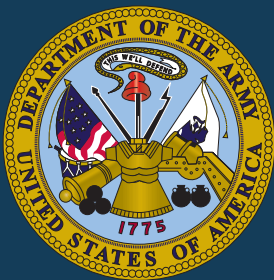


Joint Publication 4-02



Joint Health Services



17 December 2017
Incorporating Change 1
28 September 2018



PREFACE

1. Scope

This publication provides doctrine to plan, prepare, and execute joint and combined health services across the range of military operations.

2. Purpose

This publication has been prepared under the direction of the Chairman of the Joint Chiefs of Staff (CJCS). It sets forth joint doctrine to govern the activities and performance of the Armed Forces of the United States in joint operations, and it provides considerations for military interaction with governmental and nongovernmental agencies, multinational forces, and other interorganizational partners. It provides military guidance for the exercise of authority by combatant commanders and other joint force commanders (JFCs), and prescribes joint doctrine for operations and training. It provides military guidance for use by the Armed Forces in preparing and executing their plans and orders. It is not the intent of this publication to restrict the authority of the JFC from organizing the force and executing the mission in a manner the JFC deems most appropriate to ensure unity of effort in the accomplishment of objectives.

3. Application

a. Joint doctrine established in this publication applies to the Joint Staff, commanders of combatant commands, subordinate unified commands, joint task forces, subordinate components of these commands, the Services, and combat support agencies.

b. The guidance in this publication is authoritative; as such, this doctrine will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise. If conflicts arise between the contents of this publication and the contents of Service publications, this publication will take precedence unless the CJCS, normally in coordination with the other members of the Joint Chiefs of Staff, has provided more current and specific guidance. Commanders of forces operating as part of a multinational (alliance or coalition) military command should follow multinational doctrine and procedures ratified by the United States. For doctrine and procedures not ratified by the US, commanders should evaluate and follow the multinational command's doctrine and procedures, where applicable and consistent with US law, regulations, and doctrine.

For the Chairman of the Joint Chiefs of Staff:



KEVIN D. SCOTT
Vice Admiral, USN
Director, Joint Force Development

Intentionally Blank

**SUMMARY OF CHANGES
REVISION OF JOINT PUBLICATION 4-02
DATED 26 JULY 2012**

- **Clarifies United States military roles of medical care.**
- **Clarifies Joint Task Force Surgeon notional office organization.**
- **Clarifies Armed Services Blood Program operational procedures.**
- **Includes new information on comprehensive health surveillance.**
- **Includes new information on chemical, biological, radiological, and nuclear (CBRN) environmental considerations.**
- **Includes new information on elements of Patient Movement System.**
- **Updates Patient Movement Items - Asset Tracking System locations.**
- **Updates definitions, references, acronyms, and eliminates self-defining terms.**
- **Acknowledges tactical combat casualty care integration in support of the joint force.**
- **Acknowledges Medical Planners' Toolkit and Joint Medical Planners' Tool as approved means for calculating health services requirements.**
- **Adds a requirement for deploying units that will ensure effective implementation and operation of the new electronic health record across the Joint Force.**

Intentionally Blank

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ix
-------------------------	----

CHAPTER I OVERVIEW

• Introduction.....	I-1
• Military Health System	I-1
• Principles of Joint Health Services	I-1
• Joint Health Services Capabilities	I-3
• Defense Health Agency	I-7

CHAPTER II HEALTH SERVICE SUPPORT

• Overview.....	II-1
• Casualty Management.....	II-1
• Patient Movement	II-3
• Medical Logistics.....	II-6
• Health Information Management.....	II-6

CHAPTER III FORCE HEALTH PROTECTION

• Overview.....	III-1
• Casualty Prevention	III-1
• Preventive Medicine	III-1
• Comprehensive Health Surveillance and Risk Management.....	III-2
• Biosurveillance	III-3
• Combat and Operational Stress Control	III-3
• Preventive Dentistry.....	III-3
• Vision Readiness.....	III-4
• Hearing Conservation	III-4
• Laboratory Services	III-4
• Veterinary Services.....	III-5

CHAPTER IV ROLES AND RESPONSIBILITIES

• Overview.....	IV-1
• Command and Control.....	IV-1
• Joint Force Surgeon	IV-1
• Organizing the Joint Force Surgeon's Office	IV-11
• Joint Force Surgeon's Office Battle Rhythm.....	IV-25
• Joint Force Surgeon Reachback.....	IV-26
• Staff Organizations	IV-27

CHAPTER V

HEALTH SUPPORT OPERATIONS

• Overview.....	V-1
• Combat Operations	V-1
• Stability Actions.....	V-1
• Civil-Military Operations.....	V-4
• Defense Support of Civil Authorities	V-8
• Multinational Operations	V-9
• Detainee Operations.....	V-14
• Operations in a Chemical, Biological, Radiological, and Nuclear Environment.....	V-16
• Special Operations Forces.....	V-19
• Operational Contract Support	V-22

CHAPTER VI

JOINT HEALTH PLANNING

• Introduction.....	VI-1
• Health Support Planning Considerations.....	VI-1
• Planning Joint Medical Logistics.....	VI-9
• Medical Planning Tools	VI-10

APPENDIX

A	Patient Movement	A-1
B	Medical Logistics Support	B-1
C	Casualty Prevention.....	C-1
D	Intelligence Support to Joint Health Support	D-1
E	Federal Coordinating Centers and Patient Reception Areas	E-1
F	Blood Management	F-1
G	Service Component Transportation and Medical Evacuation Assets	G-1
H	Impacts of the Law of War and Medical Ethics.....	H-1
J	Planning Checklists	J-1
K	References	K-1
L	Administrative Instructions	L-1

GLOSSARY

Part I	Abbreviations, Acronyms, and Initialisms.....	GL-1
Part II	Terms and Definitions.....	GL-7

FIGURE

II-1	Notional United States Military Roles of Medical Care	II-4
II-2	Primary Tasks and Purposes of the Medical Logistics Function	II-7
III-1	Primary Tasks and Purposes of the Environmental Laboratory Services Function.....	III-5

IV-1	Primary Tasks and Purposes of the Medical Command and Control Function	IV-2
IV-2	Notional Joint Task Force Surgeon's Office Organization	IV-13
IV-3	Sample Joint Force Surgeon's Office Battle Rhythm	IV-26
V-1	Health Service Assessment Factors.....	V-7
V-2	Health Service Support Challenges in Multinational Operations	V-10
V-3	Challenges of Patient Movement During Special Operations.....	V-22
VI-1	Patient Movement Item System	VI-2
A-1	Patient Movement Requirements Center Component Lift Interface.....	A-5
A-A-1	Notional Contingency Aeromedical Evacuation Structure	A-A-4
A-A-2	Example of the Aeromedical Evacuation Process.....	A-A-6
F-1	Armed Services Blood Distribution System	F-2
F-2	Blood Report	F-14
F-3	Example Blood Report Message Format	F-15
G-1	Service Component Fixed-Wing and Tiltrotor Aircraft Transportation Assets	G-1
G-2	Service Component Rotary-Wing Aircraft Transportation Assets.....	G-2
G-3	Service Component Medical Ground Vehicles Transportation Assets	G-3
G-4	Service Component Nonmedical Ground Vehicles Transportation Assets	G-4
G-5	Service Component Rail Transportation Assets.....	G-5

Intentionally Blank

EXECUTIVE SUMMARY COMMANDER'S OVERVIEW

- **Presents the Military Health System.**
 - **Describes health service support.**
 - **Describes force health protection.**
 - **Discusses the roles and responsibilities of the Services and the joint force surgeon within the Military Health System.**
 - **Outlines health support operations.**
 - **Describes joint health planning.**
-

Overview

Joint medical capabilities are grouped under the joint functions of sustainment and protection (health service support [HSS] under sustainment and force health protection [FHP] under protection). Health support capabilities that encompass HSS and FHP are employed during all military operations. These capabilities span the operational area (OA) from point of injury/illness to definitive care, with an overall goal of treating all potentially survivable injuries, thus leading to a zero percent preventable death rate.

Military Health System

The Military Health System (MHS) fosters, protects, sustains, and restores health to support the mission. It also provides the direction, resources, health care providers, and other means necessary for promoting the health of the beneficiary population.

Principles of Joint Health Services

The principles of joint health services consist of conformity, proximity, flexibility, mobility, continuity, and control.

Joint Health Services Capabilities

Health support is provided to military personnel by applying Services' health support capabilities into a joint network of prevention, protection, and treatment, thus creating an integrated health support capability. The five overarching joint medical capabilities for joint health services are:

- First responder care.

- Forward resuscitative care.
- En route care.
- Theater hospitalization.
- Definitive care.

Defense Health Agency

The Defense Health Agency (DHA) is a combat support agency that enables the Army, Navy, and Air Force medical services to provide a medically ready force and ready medical force to combatant commands (CCMDs). DHA supports the delivery of integrated, affordable, and high-quality health services to MHS beneficiaries and is responsible for driving greater integration of clinical and business processes across the MHS.

Health Service Support

HSS services are all support and services performed, provided, and arranged to promote, improve, conserve, or restore the behavioral and physical well-being of military personnel. This includes casualty care, which encompasses a number of HSS functions that occur at all levels of command: casualty management, patient movement (PM), medical treatment (organic and area support), medical evacuation, hospitalization, medical logistics (MEDLOG), blood management, and health information management.

Force Health Protection

FHP services promote, improve, or conserve the behavioral and physical well-being of Department of Defense (DOD) personnel. These measures enable healthy and fit forces, prevent injury and illness, and protect the force from health hazards. FHP functions include: casualty prevention, preventive medicine (PVNTMED), health surveillance and risk management, biosurveillance, combat and operational stress control, preventive dentistry, vision readiness, hearing conservation, laboratory services, and veterinary services.

Roles and Responsibilities

Command and Control

Each Service is designated to provide scalable and tailorable medical command and control modules for early entry and expeditionary operations that could augment the theater capability until an operational health care infrastructure is established.

Joint force surgeon (JFS) roles and responsibilities apply to surgeons at all levels. The coordination and execution of those responsibilities falls to the appropriate JFS level, such as the CCMD surgeon and possibly the JFS until a single Service component or JFS lead is designated.

Joint Force Surgeon

The JFS is the senior medical leader in the joint force and serves as the principal joint health services advisor to the joint force commander (JFC). The JFS coordinates HSS and FHP capabilities for the joint force through the JFS office.

Organizing the Joint Force Surgeon's Office

The JFS's office must be adequately staffed and task-organized to support the mission of the joint force at all levels of command. Some considerations for determining the duties and responsibilities by the staff include:

- The mission of the joint force.
- Medical forces assigned.
- The amount of time required to plan and form the staff.
- The anticipated health threat (including chemical, biological, radiological, and nuclear [CBRN] exposures).
- Specialists required.
- Size of the workspace (on a ship, in tents, in a building).
- Environmental factors (tropical, mountainous, desert, arctic).
- Host nation (HN)/multinational support.

Joint Force Surgeon's Office Battle Rhythm

The JFS's office daily operations cycle or "battle rhythm" is developed by the deputy JFS and is normally maintained in the joint medical operations center. The purpose of the JFS's office battle rhythm is to provide the JFS's staff with a daily schedule of events necessary to support the joint force mission. The JFS's office battle rhythm reflects the times of the day for recurring events of interest to the JFS's staff and is employed as a tool for ensuring information is available so the staff can predict when key elements of mutual influence for the commander, CCMD surgeon, and subordinate components are required.

Joint Force Surgeon Reachback

To ensure efficient use of all available medical technologies and resources, the JFS may extend beyond the joint force's organic medical capabilities to identify and bring to bear resources not immediately available in

the joint operations area (JOA). Reachback allows for medical infrastructure support services that sustain forward-deployed medical force to transfer products and ideas as they are required in the JOA.

Health Support Operations

Health support operations are provided across the range of joint operations. Several types of mission support (traditional to a deployed force, operations predominantly characterized by stability tasks, foreign humanitarian assistance, defense support of civil authorities [DSCA], and multinational operations) may be provided simultaneously in various locations throughout an OA.

Combat Operations

Due to the necessity to perform lifesaving interventions for personnel suffering combat trauma within minutes of wounding or injury, medical resources must be arrayed in close proximity to the forces supported. This array also permits the medical assets to rapidly clear the JOA of casualties and enhances the JFC's ability to quickly take advantage of opportunities that present themselves during the battle.

Stability Actions

US Government public health stabilization and reconstruction efforts are normally led at the country level by a United States Agency for International Development (USAID) mission with technical and program assistance from USAID regional and technical bureaus. Military medical forces will normally play a support role in health sector reconstruction operations, which are led by civilian organizations.

Civil-Military Operations

Civil-military medicine is a discipline within operational medicine comprising public health, veterinary, and medical issues that involve a civil-military interface (foreign or domestic), including medical and veterinary DSCA activities, medical and veterinary elements of security cooperation activities, and medical civil-military operations (MCMO).

MCMO are health-related activities in support of a JFC that establish, enhance, maintain, or influence relations between the joint or multinational force and HN, multinational governmental authorities and nongovernmental organizations, and the civilian populace

to facilitate military operations, achieve US operational objectives, and positively impact the health sector.

Defense Support of Civil Authorities

DOD may provide health and veterinary services in response to a domestic incident in the US, its territories, and commonwealths in support of a primary federal agency. DOD support to this response will be initiated through a formal request for support or mission assignment process or provided as directed by the President or Secretary of Defense. Requests for health services during disasters in the US will normally be initiated by local and state health officials through the state coordinating officer to the federal coordinating officer. The Department of Health and Human Services will normally coordinate and/or provide the preponderance of the health services federal response effort through the Emergency Support Function #8, Public Health and Medical Services, and the National Disaster Medical System. Veterinary support will normally be coordinated through lead federal agencies and/or provided through the Emergency Support Functions #6, Mass Care, Emergency Assistance, Temporary Housing, and Human Services; #8; #9, Search and Rescue; #10, Oil and Hazardous Materials Response; and/or #11, Agriculture and Natural Resources.

Multinational Operations

Contributing nations bear ultimate responsibility for ensuring the provision of HSS to their forces allocated to multinational operations. Discharge of responsibility may occur in a number of ways, including agreements with other nations or the appropriate multinational planning staffs and multinational force commanders.

Detainee Operations

The medical program support for detainee operations shall comply with the principles, spirit, and intent of the law of war and the Geneva Conventions. To the extent practicable, treatment of detainees should be guided by professional judgments and standards similar to those that would be applied to personnel of the Armed Forces of the United States.

Operations in a Chemical, Biological, Radiological, and Nuclear Environment

The component command surgeons, working with the appointed JFS, guide and integrate all medical capabilities available to the command to support mission accomplishment in a CBRN environment. In planning for HSS in potential CBRN environments, preparations should include prophylaxis, to include pre-exposure immunizations, and sufficient numbers of pretreatments

and therapeutic medical products appropriately positioned for use. Plans must ensure the logistics chain is in place for expedient processing of CBRN specimens and samples at the closest appropriate laboratory.

Special Operations Forces

The theater special operations command component commander coordinates conventional health service packages to augment the special operations forces (SOF) organic medical capability using the organic surgeon section.

SOF HSS includes limited quantities of medical, critical care management, casualty evacuation, patient holding, and primary care capabilities. The special operations-advanced tactical practitioner is a highly trained special operations medic who delivers a selected level of medical care normally reserved for health care providers.

Operational Contract Support

The austere environment the force (contractors authorized to accompany the force [CAAF]) may deploy to contractors authorized to accompany and operate in, coupled with the potential for limited availability of indigenous medical capabilities in theater, dictates geographic combatant commanders, through the contract, establish and enforce the requirements for health, dental, and physical standards. CAAF who become unfit to perform their contractor duties in theater through their own actions (such as pregnancy, alcohol, or drug abuse) should be removed from the theater at the contractor's expense.

Joint Health Planning

Organization of the health support system is determined by the joint force's mission, the threat, intelligence, anticipated number of patients, duration of the operation, the theater PM policy, available lift, MEDLOG capabilities, and hospitalization requirements.

Health Support Planning Considerations

Threat. The threat is a composite of ongoing or potential adversary actions; occupational, environmental, geographical, and meteorological conditions; endemic diseases that can reduce the effectiveness of the joint force through wounds, injuries, illness, and psychological stressors; and the employment of weapons of mass destruction.

Medical Intelligence. Medical intelligence is produced by the National Center for Medical Intelligence and consists of the collection, evaluation, and analysis of information concerning the health threats and medical capabilities of foreign countries and non-state actors that have immediate or potential impact on policies, plans, or operations.

PM. Timely PM is the result of collaborative lift-bed planning and involves selection of patients for movement based on medical condition, location of available beds, route planning, selection of movement platforms, and movement control.

Patient Movement Items (PMIs). PMIs are specific medical equipment and durable supplies that must be available to support PM. The purpose of the PMI system is to support PM through pre-positioning, exchanging, and recycling of PMIs so medical treatment facility capability is not degraded.

Clinical Capabilities and MEDLOG Support. Specific clinical capabilities, location, MEDLOG supportability, and bed requirements must be considered when planning health support and must be detailed in the respective operation plan.

PVNTMED and Health Surveillance. The deployment health surveillance program is initiated and the means to counter the health threats in the OA are identified to the greatest extent possible, before the forces arrive. Specific PVNTMED procedures are generally the responsibility of the component commands. The JFS advises the combatant commander on specific PVNTMED procedures to be implemented, typically accomplished through the component commands.

Prevention of Stress Casualties. A coordinated program must be planned for the prevention, treatment, and return to duty of combat stress reaction casualties.

Mass Casualty Situations. The JFS must ensure the communications, transportation, triage and emergency management, PM, and MEDLOG management aspects of the mass casualty plan are thoroughly rehearsed.

Conclusion

This publication provides doctrine to plan, prepare, and execute joint and combined health services across the range of military operations.

CHAPTER I OVERVIEW

“The preservation of a soldier’s health should be [the commander’s] first and greatest care.”

**Excerpt from the first regulations published for an American force,
(Regulation 5, 1778–1779)**

1. Introduction

Joint health care services are conducted as part of an interrelated health system that shares medical services, capabilities, and specialists among the Service components and partners with multiple agencies and nations to implement a seamless unified health care effort in support of a joint force. Joint medical capabilities are grouped under the joint functions of sustainment and protection (health service support [HSS] under sustainment and force health protection [FHP] under protection). Health support capabilities that encompass HSS and FHP are employed during all military operations. These capabilities span the operational area (OA) from point of injury/illness to definitive care, with an overall goal of treating all potentially survivable injuries, thus leading to a zero percent preventable death rate.

2. Military Health System

The Military Health System (MHS) fosters, protects, sustains, and restores health to support the mission. It also provides the direction, resources, health care providers, and other means necessary for promoting the health of the beneficiary population. These include actions to develop and promote health awareness issues to educate customers, discover and resolve environmentally based health threats, provide health services (including preventive care and problem intervention services), and improve the means and methods for maintaining the health of the beneficiary population by constantly evaluating the performance of health support. The MHS supports all eligible beneficiaries. However, this publication will focus on addressing health support for the military personnel in joint and Service organizations in the preparation and conduct of joint operations.

3. Principles of Joint Health Services

The principles of joint health services consist of conformity, proximity, flexibility, mobility, continuity, and control.

a. Conformity with the tactical plan is the most basic element for effectively providing health support. To develop a comprehensive concept of operations (CONOPS), the medical commander/command surgeon should have direct access to the tactical commander. Medical planners and medical logisticians should be involved early in the planning process, and once the plan is established, it should be rehearsed with the forces it supports.

$$\text{CFR} = (\text{KIA} + \text{DOW}) / (\text{KIA} + \text{WIA}) \times 100$$

CFR	case fatality rate
KIA	killed in action
DOW	died of wounds
WIA	wounded in action

Note: Return to duty patients are included in the WIA calculation.

b. Proximity is providing health support to sick, injured, and wounded military personnel at the right time to keep morbidity and mortality to a minimum; it can be measured by the case fatality rate. The case fatality rate is a fraction of an exposed group, all those wounded in action including all those who die at any level. Medical assets are placed within supporting distance of the supported maneuver forces but not close enough to impede ongoing combat operations.

c. Flexibility is being prepared and empowered to shift medical resources to meet changing requirements. Changes in the operation plan (OPLAN) or operations make flexibility in medical planning and execution essential. The medical commander/command surgeon must build flexibility into the OPLAN to support the combatant commander's (CCDR's) scheme of maneuver. They must also ensure flexibility exists to rapidly transition from one level of violence to another if the situation escalates. As the current era is characterized by persistent conflict, the medical commander may be supporting simultaneous actions along the continuum from peace through major combat operations. The medical commander exercises command authority to effectively manage scarce medical resources so they benefit the greatest number of military personnel in the joint operations area (JOA).

d. Mobility ensures medical assets remain within supporting distance of maneuvering forces. The mobility and survivability (such as armor plating and other force protection [FP] measures) of medical units organic to maneuver elements must be equal to the forces being supported. Major medical headquarters (HQ) continually assess and forecast unit movement and redeployment. Medical support must be responsive to shifting medical requirements in the operational environment (OE). In an operationally constrained environment, transportation may be limited. In an operationally constrained or contested environment, transportation options may be limited. Therefore, to facilitate a continuous evacuation flow, patient movement (PM) must be a synchronized effort to ensure timely, responsive, and effective support is provided to the tactical commander. Medical units anticipating an influx of patients must consider evacuating patients on hand before the start of the engagement or return to duty, with minimized impact on continuity of care.

e. Continuity of care and treatment is achieved by moving the patient to a higher role of care, either through the roles of care or bypassing to a more appropriate role of care (depending on injuries), extending from the point of injury (POI) to definitive care. Each type of medical unit contributes a measured, logical increment of care appropriate to its location and capabilities. High casualty rates, extended distances, and patient condition may necessitate that a patient receive treatment at each role of care or bypass roles as

conditions dictate. The medical commander's or medical planner's depth of medical knowledge and ability to anticipate follow-on treatment requirements and assess the availability of specialized medical resources enable them to adjust the flow of casualties to ensure everyone treated receives the care required to optimize patient outcomes. The medical commander may recommend changes in the theater evacuation policy to adjust patient flow within the deployed setting to include skip policy and surge capacity when necessary.

f. Control is required to ensure scarce medical resources are efficiently employed to support the joint force commander's (JFC's) tactical, operational, and strategic plan. It also ensures the scope and quality of medical treatment meet professional standards, policies, and US and international law. The joint force surgeon (JFS) establishes relationships with theater medical treatment facility (MTF) commanders and others who exercise command authority over medical forces to synchronize activities within the JOA. Within a subordinate OA, medical activities will be synchronized and coordinated by the designated task force surgeon, who may vary depending upon the scope, location, and activities of the operation and OE. Task force surgeon responsibilities may be delegated to a Service component surgeon or to the subordinate JFS for operations within an established OA. If medical relationships are not established by the senior commander establishing the OA, then the JFS within an OA establishes relationships with medical commanders and others who exercise command authority over medical forces to synchronize medical activities and medical support within the designated OA. In a joint, interagency, intergovernmental, and multinational environment, it is essential coordination be accomplished across all Services and multinational forces (MNFs) and, where possible, nongovernmental organizations (NGOs) to leverage all of the specialized skills within the theater.

4. Joint Health Services Capabilities

Health support is provided to military personnel by applying Services' health support capabilities into a joint network of prevention, protection, and treatment, thus creating an integrated health support capability. The five overarching joint medical capabilities for joint health services are:

a. First Responder Care Capability

(1) The first responder care capability is defined by its time requirements. First responders include both medical and nonmedical personnel. Nonmedical first responders include those trained in combat lifesaver and tactical combat casualty care (TCCC). In addition, care provided by first responders is not limited to Service members but to all those requiring medical care (within the medical protocols). First responders are not limited to rendering treatment for only "acute minor illnesses" but rather provide initial treatment, stabilization, and, when necessary, movement to higher levels of care for the spectrum of illnesses and injuries. This capability can be divided into three categories of self-aid or buddy aid (nonmedical), emergent care services, and primary care.

(2) First responder care capability varies by Service, with the core training focused on TCCC under the current published TCCC guidelines. The application of TCCC occurs anywhere in the pre-hospital setting and can be tailored by the Joint Trauma System to support Service-specific mission requirements. TCCC training has four individual skillsets (all, combat lifesaver, combat medic/corpsmen, and combat paramedics/providers) to support the range of military operations. TCCC is the deliberate integration of tactics and medicine as the primary response to treat all casualties during combat missions and is the military counterpart to pre-hospital trauma life support. Pre-hospital trauma care in the military is initially provided by first responders (self-aid/buddy aid and combat lifesavers). TCCC focuses on threats, injuries, and conditions encountered in the pre-hospital environment with the range of interventions directed at the most serious of these conditions. Additional capabilities include the tactical critical care evacuation team (TCCET), other tactical critical care transport (TCCT), and en route critical care nurses/emergency care registered nurses. TCCC is divided into three phases:

(a) Care under fire phase—is provided by the first TCCC-trained individual in the presence of an immediate threat (combat or noncombat related); it is the most dangerous time to deliver care for both the first responder and the casualty. During this phase, the first responder should remain engaged with the threat; only life-threatening, external bleeding will be addressed, as airway management is best deferred to the next phase. In essence, only those lifesaving interventions that must be performed immediately are undertaken during this phase while minimizing impact on the mission.

(b) Tactical field care phase—is characterized by a reduced level of hostile action or threat; the casualty should be transferred to medical personnel if available, more extensive casualty care can be provided in this phase. Interventions directed at other life-threatening conditions, as well as resuscitation and other measures to increase the comfort of the patient, may be performed. Tactical field care also applies to situations in which an injury has occurred on a mission but there has been no hostile fire. Additional consideration should be applied in areas with elongated evacuation routes; medical personnel should be prepared to institute prolonged field care guidelines, as appropriate.

(c) Tactical evacuation phase—casualties are being transported to an advanced role of care by any means available (air, land, or maritime); in this phase, there may be an opportunity to provide additional medical personnel and equipment to maintain the interventions already performed, to further increase the capability of care rendered to the casualty and to be prepared to deal with the potential for the patient's condition to change during transport.

For further information, see Appendix A, “Patient Movement.”

b. Forward Resuscitative Care (FRC) Capability

(1) FRC provides the capability to deliver emergency care and initial stabilization for life threatening illnesses and injuries as soon as possible. Immediate life and limb-saving medical treatments are provided and patients are stabilized for evacuation to higher role of care.

(2) Advanced emergency services build upon first responder care capability by providing trauma life support, resuscitative care, emergency physician care, initial advanced burn management, and blood/fluid therapy. FRC includes temporary patient holding, limited pharmacy, limited laboratory, limited radiology services, and sufficient Class VIII and Class VIIIB management and resupply. Some Services include intensive care capabilities in their FRC units.

c. En Route Care (ERC) Capability

(1) The purpose of an ERC capability is the continuation of care during movement (evacuation) without clinically compromising the patient's condition. ERC normally involves transitory medical care, patient holding, and staging capabilities during transport from the POI or onset of disease, through successive roles of care, to a MTF that can meet the needs of the patient. Each Service component has organic vehicles that can be used for PM from POI to initial treatment at a MTF.

(2) ERC capability can take three forms. Casualty evacuation (CASEVAC) involves the unregulated movement of casualties aboard ships, land vehicles, or aircraft. Medical evacuation (MEDEVAC) is the timely, efficient movement and ERC by medical personnel of the wounded, injured, or ill persons from the battlefield and/or other locations to and between MTFs. MEDEVAC is conducted with dedicated ground and air ambulances, properly marked and employed in accordance with the Geneva Conventions and the law of war. MEDEVAC involves the movement of both unregulated and regulated patients. Aeromedical evacuation (AE) refers to the movement of patients under medical supervision to and between MTFs by air transportation. The United States Air Force (USAF) AE system provides for the time-sensitive ERC of regulated patients, to and between MTFs, using organic and/or contracted aircraft with medical aircrew explicitly trained for the mission. More detailed guidance on CASEVAC is provided in Army Techniques Publication (ATP) 4-02.2, *Medical Evacuation*; ATP 4-25.13, *Casualty Evacuation*; Air Force Tactics, Techniques, and Procedures (AFTTP) 3-42.5, *Aeromedical Evacuation (AE)*; and Navy Tactics, Techniques, and Procedures (NTTP) 4-02.2M/Marine Corps Reference Publication (MCRP) 4-11.1G, *Patient Movement*.

(3) The reduced medical footprint forward and “evacuate and replace” philosophy place a high demand on the ERC capabilities of all Services. Consequently, Service medical elements may integrate with lift operations, as well as with the associated capabilities of multinational partners for PM.

(4) En route hospitalization is medical care similar to theater hospitalization and, in some cases, definitive care that is required for patients during en route stops as they are being moved from an operational theater to the continental United States (CONUS). Intensive care patients that are moved via critical care air transport teams (CCATTs) require continued intensive care at each en route stop. Many of these patients require surgery to clean out wounds, etc. at these en route stops. Many non-trauma patients, such as mental health patients, also require hospital-level care at en route stops. En route hospitalization is an important capability that must be included in medical planning for

operational scenarios where the distances are too great for a single fixed-wing flight leg from the operational theater to CONUS.

d. Theater Hospitalization Capability

(1) This capability delivers health support required to medically sustain forces in the geographic combatant commander's (GCC's) area of responsibility (AOR) or in a JOA. These health services capabilities involve hospitals purposely positioned to provide support in the JOA. Hospitalization capabilities in the JOA deploy as modules or multiple individual capabilities that provide incrementally increased medical services. The hospitalization capability in the JOA offers essential care to either return the patient to duty (within the theater PM policy) and/or stabilization to ensure the patient can tolerate evacuation to a definitive care facility outside the JOA. In addition to the availability of substantial medical personnel skills, hospitalization capability in the JOA has the facilities and materiel (equipment and consumable supplies) to render significant preventive and curative health care. These highly robust services encompass primary inpatient and outpatient care; emergent care; and enhanced medical, surgical, and ancillary capabilities.

(2) Hospitalization capabilities in the JOA can vary according to the regional infrastructure, OA, and tempo of operation. A robust capability in the JOA would contain the following services not normally resident at the lower roles: advanced burn management, blood bank services, medical logistics (MEDLOG), optometry and ophthalmology, pediatrics, obstetrics, gynecology, internal medicine, cardiology, pathology, infectious disease, intensive/critical care beds and nursing, medical nutrition therapy, behavioral health, occupational health, physical and occupational therapies, dental, preventive medicine (PVNTMED), veterinary, and other medical specialties. Additional surgical capabilities exist for eye, maxillofacial, and neurosurgery. There are also expanded capabilities for radiology, pharmacy, and laboratory services.

e. Definitive Care Capability

(1) Definitive care capability is rendered to conclusively manage a patient's condition and is usually delivered from or at MTFs in or outside the homeland. For military personnel, this care capability normally leads to rehabilitation, return to duty, or discharge from the Armed Forces of the United States. It includes the full range of preventive, curative, acute, convalescent, restorative, and rehabilitative medical care.

(2) Because this definitive care capability usually resides outside the OA, the most advanced health care can be made available and accessible to the patient in terms of mutually supporting resources: medical personnel, materiel, facilities, and information. Definitive care includes all the capabilities embedded in health support, plus extraordinary preventive, restorative, and rehabilitative capabilities not existent in lesser capabilities of care. These additional capabilities give patients the maximum opportunity to enhance and sustain their performance, whether in recovery and rehabilitation, back on military duty, or as a civilian.

5. Defense Health Agency

The Defense Health Agency (DHA) is a combat support agency that enables the Army, Navy, and Air Force medical services to provide a medically ready force and ready medical force to combatant commands (CCMDs). DHA supports the delivery of integrated, affordable, and high-quality health services to MHS beneficiaries and is responsible for driving greater integration of clinical and business processes across the MHS by:

- a. Implementing shared services with common measurement of outcomes;
- b. Enabling rapid adoption of proven practices, helping reduce unwanted variation, and improving the coordination of care across time and treatment venues; and,
- c. Exercising management responsibility for joint shared services and the TRICARE Health Plan.

Intentionally Blank

CHAPTER II

HEALTH SERVICE SUPPORT

“The great thing in all military service is health.”

