EMS Subspecialty Certification Review Course

2.3.1 Scope of Practice Models
2.3.1.1 Military/federal government medical personnel
2.3.1.2 State vs. national scope of practice model
2.3.1.2.1 Levels of providers
2.3.1.3 Field capabilities

Version Date: 7/2017

Learning Objectives
Upon the completion of this program participants will be able to:
• Describe the national EMS scope of practice for various levels of providers
• Discuss the unique aspects of military and federal governmental EMS scope of practice
• List levels of National EMS scope of practice provider levels and respective field capabilities

What is the lowest level provider that may perform a surgical cricothyrotomy?
A. EMS Physician  
B. Critical Care paramedic  
C. Paramedic  
D. AEMT
Scope of Practice

• Legal description of the distinction between licensed health care personnel and the lay public and among different licensed health care professionals, creating either exclusive or overlapping domains of practice.

describes the authority, vested by the state, in licensed individuals practicing within a given state.
-establishes which activities and procedures represent illegal activity if performed without licensure.
-does not define a standard of care, nor does it define what should be done in a given situation (not a practice guideline or protocol).

Scope of Practice vs Standard of Care

<table>
<thead>
<tr>
<th>SCOPE OF PRACTICE</th>
<th>STANDARD OF CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEY QUESTION</td>
<td>&quot;Are you or were you allowed to do it?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Did you do the right thing? did you do it properly?&quot;</td>
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<tr>
<td>LEGAL IMPLICATION</td>
<td>Act of commission by unlicensed party is criminal offense</td>
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<tr>
<td></td>
<td>Act of commission or omission may lead to civil liability</td>
</tr>
<tr>
<td>VARIABILITY</td>
<td>May vary level to level, but not based on circumstances</td>
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<tr>
<td></td>
<td>Always situational, depends on a host of variables</td>
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<tr>
<td>DEFINED BY</td>
<td>Statute, rules, regulations, precedent or board interpretation</td>
</tr>
<tr>
<td></td>
<td>Scope of practice, evidence/literature, expert witnesses, juries</td>
</tr>
<tr>
<td>OTHER CONSIDERATIONS</td>
<td>Difficult to regulate knowledge through scope of practice</td>
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<tr>
<td></td>
<td>Used to evaluate professional judgment</td>
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</table>
Military Overview

- Basic "self-aid" and "buddy aid" is the lowest tier of emergency medical response.
- Combat medic program
  - Includes EMT-B equivalent training and NREMT eligibility.
  - Medical direction is conducted by the unit medical officer.
- The Air Force’s version is the Air Force specialty code (AFSC) 46X0A.
  - The 46X0A medical technician: 14 weeks of in-house training includes EMT-B curriculum and NREMT exam.
- The Navy’s version is the Hospital Corpsman Basic “A” school.
  - Corpman on deployable fleet Marine force are further trained as field medical technicians
  - Approximately 12 weeks in length and includes prehospital trauma life support.
- The military emergency medical care includes another level of provider - no real civilian counterpart:
  - Independent duty medic:
    - Training, skills, and the scope of practice similar to a physician assistant.
    - Practices often limited to active duty military.
- Many Air Force and Navy nurses are trained as flight nurses
  - additional training, serve more autonomously during fixed wing air evacuation.

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Military Levels of Care

Military levels of care ("echelons of care") is a graduated hierarchy of combat medical care and facilities

**Level I:**
- Closest to the fog of war. austere with light and mobile elements
- Organized in the battalion (approximately 400 men) and subordinate military units

**Level II:**
- Division “clearing stations” or medical company
- Comprehensive resuscitation with limited radiographic and laboratory services including whole blood capacity, contains physicians, nurses, and medics (general ward level)

**Level III:**
- First true medical facility a casualty will encounter on the battlefield
- Provide comprehensive resuscitative surgery and medical care: general surgeons, surgical and medical radiologists, and comprehensive anesthesia and nursing support

**Level IV:**
- Comprehensive theater hospital that is both large and immobile.
- PROVIDE definitive medical and surgical care, unlikely that true level IV hospitals will ever exist again.

**Level V:**
- Fixed hospital in the continental United States, includes both military, civilian, and VA hospitals.
The military levels of care ("echelons of care") is a graduated hierarchy of combat medical care and facilities. In the earliest conception of the echelons of care, it was supposed to be a rigid progression of the patient (and the care capabilities) from level I to level V. With the advent of modern aeromedical transportation of the wounded, the strict hierarchy has ceased to exist. Advanced trauma surgical capability can be provided very rapidly (almost at the battalion aid station level). Reflecting this rapid shift in doctrine, the military is considering changing the term "level" to "role".

