

Chapter 2

Roles of Medical Care (United States)

Introduction

Military doctrine supports an integrated health services support system to triage, treat, evacuate, and return the casualty to duty in the most time-efficient manner. The system begins with the casualty on the battlefield and ends in hospitals located within the continental United States (CONUS) and other safe havens. Care begins with first responder (self-aid/buddy aid and combat lifesaver), rapidly progresses through tactical combat casualty care (TCCC; care under fire, tactical field care, and tactical evacuation care) and advanced trauma management to stabilizing surgery, followed by critical care transport to a higher taxonomy of care where more sophisticated treatment can be rendered.

A basic characteristic of organizing modern health services support is the distribution of medical resources and capabilities to facilities at various levels of command, diverse locations, and progressive capabilities. This is referred to as the **four roles of care (Roles 1–4)**. As a general rule, no role will be bypassed except on grounds of medical urgency, efficiency, or expediency. The rationale for this rule is to ensure the stabilization and survivability of the patient through advanced trauma management and far-forward resuscitative surgery prior to movement between medical treatment facilities. Different roles denote differences in capability of care. Each higher role has the capability of the role forward of it and in addition expands on that capability.

Role 1

- Role 1 is point of injury care.
 - First responder care: first-aid and immediate lifesaving measures provided by self-aid, buddy aid, or a **combat lifesaver** (nonmedical team/squad member trained in enhanced first-aid).
 - Care by the combat medic or corpsman trained in TCCC. Additional battlefield providers, with various levels of training, include the Special Forces medical sergeant, special operations combat medic, SEAL (SEa, Air, Land) independent duty corpsman, special boat corpsman, pararescueman, and special operations medical technician.
- Role 1 care—**Army**.
 - Battalion aid station.
 - ◆ Includes triage, treatment, and evacuation.
 - ◆ Care is provided by the physician, physician assistant, and/or medic.
 - ◆ Goals are to return to duty or to stabilize and evacuate to the next higher role medical treatment facility.
 - ◆ No surgical or patient holding capability.
- Role 1 care—**US Marine Corps**.
 - Battalion aid station.
 - ◆ Includes triage, treatment, and evacuation.
 - ◆ Care is provided by the physician, physician assistant, and/or corpsman.
 - ◆ Goals are to return to duty or to stabilize and evacuate to the higher taxonomy of care.
 - ◆ No surgical or patient holding capability.
 - Shock trauma platoon.
 - ◆ Small emergency medical unit that supports the Marine Expeditionary Force.
 - ◆ Includes stabilization and evacuation sections.
 - ◆ Staff consists of two emergency medicine physicians and supporting staff (total staff of 25 personnel).
 - ◆ No surgical capability.
 - ◆ Patient holding time limited to 48 hours.

Role 2

- Includes basic primary care. May also include optometry; combat and operational stress control and behavioral health; and dental, laboratory, radiographic, and surgical capabilities (when augmented).
- Has increased medical capability over Role 1, but limited inpatient bed space.
- 100% mobile.
- Each service has slightly different units at this role.
- Role 2 care—**Army**.
 - Role 2 Army medical assets are located in the:
 - ◆ **Medical company–brigade support battalion**, assigned to modular brigades, which include the heavy brigade combat team, infantry brigade combat team, Stryker brigade combat team, and the medical troop in the armored cavalry regiment.
 - ◆ **Medical company–area support**, which provides direct support to the modular division and support to echelons above brigade units.
 - Role 2 medical treatment facilities are located in the treatment platoons of medical companies/troops.
 - Includes basic/emergency treatment (advanced trauma management).
 - Has capability to deliver packed red blood cells (liquid).
 - Limited X-ray, clinical laboratory, dental support, combat and operational stress control, and preventive medicine.
 - Those patients who can return to duty within 72 hours are held for treatment.
 - The **Forward Surgical Team (FST)** is assigned to the medical command or medical brigade and is attached to the Combat Support Hospital when not operationally employed forward with a medical company. The FST provides a rapidly deployable immediate surgical capability, enabling patients to withstand further evacuation. It provides surgical support in the brigade combat team. The team provides damage control surgery for those critically injured patients who cannot be transported over great distances without surgical intervention and stabilization.