**Admiral Lord Nelson, Letter to Dr. Moseley,
October 1803**

1. Overview

HSS is under the joint function of sustainment. HSS services are all support and services performed, provided, and arranged to promote, improve, conserve, or restore the behavioral and physical well-being of military personnel. This includes casualty care, which encompasses a number of HSS functions that occur at all levels of command: casualty management, PM, medical treatment (organic and area support), MEDEVAC, hospitalization, MEDLOG, blood management, and health information management.

2. Casualty Management

Roles of Medical Care. US doctrine uses roles of care to describe battlefield medical and health capabilities. Some of the North Atlantic Treaty Organization (NATO) definitions for roles of care are different from US doctrinal definitions. Similarities and differences between US and NATO are described below. A characteristic of health support is the distribution of medical resources and capabilities to provide roles of medical care. Policy provides the framework from which the medical community derives the direction and identifies the requisite people, materiel, facilities, and information to promote, improve, conserve, or restore well-being.

a. First Responder Care (Role 1)

(1) The first medical care military personnel receive is provided at Role 1 (also referred to as unit-level medical care or self-aid, buddy aid, combat lifesaver, and/or medic care). This role of care includes:

- (a) Immediate lifesaving measures.
- (b) Treatment for disease and nonbattle injury (DNBI) or degradation of functional capability sustained by personnel and caused by factors other than those directly attributed to enemy action.
- (c) Combat and operational stress preventive measures.
- (d) Patient location and acquisition (collection).
- (e) Treatment provided by designated combat medics, corpsmen, treatment squads, or animal care specialists for working animals. Major emphasis is placed on those measures necessary for the patient to return to duty or to stabilize the individual and allow for evacuation to the next appropriate role of care. These measures include treating

massive hemorrhage; managing airway, respiration, and circulation and preventing or treating hypothermia and shock; protecting wounds; immobilizing fractures; and other emergency measures, as indicated.

(2) **Self-Aid and Buddy Aid.** All military personnel are trained in a variety of basic first-aid procedures. These procedures include aid for chemical casualties with particular emphasis on lifesaving tasks. This training enables the military personnel to apply first aid to alleviate potential life-threatening situations.

(3) **Combat Lifesaver.** The combat lifesavers are nonmedical military personnel with additional trauma training beyond basic first-aid procedures. The additional duties of combat lifesavers are to provide enhanced first aid for injuries based on their training before the medical care arrives.

(4) **Medical Personnel.** Role 1 provides primary health care, specialized first aid, triage, resuscitation, and stabilization. Normally included within the basic Role 1 capabilities are routine sick call and the management of minor sick and injured personnel for immediate return to duty, as well as casualty collection from the point of wounding and preparation of casualties for evacuation to the rear. United States Marine Corps (USMC) and special operations forces (SOF) medical treatment is provided by medical personnel with enhanced medical training, the physician, or non-physician health provider.

b. FRC (Role 2)

(1) Role 2 provides advanced trauma management and emergency medical treatment, including continuation of resuscitation started in Role 1. Role 2 provides a greater capability to resuscitate patients than is available at Role 1 and, at a minimum, may conduct damage control surgery. If necessary, additional emergency measures are instituted, but they do not go beyond the measures dictated by immediate necessities. Role 2 care has the capability to provide packed red blood cells (RBCs), frozen plasma, cryoprecipitate, intravenous fluids (fluids), limited x-ray, limited laboratory, dental support, combat and operational stress control (COSC), PVNTMED, and Role 2 veterinary medical and resuscitative surgical support. Role 2 may have a limited hold capability. Additional blood product support, to include platelets, liquid plasma, and low titer Group O whole blood should be considered based on desired level of trauma management and availability of necessary supporting equipment and supplies.

(2) Role 2 subdivides into Role 2 light maneuver (LM) and Role 2 enhanced (E).

(a) Role 2 LM, depending on the mission and operational requirements, can be set up as a light and highly mobile MTF, as well as in a fixed building or on a naval platform. A Role 2 LM medical unit is able to conduct advanced resuscitation procedures up to damage control surgery. It will evacuate its postsurgical cases to Role 3 (or Role 2 E for stabilization and possible primary surgery) before evacuation to Role 4. The USMC does not field Role 2 LM units.

(b) Role 2 E provides basic secondary health care built around primary surgery; intensive care unit (ICU); ward beds; limited x-ray, laboratory, and dental support;

COSC; and PVNTMED. A Role 2 E MTF is able to stabilize postsurgical cases for evacuation to Role 4 without the requirement to first route them through a higher Role 3 facility.

c. **Theater Hospitalization (Role 3).** In Role 3, the patient is treated in a MTF or, for patients that are working animals, a veterinary facility that is staffed and equipped to provide care to all categories of patients, to include resuscitation, initial wound 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 to:

- (1) Evacuate patients from supported units.
- (2) Provide care for all categories of patients in a MTF with the proper staff and equipment.
- (3) Provide support on an area basis to units without organic medical assets.

d. **Definitive Care (Role 4).** Role 4 medical care is found in US-based hospitals and robust overseas MTFs. Role 4 veterinary care is located at the Department of Defense (DOD) Military Working Dog Veterinary Service at Lackland Air Force Base (AFB), TX. Mobilization requires expansion of military hospital capacities and the inclusion of Department of Veterans Affairs (VA) and civilian hospital beds in the National Disaster Medical System (NDMS) to meet the increased demands created by the evacuation of patients from the AOR. Role 4 represents the most definitive medical care available within the medical care system.

For more information on the mobilization process, see Joint Publication (JP) 4-05, Joint Mobilization Planning.

- e. Figure II-1 describes notional US military roles of medical care.

3. Patient Movement

a. The PM mission consists of unregulated and regulated movement, via CASEVAC, MEDEVAC, and/or AE from the point of patient injury, illness, or wounding, through successive roles of care within the theater, to include evacuation to definitive care when warranted.

b. PM is the system that provides the vital linkage between the roles of care necessary to sustain the patient during transport. This is accomplished by providing en route medical care and emergency medical intervention, if required, to enhance the patient's prognosis and reduce morbidity and mortality.

c. PM occurs at the tactical, operational, and strategic levels and requires the synchronization and integration of Service component PM resources and procedures.

Notional United States Military Roles of Medical Care

Service Comparison

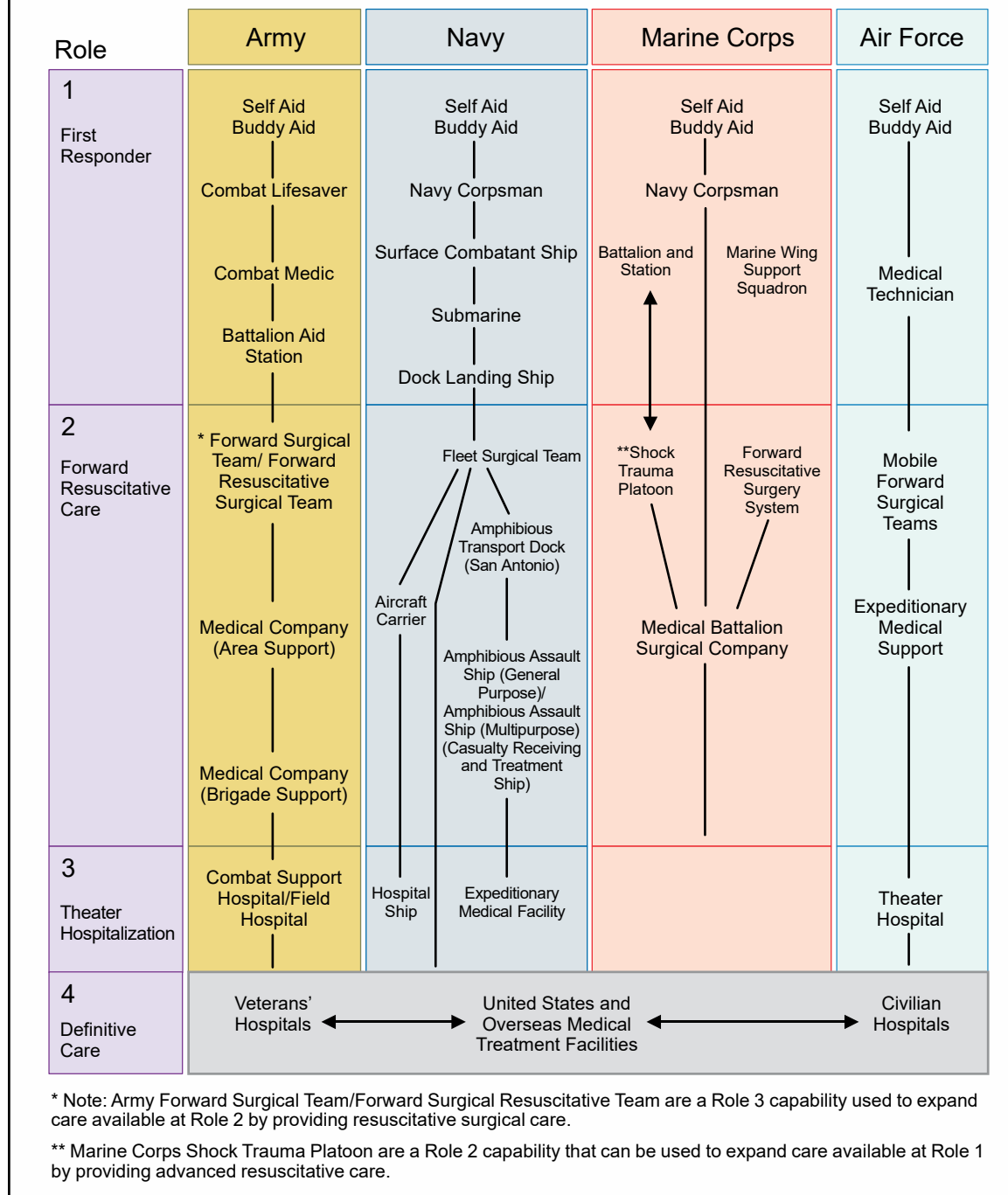


Figure II-1. Notional United States Military Roles of Medical Care

d. PM is a multifaceted mission accomplished by any combination of dedicated or designated air, ground, or sea-based evacuation platforms synchronized to provide direct or general support within the JOA. At the tactical level, organic or direct support

MEDEVAC and/or CASEVAC resources locate, acquire, treat (CASEVAC may or may not have this capability), and evacuate military personnel from the POI or wounding to an appropriate MTF where they are stabilized, prioritized, and, if required, decontaminated and prepared for further evacuation to an MTF capable of providing required essential care within the JOA.

e. Although the primary mission of MEDEVAC assets is the evacuation and provision of ERC to the wounded, the essential and vital functions of MEDEVAC resources encompass many additional missions and tasks that support the medical mission. MEDEVAC resources are used to transfer patients within the JOA and from MTFs to patient staging elements; conduct emergency movement of Class VIII, blood and blood products, medical personnel and equipment; and serve as messengers in medical channels.

f. Medical Regulating

(1) Medical regulating is the actions and coordination necessary to arrange for the movement of patients through the roles of care and to match patients with an MTF that has the necessary HSS capabilities and available bed space.

(2) The factors that influence the scheduling of PM include:

- (a) Patient's medical condition (ability to withstand evacuation).
- (b) Tactical situation.
- (c) Availability of evacuation means.
- (d) Locations of MTFs with special capabilities or resources.
- (e) Current bed status of MTFs.
- (f) Surgical backlogs.
- (g) Number and location of patients by diagnostic category.
- (h) Location of airfields, seaports, and other transportation hubs.
- (i) Communications capabilities (to include radio silence procedures).

(3) Execution of the medical regulating process at the tactical level is a function of the HQ responsible for coordinating patient evacuation from POI to a Role 2 or higher MTF. This task is often executed by the responsible HQ through the formation of a patient evacuation coordination cell (PECC).

(4) Execution of the medical regulation process at the operational level, from MTF to MTF, is conducted by the responsible United States Transportation Command (USTRANSCOM) PM requirements center, in conjunction with the guidance and direction of the affected CCDR.

4. Medical Logistics

a. MEDLOG is an integral component of the MHS that provides capabilities to organize and conduct life-cycle management of the specialized medical products and services required to operate an integrated health system anywhere in the world. MEDLOG support operations include medical management of the following functions: medical materiel (which includes procurement, storage, and distribution), medical equipment maintenance and repair, blood management (cold-chain storage, distribution, and disposal), optical fabrication and repair, and patient movement items (PMIs). It also includes health facilities planning and management, contracting support, medical hazardous waste management and disposal, and production and distribution of medical gases. The appropriate command surgeon provides guidance to the medical logistician who executes the strategic/operational planning and synchronization to meet tactical support requirements. The system is anticipatory with select units capable of split-based operations. More detailed guidance on MEDLOG is provided in JP 4-0, *Joint Logistics*; ATP 4-02.1, *Army Medical Logistics*; Air Force Instruction (AFI) 41-209, *Medical Logistics Support*; AFTTP 3-42.8, *Expeditionary Medical Logistics (EML) System*; Marine Corps Order (MCO) 4400.201, *Management of Property in the Possession of the Marine Corps, Volume 12, Marine Corps Class VIII Management and Sustainment*; NTTP 4-02.1, *Medical Logistics*; and Army Regulation (AR) 40-61, *Medical Logistics Policies*.

b. Figure II-2 describes the primary tasks and purposes of the MEDLOG function.

5. Health Information Management

Information management in support of joint health services includes the ability to identify, capture, organize, disseminate, and synthesize required operational health and medical force information in support of a commander's plans, operations, and sustainment activities within the OA. Deploying units are required to begin using Joint Operational Medicine Information Systems supplied medical information systems within 24 hours of the unit's initial operating capability. Information systems deployed in the operational environment are required to adopt and use data exchange standards that are appropriate to, and facilitate interoperability with systems that are used in that domain.

Primary Tasks and Purposes of the Medical Logistics Function

Medical Materiel Management	Organize and provide life-cycle management of medical materiel, including pharmaceuticals, medical supplies, medical assemblages, and medical gases. Plan and execute the provision of medical supplies in compliance with all applicable national standards and ensure coordination among joint logistics partners for end-to-end distribution of medical supplies required to sustain health readiness.
Medical Equipment and Technology	Organize and provide life-cycle management of medical equipment, including the assessment and integration of medical technology and the acquisition, integrated logistics support, fielding, sustainment and disposition of medical equipment required for health readiness.
Medical Equipment Maintenance and Repair	Organize and manage the maintenance of medical equipment. Plan for and execute the sustainment of medical equipment through preventive maintenance, repair services, and calibration at the organizational and support maintenance levels.
Optical Fabrication and Repair	Organize and manage the fabrication, repair, and delivery of spectacles and prescription protective eyewear. Plan and execute optical fabrication and repair services to meet the vision health and protection requirements of the force.
Centralized Management of Patient Movement Items	Support in-transit patient movement without degrading medical capabilities, and provide coordination in recycling patient movement items back from the patient's final destination, to the assigned unit or the appropriate theater of operation as applicable.
Health Facilities Planning and Management	Organize and manage the life-cycle management of medical facilities required for delivery of health services in compliance with all applicable national standards.
Medical Logistics Services	Organize and provide medically unique logistics services and functions essential to the provision of health service support to the joint force including in compliance with all applicable national standards. Includes the proper collection, control, transportation, and disposal of regulated medical waste in conjunction with preventive medicine.
Medical Contracting	Organize and manage the provision of contract support to acquire medical products and services in support of Military Health System requirements. Requires the ability to acquire and assess information for development of contract requirements or performance work statement(s); the ability to administer appropriate contractual instruments for medical products and services and the ability to collect, monitor and analyze measures of medical contract performance.
Blood Storage and Distribution	Organize and manage blood and blood products as Class VIII(B). Provide collection, storage, and distribution of blood products in accordance with the area joint blood program office to echelons above the brigade medical units and other operations.

Figure II-2. Primary Tasks and Purposes of the Medical Logistics Function

Intentionally Blank

CHAPTER III

FORCE HEALTH PROTECTION

“Pay every attention to the sick and wounded. Sacrifice your baggage, everything for them. Let the wagons be devoted to their use, and if necessary your own saddles.”

Napoleon I, 1812

1. Overview

FHP is part of the joint function of protection. FHP services promote, improve, or conserve the behavioral and physical well-being of DOD personnel. These measures enable healthy and fit forces, prevent injury and illness, and protect the force from health hazards. This chapter provides an overview of the following functions: casualty prevention, PVNTMED, health surveillance and risk management, biosurveillance, COSC, preventive dentistry, vision readiness, hearing conservation, laboratory services, and veterinary services.

2. Casualty Prevention

a. Casualty prevention involves the application of prevention and protection capabilities. These capabilities are wide-ranging, diverse, and match the complexity of human health needs. These capabilities may be focused on the individual Service members and authorized dependents or may be directed at large populations (units, bases, theater forces). Additionally, the Services develop and enforce minimum physical and mental standards to ensure military personnel are free of medical and dental conditions that will limit fitness for expeditionary military service.

b. Casualty prevention includes all measures taken by military commanders, Service members, and the health care system to promote, improve, or conserve the mental and physical well-being. One of the most critical elements of casualty prevention is the control of vaccine-preventable diseases among DOD forces, both in garrison and when forward deployed. These measures enable a healthy and fit force, prevent injury and illness and protect the force from health hazards. More detailed guidance on casualty prevention is provided in Appendix C, “Casualty Prevention;” Department of Defense Directive (DODD) 6200.04, *Force Health Protection (FHP)*; Department of Defense Instruction (DODI) 6490.03, *Deployment Health*; Military Committee Memorandum (MCM) 0017-12, *Procedures for Deployment Health Surveillance*; DOD 6055.05-M, *Occupational Medical Examinations and Surveillance Manual*; and DODI 6200.03, *Public Health Emergency Management within the Department of Defense*.

3. Preventive Medicine

a. PVNTMED involves the surveillance, identification, prevention, and control of communicable diseases, illnesses, and injuries. Health threats include DNIBIs; environmental and occupational exposures; chemical, biological, radiological, and nuclear

(CBRN) hazards, including weapons of mass destruction (WMD); and other threats to the health and readiness of personnel. They also include communicable diseases, arthropod-, vector-, food-, waste-, or water-borne. PVNTMED functions include risk communication, health education, field sanitation, medical surveillance, pest and vector control, disease risk assessment, environmental and occupational monitoring, medical countermeasures, proper waste (human, hazardous, and medical) disposal, food service sanitation, water potability, and hygiene.

b. PVNTMED includes FHP measures taken against infectious, CBRN, environmental, occupational, industrial, and operational health risks.

c. The early introduction of PVNTMED personnel or units into the JOA facilitates the protection of US forces from diseases and injuries. This early introduction also permits a thorough assessment of the health threat and operational requirements of the mission.

d. PVNTMED support to US forces and MNFs, as well as host nation (HN) civilians and dislocated civilians, may include the following: education and training on personal hygiene, field sanitation, and personal protective measures; conducting epidemiological investigations; managing immunization programs; controlling communicable diseases, pests, and vectors; and inspecting food and water sources and supplies. PVNTMED also includes analyzing the complexities of epidemiologic interactions between disease-causing organisms, their reservoirs, and hosts in different geographic, climatologic, and cultural settings.

4. Comprehensive Health Surveillance and Risk Management

a. Health surveillance includes actions to identify the populations at risk (PARs), identify and assess these populations' potentially hazardous exposures, and conduct medical surveillance to monitor and report DNBI/battle injury (BI) rates. Risk management involves reporting health risks to higher authority in a timely manner using risk communications while employing countermeasures to eliminate or mitigate health risks. Theater medical surveillance is essential for early identification of health threats to prevent, neutralize, minimize, avoid, or eliminate them. The health surveillance program must cover all periods from predeployment, deployment, redeployment, to post-deployment. Health surveillance and risk management plans and requirements must be included in the HSS annex for plans and orders.

b. A comprehensive military health surveillance program includes health surveillance conducted throughout Service members' military careers and DOD civilian employees' employment, across all duty locations, and encompassing risk, intervention, and outcome data. Such surveillance is essential for effective monitoring of DNBI and BI threats in deployed forces, requiring ongoing collection of pre- and post-deployment health data as part of the deployment health assessment. Effective monitoring of DNBI and BI threats to the deployed force requires ongoing collection of predeployment and post-deployment health data as part of the post-deployment health assessment and post-deployment health reassessment process. This is important in order to detect and evaluate operational health threats within the JOA.

c. The DOD system for documenting relevant occupational and environmental health (OEH) risk assessment data is the Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHRS-IH).

d. The system for documenting relevant food and water risk assessment (FWRA) data is the Veterinary Services Information Management System.

5. Biosurveillance

Biosurveillance is the process to gather, integrate, interpret, and communicate essential information related to all-hazards, threats, or disease activity affecting human, animal, or plant health to achieve early detection and warning, contribute to overall situational awareness of the health aspects of an incident, and to enable better decision making at all levels. Efforts cover a range of threats, including WMD or other deliberate attacks; an emerging infectious disease, pandemic, environmental disaster; or a widespread, food-borne illness. Key processes include constant scanning of the environment and rapid evaluation to detect threats and assess their severity. Information sources include not only human health but also animal, plant, and environmental health. Medical intelligence capabilities and products directly link to biosurveillance efforts. For more information on biosurveillance, refer to ATP 4-02.7/MCRP 4-11.1F/NTTP 4-02.7/AFTTP 3-42.3, *Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment*.

6. Combat and Operational Stress Control

COSC includes programs and actions to be taken by military leadership to prevent, identify, and manage adverse combat and operational stress reactions in units. These programs optimize mission performance; conserve the fighting strength; and prevent or minimize adverse effects of combat and operational stress reaction on Service members and their physical, psychological, spiritual, intellectual, and social health. The goal of these programs is to return military personnel to duty as soon as possible. Refer to DODI 6490.05, *Maintenance of Psychological Health in Military Operations*, for details of the COSC program.

7. Preventive Dentistry

a. Preventive dentistry incorporates primary, secondary, and tertiary measures to reduce or eliminate conditions that may decrease military personnel fitness in performing their mission and that could result in being removed from their unit for treatment.

b. The standards used to determine military personnel dental readiness and classification are outlined in the DOD Oral Health and Readiness Classification System. The purpose of this classification system is to standardize dental readiness, prioritize dental care, and minimize the occurrence of dental emergencies among military personnel. The early classification system also aids the commanders in estimating how many military personnel are likely to require treatment for dental emergencies during a deployment.

8. Vision Readiness

a. Vision readiness encompasses the Service member having optimal visual clarity to most effectively and efficiently complete their assignments, as well as the optical devices needed for vision correction (if required) and for eye protection of all Service members during hazardous activities, including deployment. Joint Trauma System guidelines for traumatic eye injury should be followed to ensure the appropriate care is rendered in the event of an ocular casualty.

For additional information, see Assistant Secretary of Defense for Health Affairs Memorandum, Treatment of Traumatic Eye Injuries, dated 7 July, 2014.

b. Vision services include preventive eye care to reduce or eliminate conditions that may decrease personnel readiness in performing their mission and which could result in members being removed from their duty unit for treatment. Vision services also ensure the Service member has eye protection, decreasing the occurrence of sight-threatening injuries among military personnel. Service members should have all needed devices to protect their eyes to ensure they complete the mission and do not pose a logistical burden to their unit.

c. The standards for vision readiness are Service-specific. Service-standardized vision classification systems should ensure military personnel meet the preventive eye care requirement and have all required corrective and protective devices.

9. Hearing Conservation

Hearing conservation involves the prevention and monitoring of noise-induced hearing loss. Further, it involves the management and minimizing of such hearing loss when it is found to occur. Repeated and prolonged exposure to hazardous noise from aircraft, weapons, vehicles, industrial equipment and activities, and recreational activities create a persistent risk of noise-induced hearing loss for DOD personnel. Such hearing loss leads to decreased readiness and may lead to permanent disability. Noise-induced hearing loss is preventable, may be monitored and tracked over time, and may be minimized if accurate monitoring and appropriate interventions occur. Hearing conservation is a critical FHP function but is first and foremost a leadership responsibility. More specific information about the DOD's hearing conservation program may be found in DODI 6055.12, *Hearing Conservation Program (HCP)*.

10. Laboratory Services

a. Deployable environmental laboratory services include capabilities in identification of endemic diseases, OEH hazards, and CBRN hazards. The focus of the laboratory is the total health environment of the JOA, not individual patient care. Studies in pest identification, the efficacy of pesticides, frequency of infectious agents, monitoring immune response and transmission of zoonotic diseases, and analysis of suspected CBRN samples in the JOA can be performed in deployable environmental laboratories. The laboratory personnel also function as consultants to hospital clinical laboratory services

within the JOA. The laboratory may task-organize teams and employ them forward to troubleshoot a particular problem.

For additional information, refer ATP 4-02.7/MCRP 4-11.1F/NTTP 4-02.7/AFTTP 3-42.3, Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment.

b. Figure III-1 describes the primary tasks and purposes of the environmental laboratory services function.

11. Veterinary Services

a. Adequate veterinary service support is an integral part of FHP, and it is imperative medical planners consider veterinary support in medical operational planning. DOD veterinary services capability encompasses animal health and welfare and veterinary public health. Veterinary public health focuses on the animal health interface with human health and environmental health and is an essential part of public health. More specifically, veterinary services consist of the practice of veterinary medicine and surgery, including diagnosis and treatment of sick or injured animals; animal health and zoonotic disease surveillance, epidemiology, control and prevention of zoonoses; food protection; management of health aspects of laboratory animal facilities and diagnostic laboratories; biomedical research; health education and extension; production and control of biological products and medical devices; management of domestic and wild animal populations;

Primary Tasks and Purposes of the Environmental Laboratory Services Function	
Analytical, investigation, and consultative capabilities	To identify chemical, biological, radiological, and nuclear threat agents in biomedical specimens and other samples from the operational area. To assist in the identification of occupational and environmental health hazards and endemic diseases.
Special environmental control and containment	To evaluate biomedical specimens for the presence of highly infectious or hazardous agents of operational concern.
Data analysis	To support medical analyses and operational decisions.
Medical laboratory analysis	To support the diagnosis of zoonotic and significant animal diseases that impact on military operations.
Deploy modular sections or sectional teams.	To interface with preventive medicine teams, veterinary teams, forward deployed medical units, biological integrated detection system teams, and chemical, biological, radiological, and nuclear reconnaissance and surveillance assets in the operational area.

Figure III-1. Primary Tasks and Purposes of the Environmental Laboratory Services Function

protection of drinking water and the environment; and shared management of public health emergencies. The Director, DHA, through the Veterinary Services Branch, is responsible for veterinary services, which are executed for DOD by the United States Army (USA), and in some instances support is provided to multinational partners and HN agencies. The USA Veterinary Services and USAF Public Health provide for food protection and wholesomeness. The USA veterinary units are task-organized and tailored to support government-owned animal health care, veterinary PVNTMED, and food protection (food safety and food defense) programs. The potential of foodborne disease, the threat of contamination of subsistence, the need to assess the zoonotic endemic disease threats, and the need to provide health care to military working dogs all require an early veterinary presence throughout the entire OA of all joint and multinational operations.

b. When deployed in military operations, veterinary support and PVNTMED capabilities reduce the vulnerability of US forces and MNFs to DNBI. Veterinary personnel work closely with USA, USAF, and United States Navy (USN) PVNTMED units to provide coordinated FHP support. Veterinary food inspection and use of DOD approved food sources ensure food protection, quality assurance, and wholesomeness. Services provided by veterinary units include sanitary surveillance of food source and storage facilities and surveillance of subsistence to ensure a safe and wholesome food supply. Procurement of fresh foods, packaged water, ice, and beverages is supported by veterinary personnel through food protection audits performed on local food establishments in the OA. The veterinary staff officer and JFS, through the JFC, are responsible for the publication of a directory of approved food sources for the JOA. During initial entry, exercises, and other short-term operations conducted outside the continental United States (OCONUS), authorized personnel can provide FWRA for deployed forces. These assessments assist commanders in determining the food protection risks of commercial food establishments, foreign dining facilities, and other sources of subsistence that are not approved sources for DOD procurement.

c. Comprehensive veterinary medical and surgical programs are required to maintain the health of government-owned animals. By providing complete medical and surgical care to all joint forces supported in the JOA, the USA Veterinary Service personnel assist in ensuring the effectiveness of working animals as a force multiplier. Many biological agents are zoonotic, and, therefore, quick recognition in the animal population may detect a significant hazard to human health. By monitoring and evaluating endemic animal diseases of military importance and environmental zoonotic disease hazards to both animals and humans, veterinary units assist in maintaining a healthy and fit force in the JOA.

d. Veterinary services have an essential role in formulating FHP for the joint force. Early FHP planning considerations for veterinary service support should include the CONOPS; type and duration of operation; other organizations requiring veterinary support; means of shipping Class I supplies, primary intratheater storage locations, anticipated stock levels, availability and viability of approved food sources in the area, and the feeding plan for the JOA; estimated joint force strength; proposed use and location of government-owned and/or indigenous animals; and the size and type of civil-military action program.

CHAPTER IV

ROLES AND RESPONSIBILITIES

“A soldier’s health must come before economy or any other consideration.”

Napoleon I, 17 June 1813

1. Overview

Due to the complexities of the myriad of medical functions and assets, and the requirement to provide health services across a broad OE, clearly defined roles and responsibilities are necessary to effectively utilize scarce medical resources to their full potential and capability. Like all joint medical activities, effective HSS and FHP require deliberate and clearly defined roles and responsibilities, upon which the delivery of health care in an OE is founded.

2. Command and Control

a. The complexities of the OE and the myriad of medical functions and assets necessitate a command and control (C2) capability that can plan, control, and assess the limited medical resources available to their full potential and capability. Each Service is designated to provide scalable and tailorable medical C2 modules for early entry and expeditionary operations that could augment the theater capability until an operational health care infrastructure is established. JFS roles and responsibilities apply to surgeons at all levels. The coordination and execution of those responsibilities falls to the appropriate JFS level, such as the CCMD surgeon and possibly the JFS until a single Service component or JFS lead is designated.

b. Figure IV-1 describes the primary tasks and purposes of the medical C2 function.

3. Joint Force Surgeon

a. The JFS is the senior medical leader in the joint force and serves as the principal joint health services advisor to the JFC. The JFS coordinates HSS and FHP capabilities for the joint force through the JFS office. The JFS’s staff should be reasonably balanced in experience and rank among the Services concerned and should be of sufficient size to effectively coordinate support for the following tasks:

(1) Coordination of HSS and FHP initiatives.

(2) Deployment health surveillance.

(3) Establishment and oversight on clinical quality management/assurance programs by the quality management officer. These programs ensure the provision of safe, quality health care within the MTFs (medical, dental, and veterinary), as well as during patient evacuation/movement.

Primary Tasks and Purposes of the Medical Command and Control Function	
Command and Control	<ul style="list-style-type: none"> • To plan, prepare, execute, and assess medical support. • To facilitate and enhance a seamless continuum of health care from the point of injury or wounding to definitive care in the continental United States-support base, if required. • To maximize the use of scarce medical resources.
Communications and Computers	<ul style="list-style-type: none"> • To maintain situational awareness and understanding through the use of command systems and the common operational picture. • To facilitate the transfer of medical information, to enhance the documentation of medical encounters and exposures to health hazards, and to ensure the compatibility and interoperability of medical communications for combat casualty care systems.
Task Organization	<ul style="list-style-type: none"> • To provide a scalable and tailorable medical infrastructure which ensures the right mix of medical capabilities is available to execute the medical mission. This capability is further enhanced through the modular design of medical units.
Technical Supervision	<ul style="list-style-type: none"> • To ensure medical standards are established, implemented, and monitored throughout the operational area. • To provide consultation and support to subordinate medical units/elements. • To provide a reachback capability to the continental United States-support base in the areas of the various medical disciplines and specialties.
Regional Focus	<ul style="list-style-type: none"> • To support and facilitate the execution of the combatant commander's plans.

Figure IV-1. Primary Tasks and Purposes of the Medical Command and Control Function

(4) HSS and FHP operations that sustain collaborative joint planning between CCDRs, Services, DOD agencies, NGOs, international organizations, and HN and multinational participants as required.

(5) Standardization, interoperability, and interchangeability of medical capabilities and materiel.

(6) Development of the medical plan and course of action (COA) analysis.

(7) Review of subordinate plans and operations.

