placement – assist only
Cricothyrotomy – percutaneous
End Tidal CO ₂ (ETCO ₂) – monitoring/interpretation of waveform capnography
End Tidal CO ₂ (ETCO ₂) – monitoring of non-waveform capnometry
Endotracheal intubation – nasal/oral
Gastric decompression – NG/OG tube
Head tilt-chin lift
Jaw thrust
Mouth-to-barrier
Mouth-to-mask
Mouth-to-mouth
Mouth-to-nose
Mouth-to-stoma
Obstruction – direct laryngoscopy
Obstruction – manual dislodgement
Oxygen therapy – high flow nasal cannula
Oxygen therapy – humidifier

Oxygen therapy – nasal cannula
Oxygen therapy – simple mask
Oxygen therapy – partial rebreather mask
Oxygen therapy – non-rebreather mask
Oxygen therapy – venturi mask
Pulse oximetry
Suctioning – tracheobronchial of an intubated patient
Suctioning – upper airway
Ventilators - Adjust settings established by protocol/physician orders

Cardiovascular/Circulation

Skill - Procedure
Cardiac monitoring, interpretive
Cardioversion – electrical
Defibrillation – automated/semiautomated
Defibrillation – manual
Hemorrhage control – direct pressure, tourniquet, wound packing ¹²
Mechanical CPR device
Telemetric monitoring devices - transmission of clinical/video data
Transcutaneous pacing
Transvenous cardiac pacing – monitoring and maintenance
Vagal maneuver techniques

¹² Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill – Procedure
Cervical collar
Manual cervical stabilization
Extremity splinting
Extremity stabilization - manual
Emergency moves for endangered patients
Long spine board
Mechanical patient restraint
Seated SMR (e.g., KED, etc.)
Splint – traction

IV Initiation/Maintenance Fluids

Skill – Procedure
Access indwelling catheters and implanted central IV ports
Central line monitoring
Intraosseous initiation – adult or pediatric
Intravenous access – peripheral
Intravenous initiation – peripheral
Intravenous initiation – peripheral - point of care ultrasound (POCUS)
Initiation/maintenance/monitoring – blood/blood product
Initiation/maintenance/monitoring – medicated IV
Initiation/maintenance/monitoring – non-medicated IV
Monitoring of saline or heparin-locked peripheral IV

Medication/Administration Routes¹³

Skill - Procedure
Aerosolized/nebulized route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Endotracheal tube route- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Inhaled route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intradermal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intramuscular (IM) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intramuscular (IM) Route - Immunizations
Intranasal (IN) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intraosseous (IO) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intravenous (IV) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Mucosal/sublingual (SL)/buccal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Nasogastric route – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Oral route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.

¹³ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

Oral over the counter (OTC) medications – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Rectal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Subcutaneous (SC) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Topical routes - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Topical over the counter (OTC) medications - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Transdermal routes- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.

Miscellaneous

Skill – Procedure
Assisted delivery (childbirth)
Assisted complicated delivery (childbirth)
Blood chemistry analysis
Blood glucose monitor - glucometry
Blood sampling – venous
Eye irrigation
Foley catheter initiation
Point of Care Ultrasound (POCUS) – Determine cardiac standstill
Specimen collection via nasal swab ¹⁴

¹⁴ Medical directors should ensure appropriate clinical experience to obtain an acceptable specimen to minimize inaccurate results.

Critical Care Paramedic (CCP)

This Iowa EMS clinician endorsement identifies individuals who hold a valid Iowa Paramedic certification and have completed an Iowa-approved Critical Care Paramedic program. Individuals holding a valid endorsement as a CCP and working for an approved CCP transporting service (CCT) may perform CCP skills under medical oversight and approved protocol.