- ◆ Provides lifesaving resuscitative surgery, including general, orthopaedic, and limited neurosurgical procedures.
- ◆ Consists of a 20-person team with 1 orthopaedic surgeon, 3 general surgeons, 2 nurse anesthetists, and critical care nurses and technicians.
- ◆ Transportable by ground, fixed wing, or helicopter; some FSTs are airborne deployable. Operational within 1 hour of arrival at the supported company.
- ◆ Can provide continuous operations for up to 72 hours.
- ◆ Has a ~1,000 sq ft surgical area.
- ◆ Includes 2 operating tables for a maximum of 10 cases per day and a total of 30 operations within 72 hours.
- ◆ Can provide postoperative intensive care for up to eight patients for up to 6 hours.
- ◆ The supporting medical company must provide logistical support and security.
- ◆ X-ray, laboratory, and patient administrative support are provided by the supporting medical company.
- ◆ Requires additional electricity, water, and fuel from the supporting medical company.
- ◆ The FST is not designed, staffed, or equipped for stand-alone operations or for conducting sick-call operations. Augmentation requirements are discussed in FM 4-02.25, *Employment of Forward Surgical Teams: Tactics, Techniques, and Procedures*. FSTs have been split to create two teams during Operation Iraqi Freedom/Operation Enduring Freedom.

NOTE: The Role 2 definition used by NATO (North Atlantic Treaty Organization) forces (Allied Joint Publication-4.10(A)) includes terms and descriptions not used by US Army forces. US Army forces subscribe to the basic definition of a Role 2 medical treatment facility providing greater resuscitative capability than is available at Role 1. Surgical capability is not mandatory at Role 2 according to US Army doctrine. The NATO description of Role 2 care, however, includes damage control surgery.

- **Role 2 care—Air Force.**
 - **Mobile Field Surgical Team (MFST).**
 - ◆ Consists of a five-person team (general surgeon, orthopaedist, anesthetist, emergency medicine physician, and an OR nurse or technician).
 - ◆ Can provide 10 lifesaving or limb-saving procedures in 24–48 hours from five backpacks (350-lb total gear).
 - ◆ Designed to augment an aid station or flight line clinic; no holding capacity.
 - ◆ Cannot stand alone; requires water, shelter of opportunity, communications, etc.
 - ◆ Integral to remainder of Air Force Theater Hospital System.
 - **Small Portable Expeditionary Aeromedical Rapid Response (SPEAR) team.**
 - ◆ Consists of a 10-person team: 5-person MFST, 3-person Critical Care Air Transportation Team (CCATT; see Chapter 4, Aeromedical Evacuation), and a 2-person preventive medicine team (flight surgeon and public health officer).
 - ◆ Includes a 600 sq ft tent; stand-alone capable for 7 days.
 - ◆ Can provide 10 lifesaving or limb-saving procedures in 24–48 hours.
 - ◆ Designed to provide surgical support, basic primary care, postoperative critical care, and preventive medicine for the early phase of deployment.
 - ◆ Highly mobile, with all equipment fitting in a one pallet-sized trailer.
 - **Expeditionary Medical Support (EMEDS) Basic.**
 - ◆ Provides medical and surgical support for an airbase, providing 24-hour sick-call capability, resuscitative surgery, dental care, and limited laboratory and X-ray capability.
 - ◆ The 25-member staff includes a SPEAR team.
 - ◆ Can provide 10 lifesaving or limb-saving procedures in 24–48 hours.
 - ◆ Has 4 holding beds, 2 OR tables, and 3 climate-controlled tents transportable on three pallets.
 - ◆ Total size is ~2,000 sq ft.

- **EMEDS + 10.**
 - ◆ Adds 6 beds to EMEDS basic, for total of 10 beds.
 - ◆ No additional surgical capability.
 - ◆ Has a 56-person staff.
 - ◆ Consists of 6 tents transported on 14 pallets.
- **Role 2 care—Navy.**
 - **Casualty Receiving and Treatment Ship (CRTS).** CRTSs are part of an Amphibious Ready Group (ARG) and are usually comprised of one Marine amphibious assault ship (Tarawa class) or landing helicopter deck Wasp-class ship, whose primary mission is the transport and deployment of Marines and whose secondary mission is to function as a casualty-receiving platform. An ARG typically comprises three ships, with surgical capability only on the CRTS.
 - ◆ Ships have 45 ward beds, 4 ORs (with augmented staff; see below), and 17 ICU beds.
 - ◆ A 176-person Fleet Surgical Team consists of 1 surgeon, 1 certified registered nurse anesthetist, 1 critical care nurse, 1 OR nurse, 1 general medical officer, and 12 support staff.
 - ◆ A CRTS and the Fleet Surgical Team can be augmented with 84 additional personnel to increase capability from one OR to four, as well as provide the following specialties: 2 orthopaedic surgeons and 1 oral and maxillofacial surgeon.
 - ◆ Ships have laboratory, X-ray, and frozen blood capabilities.
 - ◆ Designed for receipt and flow of casualties from helicopter flight deck and landing craft well deck.
 - ◆ Have triage areas for 50 casualties.
 - ◆ Doctrinal holding capability is limited to 3 days.
 - **Aircraft carrier battle group.**
 - ◆ Includes 1 OR, 52 ward beds, and 3 intensive care beds.
 - ◆ Staff includes 1 surgeon and 5 additional medical officers.
 - ◆ Medical assets aboard aircraft carriers are intended for use by the aircraft carrier and its task force. Aircraft carriers are not casualty-receiving ships and are not included in medical assets for support to ground forces.