(8) Coordination of PM plans with USTRANSCOM.

(9) Reachback support.

(10) HSS and FHP planning and operations to include:

- (a) Hospitalization.
- (b) PM.
- (c) Service component transportation assets.
- (d) MEDLOG support.
- (e) PVNTMED, biosurveillance, and comprehensive health surveillance.
- (f) Patient reception area (PRA).

See Appendix E, “Federal Coordinating Centers and Patient Reception Areas,” for more information.

(g) Medical aspects of reintegration. More detailed guidance on medical aspects of integration is provided in JP 3-50, *Personnel Recovery*.

(h) Blood management. More detailed guidance on blood management is provided in DODD 6000.12E, *Health Service Support*; Technical Manual (TM) 8-227.12, *Army Services Blood Program Joint Program Handbook*; TM 4-02.70/Navy Medicine (NAVMED) Publication (P)-5120/Air Force Manual (AFMAN) 41-111_IP, *Standards for Blood Banks and Transfusion Services*; DODI 6480.04, *Armed Services Blood Program Operational Procedures*; and ATP 4-02.1, *Army Medical Logistics*.

(i) Impacts of the law of war and medical ethics. The office of the JFS should consult with the joint force staff judge advocate (SJA) when law of war or medical ethics issues arise. More detailed guidance on the law of war and medical ethics is provided in *Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (GWS)*; *Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea (GWS Sea)*; *Geneva Convention Relative to the Treatment of Prisoners of War (GPW)*; *Geneva Convention Relative to the Protection of Civilian Persons in Time of War (GC)*; DODD 2311.01E, *DOD Law of War Program*; *DOD Law of War Manual*; and Field Manual (FM) 27-10, *The Law of Land Warfare*.

(j) Medical aspects to support personnel recovery.

(k) Medical repatriation of partner nation patients.

(l) Food protection support.

(m) Reception, treatment, movement, evacuation, and hospitalization of contaminated or contagious patients.

(11) The collection of medical lessons learned data that provides operational documentation and results in recommendations for change to current plans and policy.

(12) In accordance with DODI 6040.47, *Joint Trauma System (JTS)*, provide for a CCMD trauma system and trauma care policy and planning.

b. Working with the CCMD surgeon, the JFS assesses joint force HSS. The JFS assesses joint force health services requirements and capabilities (both quantitatively and qualitatively) and provides recommendations to the JFC and principal staff. As the responsibilities of the JFS are similar to those of the CCMD surgeon, the JFS should:

(1) Establish specific joint force medical readiness requirements, to include predeployment and FHP requirements; any requisite individual medical training to include safety, first aid, sanitation, health threats, and health protection measures, including those related to CBRN, infectious diseases, and environmental and/or industrial threats; and the transportation and MEDEVAC of contagious or potentially contagious and exposed patients and personnel. Medical readiness training includes individual, collective, and unit training required to maintain the proficiency and currency of health care personnel and units. This incorporates both initial and sustainment training utilizing courses, hands-on training, and exercises to develop and maintain military medical skills and competencies. The needs of contractors authorized to accompany the force (CAAF) and contractors not authorized to accompany the force (non-CAAF) in the JOA should also be considered when establishing medical readiness requirements.

(2) Advise the JFC concerning the following:

(a) The health of the joint force such as DNBI/BI rates and other health factors that could affect joint force operations to include medical threat identification and protective measures.

(b) HSS and FHP aspects of joint operations JOA.

(c) Rest, rotation, and reconstitution policies and procedures within the JOA.

(d) Prevention and protection measures and procedures, including prophylactic countermeasures (including immunizations); field sanitation measures and hygiene; veterinary public and animal health services; epidemiology; and prevention programs based on the environment, personnel, and medical information.

(e) Health surveillance, including medical and OEH surveillance.

(f) FHP operations during the joint reception, staging, onward movement, and integration (JRSOI) phase of the joint force deployment/redeployment process.

(g) The treatment and evacuation of US and MNF personnel within the JOA.

(3) Establish medical request for forces (RFF), request for assistance (RFA), and request for support. Coordinate and process requirements and support needed for mission execution through functional directorates.

(4) Establish priorities for actions within the JFS's staff and identify medical issues that are significant information reporting requirements.

(5) Determine PM requirements.

(6) Determine if an area joint blood program office (AJBPO) and/or a joint patient movement requirements center (JPMRC) needs to be established. If a JPMRC is not required, direct liaison must be established with the appropriate United States Transportation Command patient movement requirements center (TPMRC) (East, West, Americas) to provide management for intertheater regulating and PM.

(7) Determine requirement for establishment of a PECC for PM within the OA.

(8) Establish the OA HSS and FHP plan and ensure efficient and effective interface of the theater and strategic AE systems through the JPMRC.

(9) Monitor medical regulating and PM activities of the JPMRC and those theater-assigned, Service-owned PM assets to ensure procedures are established to provide patient in-transit visibility information to the manpower and personnel directorate of a joint staff (J-1).

(10) Assist the JFC in formulating a recommended PM policy within the OA and monitor evacuation requirements.

(11) During HSS and FHP planning:

(a) Participate in planning and review plans to evaluate if appropriate medical resources and infrastructure are available to support the approved CONOPS. If required, request additional resources or suggest modifications to the plan but, at a minimum, identify the risks to the commander.

(b) Assist commanders in building and maintaining a fit and healthy joint force. Focus on prevention of nonbattle casualties and effective and efficient care for casualties and the entire process of delivering responsive health support to the deployed joint force.

(c) Monitor, facilitate, and coordinate essential care of the injured and ill in the OA and their rapid evacuation to definitive medical care.

(d) Identify joint deficiencies and risks and develop joint alternative COAs to address shortfalls.

(e) Consider as medical functions for planning: PM, blood program, hospitalization (includes medical nutrition therapy for hospitalized patients), FRC

capabilities, health support for other than US forces, return to duty, MEDLOG, PVNTMED, dental services, veterinary services, COSC, medical communications system and intelligence, and host-nation support (HNS) or other United States Government (USG) department and agency support.

(f) Consider support for veterinary operations and medical civil-military operations (MCMO).

(12) Advise the commander on the medical analysis of the COAs and the medical estimate based on the integration of all health and safety risk assessments.

(13) Coordinate membership and required medical liaison relationships to appropriate joint force staff organizations.

(14) In conjunction with the joint force SJA, provide the JFC with medical treatment protocol recommendations.

(15) Assist component commands in identifying HSS and FHP requirements or shortages and assign cross-Service support where practical; conduct liaison with each component surgeon to establish and maintain HSS and FHP support.

(16) Evaluate and characterize medical and OEH threats in the JOA and make recommendations for countermeasures to control or reduce medical and OEH threats that may impact personnel health or mission objectives.

(17) Coordinate all FHP and deployment health surveillance and readiness predeployment, deployment, employment, and redeployment activities and tasks.

(18) Establish a health surveillance capability to monitor disease and environmental hazards, carry out significant event epidemiological investigations, coordinate activities of in-theater laboratory and support assets, provide related support to units, and assist with documenting in medical records the environmental and occupational monitoring results and exposure diagnoses and communicating health risks.

(19) Integrate health risks with other operational risks using risk management principles to reduce the impact on joint force missions and personnel during joint operations.

(20) Communicate risks on health and safety including protective countermeasures and other topics such as use of chemoprophylaxis, immunizations, pretreatments, insect repellants, sanitation, and first aid to joint force personnel in the JOA (to include all military personnel, all DOD civilian and other deployed federal employees, and CAAF).

(21) Establish HSS and FHP procedures for operations in a CBRN environment, to include recommending the theater PM policy of contaminated or contagious patients. For additional information, refer to JP 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear Environments*, and ATP 4-02.7/MCRP 4-11.1F/NTTP 4-

02.7/AFTTP 3-42.3, *Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment*.

(22) Provide support to the joint staff planning process especially for conducting joint intelligence preparation of the operational environment (JIPOE) and producing and distributing associated products.

(23) Provide PVNTMED/public health support and information on cultural issues relevant to interactions with HN medical systems and participate in the selection of bed-down locations.

(24) Provide guidance for the development of medical annexes to joint plans and medical estimates based on casualty planning factors.

(25) Coordinate with all other medical support activities in the JOA that may play a role in the mission to ensure unity of effort. These may include NGOs, international organizations, multinational medical units, HN medical assets, and other USG departments and agencies and activities/interest in the public health sector.

(26) Coordinate with SOF within the JOA and provide HSS and FHP as required.

(27) Ensure appropriate medical care is provided for DOD civilians, CAAF and select non-CAAF allied military personnel, and detainees, as required by US and international law, mission requirements, established medical treatment protocols, DOD policy, contractual obligations, and applicable national agreements.

(28) Plan for providing support in the prevention and treatment of stress.

(29) Develop mass casualty plans for the JOA and support Class VIII contingency and resupply plans for mass casualties.

(30) Plan for medical support to recovery operations. Coordinate with the reintegration team chief.

(31) Coordinate foreign humanitarian assistance (FHA) augmentation and provide medical support to the resultant civil-military operations (CMO). In addition, other special operations units may need conventional force medical augmentation in austere environments.

(32) Recommend the task organization of medical units to satisfy all joint force mission requirements and monitor the availability of and recommend the reassignment and utilization of medical assets in the JOA.

(33) Determine, in conjunction with the joint force SJA and the chain of command, the eligibility for medical care in joint force MTFs.

(34) Maintain situational awareness by coordinating medical information with the CCMD surgeon, component surgeons, joint force medical units, MNF surgeons, and other agency medical support personnel as required.

(35) Coordinate medical consultation services for the joint force, to include telemedicine, as required.

(36) Collect and forward medical statistical data pertinent to the JOA as required.

(37) Recommend policies and determine requirements and priorities for MEDLOG to include blood and blood products, medical supply and resupply, and medical equipment maintenance and repair services.

(38) Ensure communications equipment compatibility, standardization of radio frequencies, reports formats, treatment protocols, and requirements for equipment with multinational medical units and other USG departments and agencies when appropriate.

(39) Ensure the development and distribution of a standardized operational and medical terminology reference guide to facilitate the synchronization of health support efforts and minimize misinterpretation with multinational medical units.

(40) Ensure medical records are established and maintained on patients that are treated at MTFs in the OA of the JFS.

(41) Ensure a dental capability is established as required by the mission.

(42) Ensure a pharmacy capability is established as required by the mission.

(43) Ensure a veterinary program is established as required by mission requirements.

(44) Ensure access to clinical and environmental laboratory capabilities for the identification and confirmation of the use of chemical, biological, or radiological hazards against joint forces as required by mission requirements. There are four levels of identification for CBRN hazards: presumptive, field confirmatory, theater validation, and definitive.

For more information on the definitions and descriptions of the levels of identification, see ATP 3-11.37/Marine Corps Warfighting Publication (MCWP) 3-37.4/NTTP 3-11.29/AFTTP 3-2.44, Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance and Surveillance, and ATP 4-02.7/MCRP 4-11.1F/NTTP 4-02.7/AFTTP 3-42.3, Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment.

(45) Promote and improve the health of the joint force through programs on injury prevention, dental health, good nutrition, tobacco use prevention and cessation,

physical fitness and weight control, responsible sexual behavior, stress management, suicide prevention, alcohol and drug abuse prevention, and other health initiatives.

(46) In conjunction with the operations directorate of a joint staff (J-3) and logistics directorate of a joint staff (J-4), ensure health support, either as a responsibility of the contractor or the JFC, is fully delineated in OPLANs, operation orders (OPORDs), and contracts to assure appropriate medical staffing for CAAF in the JOA.

(47) In conjunction with the joint force SJA and CCMD JFS, develop joint force policies and procedures for detainee medical care to:

(a) Ensure the appointment of a detainee operations medical director to oversee and guide all elements of health care delivery to detainees within the OA.

(b) Ensure the medical annex of plans and orders and contingency plans include procedures for the treatment of all detainees. Medical support should specifically include emergency and essential medical care that provides for restoration of functional health, prevention of disease, and establishing policy for the medical repatriation of detainees. Services include professional medical services and medical supply. Medical support should have oversight of all sanitary aspects of food service including provisions for potable water, field hygiene and sanitation, pest management and entomological support, and PVNTMED (to include immunizations as directed and established by applicable policies), and review/coordination of use and assignment of medically trained detainees and medical materials. Ensure personnel in US custody receive health care consistent with the standard of health care that applies for US military personnel in the same geographic area.

(c) Ensure the appropriate health care providers are available to address the health care needs of female detainees.

(d) Coordinate with the detention facility commander and facilities officer for the provision of separate hygiene facilities and supplies in any facilities in which female detainees are accommodated.

(e) Ensure the provision for an initial medical screening of detainees that includes an examination and documentation of the detainee's physical condition upon initiation of detention and the examining of detainees for contagious diseases (to include chest radiograph and tuberculin skin test).

(f) Ensure detainees who are contagious are documented as contaminated, in reference to theater PM policy.

(g) Ensure medical screening of detainees is conducted monthly to monitor the general state of health, suicide prevention, medical ethics, reporting of suspected abuse, and nutrition and cleanliness of detainees and detect contagious diseases. Monthly screenings should include documentation of the weight of each detainee.

(h) Ensure PVNTMED and veterinary services; food protection inspections are conducted at the joint force detention facility.

(i) Ensure the establishment of a medical record for each detainee and that a copy of that record accompanies the detainee whenever they are transferred to another facility or released.

(j) Recommend to the JFC an immunization policy for detainees as dictated by the health threat.

(k) Ensure detainee repatriation and release procedures include a full physical prior to release or transfer, instructions for the use of prescribed medications, a supply of medications, and all appropriate medical and dental records accompany the detainee.

(l) Ensure health care providers charged with any form of assistance with the detainee interrogation process, to include interpretation of medical records and information, are prohibited from any aspect of detainee health care.

(m) Ensure measures are in place to help prevent detainees from attempting or committing suicide while in custody.

(n) Develop medical support plans for prisoners on a hunger strike and plans for prisoners who refuse medical treatment.

(o) Ensure detainees evacuated to a joint force MTF for treatment are escorted by an armed guard as designated by the JFC. The guard must remain with the patient while in the PM and treatment chain.

(p) Ensure experimental medical research is not conducted on detainees.

(q) Ensure physical security is provided by nonmedical personnel as designated by the JFC.

(r) Establish procedures to obtain signed permission for all surgical or invasive procedures performed on detainees.

(s) Ensure procedures for identifying, reporting, and resolving of medical ethics and other legal issues are established and disseminated.

(t) Ensure health care personnel who, in the course of treatment, observe or suspect a possible violation of applicable standards, including those prescribed in DODD 2310.01E, *DOD Detainee Program*, will report those circumstances to the chain of command.

(u) Identify any behavioral health science requirements.

(v) Ensure a restraint procedure is deemed necessary based purely on medical criteria for the protection of the physical or behavioral safety of the detainee, other patients, or the MTF staff. Health care personnel will not participate in the process of restraining the detainee. Rather, military police or other security personnel will be responsible for restraint of the detainees.

(w) Ensure the caloric content and dietary suitability of detainee rations. Ensure consideration of habitual diet and religious/cultural requirements of detainees.

(48) Ensure greater emphasis be placed on PVNTMED training and equipping SOF personnel due to limited support availability.

(49) Plan for medical support to the media and the media pool.

(50) Assist the JFC with preparation and submission of requests for medical capabilities and individual requirements from the CCDR through the global force management (GFM) allocation process. For additional information on the GFM process, see the Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3130.06, *Global Force Management Allocation Policies and Procedures*.

4. Organizing the Joint Force Surgeon's Office

a. The JFS's office must be adequately staffed and task-organized to support the mission of the joint force at all levels of command. Some considerations for determining the duties and responsibilities by the staff include:

- (1) The mission of the joint force.
- (2) Medical forces assigned.
- (3) The amount of time required to plan and form the staff.
- (4) The anticipated health threat (including CBRN exposures).
- (5) Specialists required.
- (6) Size of the workspace (on a ship, in tents, in a building).
- (7) Environmental factors (tropical, mountainous, desert, arctic).
- (8) HN/multinational support.

b. Some of the positions the JFS may be required to staff are provided below. Some of the functions of these positions can be combined or eliminated, as necessary and appropriate. Typical staff positions include:

- (1) Deputy surgeon.
- (2) Medical operations officer.

(3) Senior medical operations noncommissioned officer (NCO)/chief petty officer (CPO).

(4) Medical plans officer.

(5) Environmental science and engineering officer (ESEO).

(6) Industrial hygiene officer/bioenvironmental engineer/sanitary engineer.

(7) Medical intelligence officer.

(8) Area joint blood program officer.

(9) PM (evacuation) officer.

(10) MEDLOG officer.

(11) PVNTMED officer/public health officer/public health nurse.

(12) Veterinary services officer.

(13) Liaison officers (LNOs) (to include US SOF, multinational liaison, international organization/NGO LNOs, and HN LNOs).

(14) International health specialist officer.

(15) Administrative staff.

(16) Medical maintenance officer.

(17) Medical information systems officer.

c. The JFS's office may be organized in many different ways. One example is shown in Figure IV-2 and is used for illustrative purposes only. The mission of the functional areas and duties of the staff include:

(1) **Deputy JFS.** The deputy JFS facilitates the JFS's staff actions that support the JFC, serves as the JFS in the absence of the incumbent, and provides and reinforces the JFS's guidance and intent. Specific responsibilities of the deputy JFS are to:

(a) Assist the JFS to:

1. Determine office manning, equipment, and transportation requirements.

2. Develop guidelines for types of medical supplies needed, supply procedures, stockage levels, sizes and location of medical supply installations, maintenance, life cycle management, and network integration of medical devices and systems.

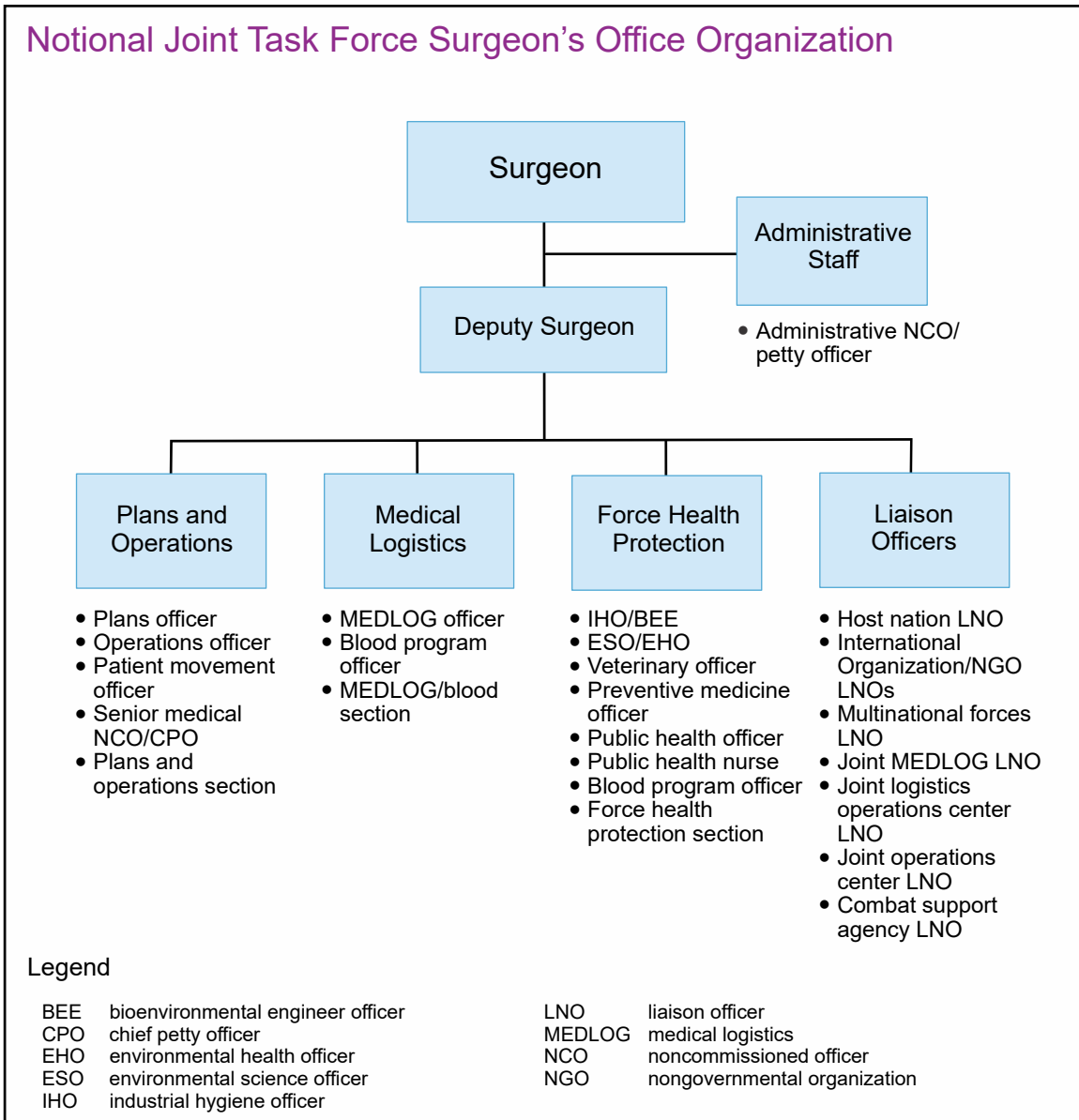


Figure IV-2. Notional Joint Task Force Surgeon's Office Organization

3. Assign responsibilities to individual sections or individuals as appropriate, to include the assignment of liaisons to the joint force J-4, civil-military operations center (CMOC), joint civil-military coordination board, humanitarian assistance survey team (HAST), and joint interagency coordination group and membership duties to the joint planning group (JPG) and other joint force organizations.

4. Maintain oversight on the implementation of JFS's policies/procedures.

5. Supervise augmentation medical teams, as required.

6. Ensure the appropriate training is conducted for the JFS's staff.

7. Maintain a master policy file and monitoring the JFS's office standard operating procedures (SOPs).

8. Monitor JFS's staff actions and functions to ensure compliance of assigned taskings (to include common administrative tasks).

9. Ensure command message themes and information operation objectives are planned into all command surgeon actions and activities.

(b) Supervise the plans and operations section of the JFS's office and the development of HSS and FHP plans.

(c) Keep the JFS informed on the status of HSS and FHP throughout the joint force by monitoring the status of patient beds; evacuation requirements; joint blood program; MEDLOG; laboratory capability; COSC; veterinary support; food protection and food service programs; dental services; deployment health surveillance and PVNTMED programs; and health activities that promote health and welfare of human populations, such as global health security, FHA, and humanitarian civic assistance.

For more information on FHA, see JP 3-29, Foreign Humanitarian Assistance.

(d) Form, organize, and supervise appropriate JFS medical boards, offices, and cells as required.

(e) Supervise the development of annex Q (Medical Services) of the OPORD/OPLAN.

(f) Compile reports reflecting the overall medical readiness of the joint force.

(g) Establish the JFS's staff daily operations cycle or battle rhythm.

(h) Coordinate and manage the JFS's office daily battle update assessment meeting.

(i) Coordinate with the joint force chief of staff (COS) to ensure the appropriate functions of HSS and FHP are integrated into the joint force battle rhythm.

(j) Serve as the chief, joint medical operations center (JMOC), as required.

(k) Serve as a JPG member and joint medical working group (JMWG) member as required.

(2) **Plans and Operations.** The plans and operations section is the focal point for all medical operational matters within the JFS's office. Its primary functions are to plan and develop the medical infrastructure to protect the health of the joint force; mitigate the effects of illness and injury within the JOA; and serve as the hub for achieving medical situational awareness by establishing a JMOC for information management and the facilitation of medical synchronization and assessment of activities and actions to

determine effectiveness in meeting operational objectives via predetermined indicators and outcomes. Staffing may include medical operations/plans officers, PM (evacuation) officer, ESEO, and senior medical operations NCO/CPO.

(a) The medical operations/plans officers will:

1. Develop medical plans.
2. Ensure appropriate health care is provided for designated civilians, multinational military personnel, and detainees per applicable agreements and US and international law. A detainee includes any person captured, detained, or otherwise under the control of DOD personnel. Detainees are characterized as enemy prisoners of war (EPWs), unprivileged enemy belligerents, retained personnel, or civilian internees.
3. Supervise integration and use of medical augmentation teams.
4. Develop the mass casualty treatment and evacuation plan.
5. Coordinate the provision of medical intelligence to the joint force.
6. Coordinate disaster relief, FHA medical augmentation, and other health activities, as required.
7. Establish medical communication requirements with the communications system directorate of a joint staff (J-6).
8. Coordinate establishment of a layered medical communications network among component medical units with the joint force J-6, with consideration for interoperability with multinational medical partners.
9. Input medical estimates into simulation models when conditions allow.
10. Plan for telemedicine support capabilities that are not currently organic to component medical units.
11. Determine information requirements and points of contact (POCs).
12. Serve as a member of the JPG and JMWG as required.
13. Serve as chief or member of JMOC as required.
14. Be prepared to serve as a member of the advanced echelon team and HAST as required.
15. Coordinate support requirements with the J-4, component logistics and medical planners, ensuring synchronization of support requirements to include general supply and services, medical supplies, and resupply plans.

(b) The medical operations/plans NCO/CPO will:

1. Assist plans and medical operations officers with collection and evaluation of medical reports and development and coordination of appropriate actions.

2. Establish equipment/maps for current and future operational planning.

3. Maintain the daily staff journal and ensure all incoming and outgoing messages and correspondence, significant events, and actions are logged.

4. Maintain all plans and operations maps/overlays/supplies. Prepare briefing slides as required.

5. Coordinate with specific Service component for medical support/augmentation as required.

6. Serve as member of JMOC.

(c) The PM (evacuation) officer will:

1. Provide oversight of the JPMRC in their role of directing medical regulating and PM activities from Role 2 (E) and Role 3 within the JOA, coordinate the movement of patients, and track hospitalization in the JOA.

2. Maintain visibility of joint and multinational MTFs, TPMRC, component commands, Global Patient Movement Requirements Center (GPMRC), and transportation agencies to facilitate patient flow and optimum use of hospitalization and evacuation assets.

3. Designate MTFs within the JOA to receive patients based upon medical regulating report.

4. Coordinate with TPMRC/GPMRC to obtain US bed designations for patients who will not be returned to duty within the theater PM policy.

5. Serve as patient administration liaison to patient administration departments/sections of component and multinational MTFs.

6. Obtain reports from component and multinational MTFs to consolidate requests for movement of patients out of the JOA.

7. Advise the JFS on a daily basis of specialty bed availability throughout the JOA and on capabilities and limitations of supporting PM resources.

8. Maintain a database of beds available by type within the JOA and cross-match patients to the MTF with the capability and capacity for the type of care required.

9. Maintain visibility of individual patients within the JOA from initial hospital admission to disposition.

10. Monitor and coordinate with USTRANSCOM for PMI requirements.

11. Coordinate with United States Transportation Command Regulating and Command and Control Evacuation System (TRAC2ES) for tracking patients in the evacuation system.

12. Develop procedures in concert with the joint force J-4 and TPMRC to transfer patients from the US medical regulating system into the HN's MEDEVAC or hospitalization system as required.

13. Monitor multinational and component MTF bed availability.

14. Monitor and coordinate with USTRANSCOM Command Surgeon and HQ Air Mobility Command/Surgeon General's Office (AMC/SGXM) for PMI requirements. Ensure patients requiring medical transport are entered into the TRAC2ES for in-transit visibility of patients in the evacuation system.

15. Develop procedures with the joint force J-1 for mutual exchange of information.

16. Serve as a member of JMOC and JMWG.

(d) The ESEO/bioenvironmental engineer/public health officer should:

1. Provide the JFS with recommendations on policies, force structure, and priorities for use of PVNTMED resources.

2. Plan, monitor, and supervise FHP operations, to include:

a. Waste control and management.

b. Prevention and control of DNBIs.

c. Vector control and management.

d. Distribution and/or administration of FHP prescription products, chemoprophylaxis, barrier creams, and immunizations.

e. Health surveillance to include medical and OEH surveillance.

f. Food and potable water services.

g. Conducting epidemiological investigations on DNBI outbreaks.

h. Biosurveillance activities.

3. Maintain the PVNTMED staff journal and ensure incoming and outgoing messages, correspondence, and significant activities are logged and receive PVNTMED reports, highlighting significant trends.

4. Monitor PVNTMED personnel, units, and equipment within the JOA.

5. Advise the JFS on a daily basis of PVNTMED activities throughout the JOA.

6. Provide the JFS with recommendations on policies regarding the sanitation of all aspects of food service from procurement and transportation to disposal.

7. Liaise with the medical plans and operations officer and when possible, a plans, operations, and medical intelligence officer regarding medical intelligence equities.

8. Coordinate with the joint force intelligence directorate of joint staff (J-2) to provide medical intelligence support input to the JIPOE.

9. Provide the JFS and subordinate medical units with situational awareness regarding the health threat of exposures to CBRN hazards and OEH threats.

10. Prepare FHP and medical intelligence/threat estimates and annexes of OPLANs/OPORDs, ensuring medical intelligence requirements are included in the appropriate annexes.

11. Maintain PVNTMED portion of the common operational picture by coordinating with the FHP section, PVNTMED detachments, and when necessary, other PVNTMED resources within deployed units and special teams.

12. Serve as a member of JMOC.

13. Be prepared to serve as a member of JMWG, advanced echelon team, and HAST as required.

14. Assist in the development and delivery of health risk communications messages to military personnel and commanders.

(3) **MEDLOG.** This section is the central point for MEDLOG within the JFS's office for planning, developing, and coordinating the MEDLOG infrastructure and support for the joint force. Staffing may include a joint MEDLOG officer, medical maintenance warrant officer, and a joint force J-4 medical LNO. The joint MEDLOG officer should:

(a) Prepare MEDLOG estimates and the logistic portion of annex Q (Medical Services) to joint force OPLANs.

(b) Review and evaluate medical reports to determine the availability of Class VIII and determine if action is required.

(c) Monitor availability and operational readiness of critical Class VIII (major end item) equipment as determined by the JFS.

(d) Assist joint force medical units with networking, sustainment, and lifecycle management of medical equipment as required.

(e) Be aware of Service Class VIII capabilities, limitations, tactics, techniques, procedures, personnel, and equipment sets.

(f) Develop and coordinate logistics recommendations as necessary and present to the JFS for approval.

(g) Ensure plans are synchronized and identify PMI recycling, replacement, and return to the originating theater.

(h) Prepare and coordinate draft messages/correspondence and present to the JFS for approval and release.

(i) Maintain contact with each component surgeons' logistics section.

(j) Assist JMOC with logistics issues and with other issues/actions as required.

(k) Interface with the theater lead agent for medical materiel (TLAMM) and/or the single integrated medical logistics manager (SIMLM) and joint force J-4 medical liaison as required.

(l) Coordinate transportation for medical units, personnel, supplies, and equipment with the joint force J-4 medical liaison; if a joint force J-4 medical liaison is not available, coordinate with the joint deployment and distribution operations center (JDDOC) and joint force J-4.

(m) Monitor status and availability of medical CBRN supplies.

(n) Maintain liaison and communications with the Defense Logistics Agency (DLA) as the executive agent for medical materiel.

(o) In coordination with the joint force J-4, maintain a listing of foreign sources of supply for consideration to reduce strategic lift, improve the range of items available, and shorten order fulfillment times and coordinate contracts required for HN medical support.

(p) Implement policies and procedures for the removal of medical wastes with the joint task force (JTF) J-4.

(q) Facilitate joint use of health services and facilities.

(r) Serve as a member of JMOC.

(s) Serve as a member of the JMWG.

(t) Review any applicable performance-based agreements that affect MEDLOG operations.

(u) Monitor DOD medical materiel quality control messages for product recalls or amplifying guidance for Class VIII materiel and disseminate to medical units throughout the OA for situational awareness/action.

(v) Monitor Food and Drug Administration (FDA) Shelf-Life Extension Program and ensure that chemical, biological, and radiological medical countermeasures efficacy testing remain current for materiel within the OA. Notify units of product recalls or lot testing requirements.