CCP Scope of Practice

Airway/Ventilation/Oxygenation

Skill - Procedure
Airway – nasal
Airway – oral
Airway – supraglottic
Bag-valve-mask (BVM)
BiPAP/CPAP
Chest decompression – needle
Chest tube – monitoring/management
Chest tube placement – assist only
Cricothyrotomy – percutaneous
Cricothyrotomy – surgical
End Tidal CO ₂ (ETCO ₂) – monitoring and interpretation of waveform capnography
End Tidal CO ₂ (ETCO ₂) – monitoring of non-waveform capnometry
Endotracheal intubation – nasal/oral
Gastric decompression – NG/OG tube
Head tilt-chin lift
Jaw thrust
Mouth-to-barrier
Mouth-to-mask
Mouth-to-mouth
Mouth-to-nose
Mouth-to-stoma
Obstruction – direct laryngoscopy
Obstruction – manual dislodgement
Oxygen therapy – high flow nasal cannula

Oxygen therapy – humidifier
Oxygen therapy – nasal cannula
Oxygen therapy – simple mask
Oxygen therapy – partial rebreather mask
Oxygen therapy – non-rebreather mask
Oxygen therapy – venturi mask
Pulse oximetry
Suctioning – tracheobronchial of an intubated patient
Suctioning – upper airway
Ventilators - Adjust ventilator settings established by protocol/physician orders

Cardiovascular/Circulation

Skill - Procedure
Cardiac monitoring, interpretive
Cardioversion – electrical
Defibrillation – automated/semiautomated
Defibrillation – manual
Hemorrhage control – direct pressure, tourniquet, wound packing ¹⁵
Mechanical CPR device
Telemetric monitoring devices - transmission of clinical/video data
Transcutaneous pacing
Transvenous cardiac pacing – monitoring and maintenance
Vagal maneuver techniques

¹⁵ Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill – Procedure
Cervical collar
Manual cervical stabilization
Extremity splinting
Extremity stabilization - manual
Emergency moves for endangered patients
Long spine board
Mechanical patient restraint
Seated SMR (e.g., KED, etc.)
Splint – traction

IV Initiation/Monitoring/Fluids

Skill – Procedure
Access indwelling catheters and implanted central IV ports
Central line monitoring
Intraosseous initiation – adult or pediatric
Intravenous access – peripheral
Intravenous initiation – peripheral
Intravenous initiation – peripheral – point of care ultrasound (POCUS)
Initiation/maintenance/monitoring – blood/blood product
Initiation/maintenance/monitoring – medicated IV
Initiation/maintenance/monitoring – non-medicated IV
Monitoring of saline or heparin-locked peripheral IV

Medication/Administration Routes¹⁶

Skill - Procedure
Aerosolized/nebulized route Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Endotracheal tube route- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Inhaled route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intradermal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intramuscular (IM) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intramuscular (IM) route - Immunizations
Intranasal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intraosseous (IO) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Intravenous (IV) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Mucosal/sublingual (SL)/buccal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Nasogastric route – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Oral route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.

¹⁶ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

Oral over the counter (OTC) medications – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Rectal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Subcutaneous (SC) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Topical routes - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Topical over the counter (OTC) medications - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.
Transdermal routes- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.

Miscellaneous

Skill – Procedure
Assisted delivery (childbirth)
Assisted complicated delivery (childbirth)
Blood chemistry analysis
Blood glucose monitor - glucometry
Blood sampling – arterial
Blood sampling – venous
Circulatory augmentation device monitoring
Eye irrigation
Finger thoracostomy – Limited to traumatic cardiac arrest only
Foley catheter initiation
Hemodynamic monitoring – central/arterial
ICP monitoring
Monitoring – arterial line

Point of Care Ultrasound (POCUS) – Determine cardiac standstill
Point of Care Ultrasound (POCUS) – eFAST Exam
Specimen collection via nasal swab ¹⁷

¹⁷ Medical directors should ensure appropriate clinical experience to obtain an acceptable specimen to minimize inaccurate results.

Appendix

IOWA EMS SERVICE PROGRAM DRIVER SKILLS PROCEDURES GUIDANCE August 2023

PURPOSE:

To guide Iowa-authorized nontransport and transport EMS service programs concerning policy development for the skills and procedures that drivers may or may not perform and assist with.

DEFINITIONS:

- “Ambulance” means any privately or publicly owned ground vehicle equipped with life-support systems and specifically designed to transport the sick or injured who require emergency medical care.
- “Emergency vehicle driver” or “driver” means a currently licensed driver rostered with the service program or other emergency response personnel with emergency vehicle driving training.
- “First response vehicle” means any privately or publicly owned vehicle that is not an ambulance and that is used solely for the transportation of personnel and equipment to and from the scene of an emergency.
- “Medical director” means a physician designated by the service program and responsible for providing medical direction and overall supervision of the medical aspects of the service program.
- “Nontransport service” means any privately or publicly owned service program which does not provide patient transportation and provides emergency medical care at the scene of an emergency.
- “Scope of Practice” identifies the psychomotor skills and knowledge necessary for the minimum competence of each identified level of state certified EMS clinician. It describes the authority vested by the State of Iowa to individuals that are certified as EMS clinicians and provides distinction between State of Iowa certified EMS clinicians and the lay public.
- “Service program” or “service” means any transport service or nontransport service, inclusive of associated satellites, that has received full or conditional authorization from the department.
- “Transport service” means any privately or publicly owned service program which utilizes ambulances in order to provide patient transportation.