**Level I:**

Closest to the fog of war, austere with light and mobile elements. Organized in the battalion (approximately 400 men) and subordinate military units.
- Self-aid and buddy aid
- Combat lifesaver (Vehicle and small unit–squad)
- Combat medic (platoon sized units)
- Aid station care (Headquarters Company of the Battalion)

The battalion aid station is the first medical "facility" casualties encounter. It is austere and highly mobile with advanced life support capabilities including physician directed medical care. Navy ships have an equivalent in the "battle dressing stations."

**Level II:**

This is the division "clearing stations" or medical company. The medical company contains physicians, nurses, and medics. Comprehensive resuscitation with limited radiographic and laboratory services including whole blood capacity. There is a limited patient holding capability (general ward level). The ship's medical department approximates this for the Navy. A similar organization is the Marine Fleet surgical support group.

Patients with injuries or illnesses beyond the capabilities of this unit are evacuated to a rear area facility or major hospital ship. Advanced trauma surgical capability can be provided very rapidly at this level with "forward surgical teams" which further blurs the 'level' of care provided to the wounded soldier.

**Level III:**

The level III echelon is the first true medical facility a casualty will encounter on the battlefield. This includes a U.S. Army combat support hospital (CSH), the United States Air Force theater hospital or expeditionary medical support (EMEDS), the Navy fleet hospitals, and the major amphibious assault ships (if augmented by a surgical support team). Level III hospitals provide comprehensive resuscitative surgery and medical care. General surgeons, surgical and medical subspecialists, and comprehensive anesthesia and nursing support are available.
Level IV:
The level IV echelon was a comprehensive theater hospital that is both large and immobile. These hospitals provided definitive medical and surgical care. Because today’s operational requirements require flexible and mobile medical facilities, it is unlikely that true level IV hospitals will ever exist again. In the current military organizational schema, enhanced combat support hospitals will meet this level IV requirement. Direct evacuation of “stabilized” to fixed hospital facilities such as military hospitals in Japan and Germany (Landstuhl Army Regional Medical Center) or in the United States will also be used. Two exceptions exist: the United States Navy’s hospital ships USNS Mercy and USNS Comfort.

Level V:
This level represents the fixed hospital in the continental United States. This includes both military, civilian, and veteran’s system hospitals. Clearly, definitive and rehabilitative care of all types can be found at a level V facility.

Military Levels of Care
Military levels of care (“echelons of care”) is a graduated hierarchy of combat medical care and facilities

Reduction in transport time interval from point of injury to damage control resuscitation and damage control surgery

Military Evacuation
• The goal of combat medical evacuation is the safe and effective movement of casualties. (MEDEVAC)
• The military refers to MEDEVAC as combat casualty evacuation on dedicated platforms.
• CASEVAC is casualty evacuation of the casualty with whatever transportation is available often with limited or no medical care.
Federal government

- The US Customs Service (ICE and Border Protection)
- Federal Bureau of Investigation
- The Federal Emergency Management Agency
- US Coast Guard
- US Secret Service
- US Park Service

State

- Each state or territory regulates EMS practitioners
- Examples of regulatory bodies for EMS:
  - Public Safety
  - Public Health
  - Transportation
  - Homeland Security
  - Medical or Health Professional Board
- EMS Physicians and Medical Directors are also regulated in some states by these bodies

National EMS Scope of Practice

- National EMS Scope of Practice Model
  - Emergency Medical Responder (EMR)
  - Emergency Medical Technician (EMT)
  - Advanced Emergency Medical Technicians (AEMT)
  - Paramedic
When you read a question ask yourself: “Who is in the scenario?”