(4) **Health Services/FHP.** The health services/FHP section's primary function is to assist the JFS and component surgeons with establishing policies and procedures to deliver a healthy and fit force, prevent casualties, and maintain the health of the joint force while deployed. Staffing may include an industrial hygiene officer/bioenvironmental engineering officer, sanitary engineer, veterinary services officer, or PVNTMED/public health officer/public health nurse. The joint force FHP officer will normally be designated from the joint force FHP staff by the JFS.

(a) The FHP officer should:

1. Assist the JFS in employing risk management principles for managing health risks to enhance mission effectiveness during joint operations.

2. Obtain and maintain comprehensive medical surveillance information and identify and assess health threats.

3. Evaluate and characterize OEH threats and recommend control measures to eliminate or reduce the risks in JOA. Ensure the completion of preliminary FWRAs, initial health risk assessments, and preliminary hazard assessments for basing locations. Communicate the health risks and impact on the mission to the JFS.

4. Collaborate with the CCMD surgeon's FHP officer to assist the JFS with establishing predeployment and post-deployment guidance.

5. Using risk management principles, evaluate the health threat controls being used in the OE to ensure they are adequately documenting risk management decisions and monitoring the effect on mitigating the risks. Provide an analysis to JFS.

6. Provide the JFS with recommendations on policies, force structure, and priorities of effort for sanitation, entomological, and sanitary engineering resources.

7. Assist the ESEO in the plans and operations section in monitoring PVNTMED and environmental operations.

8. Establish and foster liaison relationships, to include, but not limited to, the joint force J-2; J-3; National Center for Medical Intelligence (NCMI); Centers for Disease Control and Prevention (CDC); Defense Threat Reduction Agency; DHA; USMC Chemical Biological Incident Response Force; USA Research, Development, and Engineering Command; Armed Forces Radiobiology Research Institute; USA Medical Research Institute of Infectious Diseases; USA Medical Research Institute of Chemical Defense; and NGOs, international organizations, USG departments and agencies, and civilian and multinational personnel as required to facilitate support to CMO.

9. Collaborate with the CCMD surgeon's FHP officer and CBRN medical experts to provide the JFS with procedures for medical operations in a CBRN environment.

10. Communicate health risks and countermeasures for the JOA to deploying personnel and to redeploying personnel and their health care providers.

11. Individual health treatment for environmental or CBRN exposure should be documented in the individuals' medical records. Establish policies and procedures to ensure OEH surveillance data is entered, maintained, and reported in the DOD system of records, DOEHRS-IH for unclassified data and the Military Exposure Surveillance Library on the SIPRNET [SECRET Internet Protocol Router Network] for classified data.

12. Be prepared to serve as a member of JMOC, JMWG, advanced echelon team, and HAST as required.

13. Incorporate a deployment health surveillance plan and readiness requirements and a theater medical surveillance capability into annex Q (Medical Services).

14. Establish procedures to submit OEH surveillance data and reports to the joint force and the Armed Forces Health Surveillance Branch (AFHSB) of the DHA.

15. Prepare the concept of veterinary operations to the FHP portion of annex Q (Medical Services) to joint force OPLANs/OPORDs.

16. Provide the JFS with recommendations on veterinary operations to include policies, force structure, and priorities for use of veterinary resources.

17. Provide the JFS with advice and procedural recommendations for the control of existing or anticipated animal and zoonotic diseases that may be of significance for human disease prevention, for food production interests, or as bioterrorism threats.

18. Plan, monitor, and supervise veterinary operations, to include inspecting food and food sources, conducting FWRAs, and establishing a food protection program that ensures food source establishments are audited in accordance with requirements, a quality control system for source establishments supporting the theater,

food recall procedures for all subsistence items in the JOA, import laws and regulations of foreign countries, control of animal and zoonotic diseases of military significance, establishing standards and levels of veterinary care and treatment of military animals (primarily military working dogs) to include medical and surgical support, and treatment of animals other than military-owned animals as required.

19. Maintain liaison with veterinarians of higher HQ, those of US, multinational and foreign government departments and agencies, the joint force J-4 medical liaison, the joint force J-4 operational contract support integration cell (supporting contracting command, if established), and joint force food service officer.

20. Provide the JFS, in coordination with the veterinary services and PVNTMED officer, recommendations on policies regarding the sanitation of all aspects of food service from procurement and transportation to disposal.

21. Advise the JFS on foreign animal diseases that may affect redeployment of military equipment back to the US or partner nations and coordinate with the appropriate governmental departments and agencies as required.

22. Advise the JFS on agriculture, veterinary public health, and animal health factors to support medical planning by identifying potential opportunities for veterinary components of MCMO, humanitarian and civic assistance, humanitarian assistance (HA) program-excess property, and other related programs.

23. Investigate claims concerning injury or death of indigenous animals resulting from military operations as appropriate.

24. Provide guidance on decontamination procedures for US-owned equipment retrograding to the US and partner nations to prevent the transmission of animal diseases.

25. Conduct staff visits and inspections of joint force component veterinary facilities and units.

26. Serve as a member of the JMOC.

(b) The PVNTMED officer/public health officer/public health nurse should:

1. Provide the JFS with required medical information and the evaluation and interpretation of medical statistical data.

2. Triage and screen medical indicators of exposure through baseline level changes.

3. Provide population health support to the joint force.

4. Assist the joint force FHP officer with designing and developing predeployment and post-deployment guidance.

5. Provide available health risk assessment information to redeploying units and their health care providers.

6. Assist the joint force FHP officer with establishing procedures for reporting DNBI, reportable medical events, and OEH surveillance data, and with documenting all joint force personnel exposure to CBRN hazards.

7. Be prepared to provide education and counseling to a targeted civilian populace regarding health maintenance and promotion and disease prevention during FHA and CMO.

8. Be prepared to collaborate with other joint force medical personnel and assess the physical, psychosocial, and health care status of a targeted civilian populace (to include dislocated civilians) and develop a health maintenance and wellness plan of care during FHA and CMO.

9. Be prepared to serve as a member of JMOC, JMWG, advanced echelon team, and HAST as required.

10. Provide technical consultative support on medical issues related to CBRN casualty care, to include development of plans for mass casualty operations.

(c) The joint blood program office (JBPO) should:

1. Manage the joint blood program in the JOA.

2. Coordinate, monitor, and ensure component blood programs, blood product requirements, and capabilities within the JOA are managed and maintained in accordance with FDA guidelines/requirements.

3. Assess need for an AJBPO and if required, form, organize, and operate the AJBPO.

4. Monitor the joint force blood inventory status as required and brief status through the daily blood report (compiled from area blood reports).

5. Prepare CONOPS and the joint blood program portion of annex Q (Medical Services) to joint force plans and OPORDs.

6. Advise the JFS regarding management, policies, and procedures for handling blood and blood products.

7. Coordinate blood distribution for and between component Services within the JOA.

8. Establish procedures and publish instructions for disposal or destruction of excess and outdated blood.

9. Maintain liaison with the blood support detachments, expeditionary blood transshipment centers (BTCs), and the JBPO at the CCMD surgeon's office for reporting and coordination purposes.

10. Plan the handling, storage, and distribution of blood components within JOA.

11. Consolidate and forward requirements for resupply of blood products to the JBPO at the CCMD surgeon's office based on the JFS's guidance.

12. Assist the JFS with the development and dissemination of JOA blood management policies, procedures, and guidance.

13. Be prepared to serve as a member of JMWG as required.

14. Serve as a member of JMOC as required.

(5) **Medical LNOs.** The LNO section's primary functions are to monitor, coordinate, advise, synchronize, and facilitate multinational medical contributions. Its role is to foster effective coordination between multinational medical staffs, advise the JFS regarding the optimal utilization of multinational medical capabilities, and facilitate the appropriate use of health activities that enhance short- and long-term health sector goals. Staffing may include an international health specialist, HN medical LNO, multinational medical LNO, USG LNO, and/or an international organization/NGO LNO.

(a) The international health specialist on the joint force staff should primarily be prepared to provide advice and expertise to the JFS for economic and social factors support to medical planning by identifying potential opportunities for MCMO, humanitarian and civic assistance, HA program-excess property, and other related programs.

(b) HN and multination force medical LNOs should:

1. Monitor, coordinate, advise, and assist the JFS as required.

2. Advise the JFS on the medical capabilities/limitation of their service or country.

3. Establish communications with their command.

4. Possess language or translation capability.

5. Have connectivity with their HQ and provide continuous coordination and ensure cooperation between units.

6. Be informed of the operational status of their unit.

7. Facilitate the submission of required reports from their unit to the JFS as required.

8. Advise the JFS regarding the optimal utilization of their service or country's medical capabilities.

9. Attend JFS's daily battle update assessment meeting and be familiar with and prepared to brief unit plans, movement plans, and when required, movement times to critical locations.

10. Be prepared to serve as a member of JMOC.

5. Joint Force Surgeon's Office Battle Rhythm

a. The JFS's office daily operations cycle or "battle rhythm" is developed by the deputy JFS and is normally maintained in the JMOC. The purpose of the JFS's office battle rhythm is to provide the JFS's staff with a daily schedule of events necessary to support the joint force mission. The JFS's office battle rhythm reflects the times of the day for recurring events of interest to the JFS's staff and is employed as a tool for ensuring information is available, so the staff can predict when key elements of mutual influence for the commander, CCMD surgeon, and subordinate components are required. All JFS staff sections provide input to the deputy JFS in the development of the JFS office battle rhythm. They are responsible for participating in the various briefings and meetings as indicated in the battle rhythm and ensuring key information products and reports are obtained, transmitted to the commander and higher HQ, and posted and maintained on the JFS's home page. Changes to the JFS's office battle rhythm are typically announced during the JFS's daily update brief. Once the office battle rhythm is approved, the JMOC chief or the JMOC battle captain ensures the JFS's office battle rhythm is posted to the JFS's web page (see Figure IV-3).

b. The following are some recommendations the JFS should consider when providing guidance regarding the JFS's office battle rhythm:

(1) Start with the JFC's battle rhythm. The JFS's office battle rhythm must conform to the JFC's.

(2) Identify those events and activities that occur on a recurring basis.

(3) Provide comments in staff updates and meetings that the JFS will normally attend. Information should include:

(a) Any requirements for staff updates prior to meetings with the JFC, COS, CCMD surgeon, or component surgeons.

(b) Times for meetings with JFC, COS, CCMD surgeon and component surgeons (video teleconferencing, telephone, other).

Sample Joint Force Surgeon's Office Battle Rhythm

0300z	Joint Medical Operations Center shift change (Shift Change Brief)
0400z	Reports due to the Joint Force Surgeon: Blood Report, Medical Situation Report, Medical Logistics Report, Medical Regulating Report, Weekly Disease and Nonbattle Injury Report, and so on.
0600z	Staff inputs due for Morning Updates
0800z	Joint force commander Morning Update (Joint Operations Center Conference Room)
0830z	Joint Planning Group Meeting
0930z	Commander's Planning Guidance and/or Operations Synchronization Meeting
1000z	Joint force Surgeon's Daily Battle Update Brief
1030z	Joint Personnel Status Report
1100z	Daily joint force commander situation report input due
1200z	Chief of Staff Update (Staff Meeting)
1330z	Joint Medical Working Group (Medical Planners Meeting)
1400z	Combatant Command Surgeon Conference Call Update
1500z	Joint Medical Operations Center shift change (Shift Change Brief)
1530z	Staff inputs for Evening Updates
1600z	Joint Force Surgeon's Conference Call With Component Surgeons/Medical Support Units
1700z	Joint Force Commander Evening Update (Joint Operations Center Conference Room)
1900z	Web Page Updates Posted
2400z	Joint force commander situation report released

Figure IV-3. Sample Joint Force Surgeon's Office Battle Rhythm

(c) Frequency and potential meeting times of JFS's office staff updates (such as informal morning update and a more formal evening update).

(d) Nature of the updates (since types of information to be presented can drive the time required to conduct the updates).

(4) Integrate appropriate functions of HSS and FHP into the joint force battle rhythm.

6. Joint Force Surgeon Reachback

a. To ensure efficient use of all available medical technologies and resources, the JFS may extend beyond the joint force's organic medical capabilities to identify and bring to bear resources not immediately available in the JOA. Reachback allows for medical infrastructure support services that sustain forward-deployed medical force to transfer products and ideas as they are required in the JOA. It also provides a channel to contact

subject matter experts (SMEs) when a technical issue exceeds the joint force's medical SMEs' capability.

b. The JFS reachback capability network includes the CCDR staff, supporting and other CCMD SMEs, Service SMEs, DHA SMEs, Navy Health Research Center, other USG departments and agencies, designated multinational partners, academic and industrial sources, and both technical linkages and personal relationships developed through training and habitual associations. The JFS should consider the following when employing reachback:

(1) Reachback can be accomplished through various means, to include secure/unsecure e-mail, telephone, websites, and video conferencing.

(2) Reachback resources have other primary missions and may not be specifically staffed to support continuous reachback.

(3) Reachback can also result from an RFA.

(4) Reachback should be conducted using established CCMD surgeon's protocols and SOPs if available, or JFS protocols and SOPs.

(5) Video teleconferencing reachback capability requires the joint force J-6 to plan and integrate video teleconferencing reachback support into its communications system support plans and structure and provide the required/dedicated bandwidth to the JFS's staff.

7. Staff Organizations

a. The JFS may establish staff organizations or may be asked to provide medical liaison relationships and membership to internal joint force organizations to coordinate medical issues. These staff organizations and internal joint force organizations may include, but are not limited to, JPMRC, AJBPO, JMOC, JMWG, JPG, J-4 medical liaison cell, CMOC, advanced echelon team, and HAST.

b. The establishment of staff organizations is described as follows:

(1) **JPMRC.** The JPMRC integrates medical regulation responsibilities (the proper MTF specialty bed), transportation movement requirements (best mode of transportation, such as aircraft/ships/ground vehicles), mission requirements determination (the right medical crew members and medical equipment), coordination, and related activities supporting DOD PM requirements. The JPMRC provides TPMRC type, automated information system support, and operations for a joint force. Normally, supporting activities are established to support joint force DOD PM operations within the designated OA. When operating within an area that already has an established TPMRC, the TPMRC maintains overall visibility for theater DOD PM operations, while the JPMRC supports DOD PM operations within the OA and coordinates with the TPMRC for USAF intratheater PM and GPMRC for intertheater PM. Information affecting overall theater

operations is reported to the respective TPMRC per procedures established in the specific OPORD.

For more information on the patient movement requirements centers (PMRCs), see Appendix A, “Patient Movement.”

(2) **AJBPO**

(a) The CCMD surgeon may direct the establishment of an AJBPO to provide regional blood management in the theater. The AJBPO may be established upon activation of a JTF as outlined in the respective OPLAN or OPORD.

(b) The functions of an AJBPO are similar to a JBPO, but in a limited geographical area. The AJBPO:

1. Coordinates blood requirements and distribution of blood and blood products to support all the medical detachments, blood support (MDBSs) and MTFs in the AJBPO area regardless of Service component. This includes defining the distribution system for blood and blood products at all roles from the supporting expeditionary BTC or MDBS.

2. Evaluates in-theater emergency blood collecting activities, blood product depots, expeditionary BTCs, MDBSs, and MTF transfusion services within the OA to ensure the requirements of the JBPO are supported or addressed in the CCDR and/or JTF OPLAN/OPORD.

(3) **JMOC**

(a) To facilitate and provide responsive health services to the joint force, medical resources must be effectively organized and synchronized to support joint operations.

(b) The JMOC is organized with essential staff to plan, coordinate, and harmonize the joint force’s HSS and FHP operations. The major functions of the JMOC are to:

1. Provide a central location for medical planning and operations.
2. Monitor current and future operations and conduct required support planning.
3. Determine medical sustainment requirements.
4. Apprise the JFS and JFC on the status of health support to the joint force.
5. Coordinate support requirements with the supported CCMD surgeon.

6. Maintain visibility of medical unit locations, capabilities, logistic status, and overall medical system readiness.

7. Coordinate with the joint force staff in all areas, to include J-1 through J-6, and personal or special staff.

8. Manage and maintain situation reports regarding joint force medical operations.

9. Characterize disease and environmental threats within the JOA.

10. Develop medical concepts and countermeasures to mitigate disease and environmental threats.

11. Ensure FHP within the JOA.

12. Synchronize health activities with all operations and with functional stakeholders.

(c) Staffing of the JMOC is situational dependent and would normally include the following positions:

1. PM (evacuation) officer.

2. Operations officer (chief).

3. Plans officer.

4. Senior medical plans NCO/petty officer.

5. Medical operations NCO/CPO.

6. ESEO (also functions as medical intelligence officer).

7. Industrial hygiene officer/bioenvironmental engineering officer/sanitary engineer.

8. Joint MEDLOG officer.

9. HN liaison(s)/international health specialist.

10. International organization/NGO and USG liaison(s).

11. MNF liaison(s).

12. Administrative staff (clerks/typists and NCO/CPO support as required).

(d) Note: The JMOC does not replace the AJBPO or the TPMRC. These offices remain operational as defined by applicable policy. Resource staffing for the JMOC is accomplished with members assigned to the functional areas of the JFS's staff.

(4) JMWG

(a) The JMWG provides a forum for medical planners to validate, coordinate, and synchronize issues identified through the logistic coordination board of the standing joint force HQ or the joint force JPG and from other joint force boards and centers as appropriate. Once established, the JMWG functions are integrated into the JFS's staff battle rhythm.

(b) JMWG core membership includes:

1. CCMD medical planner.
2. Joint force medical planner.
3. Joint force PM officer.
4. Joint force joint MEDLOG officer.
5. Joint force J-4 medical LNO.
6. Joint force component medical planners.
7. Chief medical officer, as necessary.

(c) JMWG supporting membership includes:

1. Deputy JFS.
2. Joint force industrial hygiene officer/bioenvironmental engineering officer/sanitary engineer.
3. Joint ESEO.
4. AJBPO.
5. Joint international health specialist officer.
6. Veterinary services officer.
7. PVNTMED/public health officer/public health nurse.
8. PM patient safety officer.

(5) J-4 Medical Liaison Cell. The joint force J-4 medical liaison cell coordinates health service logistic planning and operations and serves as a conduit from the JFS's staff

to the joint force J-4 in support of medical sustainment requirements as they relate to logistics to include contracting, engineering, transportation, medical supplies, Class I for hospitalized patients, and personnel services.

(6) JPG

(a) The JPG is the joint force's planning organization consisting of designated representatives of the joint force HQ principal and special staff sections, joint force components, and other supporting organizations as deemed necessary by the JFC. The JPG is a task-organized team formed to conduct integrated planning for a specific mission. Its role is to support the commander's decision-making process. Its primary responsibilities include, but are not limited to, planning in a crisis (to include COA development), OPORD development, and planning for future operations (such as transitioning, termination, and follow-on).

(b) The medical member to the JPG should:

1. Integrate joint force HSS and FHP effort as a medical representative on the planning group.

2. Evaluate and assess health support for various COA scenarios developed during JPG planning sessions.

3. Develop medical plans in support of various OPLANs and OPORDs.

4. Identify joint medical resources to meet medical support requirements for crisis and contingency operations.

5. Establish the JMWG.

(7) CMOC

(a) The CMOC is normally established by the CDR or subordinate JFC, to assist in the coordination of activities of military forces and other USG departments and agencies, NGOs, and international organizations. There is no established structure, and its size and composition are situation dependent. The JFS may be asked to provide medical liaison to the CMOC.

(b) The medical liaison to the CMOC should be prepared to:

1. Advise the JFS regarding the optimal use of joint force medical assets during CMO.

2. Advise the JFS on civilian health care infrastructure, cultural factors, medical resources and interagency medical requirements, capabilities, and limitations within the JOA.

3. Provide the JFS with recommendations to develop policies regarding the use of military medical supplies for the treatment of dislocated civilians with standards appropriate to HN or local area.

4. Be prepared to provide sanitation and medical requirements for dislocated civilian camps and assembly areas per annex Q (Medical Services) of the OPLAN when requested by appropriate authority.

5. Maintain connectivity with the JFS and JMOC, and provide continuous coordination and ensure cooperation between CMOC and the JFS's office.

6. Establish and foster working relationships with key NGOs, international organizations, and multinational medical forces.

7. Coordinate and assist with the prevention, control, and treatment of endemic or epidemic disease within the civilian population that affects military operations.

8. Coordinate with the JFS for health support required in dislocated civilian assembly areas and camps.

9. Provide technical expertise and assistance in identifying and assessing foreign national public and private health care systems, resources, facilities, and sanitation systems.

10. Assist with and, when necessary, conduct assessments and area studies of public health systems as required.

11. Assist with mission planning on military medical interaction with civilians and medical units.

12. Assist with the transition operations of military-run medical operations to civilian authorities.

13. Determine the capabilities and effectiveness of health and sanitation systems and the impact of those systems on CMO.

14. Coordinate the use of foreign national government and private health resources for CMO and in support of government administration.

15. Provide advice and assistance in establishing technical requirements for public health services and resources to support government administration (such as clinics, hospitals, pharmacies, food preparation and storage, ambulance transportation, medical personnel, and education).

16. Provide advice and coordination in rehabilitating, establishing, delivering, and maintaining government public health systems and agencies during CMO.

(8) Advanced Echelon Team/HAST

(a) An advanced echelon team or a HAST is often established to provide a minimum capability for C2 during the buildup of the joint force and to conduct a military assessment of the situation and obtain, develop, and communicate critical information to assist the CDR and commander. These teams can assist in clarifying the joint force mission, determine force requirements to accomplish the mission, establish a sequence for force deployment, evaluate HNS, and determine whether there are ongoing operations being conducted by other than military forces. Medical personnel assigned to augment the advanced echelon team or a HAST provide medical support, assess HN medical systems (to include information on cultural issues relevant to interactions with HN medical systems), participate in the selection of bed-down locations for the joint force, validate the preliminary hazard assessment and include a communication plan (to include primary, alternate, contingency, and emergency means of communication), and conduct an OEH site assessment as needed.

(b) Medical membership to the advanced echelon team or a HAST may consist of the following JFS staff.

1. Core membership:

a. ESEO/environmental health officer and/or industrial hygiene officer/bioenvironmental engineering officer.

b. Joint force medical planner.

2. Supporting membership:

a. Joint force international health specialist officer.

b. Veterinary services officer.

c. PVNTMED officer/public health officer.

(9) **The Joint Trauma System.** The Joint Trauma System and, when established, the Combatant Command Trauma System provide JFSs with trauma and casualty care expertise in their OA. Support includes the development of clinical practice guidelines that can be tailored based upon theater requirements, guidance on the accurate and timely entry of casualty and trauma care data into the DOD Trauma Registry, and provision of casualty care and trauma-related metrics.

For additional information on the Joint Trauma and Combatant Command Trauma Systems, reference DODI 6040.47, Joint Trauma Systems (JTS).

Intentionally Blank

CHAPTER V

HEALTH SUPPORT OPERATIONS

"Ill-health, of body or of mind, is defeat. Health alone is victory. Let all men, if they can manage it, contrive to be healthy!"

Thomas Carlyle (1795-1881), British Historian and Essayist

1. Overview

Health support operations are provided across the range of joint operations. Several types of mission support (traditional to a deployed force, operations predominantly characterized by stability tasks, FHA, defense support of civil authorities [DSCA], and multinational operations) may be provided simultaneously in various locations throughout an OA.

2. Combat Operations

a. Due to the necessity to perform lifesaving interventions for personnel suffering combat trauma within minutes of wounding or injury, medical resources must be arrayed in close proximity to the forces supported. This array also permits the medical assets to rapidly clear the JOA of casualties and enhances the JFC's ability to quickly take advantage of opportunities that present themselves during the battle.

b. Command surgeon staff must be included in the planning process for combat operations. To ensure effective and efficient health support within the OE, medical support plans must adhere to the supported joint functions. Noncontiguous operations units must understand the various support relationships described in the OPORD to ensure a seamless continuum of health support is established and can be maintained.

3. Stability Actions

a. Stability actions encompass various military missions, tasks, and activities conducted OCONUS in coordination with other instruments of national power to maintain or reestablish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. Stabilization actions are conducted across the conflict continuum from peace to war and can be conducted by military forces before, during, and after conflict.

For more information on stability activities, see JP 3-07, Stability.

(1) USG public health stabilization and reconstruction efforts are normally led at the country level by a United States Agency for International Development (USAID) mission with technical and program assistance from USAID regional and technical bureaus. Military medical forces will normally play a support role in health sector reconstruction operations, which are led by civilian organizations. Medical stability actions include supporting efforts to establish or restore medical support necessary to sustain the population until local civil services are restored; assessments of the civilian

medical and public health systems such as infrastructure, medical staff, training and education, MEDLOG, and public health programs; and promoting and enhancing the HN medical infrastructure. The desired military end state in the health sector is indigenous capacity to provide vital health services. Primary consideration must be given to supporting and supplementing existing medical infrastructure. The JFC must avoid operations that supplant existing public health and medical infrastructure or that subvert longer-term plans.

(2) The JFC and JFS should ensure medical personnel and capabilities are prepared to meet not only military, but also civilian, health requirements to address patient populations similar to those encountered during FHA operations or humanitarian and civic assistance activities (e.g., children, elderly, pregnant women). Care must be taken to ensure health care standards are appropriate for the local population and at a level that can be maintained by the existing HN medical infrastructure. Further, the JFC and JFS should ensure medical personnel and capabilities are prepared to perform with other government agencies, HN ministries, international organizations, and NGOs. Military-civilian teams that plan and conduct stability activities should include personnel with medical expertise, foreign language proficiency, and cultural understanding. For more information on HSS during FHA operations, see JP 3-29, *Foreign Humanitarian Assistance*.

(3) The JFS should coordinate with public affairs to ensure the release of information relating to potential public health risks to military units.

b. Considerations for medical planning efforts in support of stability actions include:

(1) Medical Planning Considerations

(a) Military personnel likely to serve in areas where stability actions are conducted may enter with very little, if any, natural immunity to endemic diseases. The degree of cultural and social interaction required to support the mission, as well as the sharing of food, quarters, and recreational facilities with local nationals, may increase the exposure of military personnel to diseases endemic to the HN. For the most part, stability actions may last for extended periods of time (months or years, not days or weeks), increasing the risk of contracting endemic disease. The enforcement of proper FHP measures is critical to minimize the risk to personnel.

(b) When planning for and conducting HSS as a part of stability actions, the JFC and JFS must consider the health threat posed by the regional and local factors, including climate, geography, fauna, flora, and the indigenous population to the MNF, USG employees, contractors, and, as appropriate, international organizations and NGOs, as well as its impact as a contributing factor to social, political, and economic stability. Stability actions are often conducted in areas where social services have been disrupted resulting in poor sanitation, inadequate food and water distribution, civil disturbances, and general civil unrest. Significant health threats are likely with the high prevalence of diseases that are endemic and/or can become epidemic, uncontrolled distribution of hazardous wastes and hazardous materials, industrial hazards and exposures, and environmental extremes.

(2) **MEDLOG Planning.** MEDLOG plays a significant role in the delivery of health care during stability actions and contingency operations. Prior to a deployment on noncombatant evacuation operations, the senior medical person accompanying the force determines special medical supply or equipment requirements, such as personal protective equipment such as bed nets, permethrin insecticide, or insect repellent containing DEET (chemical name N,N-diethyl-meta-toluamide). In disaster response operations, the management of Class VIII materiel is critical to the successful completion of the mission. In FHA operations, the MEDLOG planner must obtain and coordinate for the delivery of MEDLOG support. In military engagement, security cooperation, and deterrence activities, the JFC may utilize MEDLOG personnel to assist the HN and the USG lead federal agency in the assessment of military or civilian medical supply infrastructure and industry. Secondary and tertiary effects of direct assistance must be considered. Procurement of supplies, including pharmaceuticals, for use on the affected civilian population may be best obtained locally or regionally. Coordination with NGOs and international organizations may be essential.

(3) **FP.** Enemy forces may not recognize the protection afforded to medical personnel by the Geneva Conventions. Health support activities may be prime targets by these groups, especially if these activities are perceived as contributing to the international effort and/or the supporting US and/or HN objectives. MTFs may be vulnerable to theft and raids on Class VIII supplies by any number of entities for their own support or to support black market activities. The JFC and JFS should ensure adequate FP measures are appropriately planned and provided to protect medical personnel from enemy actions.

(4) **Legal Issues.** The SJA and joint legal office should be consulted during planning and execution and included in all discussions related to the management and provision of care to nonmilitary personnel, such as HN civilians, third-country nationals, and dislocated civilians. The SJA assists the command in legal and diplomatic concerns and categorizing and determining the proper treatment and rights afforded to civilians on the battlefield or in the OA. Coordination with the Department of State (DOS) and USAID, who are primarily responsible for these activities, is necessary. By DOD policy, detainees fall under a different category. The USA is the executive agent for the detainee program. Detainee care is covered by AR 190-8/Chief of Naval Operations Instruction (OPNAVINST) 3461.6/Air Force Joint Instruction (AFJI) 31-304/MCO 3461.1, *Enemy Prisoners of War, Retained Personnel, Civilian Internees and Other Detainees*. Policy oversight is provided by DODD 2310.01E, *DOD Detainee Program*, and DODI 2310.08E, *Medical Program Support for Detainee Operations*. The JFC and JFS must plan to address these obligations. Medical personnel will support JFC's objectives regarding these populations.

(a) Identifying the precise category to which an individual belongs is important in determining the rights they are entitled to by international law and in accordance with US law.

(b) As the lead USG department and agency for foreign assistance, DOS and USAID possess a wide variety of appropriations and authorizations to meet the humanitarian needs of dislocated civilians and other civilians. Generally, the International

Committee of the Red Cross is notified. According to US policy, the area population, including dislocated civilians, is the responsibility of the civil government of the country in which they are residing. Planning should anticipate a formal request to provide urgent care treatment.

(c) Detainees may receive urgent medical treatment in MTFs but are unlikely to remain in MTFs or be evacuated to definitive and rehabilitative care MTFs in the US. An alternative source of definitive treatment must be organized as part of the overall medical plan.

(d) National laws in the OA may affect a range of issues, including the provision and use of medical evidence for inquiries into deaths (potentially survivable and non-survivable) and severe injury. Consult the SJA to determine applicable national laws and regulations.

4. Civil-Military Operations

a. CMO are the commander's activities performed by designated civil affairs or other military forces that establish, maintain, influence, or exploit relationships between military forces and indigenous populations and institutions by directly supporting the achievement of objectives relating to the reestablishment or maintenance of stability within a region or HN.

b. Civil-military medicine is a discipline within operational medicine comprising public health, veterinary, and medical issues that involve a civil-military interface (foreign or domestic), including medical and veterinary DSCA activities, medical and veterinary elements of security cooperation activities, and MCMO.

(1) MCMO are health-related activities in support of a JFC that establish, enhance, maintain, or influence relations between the joint or MNF and HN, multinational governmental authorities and NGOs, and the civilian populace to facilitate military operations, achieve US operational objectives, and positively impact the health sector. Veterinary MCMO are agricultural, veterinary public health, and animal health activities conducted for the same reasons as MCMO and also positively impact health and economic sectors. MCMO will normally be performed by joint or multinational medical personnel and civil affairs forces, in coordination with other USG or multinational agencies. The subsets of MCMO include peacetime medical elements of security cooperation activities; FHA; disaster response and disease outbreak response in a permissive environment; pre-conflict, health-related, civil-military activities; and health-related, civil-military activities during major campaigns and operations and post-conflict stabilization efforts. Medical and veterinary personnel may be tasked to conduct or support MCMO in activities that build and strengthen HN capacity in the public health sector or agricultural sectors. Close coordination between the JFS and civil affairs elements is essential to the success of MCMO. MCMO must always be coordinated closely with the USAID Office of the United States Foreign Disaster Assistance health advisors, other USG departments and agencies, HN medical authorities, and NGOs and international organizations.

(a) General guidance for CMO is provided in JP 3-57, *Civil-Military Operations*. MCMO actions may be in addition to activities covered under Title 10, United States Code (USC), Section 401. These operations are often conducted in areas where social services have been disrupted, resulting in poor sanitation, inadequate and unsafe food and water (as well as distribution problems), civil disturbances and general civil unrest, diseases, uncontrolled distribution of hazardous wastes and hazardous materials, and environmental extremes. In this environment, there are several health services activities that may be appropriate for MCMO, including public health activities, such as PVNTMED, personal sanitation and hygiene, safe food and water preparation and handling, infant and child care, preventive dental hygiene, immunizations of humans and animals, veterinary care, and behavioral health surveillance and support; development of logistic programs; preventive health measures for local/intrinsic industry; continuing medical education programs and medical intelligence and threat analysis; and assistance in upgrading and devising methods for supplying and sustaining existing HN medical infrastructure and facilities.