GUIDANCE:

Iowa nontransport and transport EMS service programs shall define in policy what skills and procedures their service’s drivers are allowed to perform and assist with as defined by this document. This policy shall be developed with service stakeholders to include ownership representatives, legal counsel, and the physician medical director. The completed policy shall be approved by the EMS service programs service director and physician medical director.

EMS service program drivers are allowed to perform the following:

- 1) Operate the EMS service program vehicle (ambulance, nontransport response vehicle) after having attended and completed emergency vehicle driver training as defined by the EMS service program's driver training policy.
- 2) Assist with lifting and moving of patients when under the direction and supervision of a certified EMS clinician, including the utilization and application of a long backboard, stair chair, soft stretcher, ambulance stretcher, manual lifting procedures, and other lifting devices such as the "Binder Lift". EMS service programs shall maintain documentation that education concerning these skills and procedures has been completed.
- 3) Assist with and perform skills and procedures related to "Cardiopulmonary Resuscitation" or "CPR" when under the direction and supervision of a certified EMS clinician. It is recommended that the driver completes a nationally recognized CPR class, such as AHA or Red Cross, to receive certification. If the driver has received certification in CPR they can perform skills and procedures for which they have received certification and the individual, along with the authorized EMS service program, shall not be held in violation of the Iowa Emergency Medical Care Clinician Scope of Practice concerning said certified skills and procedures, to include bag- valve-mask (BVM), jaw thrust, mouth-to-barrier, mouth-to-mask, mouth-to-mouth, mouth-to-nose, obstruction-manual dislodgement, and defibrillation-automated/semiautomated. EMS service programs shall maintain documentation of the driver's CPR certification if completed.
- 4) Assist with and perform skills and procedures related to hemorrhage control when under the direction and supervision of a certified EMS clinician and certified in "Stop the Bleed". If the driver has received certification in "Stop the Bleed" they can perform skills and procedures for which they have received certification and the individual, along with the authorized EMS service program, shall not be in violation of the Iowa Emergency Medical Care Clinician Scope of Practice concerning said certified skills and procedures, to include hemorrhage control-direct pressure, tourniquet use, and wound packing. EMS service programs shall maintain documentation of the driver's "Stop the Bleed" certification if completed.
- 5) Assist with the application of a mechanical CPR device when under the direction and supervision of a certified EMS clinician. Drivers **CANNOT** operate the machine, to include positioning/repositioning of chest compression plunger/band, starting/pausing/stopping the machine, and changing the compression rate/ratio.

EMS service program drivers CANNOT perform the following:

- 1) Any skills authorized by the Iowa Emergency Medical Care Clinician Scope of Practice unless certified in Cardiopulmonary Resuscitation (CPR) and "Stop the Bleed" as previously defined in this document.
- 2) Obtain vital signs through manual and/or automated means.
- 3) Placement of ECG pads and cables to obtain a 3-lead, 4-lead, or 12-lead ECG.
- 4) Glucometer operations to obtain a blood sample.