- **Role 2 care—US Marine Corps.**
 - **Surgical company.**
 - ◆ Provides surgical care for the Marine Expeditionary Force. Basis of allocation is one per infantry regiment.
 - ◆ Provides stabilizing surgical procedures (damage control surgery).
 - ◆ Doctrinally consists of 4 forward resuscitative surgical systems, 4 shock trauma platoons, and 4 en route care teams.
 - ◆ Has 20-bed capability.
 - ◆ Portable digital X-ray and minimal laboratory and blood banking capabilities.
 - ◆ Patient holding capability up to 72 hours.
 - **Forward Resuscitative Surgical System.**
 - ◆ Basic surgical capability module.
 - ◆ Rapid assembly, highly mobile.
 - ◆ Can provide resuscitative surgery for 18 patients within 48 hours without resupply.
 - ◆ The 8-person team includes 2 surgeons, 1 anesthesiologist, 1 critical care nurse, 2 OR technicians, and 2 corpsmen.
 - ◆ Holding capability of 4 hours.
 - ◆ No intrinsic evacuation capability.
 - ◆ Not a stand-alone organization.
 - **En route care team.**
 - ◆ Two-person team consisting of a critical care registered nurse and a corpsman.
 - ◆ Provides transport of two critically injured or ill, but stabilized, postoperative casualties.
 - ◆ Has own equipment package.
 - ◆ Capable of transporting two patients, one ventilated.
 - ◆ Dependent on opportune lift.

Role 3

- At Role 3, the patient is treated in a medical treatment facility staffed and equipped to provide care to all categories of patients, including resuscitation, initial wound surgery, damage control surgery, and postoperative treatment. This role of care expands the support provided at Role 2. Patients who are unable to tolerate and survive movement over

long distances receive surgical care in a hospital as close to the supported unit as the tactical situation allows. This role includes provisions for:

- Evacuating patients from supported units.
- Providing care for all categories of patients in a medical treatment facility with the proper staff and equipment.
- Providing support on an area basis to units without organic medical assets.
- **Role 3 care—Army.**
 - **Combat Support Hospital (248-bed).** Provides hospitalization and outpatient services for all categories of patients within theater.
 - ◆ Can provide hospitalization for up to 248 patients. The hospital includes a headquarters and headquarters detachment, and two completely functional hospital companies: one 84-bed and one 164-bed. Collectively, the hospital has four wards providing intensive nursing care for up to 48 patients and 10 wards providing intermediate nursing care for up to 200 patients.
 - ◆ Provides emergency treatment to receive, triage, and prepare incoming patients for surgery.
 - ◆ Has surgical capability—including general, orthopaedic, thoracic, urological, gynecological, and oral and maxillofacial—based on six OR tables staffed for 96 operating table hours per day.
 - ◆ Consultation services for inpatients and outpatients include area support for units without organic medical services.
 - ◆ Also provides pharmacy, psychiatry, public health nursing, physical therapy, clinical laboratory, blood banking, radiology and nutrition care services.
 - ◆ The early-entry hospitalization element (44-bed) provides up to 72 hours stand-alone operations, without resupply. Can provide hospitalization for up to 44 patients, with two wards providing intensive care nursing for up to 24 patients total and one ward providing intermediate care nursing for up to 20 patients. The hospitalization augmentation element (40-bed) augments the early-entry hospitalization element. Provides outpatient specialty

- clinic services and intermediate care hospital beds. The two elements together comprise an 84-bed company.
- ◆ The hospital company (164-bed) consists of two wards that provide intensive care nursing for up to 24 patients total and seven wards that together provide intermediate care nursing for up to 140 patients.
 - **Augmentation teams.** The Combat Support Hospital may be augmented by one or more medical detachments, hospital augmentation teams, or medical teams. These may include:
 - ◆ **Medical detachments—minimal care** capable of providing minimal/convalescent care, nursing, and rehabilitative services in support of Role 3 hospitals.
 - ◆ **FSTs** available to augment the surgical services of the Combat Support Hospital with general surgery and orthopaedic surgery capabilities when not deployed forward with medical companies to provide forward resuscitative surgical care and damage control surgery.
 - ◆ **Hospital augmentation team—head and neck** provides special surgical care for ear-nose-throat surgery, neurosurgery, and eye surgery to support the Combat Support Hospital plus specialty consultative services. The hospital team (head and neck) is the only organization authorized a CT scanner.
 - ◆ **Hospital augmentation team—special care** provides pathology support to the Combat Support Hospital clinical laboratory and specialty consultative services.
 - ◆ **Hospital augmentation team—pathology** provides pathology support to the Combat Support Hospital clinical laboratory and specialty consultative services.
 - ◆ **Medical team—renal hemodialysis** provides renal hemodialysis care for patients with acute renal failure and consultative services.
 - ◆ **Medical team—infectious disease** provides infectious disease investigation, takes measures to control the spread of disease, ensures access to health services, and provides consultative services. This team may include or partner with special care teams with a preventive medicine / public health nurse when public health measures are required.