(b) The focus of health service initiatives during MCMO is to improve HN capacity to provide public health and medical services to its population, thereby enhancing legitimacy of the HN, enhancing FP, and accomplishing the JFC's objectives. Health service during MCMO contributes to the initiation and establishment of long-term developmental programs that are sustainable by the HN.

(2) Medical and veterinary elements of security cooperation activities encompass military health-related peacetime activities with other nations that are projected to shape the security environment by building the capability and interoperability of partner nations. Programs include military-to-military exercises and operations that establish, shape, maintain, and refine relations with other nations and capacity-building projects in the military health sector that transfer technical knowledge, skills, and other resources to individuals and institutions so they acquire the long-term ability to establish and deliver competent public services.

(3) In assigned MCMO missions, JFSs and joint medical planners must consider, in consultation with counterparts in civilian USG departments and agencies, the types of medical resources required to conduct such operations. Medical personnel must coordinate closely with civil affairs elements and information operations to ensure unity of effort. Every effort must also be made to ensure proper coordination with the USG department or agency that may have the lead for all or part of a given operation. Coordination with other agencies in the JOA may also be necessary. These agencies may include multinational partners, HN agencies, NGOs, international organizations, and other groups, to include religious organizations.

(a) The JFC and JFS should not assume the lead for projects in the HN health sector (except during an occupation). The HN is sovereign and has ultimate ownership of all projects. The JFC and JFS should ensure medical planning for MCMO missions include cultural awareness and should take measures to guarantee that these operations support and not detract from the legitimate authority of an HN government.

(b) Furthermore, the JFC and JFS should consider the unique venue for MCMO missions is contingent on several factors, which include the level of hostilities, rules of engagement, political climate, economic status, cultural influences and biases, religious preferences and cultural standards, and other socioeconomic considerations. Accordingly, the JFC and JFS should ensure, that during MCMO missions, the medical staff includes an international health officer or SME with regional medical expertise and linguistic proficiency that can foster partnerships with military, civilian, multinational and USG personnel, international organizations and NGOs; provide technical expertise; and assistance in identifying and assessing foreign national public and private health systems, sanitation systems, health services, personnel, resources, and facilities. Careful attention must be paid to avoid the appearance of preferential treatment of individual ethnic groups during MCMO. Efforts should be made to support an equitable HN health system and, when possible, augment existing HN capabilities to avoid duplication of efforts and avoid potential devaluation of HN services (i.e., providing free medications that eliminate the local pharmacy industry).

(4) The JFC and JFS should also organize medical elements based on the anticipated needs of both the joint force and the civilian populace, within the limits of the military mission and applicable laws and regulations. Medical representatives should seek to participate in all relevant civilian and military coordination mechanisms. Medical personnel should also interact with any existing coordination centers, such as the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) on-scene operational coordination center. To adequately anticipate noncombatant needs, JFSs and joint medical planners must conduct a health service assessment that examines the factors listed in Figure V-1. Standards of care should be agreed upon with the HN and the lead USG department or agency during mission planning. Normally, HN standards or international consensus minimum standards (such as the Sphere Project, *Humanitarian Charter and Minimum Standards in Disaster Response and the International Health Regulation*) should be used. The JFC, JFS, and civil affairs should monitor and assess MCMO throughout planning and execution and should utilize both measures of performance and measures of effectiveness. Planners should anticipate unintended consequences and should correct for them during and after execution. The JFC and JFS should be cognizant that in MCMO, the provision of health and veterinary support and education play a direct role in countering both medical and general threats and provide a noncontroversial and cost-effective means of utilizing the military element to support US national interest in another country by:

(a) Assisting with the development and refinement of the HN medical infrastructure.

(b) Providing, assisting, and sustaining the basic necessities of life for the general population through development and/or enhancement of the HN civilian medical programs.

(c) Providing assistance in establishing, repairing, or improving basic health and sanitation services, especially if these have been degraded by military operations.

Health Service Assessment Factors

- Population demographics
- Sanitation and personal hygiene
- Endemic and epidemic disease surveillance
- Available medical intelligence
- Availability and accessibility of health care delivery systems and processes
- Cultural factors related to medical support
- Primary care capabilities
- General health of the population
- Baseline health indicators
- Political impact of providing care to the local population
- Anticipated type, number, and capabilities of relief organizations
- Secondary and tertiary hospital facilities and supporting transportation
- Local facilities for production of medical equipment and supplies
- Education and training levels of medical professionals and technicians
- Ongoing international and local civilian assistance efforts
- Pandemic response capability
- Incident response capability
- Host nation existing military and civilian health sector plans and goals

Figure V-1. Health Service Assessment Factors

c. Significant health benefits can be derived from nonmedical interventions, such as improving the water supply, electrical grid, ensuring security of MTFs, and waste management and disposal. JFSs and joint medical planners should coordinate with other staff sections (such as the J-4 logistics and engineers, J-3 FP operations), NGOs, international organizations, and other USG departments and agencies to accomplish this.

d. Financial issues for consideration during stabilization efforts include:

(1) Maintenance costs, particularly the provision of medical materiel, resupply, and PM.

(2) Medical supplies approved for donation, eligibility determination, credentialing, malpractice suits, and reimbursement procedures for health support and supplies.

5. Defense Support of Civil Authorities

a. DOD may provide health and veterinary services in response to a domestic incident in the US, its territories, and commonwealths in support of a primary federal agency. DOD support to this response will be initiated through a formal request for support or mission assignment process or provided as directed by the President or Secretary of Defense (SecDef). Requests for health services during disasters in the US will normally be initiated by local and state health officials through the state coordinating officer to the federal coordinating officer. The Department of Health and Human Services (DHHS) will normally coordinate and/or provide the preponderance of the health services federal response effort through the Emergency Support Function #8, Public Health and Medical Services, and the NDMS. Veterinary support will normally be coordinated through lead federal agencies and/or provided through the Emergency Support Functions #6, Mass Care, Emergency Assistance, Temporary Housing, and Human Services; #8; #9, Search and Rescue; #10, Oil and Hazardous Materials Response; and/or #11, Agriculture and Natural Resources.

b. As directed or authorized, DOD health services, to include veterinary support, may be provided under different situations:

(1) **Stafford Act.** Requests for DOD health services assistance may be generated by the state coordinating officer, federal coordinating officer, and defense coordinating officer through submission of a Federal Emergency Management Agency (FEMA) RFA or mission assignment. Requests typically flow from FEMA to the Executive Secretary of DOD and are processed forward to SecDef for approval. If a joint field office (JFO) is established, RFAs flow through the JFO to the CCDR with DSCA responsibilities for approval. If the JFO is not established, RFAs would flow from FEMA to the CCDR with DSCA authority for approval. For RFAs that are beyond the CCDR's authority, the Joint Staff processes requests for SecDef approval.

(2) **Economy Act of 1932.** Any federal agency (such as DHHS) may request DOD health service assistance directly under the authority of the Economy Act of 1932. RFAs will be processed in accordance with DODD 3025.18, *Defense Support of Civil Authorities (DSCA)*, and the National Response Framework (NRF). Such assistance is provided on a reimbursable basis.

(3) **Immediate Response Authority.** DOD policy on immediate response addresses the authority delegated to military commanders to provide immediate assistance at the request of a competent civil authority to save lives, prevent human suffering, or mitigate great property damage in the event of imminently serious conditions resulting from any civil emergency or attack and may or may not be associated with a declared or undeclared disaster.

c. When employed, DOD health services assets deploy within the AOR for the purpose of protecting the force from disease and environmental threats or man-made disasters and assisting civil authorities by rendering responsive casualty care management through the continuity of care. DOD medical capabilities will remain under the C2 of

supporting CCMDs, the Services, or defense agencies and provide support to the supported organization (e.g., detainee holding area, USTRANSCOM, and Service MTFs). Select medical units identified in a SecDef-approved deployment order may be allocated to the supported CCDR and subsequently commanded by a component command or dual status commander-led JTF (e.g., expeditionary medical support, medical company [area support]).

d. Unique to DSCA operations within the homeland is the opportunity for the US Armed Forces and the National Guard (NG) under the command of a governor to be employed simultaneously in support of civil authorities in the US for the same purpose. Under these circumstances and without limiting the authority of the President, SecDef, or a governor to prescribe C2 arrangements for forces under the command, establishment of a dual-status commander should be used and is the customary C2 arrangement per Title 32, USC, Section 317. DOD health services capabilities should be able to operate in a joint and interagency environment, within the NRF, providing internal health services and FHP to the JFC or, when tasked, to an incident commander.

For more information on domestic support, see JP 3-28, Defense Support of Civil Authorities. For more information on immediate response authority, see DODD 3025.18, Defense Support of Civil Authorities (DSCA).

6. Multinational Operations

a. Multinational support operations are complicated by a number of characteristics that fundamentally affect the provision of health services.

- (1) Unique nature of every individual operation.
- (2) Geographic, topographic, and climatic variations of the OA.
- (3) Numbers of individual nations involved in each operation.
- (4) Variations in national standards of HSS and equipment.
- (5) Language and communications differences.
- (6) Political complexity and dynamic nature of each operational scenario.
- (7) Mission of medical support forces.

(8) Differences in individual national objectives and/or restrictions for participation in operations and integration of the overall mission.

(9) A medical staff may face numerous challenges affecting the health of multinational personnel deployed on operations. Therefore, multinational HSS operations require clearly defined guidance. Common HSS challenges in multinational operations are shown in Figure V-2.

Health Service Support Challenges in Multinational Operations

- Difference in doctrine
- Differing stockage levels
- Logistics mobility
- Interoperability concerns
- Competition between participants for common support
- Resource limitations

Figure V-2. Health Service Support Challenges in Multinational Operations

(10) Medical plans must be tailored to each operation and meet the demands of geography, individual national needs, language, and communication difficulties. Plans must be capable of rapid implementation and be flexible enough to manage rapidly changing operational demands.

(11) Every deployed MNF normally has a surgeon and/or chief medical officer who has direct access to the multinational force commander (MNFC).

(12) Each deployed national contingent that has medical personnel should have a single designated individual who has the clinical responsibility for all national health services matters.

b. Health Services Considerations during Multinational Operations

(1) Contributing nations bear ultimate responsibility for ensuring the provision of HSS to their forces allocated to multinational operations. Discharge of responsibility may occur in a number of ways, including agreements with other nations or the appropriate multinational planning staffs and MNFCs.

(2) **International Convention for the Treatment of the Sick and Wounded.** HSS for operations will comply with provisions of the Geneva Conventions. Persons entitled under the terms of the Geneva Conventions shall, without discrimination, receive medical treatment on the basis of their clinical needs and the availability of medical resources. Treatment will be provided free of charge up to the point of stabilization.

(3) **Standards of Health Services.** Operational health services to MNFs must meet standards that are acceptable to all participating nations. Care provided to US forces participating in a multinational operation must meet US standards.

(4) **Estimation of Medical Risk.** Estimation of medical risk and the associated casualty rates is the responsibility of the individual nation with health services advice of the multinational operational staffs.

(5) **Multinational Health Services Capabilities.** In multinational operations, medical resources are typically distributed into four roles, with capability increasing from Role 1 to Role 4. The minimum capabilities of each role are intrinsic to each higher role. As an example, a Role 3 facility has the ability to carry out Role 1 and Role 2 functions. An MNF cannot be reduced below the minimum capabilities of its given numeric descriptor. Therefore, a medical asset cannot be described as a role “minus.” Under battle conditions, the flow of casualties generally follows the pattern from Role 1 to Role 3 MTFs with further MEDEVAC to Role 4 hospitals taking place as appropriate.

(6) Multinational health services capabilities are normally provided appropriately to a particular operation. Policy for national contributions will generally be as follows:

- (a) Role 1—National responsibility.
- (b) Role 2—National and/or lead nation. For the US, Role 2 is a national responsibility.
- (c) Role 3—National and/or lead nation. For the US, Role 3 is a national responsibility.
- (d) Role 4—National and/or force provided (contracted). For the US, Role 4 is a national responsibility.

c. **Multinational Planning Considerations**

(1) Contributing nations retain ultimate accountability for the health of their forces, but the MNFC will normally share the responsibility for or has an interest in the health of assigned forces. To meet this requirement, the MNFC needs appropriate medical staff available at the early stages of planning HSS for an operation.

(2) National medical systems should be retained as an organic force structure to the contributing nation’s forces as much as possible. However, medical planners must seek to take advantage of economies of scale, which may be achieved from multinational concepts such as lead nation responsibilities, role specialization, and mutual assistance.

(3) The HNS resources available in the OA are the key to determining the size and capability of the medical organization that the MNF must establish. The more HNS available for use, the less that has to be found from contributing nations. Overall, a mixture of medical intelligence analysis and on-the-ground reconnaissance assesses HNS capabilities. A key issue will be the standards of HSS available, compared to the MNF and national contingent criteria.

(4) Health services requirements are to be determined by the appropriate MNFC in consultation with contributing nations and the HSS planning staff. Health services resources will be specified as those necessary to prevent and control DNBI and to collect, evacuate, and treat casualties.

(5) Maximum effort must be made to tailor health services mission requirements. Medical planners must find a balance of capabilities. An example may be to organize a single nation to provide a particular function, such as lead agent, for all contingents.

(6) From the outset of an operation, policy must be established regarding the entitlement of non-US military and/or nonmilitary staffs and other authorized personnel in-theater and for all medical treatment other than emergency measures.

(7) Establishing the PM policy is a command decision of each nation. Medical and logistic staffs will advise. The CCMD surgeon will promulgate recommendations and will monitor the established PM policy.

(8) A comprehensive and effective communications system and intelligence plan is fundamental to multinational HSS planning considerations. It begins prior to deployment, with the establishment of a competent medical planning team at the MNF HQ. It is also crucially dependent upon the following:

(a) Clearly established lines of accountability and control agreed to by all participating contingents.

(b) Liaison at every level, including HNS and any NGOs in theater.

(9) The expertise to manage PVNTMED responsibilities must be made available at all levels. The requirement will be for PVNTMED units, as well as individual experts. The provision of this capability lends itself well to a lead nation approach. The shape and size of the theater PVNTMED capability will be dictated primarily by the following:

(a) The size of the MNF to be supported, its dispersal, and the theater topography.

(b) The capability of national contingents to implement preventive measures independently.

(c) The responsibility to ensure personnel are prepared and appropriately trained in field PVNTMED measures before deployment to an operation. This must include the necessary pretreatments, chemoprophylaxis, barrier creams, and immunizations.

1. Recommendations for pretreatment, immunization, and chemoprophylaxis for the MNF will be made by the chief medical officer during the initial planning stage, but it remains the responsibility of each nation ultimately to ensure its personnel are adequately protected.

2. An MNF policy must be issued as early as possible regarding the prophylaxis measures that must be taken by all individuals deploying into the OA. Instructions must cover measures to be taken before deployment, while in-theater, and during post-deployment.

(d) It is a national responsibility to maintain high standards for the provision of food and water, as well as field sanitation standards.

1. The JFS and/or chief medical officer will inspect and audit national measures to ensure acceptable standards are maintained in these areas.

2. Minimum standards acceptable to all participating nations must be maintained if the MTFs are to be used to support personnel outside the respective national force.

(10) The chief medical officer's force hygiene officer is responsible for coordinating PVNTMED services such as regional spraying or vector control and advising on placing local population centers and/or facilities off limits.

(11) Education on prevention of diseases is a national responsibility.

d. PM in Multinational Operations. The theater PM policy, known in some nations as a holding policy, is the key to balancing the treatment capability available at each level of care against the required medical PM assets. The provision of resources will be coordinated by the MNF HSS planning staff but will comprise assets from a number of sources, including HN support. Theater medical PM requires careful planning and an acquisition and cross-servicing agreement.

(1) PM from POI to Role 1—National responsibility.

(2) PM from Role 1 to Role 2/3—National, force, and lead nation.

(3) PM to Role 4—National, force, and lead nation.

e. Personnel in Multinational Operations

(1) National contingents will be expeditiously notified through designated national liaison POCs of individuals that become critically injured or ill or die.

(2) Medical obligations under international law will be particularly crucial to the management of personnel such as detainees and dislocated civilians. Medical plans must detail the degree of care to be offered to these groups and how continuity of care is to be provided, when needed.

(3) Only urgent medical treatment, within the capability of the deployed multinational medical force and not otherwise available will be offered to dislocated civilians in conjunction with HN or United Nations Office of the High Commissioner for Refugees.

f. MEDLOG in Multinational Operations. The holding, issuing, and accounting for all medical, dental, and veterinary supplies (equipment, pharmaceutical, and consumables) to an MNF is a major undertaking. It is a joint responsibility of the chief medical officer and the MEDLOG officer, whose offices must cooperate to create a system

with the necessary reliability, flexibility, and speed. The supply of blood and blood products to multinational operations is a complex and sensitive issue, stemming from the wide disparity of standards between nations and the legal constraints incumbent upon some of them. Consequently, the supply of blood and blood products is considered as a separate function within health service logistics. The availability of blood and blood products is essential for management of the seriously injured and sick. For the majority of multinational operations, this will require its provision at theater hospitals and at FRC capabilities if providing resuscitative surgical care.

(1) For multinational operations, the general principle is that national contingents should be responsible for the supply of blood to their own injured and sick. In reality, this is not always a practical proposition. The requirement must, therefore, be that all blood and blood products used in theater comply with internationally agreed-upon standards. Where a particular nation cannot accept this as policy, they must organize their own system of supply at national expense.

(2) The most cost-effective and rational approach is for the force medical planning staffs to coordinate supplies through the lead nation, using supplies from a nation whose blood and blood products are acceptable to all contingents.

(3) Consider laws and regulations of each country applicable to their personnel.

g. Legal Issues in Multinational Operations

(1) Both international and US laws, particularly concerning the medical management of dislocated civilians, detainees, and non-entitled civilians, must be considered in multinational operations. The JFS should be particularly sensitized to the limits imposed by Title 10, USC, which outlines under what conditions non-DOD beneficiaries can receive medical treatment from US medical forces.

(2) Any pathological materials and/or tissues taken in the course of conducting an autopsy or preparing a death certificate must be turned over to the decedent's national representative. Human remains are returned through designated mortuary affairs personnel. In addition to the legal issues, social and cultural customs with regard to the disposition of deceased personnel should be respected to the extent possible.

7. Detainee Operations

a. During the conduct of joint and multinational operations, the JFS and component medical forces must be prepared to provide health support to a wide array of individuals that may be detained by US forces.

b. DOD policy is that all persons detained by the Armed Forces of the United States during the course of military operations shall be treated humanely from the moment they are captured and for the duration of their detention by US forces. The inhumane treatment of detainees is prohibited by the Uniform Code of Military Justice, domestic and customary international law, and DOD policy.

c. DOD policy is that all DOD personnel (military and civilian personnel) and CAAF who obtain information about a reportable incident (such as abuse) as set forth in DODD 2311.01E, *DOD Law of War Program*, and DODI 2310.08E, *Medical Program Support for Detainee Operations*, will immediately report the incident through their chain of command or supervision. Reports may also be made through other channels, such as the military police, a judge advocate, or an inspector general, who will then forward a report through the appropriate chain of command.

d. The medical program support for detainee operations shall comply with the principles, spirit, and intent of the law of war and the Geneva Conventions. To the extent practicable, treatment of detainees should be guided by professional judgments and standards similar to those that would be applied to personnel of the Armed Forces of the United States. Medical program support for detainee operations should:

(1) Provide medical care that focuses upon emergency surgery and essential postoperative management to prevent probable death or loss of limb or body functions; essential care; and sanitary and PVNTMED measures, to include isolation areas, as necessary to prevent epidemics, routine sick calls, and specialized medical care and treatment as appropriate.

(2) Ensure the provision of an initial detainee medical screening that includes an examination and documentation of the detainee's physical and medical condition upon initiation of detention and a monthly medical screening to monitor the general state of health, nutrition, and cleanliness. Ensure the detainee repatriation and release procedures include a medical screening, instructions for the use of prescribed medications, and a supply of medications, and all appropriate medical and dental records accompany the detainee.

(3) Ensure the appropriate health care providers are available to address the health care needs of female and juvenile detainees when operationally allowable. Copies of the medical record should accompany the detainee whenever they are transferred to another facility or repatriated.

(4) Establish accurate and complete medical records on all detainees. Medical records must be established and maintained for all detainee medical encounters, whether in MTFs or through medical personnel in the field.

(5) Ensure detainees are not utilized as human subjects for medical/scientific experimentation.

(6) Ensure health care professionals charged with any form of assistance with the interrogation process, to include interpretation of medical records, are not involved in any aspect of detainee health care. Health care providers charged with the care of detainees should not be actively involved in the interrogation process, advise interrogators how to conduct interrogations, or interpret individual medical records/medical data for the purposes of interrogation or intelligence gathering.

(7) Ensure the psychologist assigned as the behavioral science consultant who assists interrogators and the detention staff with interrogations and the management of detainees is not assigned a mission of patient care. Personnel that comprise the behavioral science consultation team are not assigned to MTFs and employ their professional training not in a provider-patient relationship. Therefore, behavioral science consultation team members should not consult with the detainee medical treatment team on issues of detainee medical care.

(8) Advise the detention facility commander on the caloric content and dietary suitability of detainee rations. Account will also be taken of the habitual diet and religious/cultural requirements of the detainees.

For more information, see JP 3-63, Detainee Operations.

8. Operations in a Chemical, Biological, Radiological, and Nuclear Environment

a. The JFC, at all levels, is faced with the possibility that any operation may have to be conducted in a CBRN environment. The term “CBRN environment” refers to any OE that includes CBRN threats and hazards and their potential resulting effects. The threat of having to conduct operations in a CBRN environment poses unique challenges to medical forces worldwide.

b. The component command surgeons, working with the appointed JFS, guide and integrate all medical capabilities available to the command to support mission accomplishment in a CBRN environment. In planning for HSS in potential CBRN environments, preparations should include prophylaxis, to include pre-exposure immunizations, and sufficient numbers of pretreatments and therapeutic medical products appropriately positioned for use. Plans must ensure the logistics chain is in place for expedient processing of CBRN specimens and samples at the closest appropriate laboratory. In addition, other applicable medical products such as ventilators and medical barrier materials accounting for anticipated interventions should be included in the planning along with sufficient bed types and capacity according to the expected number of patients and types and severity of conditions.

c. CBRN contamination mitigation may require additional specialized military forces, and these forces may need to coordinate and cooperate with agencies, organizations, and individuals outside the military chain of command or direct control. In many situations, the JFC may be in a supporting role to civil authorities or to HN authorities. Regardless of the role, the JFC and joint force elements must be prepared for CBRN contamination at any point, including the transition from a noncombat to combat environment. In the US, there may be a requirement to augment civilian medical capabilities in the handling of casualties resulting from CBRN incidents. The ability of domestic and HN MTFs to handle mass casualties from CBRN effects should be assessed and factored into US joint and multinational planning. Close coordination with health support and other public health providers in the theater is a vital means of detecting chemical or biological attacks, since casualties from such an attack may appear initially in the civilian medical system. A mass casualty situation may result when CBRN hazards are employed. Additional HSS

personnel and equipment must be provided quickly if the level of care is to be maintained. Treatment at far forward MTFs is limited to lifesaving or limb-saving care. Casualties that can survive evacuation to the next role of care are not treated at the forward facility. This provides time for treating those casualties that cannot survive immediate evacuation.

d. In planning CBRN defensive measures, the JFC should make good use of the numerous publications each Service produces and consider potential defensive measures. These defensive measures should include targeting key areas for surveillance, employing personal protective measures to help prevent exposure, and instituting detection strategies.

e. PVNTMED specialists play an important role in assessing the health threat posed by potential and actual CBRN incidents. They can identify potential health threats and determine when to use prophylaxis (e.g., immunizations) and other prevention and control measures. Following any CBRN incident, special emphasis should be placed upon food and water sanitation, hygiene, and common prevention measures that reduce the spread of disease. Rigid enforcement of water sanitation and personal hygiene measures may reduce the incident's effects.

f. Since symptoms caused by biological agents may not become discriminating for several days, personnel may not become acutely aware of an attack until well after an attack has occurred. The first indications of a biological attack may be the appearance of similar vague or nonspecific symptoms in an abnormally large percentage of the force. Until the medical staff recognize these co-occurring vague symptoms as a definite trend, a biological attack may not be suspected. Effective biosurveillance is a key tool to early detection of a CBRN attack. Once a CBRN incident is suspected or observed, trained DOD medical and veterinary personnel in clinical, veterinary, or hospital settings collect human or animal clinical specimens, as appropriate, utilizing universal safety precautions. Concurrently, PVNTMED personnel, medical laboratory and field laboratory personnel, CBRN specialists, damage control personnel, veterinary personnel, public health officers, technical intelligence collection teams, or bioenvironmental engineering personnel collect environmental and food samples. These specimens and samples are then routed as quickly as possible through the different levels of CBRN identification. The levels of analysis and identification of the specimens and sample provide the commander and command surgeon critical information to support timely decisions regarding avoidance, protection, decontamination measures, and medical prophylaxis and treatment for affected units and personnel if needed. The results can also support preliminary attribution (prove or disprove) to implicate or support trace analytics for the source of the identified CBRN material.

g. Even if the cause of the illness turns out not to be single or multiple CBRN agents, the earlier detection of the hazard in the environment or diagnosis of resultant medical conditions in casualties helps limit complications and further spread of contamination or transmission of infectious agents. For this reason, expedited shipment and processing of environmental samples and clinical specimens within the AOR and, if needed, outside of it, is crucial to effective treatment and medical recovery of force personnel. JFS in cooperation with the component command surgeons should therefore maintain a unified tracking system within their OAs that allows medical personnel to quickly identify the

closest in-theater laboratory with appropriate analytical capabilities for routing specimens and samples.

h. The use of WMD can create large numbers of casualties who have been exposed to CBRN hazards. Whether the exposure was deliberate or accidental does not alter the basic principles of treatment. Roles 2-4 of medical care should, however, be prepared to respond rapidly as casualty workload will likely peak quickly with little advance warning. As some biological agents are transmissible between humans, they may cause problems for some time after any initial attack.

i. One of the first considerations after a CBRN incident is to determine to what extent evacuation assets will be committed to contaminated areas. Patients with known or suspected contamination with CBRN hazards may need to be treated in-place and not be moved within the USAF AE system. Movement of chemical, biological, and radiological casualties can spread contamination to uncontaminated areas. If movement is essential to preserve life or meet critical operational objectives, according to the dictates of the situation or as directed by appropriate authorities, decontamination is performed to the extent possible and all efforts made to prevent the spread of contamination during movement. All contaminated casualties are decontaminated at a pre-established thorough decontamination or mass casualty decontamination site, as the situation permits. Chemically contaminated casualties must be decontaminated at the patient decontamination site before they are admitted into a MTF as early as possible with few exceptions. Depending on the chemical agent and other factors, admission of contaminated casualties into a MTF may contaminate the facility, potentially reducing treatment capabilities in the facility. Concurrence for medical movement of contaminated patients aboard USAF fixed-wing assets is granted by referring and receiving GCC; Commander, USTRANSCOM; and SecDef in consultation with medical authorities.

j. Decontamination of patients serves three purposes: reduces the amount of contaminant that is absorbed by the patient, prevents the potential spread of contamination, and protects medical assets (including medical personnel and equipment). Decontamination and triage of CBRN casualties will obviously vary with the situation and the contaminant. Therefore, medical units must have a basic CBRN mass casualty plan that can be modified to meet varying situations. Each medical facility must be able to establish its own patient decontamination site. As in any mass casualty situation, arriving casualties should be examined at a triage point and directed to the proper area. An additional triage decision in CBRN mass casualty situations is whether patients have medical conditions that take priority over decontamination. Ninety percent of all decontamination can be performed without interfering with medical treatment simply by removing a casualty's outer clothing and shoes.

k. Radiologically contaminated casualties should be decontaminated before admission to a MTF; however, radiological contamination should not interfere with immediate lifesaving treatment or the best possible medical care. Although casualties may have received substantial radiation exposure, this exposure alone does not result in the individual being contaminated. Normally, contaminated casualties do not pose a short-term hazard to the medical staff; rather, the contamination is a hazard to the casualty's

health. Radioactive decontamination is simple: removing all outer clothing and a brief washing or brushing of exposed skin will reduce 90 percent of contamination; vigorous bathing or showering is unnecessary.

1. Even if a CBRN incident produces few fatalities, it may likely result in numerous casualties who require extensive treatment and a large number of patients who are well but will report for medical treatment anyway. Additionally, medical personnel may need to work in mission-oriented protective posture gear, which will reduce their effectiveness. Decontamination efforts may reduce staff available to perform medical functions. As a result, the unit will be considerably less effective.

For more information, see JP 3-11, Operations in Chemical, Biological, Radiological, and Nuclear Environments, and ATP 4-02.7/MCRP 4-11.1F/NTTP 4-02.7/AFTTP 3-42.3, Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment.

9. Special Operations Forces

a. Organic Medical Capability

(1) **Medical Planning.** The theater special operations command component commander coordinates conventional health service packages to augment the SOF organic medical capability using the organic surgeon section.

(2) **SOF HSS.** SOF HSS includes limited quantities of medical, critical care management, CASEVAC, patient holding, and primary care capabilities. The special operations-advanced tactical practitioner (SO-ATP) is a highly trained special operations medic who delivers a selected level of medical care normally reserved for health care providers. Through advanced training and certification processes, the SO-ATP independently manages complex traumatic and medical problems. The SO-ATP is expected to provide long-term trauma medical care, routine health care, and PVNTMED for troops in austere conditions where no other advanced, medical provider is available. Through tactical medical and emergency protocols, the SO-ATP maintains advanced knowledge in common orthopedic problems, respiratory illnesses, gastrointestinal disorders, dermatological conditions, and environmental hazard illnesses. An SO-ATP may provide routine garrison health care by assisting unit medical providers with daily sick call at unit level or conduct scheduled clinical rotations to sustain clinical health care skills. The SO-ATP employs a wide-spectrum of pharmacological capabilities for pain management and antibiotics to manage combat trauma and medical emergencies normally managed by medical officers. Specialized medical equipment and supplies are employed by the SO-ATP dependent upon evacuation modes, distances, and capabilities. The SO-ATP is expected to manage and package a multisystem trauma casualty for evacuation directly to a surgical capability. The scope of practice for an SO-ATP includes:

(a) Executing paramedic-level skills for trauma and medical emergency care, including invasive and pharmacological interventions, to reduce morbidity and mortality associated with acute prehospital traumatic and medical emergencies.

- (b) Conducting TCCC at the combat paramedic level and execute tactical trauma protocols.
- (c) Training and directing routine and emergency medical care.
- (d) Establishing combat casualty collection points.
- (e) Conducting initial surgical and medical patient assessment and management.
- (f) Conducting triage and providing advanced trauma management.
- (g) Preparing patients for evacuation.

b. SOF Operational Medicine

(1) All SOF medics receive advanced tactical paramedic training and certification. In addition, some SOF personnel are state certified or national certified emergency medical technicians or paramedics. SO-ATP are capable of providing advanced TCCC. Additionally, SOF medical elements are comprised of advanced medics with Service independent duty designations. These enlisted medics are trained as independent, interoperable combat medics with the Service-/mission-unique medical capabilities (for instance, sea-based, small unit operations, veterinary, or aviation medicine). SOF medical and medical service personnel from all organizational levels can provide augmentation, advice, and synchronization for HSS operations in support of SOF at forward operating bases (FOBs), depending on the mission requirements and availability of conventional medical support. SOF medical capabilities include advanced trauma management, sick call, logistic support, blood, laboratory, patient hold, and transportation capabilities to support special operations bed-down locations.