Scope of Practice – All Clinician Levels

Airway/Ventilation/Oxygenation

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Airway – nasal		✓	✓	✓	✓
Airway – oral	✓	✓	✓	✓	✓
Airway – supraglottic	✓	✓	✓	✓	✓
Bag-valve-mask (BVM)	✓	✓	✓	✓	✓
BiPAP				✓	✓
CPAP		✓	✓	✓	✓
Chest decompression – needle				✓	✓
Chest tube – monitoring/management				✓	✓
Chest tube placement – assist only				✓	✓
Cricothyrotomy – percutaneous				✓	✓
Cricothyrotomy – surgical					✓
End Tidal CO ₂ (ETCO ₂) – monitoring and interpretation of waveform capnography			✓	✓	✓
End Tidal CO ₂ (ETCO ₂) – monitoring of non-waveform capnometry		✓	✓	✓	✓
Endotracheal intubation – nasal/oral				✓	✓
Gastric decompression – NG/OG tube				✓	✓
Head tilt-chin lift	✓	✓	✓	✓	✓
Jaw thrust	✓	✓	✓	✓	✓
Mouth-to-barrier	✓	✓	✓	✓	✓
Mouth-to-mask	✓	✓	✓	✓	✓
Mouth-to-mouth	✓	✓	✓	✓	✓
Mouth-to-nose	✓	✓	✓	✓	✓
Mouth-to-stoma	✓	✓	✓	✓	✓
Obstruction – direct laryngoscopy				✓	✓
Obstruction – manual dislodgement	✓	✓	✓	✓	✓
Oxygen therapy – high flow nasal cannula				✓	✓
Oxygen therapy – humidifier		✓	✓	✓	✓
Oxygen therapy – nasal cannula	✓	✓	✓	✓	✓
Oxygen therapy – simple mask	✓	✓	✓	✓	✓

Oxygen therapy – partial rebreather mask		✓	✓	✓	✓
Oxygen therapy – non-rebreather mask	✓	✓	✓	✓	✓
Oxygen therapy – venturi mask		✓	✓	✓	✓
Pulse oximetry		✓	✓	✓	✓
Suctioning – tracheobronchial of an intubated			✓	✓	✓
Suctioning – upper airway	✓	✓	✓	✓	✓
Ventilators – Limited to initiate or maintain the use of ventilator without making any adjustments to any settings only		✓			
Ventilators – Limited to adjusting ventilator setting of rate, tidal volume, and inspiratory time setting only			✓		
Ventilators - Adjust ventilator settings established by protocol/physician orders				✓	✓

Cardiovascular/Circulation

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Cardiac monitoring, non-interpretive – Limited to ECG acquisition and transmission only		✓	✓		
Cardiac monitoring, interpretive				✓	✓
Cardioversion – electrical				✓	✓
Defibrillation – automated/semiautomated	✓	✓	✓	✓	✓
Defibrillation – manual				✓	✓
Hemorrhage control – direct pressure, tourniquet, wound packing ¹⁸	✓	✓	✓	✓	✓
Mechanical CPR device	✓	✓	✓	✓	✓
Telemetric monitoring devices - transmission of clinical/video data		✓	✓	✓	✓
Transcutaneous pacing				✓	✓
Transvenous cardiac pacing – monitoring and maintenance				✓	✓
Vagal maneuver techniques				✓	✓

¹⁸ Packing materials are limited to the use of non-impregnated gauze or gauze impregnated with a hemostatic agent only. Wound packing of eyes, ears, nose, mouth, vagina, and anus with any material is prohibited. Insertion devices, either inflatable or non-inflatable, are prohibited.

Splinting/Spinal Motion Restriction (SMR)/Patient Restraint

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Cervical collar	✓	✓	✓	✓	✓
Manual cervical stabilization	✓	✓	✓	✓	✓
Extremity splinting	✓	✓	✓	✓	✓
Extremity stabilization - manual	✓	✓	✓	✓	✓
Emergency moves for endangered patients	✓	✓	✓	✓	✓
Long spine board		✓	✓	✓	✓
Mechanical patient restraint		✓	✓	✓	✓
Seated SMR (e.g., KED, etc.)		✓	✓	✓	✓
Splint – traction		✓	✓	✓	✓

IV Initiation/Monitoring/Fluids

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Access indwelling catheters and implanted central IV ports				✓	✓
Central line monitoring				✓	✓
Intraosseous initiation – adult or pediatric			✓	✓	✓
Initiation/maintenance/monitoring – blood/blood product				✓	✓
Intravenous access – peripheral			✓	✓	✓
Intravenous initiation – peripheral			✓	✓	✓
Intravenous initiation – peripheral – point of care ultrasound (POCUS)				✓	✓
Initiation/maintenance/monitoring – medicated IV				✓	✓
Initiation/maintenance/monitoring – non-medicated IV ¹⁹			✓	✓	✓
Monitoring of saline or heparin-locked peripheral IV		✓	✓	✓	✓

¹⁹ AEMT's are restricted to the following isotonic crystalloid solutions; Normal Saline 0.9% (NS 0.9%), Lactated Ringers (LR), Dextrose 5% in water (D5W), and Dextrose 10% in water (D10W) infusions.