NOTE: Based on the experiences of a decade of theater operations, a draft Army force design update, if approved, will dramatically change the structure of the Combat Support Hospital and augmentation teams to enhance future medical capabilities in theater and further improve modularity. It is also important to note that operational employment does not always mirror doctrine. As an example, the only organization doctrinally authorized a CT scanner is the hospital augmentation team (head and neck). However, upon operational employment, a Combat Support Hospital may very well be provided with a CT scanner even if a hospital augmentation team (head and neck) is not attached.

- **Role 3 care—Air Force.**
 - **EMEDS + 25.**
 - ◆ 25-bed version of EMEDS basic.
 - ◆ Has 84 personnel, 2 OR tables, 9 tents (600 sq ft), and 20 pallets.
 - ◆ Can provide 20 operations in 48 hours.
 - ◆ Additional specialty modules can be added, including vascular/cardiothoracic, neurosurgery, obstetrics/gynecology, ear-nose-throat, and ophthalmology teams; each comes with its own personnel and equipment modules.
 - **Air Force theater hospital.**
 - ◆ Structures and staffing are capabilities-based and modular.
 - ◆ Represents the largest Air Force critical care and surgically capable medical treatment facility in the theater of operations.
 - ◆ Can function as a theater aeromedical evacuation hub.
- **Role 3 care—Navy.**
 - **Expeditionary medical facility.**
 - ◆ Standard configuration has 150 beds, including 40 intensive care beds and 4 ORs.
 - ◆ Provides emergency treatment to receive, triage, and prepare incoming patients for surgery.

- ◆ Has surgical capability, including general, orthopaedic, thoracic, urological, gynecological, and oral and maxillofacial, based on four OR tables staffed for 96 operating table hours per day.
- ◆ Consultation services for inpatients and outpatients include area support for units without organic medical services.
- ◆ Also provides pharmacy, psychiatry, public health nursing, physical therapy, clinical laboratory, blood banking, radiology, and nutrition care services.
- ◆ Stand-alone; full ancillary services.
- ◆ Complete base operating support available.
- ◆ Includes class VIII support until theater is “mature” or approximately 60 days after operations commence.
- ◆ Large holding capability.

NOTE: Based on the experiences of a decade of evolutionary operations, Navy Expeditionary Health Service Support is considering a dramatic change to the structure of expeditionary medical facilities. Determinations will be made regarding scalability, modularity, mobility, and deployable capability to improve and enhance Navy Medicine’s flexibility in providing medical support across the full range of military operations.

o **Hospital ships (currently the USNS *Mercy* and USNS *Comfort*).**

- ◆ Each ship has 999 beds consisting of 88 intensive care beds (68 general intensive care beds and 20 postsurgical recovery beds). All 88 beds are equipped with piped in oxygen and suction, and cardiac monitoring capability. One ward is configured with 11 respiratory isolation beds.
- ◆ Inpatient ward capability includes 400 intermediate care and 500 minimal care/convalescence beds. The 500 minimal care beds are upper bunks, unsuitable for injury patterns related to fractures. Most upper bunks are typically used by escorts and patients ready to return to full duty.
- ◆ Each ship has support services for up to 12 ORs.

- ◆ Each ship has 1,216 medical staff (273 officers and 943 enlisted).
- ◆ Extensive laboratory and X-ray capabilities, including CT scan.
- ◆ Large blood bank with frozen blood capability.
- ◆ Patients are allowed a 5-day average stay in accordance with a baseline 7-day evacuation policy.

Role 4

- Role 4 medical care is found in CONUS-based hospitals and other safe havens. Mobilization requires expansion of military hospital capacities and the inclusion of the Department of Veterans Affairs and civilian hospital beds in the National Disaster Medical System to meet the increased demands created by the evacuation of patients from the area of operations.

For Clinical Practice Guidelines, go to
http://usaisr.amedd.army.mil/clinical_practice_guidelines.html