(2) **USA SOF.** Health services for Army SOF is usually accomplished by unit-level organic health services resources, special operations support battalion assets, and the theater HSS capability. Army civil affairs units have a highly limited, organic health services capability. Civil affairs medical sergeants provide a level of expertise between a special operations combat medic (SOCM) and a special forces medical sergeant, but are limited in number and typically assigned to the active duty brigades. USA reserve civil affairs units (battalion and higher) have medical personnel assigned to the public health functional specialty teams. These personnel are organized to primarily provide advice and expertise to the supported mission's CMO, not as health services providers to the force. Medically trained personnel in civil affairs provide assistance in identifying gaps and capabilities and assessing foreign public and private health systems, to include health and sanitation systems, agencies, personnel, and facilities. Civil affairs personnel may work with NGOs and international organizations to rehabilitate or develop functional health care systems within the OA.

(3) **USAF SOF.** Health services for Air Force SOF is usually accomplished by unit-level organic health services resources, including the SOF medical element. Additionally, the special operations surgical teams provided by Air Force Special

Operations Command comprises a fraction of the total required capability to meet SOF forward resuscitative surgical requirements for each theater special operations commands' mission to execute their respective regional plans. USAF SOF medics uniquely provide aerospace medicine and CASEVAC support from forward areas to the SOF air-ground interface point. Pararescue jumpers (PJs)/specialists, because of their combat skills and training, are the most appropriate resource to render trauma medical support in threat environments and increased risk scenarios. PJs are specifically trained for combat surface operations either independently or in conjunction with other SOF teams. USAF PJs are specifically organized, trained, and equipped to conduct the personnel recovery mission. PJs provide SOF and combat air forces with an air-to-ground personnel recovery capability and the ability for infiltration and exfiltration using USAF (primary), USA, USN, or partner nation fixed-wing, tiltrotor, and vertical lift aviation resources. USAF SOF medical elements and USA Special Operations Aviation Regiment medics provide SOF with a CASEVAC capability aboard USA special operations aviation assets. SOF medical capabilities include advanced trauma management, sick call, logistic support, blood, laboratory, patient hold, and transportation capabilities to support special operations bed-down locations. All lab testing done by SOF medical personnel must be done in accordance with DOD Manual 6440.02, *Clinical Laboratory Improvement Program*.

(4) Navy Special Operations Forces (NAVSO) Operational Medicine. Medical assets assigned to Naval Special Warfare Command (NAVSPECWARCOM) have first responder capabilities for basic clinical care, emergency medicine, trauma care, and other diverse types of casualties. NAVSPECWARCOM has no organic FRC, AE, MEDEVAC, PVNTMED, laboratory, veterinary, or dental capabilities. Deployed NAVSO rely on other conventional USA, USN, USAF, and sister SOF HSS for nonorganic medical capabilities. Medical personnel assigned to NAVSPECWARCOM support units include undersea medical officers, physician assistants, independent duty hospital corpsmen, diving medical technicians, hospital corpsmen, non-physician medical providers, and SOCM, providing first response capabilities.

(5) USMC SOF Operational Medicine. Health services for Marine Forces Special Operations Command (MARFORSOC) is accomplished by unit-level, organic HSS resources; Marine Raider battalion assets; and Marine Raider Group resources. Marine special operations companies possess a limited number of USN medical personnel with enhanced trauma skills, including advanced tactical paramedics, PVNTMED, and limited veterinary and dental capabilities; they are also capable of providing basic Role 1 care. All Marine Raider battalion elements are comprised of Fleet Marine Force (FMF) reconnaissance independent duty corpsman or FMF reconnaissance corpsman. Reconnaissance independent duty corpsmen are qualified to practice independent of a physician in austere environments and provide advanced medical and trauma management to casualties. MARFORSOC has no organic FRC. USN medical personnel assigned to MARFORSOC support units include undersea medical officers, board certified physicians, physician assistants, non-physician medical provider, surface force independent duty corpsman, diving medical technicians, and FMF hospital corpsmen.

c. SOF HSS Planning

(1) The goal of special operations HSS planning is twofold: first, provide integrated, augmented conventional support into the concept of the special operations mission without compromising the objectives; second, articulate the unique challenges of the operation that will complicate the delivery of health services by conventional units (see Figure V-3). The SOF HSS must ensure the conventional medical planner understands these aspects. The conventional medical planner must translate SOF-unique requirements into the conventional health services infrastructure best suited to support the mission.

(2) Unique challenges of health services to SOF must be incorporated into health services planning at the theater JFS staff level, with full knowledge and concurrence of special operations command planning staff. Health services must be planned and coordinated with subordinate joint force elements by the theater JFS staff.

(3) The JFS and the theater special operations command and/or SOF component medical planners develop comprehensive OA-specific plans to support the special operations mission planning and execution cycle. Essential aspects of these plans link SOF with conventional health services. Additionally, strategic and operational circumstances may require arrangement for HN hospital support for special operations missions terminating in friendly territories within a theater.

(4) SOF missions that may require special management of personnel will be coordinated by the SOF medical planner or special mission unit medical or counterintelligence professionals to ensure SOF operations are integrated into conventional medical capabilities with the least opportunity of mission compromise.

(5) SOF entry to the conventional HSS system may occur at the nearest FRC capability but will normally occur at the first MTF of admission.

10. Operational Contract Support

a. Operational contract support is the process of planning for and obtaining supplies, services, and construction from commercial sources in support of joint operations.

b. This section provides the basic doctrine for DOD contractors and their subcontractors at all tiers under DOD contracts, including third-country nationals and local

Challenges of Patient Movement During Special Operations

- Absence of health care and dedicated evacuation assets
- Forward resuscitative surgery and theater care is difficult to access
- Special missions are conducted forward of forward line of own troops, conventional support
- Patient movement may be precluded

Figure V-3. Challenges of Patient Movement During Special Operations

national personnel who provide support to US forces in contingency operations or other military operations designated by the GCC under such contracts. It also addresses a subcategory of contingency contract personnel, which are provided with an appropriate identification card under the Geneva Conventions. The doctrine does not apply to contractor personnel in the US and its territories; nor does it apply to contractor personnel who support long-term, forward-stationed US organizations and facilities outside any declared contingency area.

c. Prior to deploying, certain medical readiness requirements must be satisfied for contingency CAAF to deploy to an OA. CAAF status will be formally codified by the issuance of a Synchronized Predeployment and Operational Tracker-generated letter of authorization that reflects the appropriate level of government-furnished support such as security; base camp services; post/base exchange access; morale, welfare, and recreation; and medical care. These predeployment requirements, identified during the planning process and included in the appropriate contract, communicate to the contractor the specific theater medical readiness requirements. GCCs should ensure CAAF are not permitted entry into the theaters without first being medically evaluated and prepared for entry into the OA by processing through a deployment center or approved contractor run process. Medical and dental screening of CAAF should be accomplished prior to deploying to avoid returning medically unfit individuals from the theater. Similar to military personnel, CAAF should pass a complete medical evaluation based on the functional requirements of the job required by contract in the OA. Emphasis should be placed on diagnosing cardiovascular, pulmonary, orthopedic, neurologic, endocrinologic, dermatologic, psychological, visual, and auditory conditions, which may preclude performing the functional requirements of the contract, especially in austere environments encountered in some contingency operations. Additionally, CAAF should have a thorough dental exam and complete all necessary dental work prior to deployment. Individuals who are deemed not medically qualified at the deployment center or during the deployment process or who require extensive preventive dental care should not be authorized to deploy.

(1) DOD contractors provide medically, physically, and psychologically fit personnel to perform contracted duties in contingency or crisis operations as outlined in the contract. The fitness specifically includes the ability to accomplish the tasks and duties unique to a particular operation and the ability to tolerate the environment and operations conditions of the deployed location. SecDef may direct immunizations as mandatory for contractors deploying with the force performing essential DOD contractor services per DODI 6205.4, *Immunization of Other Than US Forces (OTUSF) for Biological Warfare Defense*.

(2) Any CAAF deemed unsuitable for deployment due to medical or dental reasons should not be authorized to deploy with the military force. Additionally, contingency CAAF should not be authorized to deploy without collection of required medical, dental, and DNA [deoxyribonucleic acid] reference specimens for accession into the Armed Forces Repository of Specimen Samples for the Identification of Remains.

(3) GCCs should ensure all contracts with associated CAAF employees contain minimum medical and dental requirements and a requirement for contractors to provide these records for their deploying personnel.

(4) The CCMD surgeon and the subordinate JFSs should ensure health services, either as a responsibility of the contractor or the GCC/JFC, is fully delineated in OPLANs, OPORDs, and operational-specific policy to ensure appropriate medical staffing in the AOR/JOA, and should also include CAAF that are providing essential contractor services, in their medical surveillance plans. The supporting contracting office is responsible to ensure these requirements are documented in the contract and, when appropriate, reflected on each contractor's letter of authorization.

For more information on letter of authorization, see JP 4-10, Operational Contract Support.

d. The austere environment CAAF may deploy to and operate in, coupled with the potential for limited availability of indigenous medical capabilities in theater, dictates GCCs, through the contract, establish and enforce the requirements for health, dental, and physical standards. CAAF who become unfit to perform their contractor duties in theater through their own actions (such as pregnancy, alcohol, or drug abuse) should be removed from the theater at the contractor's expense.

(1) During contingency operations in austere and hostile or uncertain environments, CAAF may not have access to emergency medical support established by their employer. MTFs within the theater of operations should provide resuscitative care, limited hospitalization for stabilization, and short-term medical treatment, with an emphasis on return to duty or placement in the PM system, and assist with PM to a selected civilian facility in emergencies, where loss of life, limb, or eyesight could occur. All costs associated with the treatment and transportation of CAAF to the selected civilian facility are reimbursable to the USG and are the responsibility of the CAAF, their employer, or their health insurance provider.

(2) CAAF are afforded resuscitative and medical care when life, limb, or eyesight is jeopardized and emergency medical and dental care while supporting contingency operations. Emergency medical and dental care include refills of prescription or life-dependent drugs (Note: contractor personnel are required to deploy with 180 days of required medication and cannot be assured that their specific medication will be included on the theater pharmaceutical formulary), broken bones, lacerations, broken teeth, or lost fillings.

(3) CAAF are not afforded primary and routine medical or dental care unless specifically authorized under the terms of the DOD contract and approved by the supported JFC. Primary medical and dental care includes inpatient and outpatient services, nonemergency evacuation, pharmaceutical support, dental services, and other medical support as determined by the GCC/JFC based on recommendations from the JFS and existing capabilities of the forward-deployed MTFs. CAAF must make non-DOD arrangements to obtain all of their chronic prescription therapy.

(4) In instances where CAAF require PM for medical reasons from the AOR/JOA to a MTF funded by the Defense Health Program, normal reimbursement policies would apply for services rendered by the facility. Should CAAF require AE to the US, the sending MTF should assist the CAAF in coordinating arrangements for transfer to a civilian facility of their choice. All costs associated with the treatment and transportation of CAAF to the selected location are the responsibility of the contractor personnel, their third-party health insurance, or their company. When US forces provide emergency medical care to non-CAAF hired under theater or external support contracts, these patients should be evacuated/transported via national means (when possible) to the nearest local MTF.

(5) Non-CAAF are not authorized to receive medical and dental support from US MTFs, but may receive resuscitative care from US medical sources when injured on the job while working within the confines of a US military facility or in the vicinity of US troops on a reimbursable basis. When resuscitative care is provided to non-CAAF personnel, they should be transferred to a local medical facility as soon as medically feasible.

Intentionally Blank

CHAPTER VI

JOINT HEALTH PLANNING

“A good battle plan that you act on today can be better than a perfect one tomorrow.”

General George S. Patton (1885-1945)

1. Introduction

This chapter presents an overview of joint health planning for the JFS and staff when faced with a specific contingency. More detailed guidance on joint planning is provided in JP 5-0, *Joint Planning*.

2. Health Support Planning Considerations

a. Timely, effective planning and coordination are essential to ensure adequate and sustainable health support in a JOA. Proper planning permits a systematic examination of all factors in a projected operation and ensures interoperability with the campaign plan or OPLAN (see CJCSM 3130.03, *Adaptive Planning and Execution [APEX] Planning Formats and Guidance*). Organization of the health support system is determined by the joint force’s mission, the threat, intelligence, anticipated number of patients, duration of the operation, the theater PM policy, available lift, MEDLOG capabilities, and hospitalization requirements.

(1) **Threat.** The threat is a composite of ongoing or potential adversary actions; occupational, environmental, geographical, and meteorological conditions; endemic diseases that can reduce the effectiveness of the joint force through wounds, injuries, illness, and psychological stressors; and the employment of WMD.

(2) **Medical Intelligence.** Medical intelligence is produced by NCMI and consists of the collection, evaluation, and analysis of information concerning the health threats and medical capabilities of foreign countries and non-state actors that have immediate or potential impact on policies, plans, or operations.

(a) Medical intelligence merges the capabilities of the medical and intelligence communities to gain a better understanding of potential threats and to identify mitigation and response options to minimize potential impacts. Through proactive analysis and increased situational awareness, medical intelligence is an essential component in understanding the threat environment and formulating policy and response options. Medical intelligence data is critical in enabling the JFS and medical planner to provide the joint force command with information to attain situational understanding of health threats; enable the development of HSS and FHP policies and plans that mitigate natural, accidental, and intentional incidents; provide information to assist in the deterrence, prevention, mitigation, and destruction of CBRN threats and aggression; and redefine the OE from a medical perspective by employing strategic and PVNTMED response planning.

(b) The JFS and medical planner must consider all threats affecting HSS and FHP, and be prepared to provide medical information to the J-2 for inclusion in the JIPOE process. Medical intelligence preparation of the operational environment (MIPOE) is the systematic process used by a medical planner to analyze information on medical aspects of disease threats, enemy capabilities, terrain, weather, local medical infrastructure, potential humanitarian and refugee situations, transportation issues, and political, religious and social issues for all types of operations. MIPOE can be inserted into the JIPOE process assisting JFSs and medical planners in analyzing enemy, environmental, and medical threats in the JOA. It includes data not only on health and disease threats in the JOA.

(3) **PM.** Timely PM is the result of collaborative lift-bed planning and involves selection of patients for movement based on medical condition, location of available beds, route planning, selection of movement platforms, and movement control. The medical planner should consider using all means of PM.

(4) **PMIs.** PMIs are specific medical equipment and durable supplies that must be available to support PM. Examples of PMIs include ventilators, litters, patient monitors, and pulse oximeters. The purpose of the PMI system (see Figure VI-1) is to support PM through pre-positioning, exchanging, and recycling of PMIs so MTF capability is not degraded. The originating MTF will identify, on the patient movement request (PMR), any special medical equipment required for transport. The MTF is not equipped to provide organic PMI equipment for PM except in an emergency and then should follow-up with the receiving unit for return of their equipment. The CCATT or AE crew members should bring required PMI equipment identified in the PMR with them to facilitate movement.

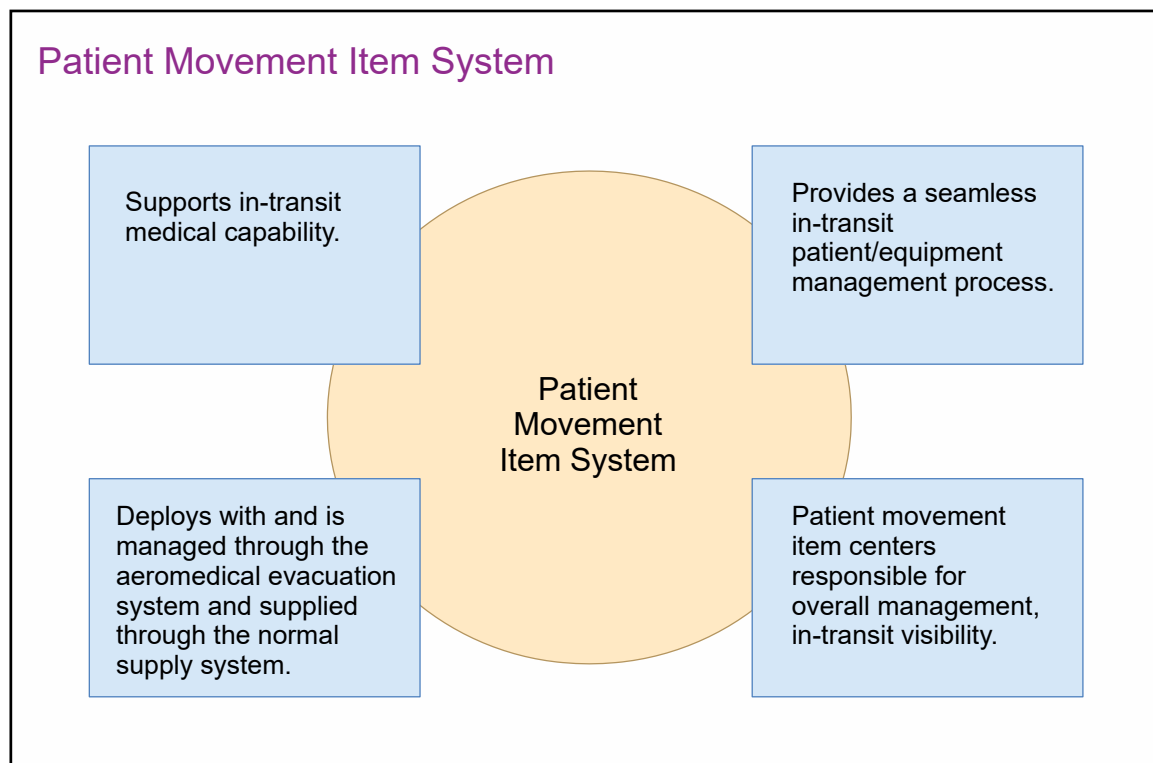


Figure VI-1. Patient Movement Item System

The MTF should provide supplies and medications to support the PM. PMIs accompany a patient throughout the chain of movement, from the originating MTF to the destination MTF, whether it is an intratheater or intertheater transfer. Planners should ensure PMIs are available at the correct location and ready for use and PMI centers are established (establishment of theater PMI centers and cells is the responsibility of the USAF). PMI centers, cells, and nodes are established at aerial ports of embarkation (APOEs)/aerial ports of debarkation (APODs), AE hubs, and/or Role 3 MTFs to support PM. PMI equipment levels are established based on the worst three days of PM, either based on planning factors for initial setup or six-month historical data for continuous operations. Centers, cells, and nodes track, receive, and refurbish (based on local capability) PMI equipment to ensure availability for PM. PMI centers and/or cells can be augmented with personnel and equipment from the other Services; liaison personnel may also be assigned. PMI nodes will request replacement PMI equipment from their assigned supporting PMI center or cell based on their approved levels and PMI on hand. Medical units will establish resupply with the designated TLAMM for supply and accessories and manage levels locally. More detailed guidance on PMIs is provided in ATP 4-02.2, *Medical Evacuation*.

(5) Clinical Capabilities and MEDLOG Support. Specific clinical capabilities, location, MEDLOG supportability, and bed requirements must be considered when planning health support and must be detailed in the respective OPLAN. Medical planners must consider the following:

(a) Sufficient personnel with the clinical capabilities necessary to provide care for the expected number and types of patients in the theater, to include trauma planning factors.

(b) Specific clinical capability, relative mobility, logistic supportability, and the necessity to ensure a logical expansion of capabilities in theater.

(c) Critical time and distance factors that impact morbidity and mortality rates.

(d) MEDLOG issues, including:

1. Standardization.
2. Use of a theater SIMLM.
3. Liaison with the TLAMM.
4. Items requiring special handling and storage.
5. Transportation and distribution.
6. Assessment and use of PMI asset tracking.
7. Type and quantity of medical supplies needed.

8. Supply procedures and sustainment requirements.

9. Medical equipment maintenance and support requirements.

10. Disposition of medical waste in accordance with health and environmental considerations.

11. MEDLOG information management systems.

12. Medical facility planning and management.

(e) Blood product supply and distribution.

(6) **PVNTMED and Health Surveillance.** Risk assessment and analysis, as well as PVNTMED measures, must be included early in medical planning. The deployment health surveillance program is initiated and the means to counter the health threats in the OA are identified to the greatest extent possible, before the forces arrive. Specific PVNTMED procedures are generally the responsibility of the component commands. The JFS advises the CDR on specific PVNTMED procedures to be implemented, typically accomplished through the component commands.

(7) **Prevention of Stress Casualties.** A coordinated program must be planned for the prevention, treatment, and return to duty of combat stress reaction casualties. See Chapter III, “Force Health Protection,” paragraph 6, “Combat and Operational Stress Control.”

(8) **Mass Casualty Situations.** Procedures for handling mass casualties must be established to include casualty management resulting from CBRN incidents (including the employment of WMD), combat, or other military operations. Particular emphasis is placed on the flexibility of medical units to respond to sudden changes in the casualty situation. Successful management of a mass casualty situation is a complex task where success relies as much on well-practiced logistics and communications as it does on skilled medical treatment. The JFS must ensure the communications, transportation, triage and emergency management, PM, and MEDLOG management aspects of the mass casualty plan are thoroughly rehearsed. Additionally, JFSs must ensure chaplains are present to support wounded, ill, or injured personnel, as well as staff members both during and after the situation.

(9) **Veterinary Services.** See Chapter III, “Force Health Protection,” paragraph 11, “Veterinary Services.”

(10) **Dental Services.** As a functional category of health support, dental services plays a significant role in FHP for the joint force. Dental services must be included in the early stages of planning. Dental resources and capabilities must be planned for and include the treatment, restoration, and maintenance of oral health.

(a) **Dental Readiness.** Dental readiness and dental health should be in accordance with policy requirements and available resources.

1. A healthy and fit force provides the commander with optimally fit military personnel capable of withstanding the physical and mental rigors associated with combat and other military operations. In-garrison and operational dental care ensures a dental ready force.

2. Dental care is preventive in nature, thereby ensuring protection.

3. Dental's secondary mission is to augment medical assets during mass casualty situations. Proper planning and training are essential to mission success.

(b) Dental service planning must include the consideration of two categories of dental services in joint and multinational operations. One category of dental care is provided within the OA, and another category of dental services is provided in the support base.

(c) The planning process includes an evaluation of the size and anticipated duration of the operation, along with categories of dental care required to support the operation.

1. Category I—Operational Care

a. Emergency Care. Care given for the relief of oral pain; diagnosis and treatment of infections; control of life-threatening oral conditions (hemorrhage, cellulitis, or respiratory difficulties); and treatment of trauma to teeth, jaws (maxilla/mandible), and associated facial structures is considered emergency care. Emergency care is the most austere type of care and is available to deployed military personnel. Common examples of emergency treatments are airway management, hemorrhage control, stabilization of maxillofacial injuries (fracture stabilization, soft tissue injury/laceration repair), simple extractions, management of maxillofacial infection (antibiotics, incision, and drainage), interim pulp therapy (pulpectomy), pain medication, and temporary restorations.

b. Essential Nonemergency Care. Care necessary to intercept potential emergencies to prevent lost duty time and preserve fighting strength is considered essential nonemergency care. Personnel in Dental Class 3 (untreated oral disease with potential to cause an emergency within 12 months) should be provided this level of care as the tactical situation permits. Common examples of essential nonemergency care are basic restorations, extractions, definitive pulp therapy (pulpectomy, obturation), treatment of periodontal conditions, and simple prosthetic repairs. Essential nonemergency care is also intended to maintain the overall oral fitness of personnel at a level consistent with combat readiness. Most dental disease is chronic and recurring. Unit dental readiness and health will deteriorate from the day of deployment if essential dental care is not provided by deployed dental support. JTF dental units should provide essential nonemergency care to those in Dental Class 2 (untreated oral disease not anticipated to cause an emergency within 12 months) as the tactical situation and availability of dental resources permit.

2. Category II—Comprehensive Care. Dental treatment to restore and/or maintain optimal oral health, function, and aesthetics is comprehensive dental care.

This category of care is usually reserved for medical support plans that anticipate an extended period of reception and training in theater and is also included as a component of the theater hospitalization capability. The scope of facilities needed to provide this level of dental support could equal that of theater hospitalization capability MTFs.

(11) **Pharmacy Service.** Ensure a pharmacy capability is established as required by the mission and any requirement to support recurring prescriptions for deploying forces.

(12) **HN Support.** HNS can be a significant force multiplier. HNS must be equivalent to US standards for services provided to US forces. The JFS must assess HN medical capabilities and make recommendations to the JFC on their use for deployed US forces. Descriptions of HN medical capabilities should be sought from sources such as the NCMI (<https://www.ncmi.dia.smil.mil>), Foreign Clearance Guide (<http://www.fcg.pentagon.mil/fcg.cfm>), US embassy health unit personnel in-country, base support plan surveys, and recent exercise or operation after action reports. In many operations, HN blood supplies do not meet US standards of care. The JFS should make arrangements to store and use blood products from US-approved sources even if HN MTFs are planned to support the deployed force. HNS may reduce the lift requirements necessary to deploy health support to the JOA. There are specific legal and regulatory requirements associated with the use of HN assets and medical planners must ensure all requirements are evaluated prior to inclusion of a HN capability in the support plan.

(13) **Health Support for Returned US Prisoners of War (POWs) and Detained Personnel.** The CCDR establishes a theater plan on the proper handling and provision of health support for returned US POWs and detained personnel.

b. Additional Health Support Considerations

(1) **Health Support in Multinational Operations.** US military operations are often conducted with the armed forces of other nations in pursuit of common objectives. Each multinational operation is unique, and key considerations involved in planning and conducting multinational operations vary with the international situation and perspectives, motives, and values of the organization's members. JFSs and medical planners should be cognizant of the following regarding multinational operations:

(a) **Cultural Differences.** Medical personnel should remain mindful of the fact that each force has a unique cultural identity. The JFS and medical planner should identify key staff positions with language and regional expertise requirements and plan for adequate interpreters or translators and area specialists to support medical operations.

(b) **Liaison.** The JFS and medical planner should establish multinational medical LNO requirements early in the planning process.

(c) **Medical Intelligence.** Members of the MNF may operate separate intelligence systems in support of their own policy and military forces. These national systems may vary widely in sophistication and focus and may not have capabilities similar to the US to collect and process medical intelligence. The JFS and medical planner should

collaborate with the J-2 to provide appropriate information early in the planning process, so the JFC may determine what information can be shared with MNFs.

(2) **Health Support in JRSOI Operations.** JRSOI operations encompass all of the activities needed to receive a unit's equipment and personnel at APODs and seaports of debarkation. The JFS and medical planner's scope of responsibilities during JRSOI activities typically begins prior to the reception of units at the APODs and seaport of debarkations. Medical planning for JRSOI operations should include an assessment of HN medical facilities and services for potential HNS, predeployment planning activities for FHP, and planning for medical capabilities to sustain health support operations during the four phases of JRSOI operations. The JFS and medical planner should also ensure JRSOI HSS and FHP requirements are appropriately detailed in the appropriate OPLANs and OPORDs.

(3) **Health Support for CAAF.** The JFS and medical planner should ensure health support, either as a responsibility of the contractor or the JFC, is fully delineated in OPLANs, OPORDs, and contracts to ensure appropriate medical support in the JOA for contractors deploying with the force. Additionally, the JFS and medical planner should ensure specific theater medical readiness requirements are identified in the medical annex of OPLANs and OPORDs. These requirements include predeployment and FHP requirements and individual medical training in safety, first aid, sanitation, health risks, and health protection measures, including those related to CBRN and environmental and/or industrial hazards.

(4) **Health Support for MCMO.** The JFS may be tasked to support or execute CMO, in coordination with civil affairs elements. If assigned MCMO missions, the JFS and medical planner must consider the different types of medical resources required to conduct such operations and ensure planned actions support the command's desired end state. It is essential the JFS and medical planner coordinate closely with civil affairs elements, information operations cell, as well as other USG departments or agencies, multinational partners, HN agencies, international organizations, NGOs, and religious organizations. This is necessary to ensure unity of effort. Additionally, all MCMO support efforts should be measureable, achievable, and support transition or termination. The recipient of MCMO efforts should be left with a self-sustainable capability upon transition/termination. Coordination and support planning should be appropriately identified in the civil-military and interagency annexes of OPLANs and OPORDs. The JFS and medical planner should also ensure, during the various phases of planning for MCMO, consideration is given to ensuring the medical staff includes an international health officer or SME, to include a veterinary SME, with regional medical expertise. The international health officer or SME should foster partnerships with military, civilian, HN, multinational, and USG personnel; NGOs; and international organizations. Efforts should also be made to provide technical expertise and assistance in identifying and assessing foreign national public and private health systems, sanitation systems, health services, personnel, resources, and facilities.

(5) **Medical Waste and Other Environmental Considerations.** The JFS, medical planner, medical logistician, and PVNTMED personnel, in conjunction with the

J-4, should develop a plan to address the disposal of regulated medical and radiological waste. This plan should consider all aspects of operations for prevention of pollution, protection of the environment, and compliance with pertinent regulatory guidance/policy to mitigate exposure of US and MNFs or unfavorable publicity and future claims for damages. The JFS and medical planner should ensure the plan for medical waste and other environmental considerations are published in the medical annex and environmental consideration annex of OPLANs and OPORDs and appropriate fragmentary orders.

(6) **Interagency Coordination.** As the US military increasingly integrates its operations with other organizations and nations, joint medical operations will require an increased contact and collaboration between the US military, USG departments and agencies, foreign governments, NGOs, and international organizations, all of which will influence the development and execution of HSS and FHP operations. Close coordination and cooperation with these groups may prevent duplication, lessen the friction of potential rivalry, and improve results. The JFS and medical planner must consider processes and procedures to fully integrate the interagency perspective and position into medical planning, execution, and the assessment process and should consider how joint HSS and FHP operations and the actions of involved interagency organizations contribute to the desired end state. This consideration requires extensive liaison and coordination with all involved parties.

For additional doctrine on interagency coordination, see JP 3-08, Interorganizational Cooperation.

c. **Other Planning Considerations.** Other planning considerations that the medical planners must take into account to support joint operations include:

(1) Ensuring adequate joint medical communications architecture is established to provide compatible and responsive communications for the medical system.

(2) **Medical Treatment Protocols.** While it is anticipated that medical care may be provided by the HN or other international organizations, the US may be requested to provide for certain categories of forces and other personnel within the JOA. Consequently, medical planning consideration may include many different populations, such as DOD civilians, contractors (including third-country nationals and contractors deploying with the force), indigenous civilians, MNFs, other government agencies, NGOs, international organizations, and other personnel requesting assistance in circumstances of life, limb, or eyesight emergencies. JFSs and medical planners should review entitlements, applicable laws, and regulations for the provision of US military medical care to nonmilitary beneficiaries and military and nonmilitary personnel of other nations (to include eligibility for USAF AE movement and procedures for obtaining SecDef designee status) and in consultation with the SJA, establish medical treatment protocols recommendations for the CCCR/JFC. Once policies are established, JFCs, JFSs, and medical planners should ensure the approved medical treatment protocol policies are published and disseminated to all joint force personnel.

(3) Coordinate medical requirements in support of natural disasters (Such coordination can be facilitated by conferring with the UNOCHA, <http://www.reliefweb.int>, to prevent duplication of efforts by other countries, solicit current needs, and increase the effectiveness of response efforts from multiple responding countries and NGOs.)

(4) Coordinate support with outside relief agencies (Red Cross, NGOs, and international organizations) in theater to ensure complete visibility for overall medical situation and requirements, including integrated transfer of responsibilities for policies and procedures.

(5) **Amphibious Task Force (ATF).** ATF medical planning responsibilities are closely related to those of the landing force (LF). Detailed, coordinated, and parallel planning is required between the ATF and LF commanders.

(6) **Airborne Operations.** Airborne operations establish a lodgment in an isolated uncertain or hostile environment. Detailed, coordinated, and joint planning is required between the ATF commander and the JFC. Each surgeon of these commands has specific medical planning responsibilities that are detailed in JP 3-17, *Air Mobility Operations*, and JP 3-18, *Joint Forcible Entry Operations*.

(7) During planning, and while supporting joint operations, coordinate with the joint force chaplain's office, the J-1, component commands, Service HQ, and others as required, to provide pastoral care and religious support at hospitals and MTFs.