Medication/Administration Routes²⁰

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Aerosolized/nebulized route – Limited to beta agonist, bronchodilator, and/or anticholinergic for dyspnea and wheezing only		✓	✓		
Aerosolized/nebulized route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Endotracheal tube route- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Inhaled route – Limited to patient self-administered nitrous oxide only			✓		
Inhaled route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Intradermal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Intramuscular (IM) route – Limited to auto-injector for opioid antagonist only	✓	✓			
Intramuscular (IM) route – Limited to auto-injector to self or peer administration for chemical/hazardous material antidote only	✓	✓			
Intramuscular (IM) route – Limited to auto-injector Epinephrine for anaphylaxis only (Patient's prescribed autoinjector only)	✓				
Intramuscular (IM) route – Limited to auto-injector Epinephrine for anaphylaxis only (patient prescribed or service carried auto-injector only)		✓			
Intramuscular (IM) route – Limited to Immunizations during a public health emergency only ²¹		✓			
Intramuscular (IM) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.			✓	✓	✓

²⁰ This table indicates what medication routes are permissible by clinician level and secondarily, specific medication limitations that may exist associated with each route and clinician level.

²¹ Medical directors should ensure appropriate clinical experience, education and documented credentialing including the separate skills of medication preparation, medication dilution, filling a syringe from a multi-dose vial, and changing the needle on a syringe.

Intranasal (IN) route – Limited to opioid antagonist that is unit-dosed in a pre-measured syringe only	✓	✓			
Intranasal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.			✓	✓	✓
Intraosseous (IO) route – Limited to Dextrose, Glucagon, Ondansetron, Opioid antagonist, pain analgesia, and Epinephrine during cardiac arrest only			✓		
Intraosseous (IO) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Intravenous (IV) route – Limited to Dextrose, Glucagon, Ondansetron, Opioid antagonist, pain analgesia, and Epinephrine during cardiac arrest only			✓		
Intravenous (IV) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Mucosal/sublingual (SL)/buccal route – Limited to buccal route for Glucose for suspected hypoglycemia only . Limited to sublingual (SL) route for Nitroglycerin for chest pain of suspected ischemic origin only (must utilize the patient's prescribed medication only)		✓			
Mucosal/sublingual route/buccal - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.			✓	✓	✓
Nasogastric route – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Oral route – Limited to Glucose for suspected hypoglycemia and Aspirin for chest pain of suspected ischemic origin only		✓			
Oral route – Limited to Glucose for suspected hypoglycemia, Aspirin for chest pain of suspected ischemic origin, and Ondansetron for nausea only			✓		
Oral route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓

Oral over the counter (OTC) medications – Limited to analgesics for pain or fever and Diphenhydramine for suspected allergic reaction only		✓	✓		
Oral over the counter (OTC) medications – Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Rectal route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Subcutaneous (SC) route - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.			✓	✓	✓
Topical routes - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Topical over the counter (OTC) medications - Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓
Transdermal routes- Medications identified within the service program approved protocols or facility authorized written/verbal/standing order or guideline.				✓	✓

Miscellaneous

Skill - Procedure	EMR	EMT	AEMT	PM	CCP
Assisted delivery (childbirth)	✓	✓	✓	✓	✓
Assisted complicated delivery (childbirth)		✓	✓	✓	✓
Blood chemistry analysis				✓	✓
Blood glucose monitor - glucometry		✓	✓	✓	✓
Blood sampling – arterial					✓
Blood sampling – venous			✓	✓	✓
Circulatory augmentation device monitoring					✓
Eye irrigation	✓	✓	✓	✓	✓
Finger thoracostomy – Limited to traumatic cardiac arrest only					✓
Foley catheter initiation				✓	✓
Hemodynamic monitoring – central/arterial					✓
ICP monitoring					✓
Monitoring – arterial line					✓
Point of Care Ultrasound (POCUS) – Determine cardiac standstill				✓	✓
Point of Care Ultrasound (POCUS) – eFAST Exam					✓
Specimen collection via nasal swab ²²		✓	✓	✓	✓

²² Medical directors should ensure appropriate clinical experience to obtain an acceptable specimen to minimize inaccurate results.