- You, a medical director on scene (the default)
- Providers on scene with you providing OLMD
- Providers on scene functioning on standing orders
  - Be sure to know what is their level and what they can do

<table>
<thead>
<tr>
<th></th>
<th>Emergency Medical Responder</th>
<th>EMT and AEMT</th>
<th>Paramedic</th>
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<tbody>
<tr>
<td>Critical</td>
<td>Simple</td>
<td>Fundamental</td>
<td>Complex</td>
</tr>
<tr>
<td>Emergent</td>
<td>Simple</td>
<td>Fundamental</td>
<td></td>
</tr>
<tr>
<td>Lower Acuity</td>
<td>Simple</td>
<td>Simple</td>
<td>Simple</td>
</tr>
</tbody>
</table>

Cognitive Material for each level

Fig 1: The relationship among education, certification, licensure, and credentialing.
**EMR Field Capabilities**

- Simple skills focused on life-saving interventions for critical patients
  - EMR is not the primary caregiver
  - Renders on scene care while awaiting additional EMS response
  - Simple noninvasive interventions
  - Minimize secondary injury
  - Comfort patient and family

- Airway and breathing
  - Insertion of airway adjuncts in the oropharynx
  - Use of positive pressure ventilation devices
  - Suction of the upper airway
  - Supplemental oxygen therapy

**EMR Field Capabilities**

- Pharmaceutical interventions
  - Use of unit dose auto injectors of life-saving medications

- Medical/cardiac care
  - Use of AED

- Trauma care
  - Stabilization of suspected cervical spine injuries
  - Stabilization of extremity fractures
  - Control of hemorrhage
  - Emergency moves

**EMT Field Capabilities**

- Acute management and transportation of critical and emergent patients
  - At an emergency scene until transportation resources arrive
  - From emergency scene to a healthcare facility
  - Between healthcare facilities
  - Other healthcare settings

- Basic noninvasive intervention to reduce morbidity and mortality associated with acute out of hospital medical and traumatic emergencies
  - Emergency care based on assessment findings
  - Provide care to minimize secondary injury
  - Provide comfort to patient and family
  - Transport patient to an emergency facility
EMT Field Capabilities

- Minimum licensure level for transporting patients in an ambulance
  - Basic skills that are effective and can be performed safely in an out of hospital setting with medical oversight and limited training
  - EMT may make destination decisions in collaboration with medical oversight
  - EMT serves as part of an EMS response system
- Airway and breathing
  - Insertion of airway adjuncts into either our pharynx or nasopharynx
  - Use of positive pressure ventilation devices
- Pharmacological interventions
  - Assist patients in taking their own prescribed medicines
  - Administration of:
    - Oral glucose for suspected hypoglycemia
    - Aspirin for chest pain of suspected ischemic origin
- Trauma care
  - Application and inflation of pneumatic anti-shock garment

AEMT Field Capabilities

- Includes basic and limited advanced skills focused on the acute management and transportation of critical emergent patients
- Limited advanced and pharmacological interventions
- Emergency care based on assessment findings
- High benefit, low risk advanced skills for systems that cannot support or justify paramedic care
  - Rural and volunteer systems
  - Part of a tiered response system

AEMT Field Capabilities

- Airway and breathing
  - Advanced airway device placement
  - Tracheal bronchial suctioning of an already intubated patient
- Pharmacological interventions
  - Intravenous access
  - Intraoesophageous access
  - Administration of intravenous fluids
  - Sublingual nitroglycerin
  - Subcutaneous or intramuscular epinephrine for anaphylaxis
  - Glucagon intramuscularly
  - Inhaled beta agonists
  - Narcotic antagonists
  - Nitrous oxide for pain relief
Paramedic Field Capabilities

• Invasive and advanced skills focus on the acute management and transportation of all patients who access the emergency medical system
• Invasive and pharmacological interventions to reduce the morbidity and mortality associated with acute out of hospital traumatic and medical emergencies
• Advanced assessment and formulation of a field impression

Paramedic Field Capabilities

• Airway and breathing
  – Endotracheal intubation
  – Percutaneous cricothyrotomy
  – Decompression of the pleural space
  – Gastric decompression
• Pharmacologic interventions
  – Intraosseous access
  – Enteral and parenteral administration of approved prescription medications
  – Access indwelling catheters and implanted central IV ports for fluid and medication administration

EMS Provider Specialty Care

• Critical Care Paramedic
• Flight Paramedic
• Advanced Practice Paramedic
• Community Paramedic
• Wilderness EMT / Paramedic
• Tactical EMT / Paramedic
• Mobile Intensive Care Paramedic
What is the lowest level provider that may perform an open cricothyrotomy?

a) EMS Physician  
b) Critical Care paramedic  
c) Paramedic  
d) AEMT

Take-Home Points

- Scope of practice is ultimately defined by the state
- Nuances to national, military, and individual state scopes of practices
- National Scope of Practice EMS Providers:  
  – EMR, EMT, AEMT, Paramedic
- This topic is part of the EMS core content Medical Oversight of EMS - 30% of the test