3. Planning Joint Medical Logistics

a. Health support is reliant upon the specialized materiel and services provided by MEDLOG; therefore, the joint MEDLOG plan is an integral and critical component of annex Q (Medical Services). Medical units and maneuver units usually begin requesting MEDLOG support immediately upon arrival as they provide area medical support to organic personnel, identify unit shortages, or begin early operations in support of forces in the JOA.

b. The MEDLOG planner must understand the CCDR's CONOPS and the medical concept of support. This includes understanding any requirements to provide or receive MEDLOG. This includes anticipated medical risks and planned countermeasures for environmental and occupational threats and contingency plans to respond to a CBRN incident. The MEDLOG planner should also assess the possibility for mission expansion into FHA or nation building and identify the additional capabilities that may be required to support these missions.

c. The MEDLOG planner coordinates with the command J-4 and other designated movement control organizations. Medical materiel will typically flow through the same distribution channels and is subject to the same movement controls as all other classes of supply. MEDLOG capabilities should be located at or near theater distribution nodes to enable access to intratheater distribution capabilities. Medical materiel normally flows into the theater by strategic air (military or commercial); therefore, primary medical theater

distribution activity should be located at an APOD that has access both to strategic and intratheater distribution channels.

d. The MEDLOG planner considers several key aspects of support to ensure the appropriate supplies, equipment, and MEDLOG services will be available to meet medical requirements.

e. The MEDLOG planner and JFS identify the MEDLOG capabilities necessary to support the medical plan for incorporation into the CCDR's force requirements and ensure they are programmed for movement into the theater. The time-phased force and deployment data (TPFDD) is the portion of the OPLAN containing movement data for both cargo and personnel. Strategic lift into the theater is typically limited, and the CCDR establishes guidance on movement priorities. The arrival of MEDLOG capabilities must be phased to permit the accomplishment of all theater preparatory tasks and enable support to forces as they arrive in theater.

4. Medical Planning Tools

a. The Joint Medical Planning Tool (JMPT) and the Medical Planners' Toolkit (MPTk) are approved and accredited for medical planning.

(1) The JMPT is a COA, decision support tool. It simulates the stochastic flow of patients from the POI through more definitive care. The JMPT provides the ability to determine the best COA for the anticipated patient stream (from the MPTk) with the available medical assets. It gives medical planners the ability to determine the optimal configuration of MTFs for patient treatment. It assists medical planners in determining the number of operating room tables or ward beds required for a given scenario based on the apportioned medical assets and their location in the OA. It assists medical planners determine the lift requirements for effective PM. It gives medical planners the capability to conduct risk assessments and determine the medical treatment network that would optimally treat the expected patient stream. The JMPT provides the ability to develop component plans and then merge for a joint scenario.

(2) The MPTk includes four tools: Patient Condition Occurrence Frequency (PCOF) Tool, Casualty Rate Estimation Tool (CREstT), Expeditionary Medicine Requirements Estimator (EMRE), and Estimating Supplies Program (ESP).

(a) The PCOF Tool provides a comprehensive list of range of military operations spanning baseline probability distributions for illness and injury, based on empirical data, and expressed in ICD-9 [International Classification of Diseases] codes. It allows the user to store, edit, export, import, and manipulate these distributions to better fit planned operations. It also generates precise, expected, patient probability distributions. These mission-centric distributions include combat and FHA.

(b) CREstT provides the capability for planners to emulate the plan to calculate the combat and noncombat injuries and illnesses that would be expected during military operations. Casualty estimates can be generated for ground combat, ship attacks, fixed facilities, and natural disasters. CREstT-generated patient streams are based on the

casualty estimate and the user selected PCOF distribution. It uses stochastic processes to allow users to evaluate medical planning risk.

(c) The EMRE estimates the operating room, ICU bed, ward bed, staging bed, evacuation, and blood product requirements for theater hospitalization based on a given patient load. Patient loads are based on a user-specified average daily patient count or patient streams derived by CREStT. The EMRE uses stochastic processes to allow users to evaluate medical planning risk.

(d) ESP estimates consumable medical supplies necessary to treat patients with specific diagnoses by day of an operation (called a patient stream). These patient streams are provided from CREStT output. ESP generates estimates of supply usage on a daily basis and includes estimates of cost, weight, and volume.

b. Theater PM Policy

(1) The theater PM policy is documented in the HSS enclosure in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3110.03, *(U) Logistics Supplement for the 2015 Joint Strategic Capabilities Plan (JSCP)*. The supported commander, in conjunction with supporting commanders and USTRANSCOM, set the specific theater policies prior to OPLAN execution. Upon execution, the GCC adjusts the theater PM policy as needed.

(2) The theater PM policy is executed by the GCC. The theater PM policy delineates the maximum number of days that patients may be held within the command for treatment prior to further movement or return to duty. Patients who cannot return to duty within the specified number of days are evacuated to the next higher level of care for further treatment. Shorter movement policies within the theater reduce theater bed requirements and increase the number of beds required elsewhere. Shorter movement policies also increase movement requirements. The theater PM policy is flexible and can change as the tactical situation dictates.

(3) The theater evacuation policy is established by SecDef with the advice of the Joint Chiefs of Staff and upon the recommendation of the GCC. The policy establishes, in number of days, the maximum period of non-effectiveness (hospitalization and convalescence) that patients may be held within the theater for treatment. This policy does not mean a patient is held in the JOA for the entire period of non-effectiveness. A patient who is not expected to be ready to return to duty within the number of days established in the theater evacuation policy is treated, stabilized, and then evacuated out of theater. This is done providing the treating physician determines such evacuation will not aggravate the patient's disabilities or medical condition. For example, a theater evacuation policy of seven days does not mean a patient is held in the theater for seven days and then evacuated. Instead, it means a patient is evacuated as soon as possible after the determination is made that the patient cannot return to duty within seven days following admission to a Role 3 MTF.

c. Planning Factors for Blood Products

(1) Blood planning factors, which are historically founded, are resident in the MPTk EMRE. Those planning systems can be utilized by the respective CCMD's medical planners to generate an initial estimate of daily blood product requirements for the theater.

(2) Theater-wide blood planning factors are:

(a) RBCs; 3.0 units for each initial admission of wounded in action (WIA) and nonbattle injury (NBI).

(b) Fresh frozen plasma (FFP)/plasma frozen within 24 hours; 1.60 units for each initial admission of WIA and NBI.

(c) Platelet concentrates; 0.15 units for each initial admission of WIA and NBI.

(d) Cryoprecipitate; 0.40 units for each initial admission of WIA and NBI.

(3) The heads of the DOD components apply current casualty rates to forces at risk for each OPLAN. Those numbers are used with the appropriate planning factors listed above to determine the blood product requirements and are incorporated in the respective OPLANs, as appropriate. A case fatality rate reflects the proportion of deaths due to a defined condition or event within a designated population. For operational purposes, the case fatality rate is used to determine the death rate for both illnesses and injuries sustained in the OE and provides a measure of risk and overall lethality. For those who sustain combat wounds, the case fatality rate is expressed as a percentage of all personnel who were both killed in action and died of wounds divided by all personnel who die due to combat-related injuries.

(4) The blood product requirements calculations are performed utilizing MPTk EMRE. Use of EMRE is the best way to estimate blood and blood product requirements in any planning or operational setting.

APPENDIX A PATIENT MOVEMENT

Annex	A	Aeromedical Evacuation
	B	Patient Movement Items
	C	Tactical Critical Care Transport

1. Introduction

a. The primary mission of the DOD PM system is to evacuate and transport US military casualties within and from the JOA to the appropriate role of care provided in or out of the theater, as required. Timely PM plays an important role in health support and supports the CONOPS and evacuation requirements. PM is a system that provides a continuum of care and coordinates the movement of patients from POI or onset of disease, through successive roles of care, to a MTF that can meet the needs of the patient. Each Service component has MEDEVAC or CASEVAC capability and is responsible for evacuation from POI to initial treatment at an appropriate role of care.

b. The PM system is comprised of two distinctively different but complimentary components, the primary PM elements and the supporting PM elements. When properly integrated, synchronized, and employed, these elements provide the necessary and vital linkage between the roles of care to support the overall joint health services mission through PM.

(1) The primary PM elements include dedicated ground (USA/USMC) and air ambulances (USA) that make up the entirety of DOD MEDEVAC assets and designated USAF AE assets.

(a) MEDEVAC is the system within the “forward/or tactical” area that provides the vital linkage between the roles of care and is performed by dedicated, standardized MEDEVAC platforms (ground and air ambulances), with medical professionals who provide the timely, efficient movement and ERC of the wounded, injured, or ill persons. MEDEVAC moves both regulated and unregulated patients. These dedicated assets are properly marked with a red cross in accordance with the Geneva Conventions and the law of war where they are legally classified as noncombatants, solely performing a humanitarian mission. In accordance with the Geneva Conventions and the law of war, it is strictly forbidden to make these assets a target for attack. This special protection under the law of war provides a reduced level of risk to the patient and crew as they conduct their PM mission. The dedicated nature of these assets provides for the most expeditious response to calls for support. Additionally, the provision of ERC provided by medical professionals on medically equipped vehicles or aircraft greatly enhances the patient’s potential for survival and recovery and may reduce long-term disability by maintaining the patient’s medical condition in a more stable manner. Last, the standardization of these assets ensures the continuity of care between roles of care. For these reasons, MEDEVAC is the primary and preferred means of PM from POI to and between Role 3. Although the USA and USMC both employ ground ambulances, the USA provides intratheater aeromedical evacuation as the only Service with dedicated air ambulances. The USA provides intratheater aeromedical evacuation to all land maneuver

forces (once ashore) and also provides support to ship-to-shore and shore-to-ship PM requirements.

(b) The USAF AE system provides the vital linkage between the roles of care for regulated patients over extended distances and to CONUS for final patient disposition. USAF AE is performed by designated fixed-wing platforms configured with standardized medical equipment and staffed with medical professionals who provide the timely, efficient movement and ERC of the wounded, injured, or ill persons. The provision of ERC provided by medical professionals on medically configured aircraft greatly enhances the patient's potential for survival and recovery and may reduce long-term disability by maintaining the patient's medical condition in a more stable manner. The standardization of equipment and medical professionals aboard USAF AE assets ensures the continuity of care between roles of care. For these reasons, joint/Service intertheater PM is currently accomplished by the USAF AE system to move patients out of the OA and to Role 3 and Role 4 MTFs to meet the patients' definitive care needs. However, USAF AE may not always be the feasible/or logical means of transport.

(2) The secondary PM element involves CASEVAC, which is utilized in every Service to support the primary PM elements and overall PM mission execution. CASEVAC involves the movement of casualties aboard any designated or opportune use of nonmedical assets. In contrast to dedicated MEDEVAC assets, CASEVAC assets may or may not include the provision of ERC, depending upon the availability of medical augmentation personnel. Likewise, CASEVAC may include carry-on medical equipment to accompany medical personnel, but the equipment and supplies are dependent upon availability at the time of the mission. As a non-medical platform, whether designated or not, a CASEVAC platform retains its legal combatant status within a given OA. Therefore, the use of these assets includes the acceptance of additional risk to the patient (who is a non-combatant) by virtue of being transported on a combatant platform that can be made the object of attack. Without standardization of equipment or en route medical care, CASEVAC generally lacks the assurance of continuity of care between the roles of care. Even with these limitations, CASEVAC is an essential part of the overall PM mission. For instance, CASEVAC is often the only available asset to conduct PM for a maritime casualty. CASEVAC is also an essential capability when or if PM missions requirements exceed MEDEVAC capabilities. Judgment and careful planning are essential elements applied to the use of CASEVAC within the PM system, but essential to the overall PM mission.

c. The OE during major operations and campaigns may present lethal threats requiring the evacuation of casualties to highly developed medical capabilities in the JOA and locations outside the JOA for advanced medical services and rehabilitative care. The decreased medical footprint and the increased PM requirements demand a more interdependent medical community, improved interagency and multinational partnerships, and joint solutions.

2. Roles and Responsibilities

a. The Services organize, train, and equip fully capable PM medical assets. Services also ensure in-garrison and deployed medical staff are trained and proficient at using TRAC2ES to request PM and that clearing flight surgeons, who assess patients prior to movement, are fully capable. DHA ensures there are sufficient opportunities for staff to maintain clinical currency.

b. GCCs, in coordination with USTRANSCOM, set the theater PM policy and are responsible for PM within their AORs. GCCs synchronize component PM planning within their AOR and ensure plans integrate with USTRANSCOM global PM plans to optimally address theater PM requirements. If theater PM assets are unable to execute all PM requirements, the GCC may request USTRANSCOM augment PM capabilities.

c. The Commander, USTRANSCOM, through the USTRANSCOM Command Surgeon, executes their Unified Command Plan responsibility to serve as the single manager for global PM. This includes PM from fixed facilities, as well as support for natural disasters, counterterrorism activities, and other contingencies. USTRANSCOM retains operational control (OPCON) of PM regulating center personnel supporting GCCs.

(1) The USTRANSCOM Command Surgeon, in coordination with CCMDs, allied nations, and international organizations, coordinates global PM planning efforts in support of GCC requirements. In addition, the USTRANSCOM Command Surgeon provides standardized processes and oversight of global PM, ensuring patient safety and quality of care. This includes the authority to direct an event review and/or safety investigation for PM events involving USTRANSCOM personnel/assets.

(2) TPMRCs are standing, joint activities reporting to the USTRANSCOM Command Surgeon, which are responsible for management, validation, and coordination of USTRANSCOM PM missions using global PM assets. They are collocated with regional operation control centers and communicate PM requirements to the component responsible for executing the mission.

(a) **TPMRC Alignment.** TPMRC-Americas supports PM requirements in the Americas (United States Northern Command [USNORTHCOM] and US Southern Command AORs); TPMRC-East supports PM requirements in the US Central Command, US Africa Command, and US European Command AORs; and TPMRC-West supports PM requirements in the US Pacific Command AOR. In contingency operations, the Joint Patient Movement Expeditionary System can deploy in support of theater-specific PM requirements.

(b) **TPMRC Operations.** The TPMRC staff maintains visibility of bed availability and medical capability at military medical facilities, as well as at select non-DOD partner facilities through the NDMS or other agreements. TPMRCs receive PMRs through TRAC2ES, then validate eligibility and clinical requirements and match PM requirements with available transportation assets to move the patient as safely and efficiently as possible to the appropriate role of care. Theater validating flight surgeons

(VFSs) provide physician medical direction and oversight of PM validation and ERC, as needed during PM, for missions conducted using military assets. The TPMRC staff communicates PM requirements to the appropriate component operations center; if movement assets are not available to the desired location, the PMRC may approve an alternative destination, if patient care is not compromised. If no military assets are available, commercial air travel may be utilized for patients who do not require ERC. USTRANSCOM activities may utilize contract commercial air ambulance assets to move validated patients requiring ERC when military PM assets are unavailable. The TPMRC staff also monitors PM system performance and reports patient safety concerns or other opportunities to improve safety and operational effectiveness. Due to imminent danger, unregulated casualties that require immediate movement may be moved by USTRANSCOM assets without prior PMRC validation. A VFS will clear the patients for evacuation.

3. Patient Movement Process

a. Within the intratheater environment, specifically at the tactical level, PM requires the use of dedicated MEDEVAC assets from the USA/USMC, as well as designated CASEVAC assets from each Service. Request procedures and methods of transmission for initial evacuation or movement of patients is dependent on Service and other factors (mission, enemy, terrain and weather, troops and support available-time available, and civil considerations). However, the message format for requesting MEDEVAC (and CASEVAC, unless otherwise directed) is by use of the standard 9-line MEDEVAC request in accordance with ATP 4-02.2, *Medical Evacuation*. To request further PM, a PMR is normally submitted by the Service MTF patient administration or medical regulating office to the appropriate PMRC. The PMRC evaluates the request for necessity, acuity, eligibility, precedence, and mode (see Figure A-1). PMRs are normally submitted through TRAC2ES for patient in-transit visibility. PMRs may also be submitted by fax, voice telephone, radio and/or satellite communications, using a standard movement request worksheet, when TRAC2ES is inaccessible. Patient information items required to request PM will be determined by the PMRC and will depend on the OE.

b. The PMRC maintains visibility of medical capability within its AOR, clinically validates patients, and coordinates with Service components for patient theater evacuation. This process matches the patient to a facility with the necessary capabilities and bed availability. Once the PM request is validated, it is passed to the appropriate Service component for execution.

c. The PMRC coordinates PM, validates requirements, and maintains in-transit visibility. Lift operations centers may request other destinations due to availability of lift and routes to support evacuation. Delivery to alternative destinations can be executed, with the approval of the PMRC, upon evaluation to ensure patient care is not compromised.

d. The patient administration director (PAD) (clerk/officer) or the medical regulating officer (MRO) is responsible for contacting the PMRC with PM requirements and submitting PM data. The PAD and MRO can manage the domestic CONUS-based PM system, to include contingency and CONUS PM systems within the strategic and

Patient Movement Requirements Center Component Lift Interface

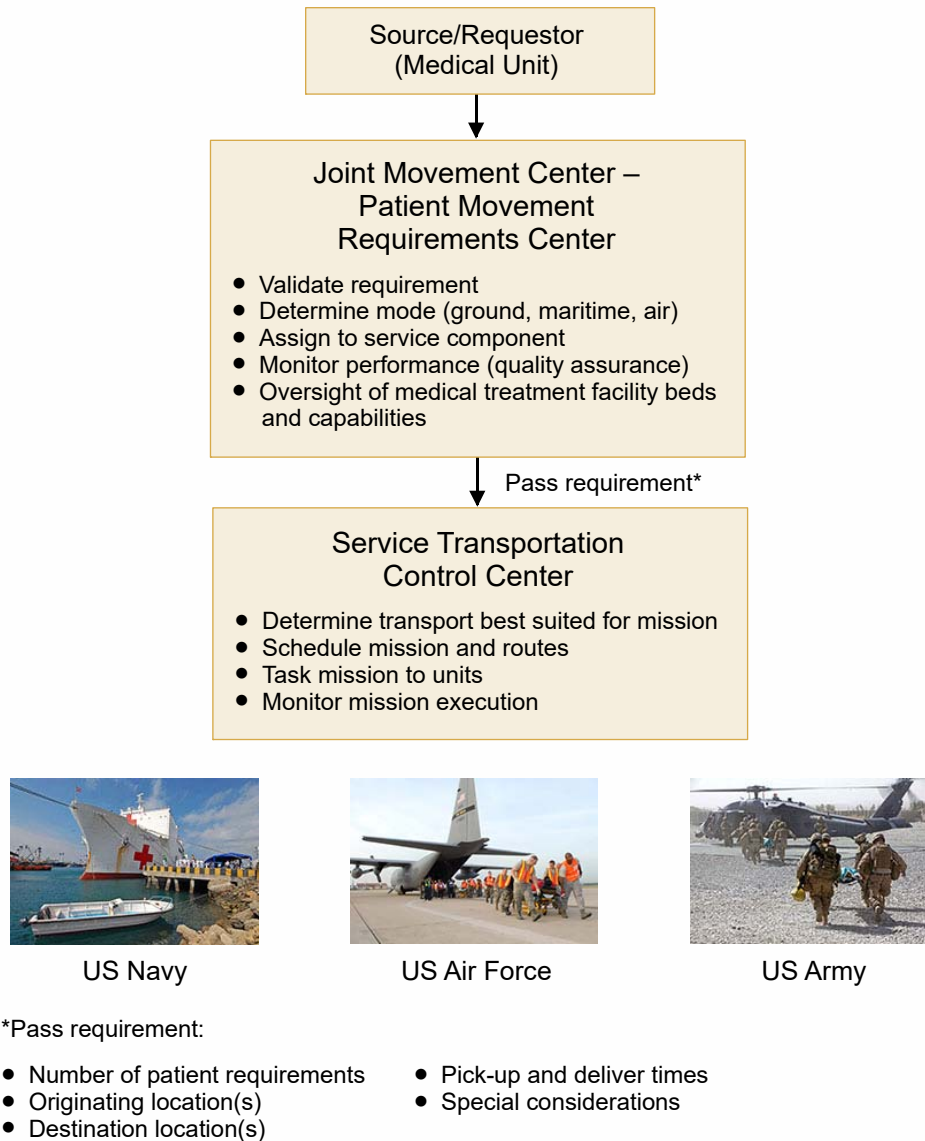


Figure A-1. Patient Movement Requirements Center Component Lift Interface

operational intertheater and intratheater and OA. The PAD and MRO coordinate, maintain, and report bed status for overall patient regulating determination of follow-on MTFs. They are responsible for communication and information management using automated information systems (i.e., TRAC2ES) and patient and documentation management, including medical aspects of PM; visibility and accountability; and pre-movement preparation, to include PMR, patient receipt, and medical documentation management. They serve as the liaison between referring physician and medical staff, the patient, and the patient requirements center.

e. Due to imminent danger, unregulated casualties that require immediate movement may be moved without prior PMRC validation. However, a VFS or medical authority will be identified to clear the patients for evacuation.

4. Patient Movement Operations

a. Movement of patients between points within a GCC's AOR that can be accomplished with tactical modes of transport are referred to as intratheater, while movement of patients requiring global mobility assets between the GCC's AOR to points outside the AOR is referred to as intertheater.

(1) Intratheater operations are regional in nature and serve a single CDR's requirements. These operations are normally conducted using forces assigned, attached, or made available for tasking to the CDR's requirements. The preferred method of evacuation for intratheater PMs is via USA MEDEVAC platforms (both ground and air ambulances). For casualties in areas supported by MEDEVAC with wounds that potentially jeopardize life, limb, or eyesight (Category Urgent/Urgent Surgical), USA air ambulances provide aeromedical evacuation from the POI (or designated location) to the appropriate location of the 9-line evacuation request. For casualties in areas not supported by MEDEVAC, or when MEDEVAC assets are unavailable, various CASEVAC assets are employed to conduct the PM mission. Patients are most likely to enter the joint system for evacuation and medical regulation at the theater hospitalization capability (Role 3). However, casualties may enter at Role 1 and/or Role 2 locations, depending on the supported patient administration capabilities. Intratheater PM requires a coordinated effort between Service and HN MTFs, Service component organic and theater evacuation assets, and the responsible PMRC. However, when PM occurs within the seabase, it is a naval Service effort. The JFS develops intratheater policies in coordination with Service component evacuation representatives.

(2) Intertheater operations are generally global in nature and serve the transportation needs of the CCMD outside the JOA that support the conduct of operations within the JOA. USTRANSCOM directs policies and procedures for intertheater PM and identifies transport resources. Currently, intertheater PM is primarily conducted utilizing airlift assets as long evacuation distances may preclude other modes of PM in supporting rapid evacuation out of the CCMD AOR. However, circumstances permitting, other modes and lift assets may be used for intertheater PM. Patients are most likely to enter the intertheater system from a theater hospitalization capability for movement to a definitive care capability, outside the theater, and eventually to the US. Intertheater PM requires a coordinated effort between Service or HN MTFs, responsible PMRCs, GPMRC, and transportation agencies.

b. PM and Roles of Care

(1) **Point of Injury or Illness to Role 2.** Generally, the component commands are responsible for evacuation of the casualty from point of injury or illness to Role 1 or Role 2 via dedicated, designated, or opportune ground or air transportation. This is accomplished through a combination of litter carries, manual carries, ground

transportation, and limited air (fixed- or rotary-wing) transport. The USA generally employs dedicated MEDEVAC assets such as ground and air ambulances. The USN normally relies on lifts of opportunity. The USMC has some dedicated ground evacuation and relies on designated air and other lifts of opportunity. If USAF assets are required, at this level, lifts of opportunity may be used.

(2) **Role2 to Role 3.** Movement within and from Role 2 may be executed using either Service component assets or the joint common-user PM system. For example, the USMC has no organic Role 3 capabilities, and this care is provided by the USN. The USN does not have dedicated or designated evacuation vehicles with the capacity to go forward and retrieve patients from units with Role 1 and Role 2 and evacuate them to Role 3. For this reason, the USA will be tasked with providing aeromedical evacuation support for ship-to-shore and shore-to-ship. For environments beyond the capabilities of rotary-wing AE support, USTRANSCOM coordinates strategic PM operations in support of GCC and global PM requirements over long distances, which are not feasible with tactical GCC assets. While USAF AE is typically the fastest mode of strategic PM, other modes of strategic PM may be considered in contested environments or when casualties cannot safely move by air for other reasons.

(3) **Role 3 to Role 4.** If a patient cannot be returned to duty within the limits of the theater PM policy, the originating Role 3 will normally request PM to another Role 4 for more definitive care and disposition. The originating Role 3 will submit a PMR, in accordance with prescribed procedures, using TRAC2ES. PMRs are submitted to the appropriate PMRC, if a JPMRC is established. The JPMRC validates and regulates movement requirements and coordinates the requirements with the TPMRC for intratheater PM or with the GPMRC for intertheater PM. The JPMRC identifies intratheater PM requirements through the theater Air Force air operations center (AOC) or joint air operations center (JAOC) and air mobility division's (AMD's) AE control team. The TPMRC coordinates with the theater assigned AOC to identify theater airlift assets available and with the TPMRC-Americas to identify intertheater PM requirements through the 618 Air Operations Center (Tanker Airlift Control Center) (618 AOC [TACC]).

(4) **Role 1/Role 2 to Role 4.** Some joint operations may present unique situations and considerations where a Role 3 may not exist. Stabilized casualties may enter the joint common-user PM system at Role 1 and be evacuated directly to a Role 4 in another theater. In such cases, the component command MRO will submit a PMR to the JPMRC. CONUS movement includes redistribution of patients to their home or unit of record. Members discharged from medical care and requiring movement to their home station instead of the theater will typically be managed through the personnel system in a duty passenger status.

5. Planning Considerations

a. Each OPLAN identifies the infrastructure necessary to support medical care and PM. Medical planners use the JMPT to combine the PAR and combat intensities to create a joint stream of patients requiring medical attention. The JMPT estimates daily number of evacuees, operating room tables, ICU beds, ward beds, staging beds, and blood products. Planners should consult the En Route Infrastructure Master Plan, published annually by

USTRANSCOM, to ensure planned medical assets, which may require PM support, are accessible by available PM modalities.

b. The joint PM system can support US/domestic PM requirements identified under activation of the NDMS and the NRF under the auspices of DSCA. USTRANSCOM is the validating authority for PM requirements as the supporting command to USNORTHCOM or US Pacific Command in its DSCA mission under the NRF. The Services provide PM assets from existing active, reserve, and NG forces in execution of the NRF in the US. These include activities and measures taken by DOD components to foster mutual assistance and support between DOD and any civil government agency in planning or preparing for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. NG PM assets may be mobilized as part of their state's emergency management plan, or executed through an emergency management assistance compact with a requesting state, and deployed/employed in a state active duty status. USTRANSCOM will coordinate laydown of USG PM forces with USNORTHCOM and execute priorities established by FEMA. USG PM assets will move regulated patients using TRAC2ES. NG forces under Title 32, USC, control will coordinate with the appropriate HQ.

c. **Medical CONOPS.** Each Service component is responsible for all functions of the Service-specific PM system, including operational guidance, intelligence, medical direction, logistics, and communications support. From initial injury to definitive care, the treatment and evacuation of patients from the battlefield transcends many levels of communication and coordination, routinely crossing Service boundaries. Thorough knowledge of the PM systems will expedite casualty care and save lives. Patient evacuation must be planned to support any operation. JFCs should integrate and coordinate the use of evacuation resources toward the common purpose of reducing mortality while maintaining the medical continuum of care. It is therefore critical each Service component properly plan to operate its portion of the overall PM system. Planning ensures a coordinated effort in providing timely and effective PM that involves determining theater movement estimates, identifying frequency channel lift requirements, and regulating appropriate MTFs. All available forms of transportation must be considered within the constraints of the tactical situation and the details of patient handling.

(1) Evacuation plans should integrate and include ground ambulances, rotary- and fixed-wing evacuation platforms, crew, and attendants. Plans should also include en route (ground and air) critical care teams for transporting patients with critical care needs, Service staging or holding MTFs, Service liaisons, appropriate Service operational requirements, C2 elements, equipment, and handling to include reconstitution of PMIs.

(2) The USA provides patient evacuation support (rotary-wing and ground) on an area support basis and includes support to all Services operating within their assets' operational reach. Additionally, USA supports ship-to-shore and shore-to-ship patient evacuation operations. If USA air ambulance assets are not available, the USN and USMC have the responsibility for ship-to-shore and shore-to-ship patient evacuation operations. The USN conducts ship-to-ship movement of patients.

(3) The USAF provides assets for AE. The USAF AE system conducts intertheater and intratheater PM. As with USA MEDEVAC, the USAF AE system provides time-sensitive, mission-critical ERC to patients to and between MTFs. Care is delivered by USAF medics specially trained to operate within a global AE system. The USAF's AE capability comprises a system of systems including ground and airborne forces providing and supporting medical care within MTFs, patient staging platforms, and in the air. AE personnel—crews, CCATT, and other specialty teams—execute PM predominately on mobility aircraft, as well as aboard sister Service, contracted, and international partner aircraft. AE forces support the full range of military operations. The system is designed to be flexible to enable it to operate across the spectrum of conflict and interface with joint forces, MNFs, and SOF.

d. Integration of Multinational Evacuation Support. Other Services and MNFs use various ground transportation and rotary- and fixed-wing aircraft for patients. They also use their own medically trained crew members or medical attendants. US medical personnel may perform appropriate duties on non-US evacuation platforms if it is in the interest of the USG and approved by the GCC. Conversely, MNFs may also integrate with US medical forces. Planners will identify the potential need and the operations center will work inter-fly agreements.

e. Service Component Transportation and MEDEVAC Assets. A detailed listing of Service component evacuation resources and their capabilities can be found in Appendix G, "Service Component Transportation and Medical Evacuation Assets."

f. Protection Under the Geneva Conventions. Depending upon the designation of patient evacuation assets, protection under the Geneva Conventions differs.

(1) MEDEVAC assets are dedicated; marked with the red cross; medically manned and equipped; and exclusively employed for the removal of wounded, sick, or shipwrecked combatants and for the transport of medical personnel and equipment. As long as these assets are employed in this manner, and not used for acts considered harmful to the enemy (e.g., for military purposes such as transporting able-bodied combatants or used to carry ammunition to combat forces), they are protected under the Geneva Conventions.

(2) Designated PM assets include CASEVAC platforms used by all Services, as well as AE platforms used by the USAF. The primary missions of these platforms are nonmedical; the assets are not externally marked and are allocated on the air tasking order and configured for PM. While patients are protected under the Geneva Conventions, these conveyances are not. Movement of patients with designated assets must have medical personnel and medical equipment aboard commensurate with patient condition to provide appropriate care for the patient.

(3) **Opportune lift** is the portion of lift capability available for use after planned requirements have been met. These nonmedical assets convey cargo and passengers throughout the JOA and could be used to move patients. While patients are protected under the Geneva Conventions, these conveyances are not. Movement of patients with opportune

lift should have medical personnel and medical equipment aboard commensurate with patient condition to provide appropriate care for the patient.

For more information on how the Geneva Conventions affect health support, see Appendix H, “Impacts of the Law of War and Medical Ethics.”

g. **PMIs.** Medical equipment, tested and certified for use on Air Force and Army transportation platforms (e.g., ventilators, vital sign monitors, infusion pumps, and defibrillators,) and durable supplies (e.g., litters, mattress pads, and backrests) required to support the patient during evacuation are referred to as PMIs. The PMI program does not replace or recycle expendable supplies. The handling and return of equipment to the originating theater through the evacuation system requires a reliable supporting logistics infrastructure to ensure PMIs are available and serviceable. A plan for PMI recycling, replacement, and the return of evacuation equipment and PMIs to the originating theater should be addressed and coordinated with HQ AMC/SGXM in the respective OPLAN. Large MEDLOG units may support smaller units (MEDEVAC and special operations) without an organic MEDLOG capability.

For more information on PMIs, see Annex B, “Patient Movement Items,” to Appendix A, “Patient Movement.”

h. **Categories of Evacuation Precedence.** The process of patient categorization determines how quickly a patient should be evacuated within the PM system based on a casualty’s medical condition. In accordance with international law, casualties are categorized solely on their medical condition, without any distinction founded on sex, race, nationality, religion, political opinions, or any other similar criteria. Senior medical personnel, or if no medical personnel are present, the senior military personnel on site, determines the precedence for PM. At the tactical level, the process for requesting evacuation support may be dependent on mission, enemy, terrain and weather, troops and support available-time available, and civil considerations and defined through the orders process. Typically, the 9-line MEDEVAC request format will be utilized to activate evacuation resources. Patients will only be evacuated as far rearward through roles of care as necessary to meet their medical conditions. For patients requiring further movement beyond the initial Role 3 MTF or comparable civilian medical facility, the PMR will be submitted to the PMRC based on each patient’s condition/status. Patient condition/status may be upgraded or downgraded at each succeeding role of care. Timeframes to provide fixed-wing evacuation assets PM begin once a PMR is passed to the responsible PMRC.

(1) **Priority I—Urgent.** Is assigned to emergency cases that should be evacuated as soon as possible to save life, limb, or eyesight and to prevent complications of serious illness and to avoid permanent disability.

Note: In some special cases, it may be necessary to bypass a role of care and evacuate a patient directly to a higher role of care to best facilitate the immediate medical needs of the patient and improve patient outcomes. In these cases, as well as those that require the use of strategic USAF AE assets, the one-hour standard might be exceeded due to evacuation time required to reach the appropriate role of care.

(2) **Priority IA—Urgent-Surgical.** Is assigned to patients who must receive far forward surgical intervention to save life and stabilize for further evacuation.

Note: This precedence is not used for strategic AEF.

(3) **Priority II—Priority.** Is assigned to wounded, ill, and injured personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within four hours or if the medical condition could deteriorate to such a degree that he will become an urgent precedence or whose requirements for special treatment are not available locally or who will suffer unnecessary pain or disability.

Note: In cases requiring the use of strategic USAF AEF, the time standard is 24 hours.

(4) **Priority III—Routine.** Is assigned to wounded, ill, and injured personnel requiring evacuation but whose condition is not expected to deteriorate significantly. Patients in this category should be evacuated within 24 hours.

Note: In cases requiring the use of strategic USAF AEF, the time standard is 72 hours.

(5) **Priority IV—Convenience.** Is assigned to patients for whom evacuation by medical vehicle is a matter of medical convenience rather than necessity.

Note: This precedence is not used for strategic USAF AEF.

6. Multinational Considerations

a. **PM in Multinational Operations.** GCCs are responsible for intratheater PM. This may include the movement of MNFs, neutrals, and even detainees. The GCC's policy should be recorded in the CCMD PM policy.

(1) The theater PM policy, known in some nations as a holding policy, is the key to balancing the treatment capability available at each role of care against the required PM assets. The provision of resources will be coordinated by the MNF planning staff and will be comprised of assets from a number of sources, including HNS. Theater PM requires careful planning and is dependent on whether the US partners and other partner nations require the establishment of an acquisition and cross-servicing agreement. Other standing agreements may already cover support arrangements between the US and the participating nations such as members of the United Nations or NATO. Establishing the PM policy is a command decision of each nation. Medical and logistic staffs will advise. The CCMD surgeon and/or JFS will provide recommendations and monitor the established patient policy.

(2) Contributing nations bear ultimate responsibility for ensuring the provision of health care to their forces allocated to multinational operations. This may be discharged in a number of ways, including agreements with other nations or the appropriate multinational planning staffs.

(3) Medical planners should always consider the quality, suitability, and availability of multinational and HNS to meet PM requirements. Multinational partners/HNs may possess unique evacuation assets that could augment national capabilities. The use of these evacuation assets, regardless of mode, should be coordinated through appropriate multinational and HN agreements

b. **HNS.** See Chapter V, “Health Support Operations.”

7. Patient Stability

a. To minimize harm and improve overall patient outcomes, it is important to ensure patients are properly prepared for evacuation prior to movement within the PM system. The capability to prepare patients for movement naturally improves with each role of care due to the additional personnel and resources available. Within the tactical environment (below Role 3), it is routine for evacuation assets to move inherently unstable patients. In these situations, ERC is essential to successful patient outcomes. To safely evacuate these unstable and critically ill patients, the USA employs critical care trained flight paramedics on air ambulances. When situations dictate, these flight paramedics can be augmented with en route critical care nurses, physicians, or other medical attendants, as required. Patients validated for strategic USAF AE movement must be stabilized (secure airway, controlled hemorrhage, treated shock, and immobilized fractures) as much as the local situation and resources allow. Interventions (such as intravenous or Foley catheter) should be initiated prior to flight, if possible. Patients not clinically stable due to severity of wounds or medical condition, limited medical resources, or time constraints may require advanced clinical capability while awaiting transport at an airhead or during flight. At times, the patient’s clinical instability may be the very reason they are being moved by air from a lesser capable facility to another of greater capability. The USAF AE ERC system provides qualified flight nurses and AE technicians. CCATT or other medical attendants can be added based on patient acuity, stability, and conditions.

b. **Stable.** One who, in the best clinical judgment of the responsible medical provider, can withstand a bed-to-bed evacuation of up to 12 hours for intratheater movement and 48 hours intertheater and is unlikely to require intervention beyond the scope of standard ERC capability during the evacuation.

c. **Stabilized.** Patient condition may require emergency, but not surgical intervention, within the evacuation phase. Patient’s condition is characterized by secure airway, control or absence of hemorrhage, shock adequately treated, and major fractures immobilized.

d. **Unstable.** A patient whose physiological status is in fluctuation. Emergency treatment and/or surgical intervention are anticipated during the evacuation. Unstable patients’ rapidly changing status and requirements are beyond the standard ERC capability and require medical/surgical augmentation. Patient transport validation is essential to ensure the evacuation environment is conducive to an optimal outcome.

8. Contaminated Patients

Patients with known or suspected of contagious diseases will usually be treated in place. However, such patients may be transported within the PM system, to include the USAF AE system, when directed by appropriate authorities and needed to preserve life, meet critical operational objectives, and respond to the dictates of the situation. These cases include infections with any agent that may pose a potential threat to national security, require special public health action, or have the potential to cause public panic and social disruption. Patients known or suspected of contagious diseases should be documented and treated at the appropriate role of care. If PM is required, prior approval must be given by the involved GCCs; Commander, USTRANSCOM; and SecDef in consultation with medical authorities. In addition, with SecDef approval, the appropriate patient isolation unit and/or Transportation Isolation System can be employed by USTRANSCOM to move these patients. Plans must include the potential return of contagious personnel to the US.

9. Communications System Support

a. A responsive communications system is essential to the conduct of PM. The JFC should establish a system that integrates the available capabilities of the PM system; synchronizes its application; and prepares to employ air, land, and sea forces to achieve PM objectives. This system should also support the operational requirements of medical information management as it relates to patient accounting and reporting, medical regulating, and patient in-transit visibility.

b. Service component commanders are responsible for C2 of their respective transportation agencies involved in joint PM. However, the JFS establishes a joint PM CONOPS and identifies communications requirements necessary to integrate the functional aspects of the joint PM, medical regulating, and evacuation protocols out of the theater. This may include defining the requirements needed for intratheater and intertheater support. Effective PM during joint operations will require a closely coordinated and mutually supportive effort of all participating forces carefully balancing mission requirements while contributing to the total theater PM effort.

c. The JFC may provide detailed communications plans or assign communication management responsibilities to a single-Service component for specific functions during joint PM operations. Early identification of communications system requirements for evacuation connectivity is essential. At a minimum, medical communications in support of PM must provide reliable, real-time, and, when possible, redundant communications within an OA and from the OA to the US. They must also provide a link between the most forward point where the patient enters the PM system, long-haul communication to PMRC, and each role in the medical system to the destination MTF or medical element.

d. The degree of success of PM operations is a function of the availability of reliable communications over dedicated and interoperable systems. Planners must identify frequencies that are common between Service component support forces assigned a PM mission. If no commonality exists, the JFC develops a plan for adequate communications

support to all Service components. All frequency requirements for organic equipment must be coordinated with the GCC's plans staff.

e. Short-range radio communications should be provided by each Service component to ensure communication between MTFs, evacuation vehicles, boats, aircraft, and evacuation operational C2.

f. When available, theater-based, long-range communications will generally be provided by high-frequency radios; satellite communications; and defense voice services, such as the Defense Switched Network (DSN), Defense Information Systems Network, and the Defense Messaging System.

g. Satellite communications offering access to commercial telephones or point-to-point systems should be used when available.

h. Secure communications are provided through voice and data security communications equipment.

i. CJCSM 3150.05, *Joint Reporting System Situation Monitoring Manual*, outlines responsibilities and message text format requirements for operational PMRs and evacuation procedures. User Services should have the communication equipment and personnel to identify their requirements to the PMRC. These messages include the following:

(1) Medical regulating report.

(2) PMR.

j. TRAC2ES is used at the global and theater levels for PM monitoring, forecasting, and planning and supports fixed and deployable operations. TRAC2ES is used to provide in-transit visibility, transport to bed solutions, planning, coordination, allocation, data analysis, and decision support, as well as a patient safety module and the ability to extract/analyze PM data. It meets patient medical treatment needs by matching medical treatment capabilities and beds to available transport and maintains historical information and in-transit visibility on all patients moved in the PM system. TRAC2ES can create and manage PMRs, update, submit, and manage bed and capability reporting, create and manage mission plans monitor, report PM and location, respond to and record mission changes, and execute mission completion activities. TRAC2ES also produces a PM quality-report, a MEDEVAC mission report, and an Air Force (AF) Form 3899 (Aeromedical Evacuation Patient Record).

ANNEX A TO APPENDIX A AEROMEDICAL EVACUATION

1. Introduction

a. The USAF AE system provides a critical PM capability that cuts across traditional Service lines. Since World War II, the preponderance of AE patients generated during combat and contingency operations have come from USA and USMC ground combat units. Therefore, it is important the USAF AE system integrates well with the medical components of all Services. Moreover, during the past decade, it has become increasingly important that the USAF AE system continue to develop its capability to integrate with components of our nation's multinational partners.

b. The USAF lead command for AE is HQ Air Mobility Command (AMC). The AMC is charged with the responsibility to operate the common-user USAF fixed-wing AE system and to procure and execute commercial augmentation. The USAF AE provides fixed-wing movement of patients requiring in-flight care and supervision by AE crew member to locations offering appropriate roles of medical care. AE can significantly improve casualty recovery rates by providing rapid transportation of the sick and wounded to MTFs for treatment. The USAF AE system can operate as far forward as conventional fixed-wing aircraft are able to conduct air/land operations.

c. The USAF AE system provides:

- (1) Integrated control of casualty movement by air transport.
- (2) Specialty trained aircrew clinicians and operational support personnel.
- (3) Equipment for in-flight supportive medical care and ground support operations.
- (4) CCATT to monitor and manage specific patients requiring intensive care.
- (5) En route staging capability/patient preparation at or near secure airstrips for the processing and care of casualties entering, en route, or leaving the USAF AE system.
- (6) **AE Categories of Evacuation Precedence.** Due to the nature of AE operations and the use of mobility airframe to provide this expeditionary PM asset, the AE precedence categories are different than those utilized for other PM options. AE PM categories are:
 - (a) Urgent: Patients who must be moved immediately to save life, limb, or eyesight, or to prevent complication of a serious illness.
 - (b) Priority: Patients requiring prompt medical care that must be moved within 24 hours.

(c) Routine: Patients who should be picked up within 72 hours and moved on routine/scheduled flights.

2. Aeromedical Evacuation Command and Control

a. C2 of AE is consistent with overall USAF air mobility C2. In contingency operations, AE-specific items will be outlined in annex C (Operations) of the OPORD and general PM guidance should be outlined in annex Q (Medical Services). Aeromedical assets should be integrated within the inherent mobility structure established to support airlift operations from the AMD to the wing and down to each element.

b. **Peacetime AE Structure.** The USAF AE system has been standardized to ensure peacetime processes mirror wartime processes. This allows for the system to exercise its wartime infrastructure in peacetime and enhance wartime training. C2 of AE assets, to include tasking authority for AE and mobility forces, resides with the normal airlift and mobility C2 structure. Field and AE squadron operations will be conducted through operational wing C2 channels. Intratheater air mobility operations are defined by geographic boundaries. Air mobility forces assigned or attached to that GCC normally conduct these operations. Intratheater common-user air mobility assets are normally scheduled and controlled by the theater USAF AOC or JAOC if established. The ability to identify and coordinate movement requirements (visible in Joint Deployment and Distribution Enterprise-common systems) is critical to providing theater reachback support from the AMC 618 AOC (TACC). When intratheater air mobility requirements exceed the capability of assigned or attached forces, other mobility forces can support intratheater airlift using a support relationship. The supported commander may also request augmentation from SecDef through the RFF process. The 618 AOC (TACC) serves as the AOC for the AMC air mobility mission and is responsible for tasking and controlling operational missions for all activities supporting AMC's global air mission.

c. **JTF Air Mobility Operations.** During joint operations, it may be necessary to establish a JTF within a GCC's AOR. This allows the GCC to maintain a theater-wide focus and at the same time respond to a regional requirements within the theater. When this occurs, a JTF will be designated and forces made available for this operation. The commander, Air Force forces (COMAFFOR), will normally be delegated OPCON of Air Force assets; if designated, the joint force air component commander (JFACC) will typically exercise tactical control over air mobility forces made available to the JFACC. If the JTF requires additional air mobility forces beyond those already made available for tasking, additional augmentation may be requested.

(1) The COMAFFOR may appoint a director of mobility forces (DIRMOBFOR) to function as coordinating authority for air mobility with all commands and agencies, both internal and external to the JTF, including the JAOC, the 618 AOC (TACC), and the JDDOC and/or the joint movement center.

(a) The DIRMOBFOR is normally a senior officer who is familiar with the OA and possesses an extensive background in air mobility operations. The DIRMOBFOR serves as the designated agent for all air mobility issues in the OA and for other duties as

directed. At the discretion of the JFC, the DIRMOBFOR may be sourced from the theater's organizations or USTRANSCOM. The DIRMOBFOR should be collocated with the JAOC AMD to maximize effectiveness.

(b) The DIRMOBFOR ensures the effective integration of intertheater and intratheater air mobility operations and facilitates intratheater air mobility operations on behalf of the COMAFFOR. The DIRMOBFOR provides guidance to the AMD on air mobility matters, but such guidance must be responsive to the timing and tempo of operations managed by the JAOC director.

(2) The DIRMOBFOR also has distinct responsibilities in relation to joint force staffs. Air mobility requirements do not originate in the AOC. They originate at the component level and are validated by either the theater joint movement center/JDDOC (when established) or by the GCC's J-3 in coordination with the J-4. This may vary slightly in different theaters. Consequently, an essential role for the DIRMOBFOR is to serve as the principal interface between the AOC, the theater's J-4, and the joint movement center/JDDOC to obtain appropriate prioritization of air mobility tasks while balancing requirements and air mobility capability.

For more discussion of the DIRMOBFOR, see JP 3-17, Air Mobility Operations.

d. Routine Operations. To assist in the employment of mobility forces, each of the GCCs has a USTRANSCOM transportation LNO. GCCs with assigned air mobility forces have combatant command (command authority) over those forces and normally delegate OPCON over those forces through Service component commanders. The COMAFFOR executes the C2 of USAF air operations in the theater or OA through the AOC. One of the AOC divisions, AMD, usually oversees intratheater air mobility operations.

e. Contingency AE Structure (see Figure A-A-1). Deployed expeditionary air forces are organized to ensure unity of command. Deployed AE forces are organized within the constructs of the air expeditionary task force and are tailored based on the size and scope of the operation. C2 of theater AE forces in contingency operations are defined in the warning/execution/OPORD.

(1) When a JTF is formed, command relationships for air mobility forces are established by the JTF establishing authority. The command relationship established for these forces are normally exercised through the JFACC and/or COMAFFOR. The JAOC director is charged with the effectiveness of joint air operations and focuses on planning, coordinating, allocating, tasking, executing, and assessing air operations in the OA based on JFACC guidance and DIRMOBFOR coordination.

(2) The AMD is made up of an air mobility control team, airlift control team, air refueling control team, and AE control team. The AMD integrates and directs the execution of theater assigned or attached Service organic mobility forces operating in the OA in support of objectives. OPCON of USTRANSCOM assigned air mobility forces supporting, but not attached to, the JTF or subordinate command remains with AMC. This expansion of C2 systems requires the AMD to interface with the 618 AOC (TACC), other

AMDs if required, and the JAOC combat operations and combat plans divisions to ensure air mobility missions are included in the air tasking order. Figure A-A-1 illustrates the

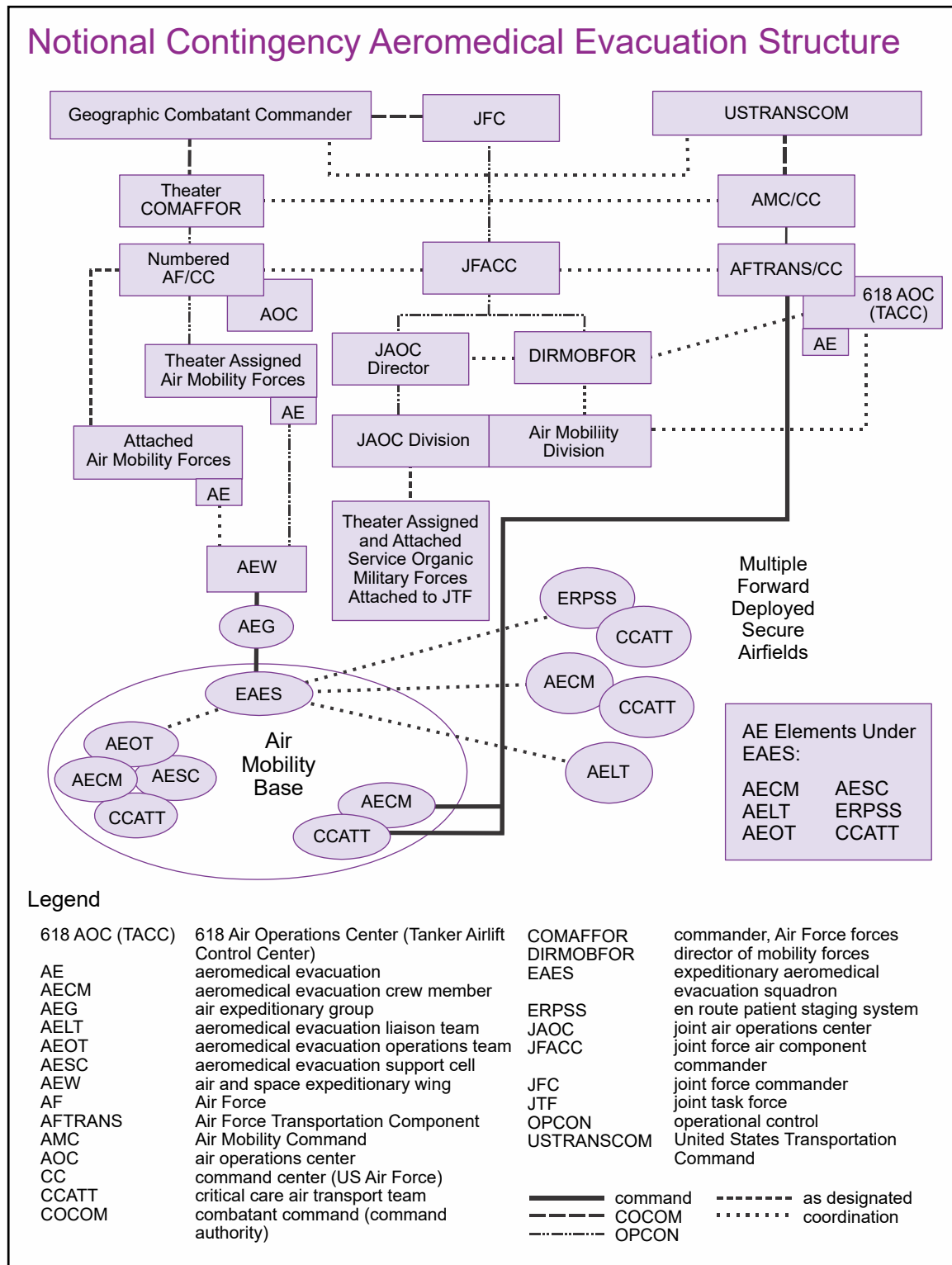


Figure A-A-1. Notional Contingency Aeromedical Evacuation Structure

arrangement of the JAOC and associated command relationships with respect to air mobility operations.

For more information on air mobility operations, see JP 3-17, Air Mobility Operations.

3. Aeromedical Evacuation Operations

a. The AMC manages and operates the intertheater and AE subsystems and provides AE elements and planning assistance to the theater, in intermediate supporting theaters, or in the US. The USAF in Europe and US Pacific Air Forces are responsible for their theater-assigned AE units and associated airlift units. When contingencies exceed theater AE capabilities, AMC provides mission-specific augmentation forces to support increased theater requirements and expands or establishes the intertheater capability to support movement between theaters, or to and within the US, as required.

b. AE forces are modular by design and can be tailored and deployed to meet situational requirements. The AE process depends on reliable, pertinent, and timely communication and coordination between the originating requestor, the PMRC, the appropriate airlift agency, AE elements, and the destination MTF (see Figure A-A-2).

c. The airlift agency (AOC/JAOC/AMD) executes the AE mission by optimizing the use of available multi-mission aircraft, mixing cargo and AE on mobility missions, and integrating AE requirements into cargo channel routes. Airlift for urgent and priority patients is tasked from alert AE crews, diversion of in-system select aircraft, or contracting with a civilian air ambulance. Each patient's clinical requirements may also dictate specific airframe use. To enhance responsiveness, AE crews and critical care transport teams should be positioned based on airlift and key patient originating locations. On execution, AE plans may integrate allied and/or other Services' airlift capabilities, when appropriate. AE and airlift elements are tasked through the air and space expeditionary wing using an air tasking order. The air and space expeditionary wing will provide airlift, aircrews, and augmentation assets (equipment and/or specialized medical personnel) to comply with the tasking. AE assets are placed at appropriate locations throughout the JOA for rapid response.

See Appendix G, "Service Component Transportation and Medical Evacuation Assets," for more information on air transportation assets.

d. AE interface with special mission operations and rescue. Some special mission operations and expeditionary forward deployed operations, such as USMC expeditionary forces (to include Marine Corps SOF), and combat search and rescue (SAR) at times may not possess organic AE capability augmentation support and must identify requirements to obtain conventional AE support at forward airbases. Supporting SOF requires the HSS planner to understand both MEDEVAC and CASEVAC platforms (sea, air, and land) and be prepared for unconventional transport methods.

(1) The evacuation of casualties within the joint special mission arena can be a particularly complex issue since these forces often operate in small, widely dispersed teams, and in locations not easily accessible. Flexibility and sensitivity to the particular

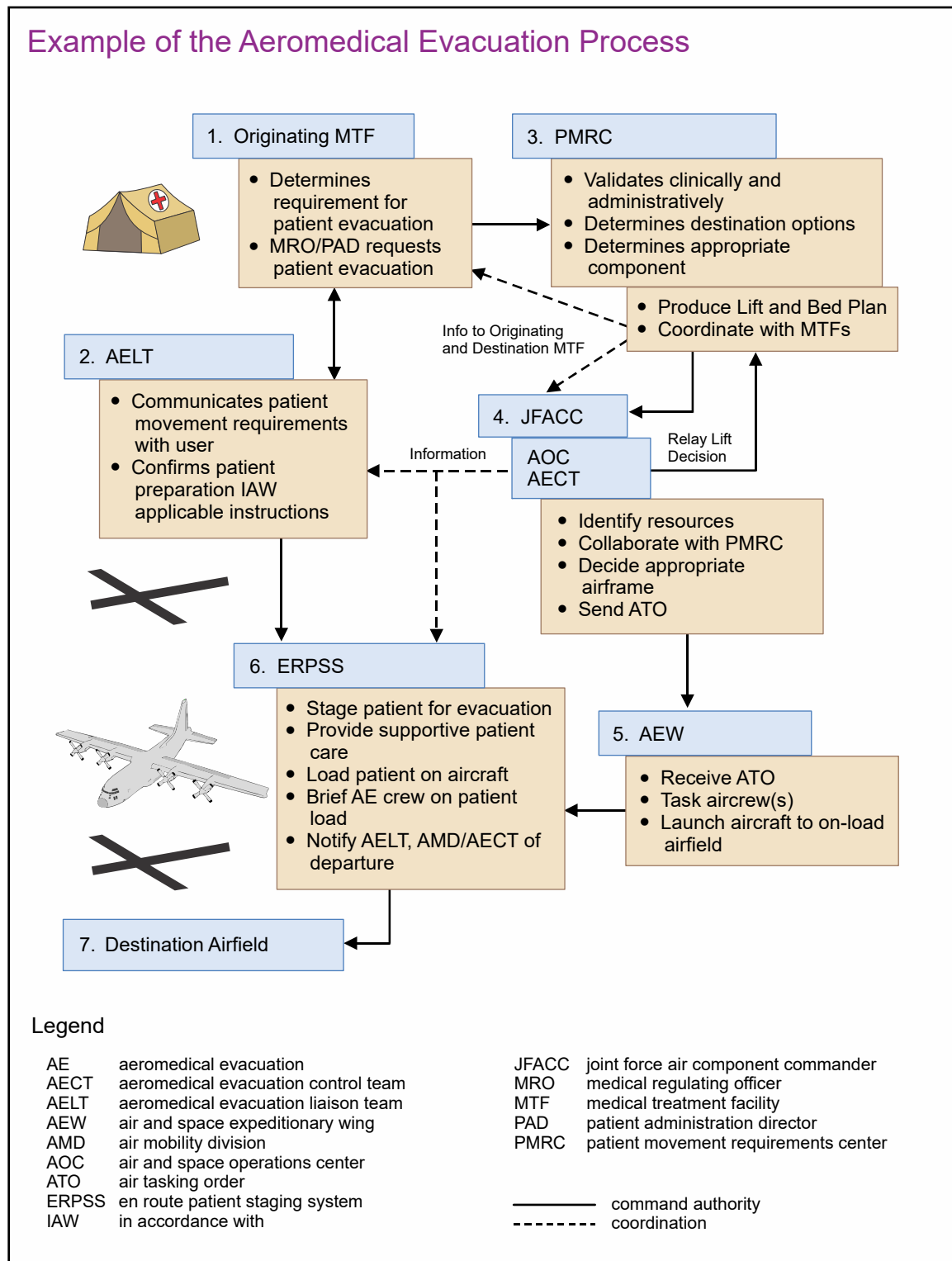


Figure A-A-2. Example of the Aeromedical Evacuation Process

needs of the special mission community, both clinically and administratively, are important to consider in determining how to best support their AE requirements. The special mission forces are responsible for care and evacuation of casualties from the forward location to

the secure airfield where AE forces will assume responsibility for the casualties, freeing special mission medical assets to return to forward locations. The AE planner must understand the need for limited resources and yet versatile, flexible capability to support special missions.

(2) The Air Force Special Operations Command's special operations surgical team is a specially trained and equipped form of CCATT; special operations critical care evacuation teams are organic to USAF SOF to meet their unique mission requirements. These teams provide care to casualties transiting the SOF CASEVAC system and provide continued trauma and postoperative casualty management aboard organic SOF aircraft and other opportune evacuation platforms.

e. Detainee missions fall under the responsibility of security forces and are politically sensitive. Normally a CONOPS is written to outline roles and responsibilities. AE policies and processes exist for moving EPWs/detainee patients on AE missions. Transport missions that move detainees between holding locations are not AE missions and are not supported by AE personnel.

f. The USAF AE aircrew members may perform appropriate duties in non-USAF aircraft if it is in the interest of the USG and approved by both the GCC and the controlling aircraft authority. Conversely, MNFs may also integrate with AE forces. The AE planner will identify these requirements. The operations center, in peacetime or wartime, will work inter-fly agreements through the line of the USAF. In peacetime, Service component commands may require inter-fly agreements to be processed before AE crews from one command can fly with others.

4. Operations Phasing and Force Sequencing

AE forces provide a rapid, flexible, incremental, mobile response. Unit type codes (UTCs) are employed to provide command, control, communications, patient care, and system support. The USAF AE system needs to have the capability to move casualties after minimal stabilization from forward areas. The concept is to employ an immediate, versatile, and flexible AE presence to respond to the needs of the deployed forces. After the initial buildup, the planners can augment the deployed teams with more manpower and equipment (augmentation packages), as required, to support more intense or ongoing operations.

a. **AE Crews.** AE crews are specially trained to perform in-flight medical care; are experts on aircraft configuration; and provide the operational interface between the patient, medical equipment, and aircraft systems.

b. **CCATT.** CCATTs provide specialized care, in conjunction with AE crews, to evacuate critical patients requiring advanced care during transportation. CCATTs represent a specialty or critical care team that can be added to the basic AE crew to offer a higher role of care to stabilizing patients during AE staging and flight. AE missions that require the addition of a CCATT will be validated by the PMRC and tasked by the AE control teams.

c. **TCCET.** The TCCET provides damage control resuscitation and critical care support in the perioperative phase of care across the spectrum of unregulated into regulated portions of the ERC system. The perioperative phase of care includes the care of the patient prior to access to surgical stabilization, as well as the post-operative patient with ongoing stabilization and critical care needs. The TCCET operates in an uncertain or hostile environment where risk is mitigated as much as possible.

d. **En Route Patient Staging System (ERPSS).** The ERPSS is a flexible, modular patient staging system able to operate across the spectrum of conflict, such as military operations, FHA, and DSCA. Utilizing the ERPSS force modules that support operations ranging from 10-250 beds, patients may be held from 6 to 72 hours, dependent upon the arrival of the earliest opportune aircraft for which a patient can be prepared for AE. The primary mission of the ERPSS is to provide personnel and equipment necessary for 24-hour staging operations for patients entering and transiting the ERC system worldwide. The ERPSS coordinates and communicates with medical and AE elements to accomplish patient care and PM, including ground transportation. It provides patient reception, complex medical/surgical nursing, and limited emergent intervention, and ensures patients are medically and administratively prepared for flights.

e. **Aeromedical Evacuation Liaison Team (AELT).** The AELT provides support between the forward user and the AE system in the form of operational and clinical interface. This interface may occur at locations that do not otherwise have USAF personnel on them such as far forward/bare bases and shipboard. The flight nurse liaison assists the local medical unit in preparing AE patients for flight. The administrative officer is responsible for working with the airlift center and aerial port elements to ensure the aircraft is properly configured and equipment pallets, patients, and AE support personnel are properly manifested on the AE mission. The communications personnel may be integrated into the airlift operations element supporting flight line operations or the wing operations center. Establishing a communication network with airlift operations is essential for rapid evacuation.

f. **Expeditionary AE Squadron.** The expeditionary AE squadron is assigned to an AE squadron and air expeditionary group. The deployed unit type report AE command squadron integrates into air and space expeditionary wing operations. The expeditionary AE squadron provides command functions for all AE personnel assigned to the air and space expeditionary wing. The expeditionary AE squadron ensures all elements are prepared to conduct AE operations as tasked by the AOC and will provide AE assets to support the wing operations center. The expeditionary AE squadron can arrange support requirements for follow-on AE forces, as required. In larger contingencies, there may be more than one expeditionary AE squadron assigned to an air and space expeditionary wing or air expeditionary group.

g. **Aeromedical Evacuation Operations Team (AEOT).** The AEOT may be integrated into the air mobility control center (a permanent en route C2 function). AEOTs are located at strategic airlift hubs or en route locations to support aircrews, equipment, and launch and recover operations. The AEOT provides direct supervision and crew management for assigned, attached, and transiting AE crews and CCATTs in conjunction

with the air mobility operations control center, AE control team and base operations, as applicable. The AEOT coordinates requirements to include launch and recovery, life support, billeting, food service, transportation, and administration for AE crew members/CCATT. The AEOT supports AE missions through assigned aircraft configuration and equipment to include patient loading interface and resupply of in-flight kits, medications, and patient liquid oxygen. They provide oversight and operational support on flight line activities, patient loading and unloading, and aircraft arrival and departure times.

h. Aeromedical Evacuation Support Cell (AESC). The AESC provides communications and air and space ground equipment maintenance support to all UTCs assigned to the theater AE system. The AESC should be staged with equipment at key locations, normally with the expeditionary AE crew member support, within the AOR to support AE requirements. Communications networks will be integrated with airlift operations.

5. Planning for Aeromedical Evacuation

AE planners are an integral part of the airlift planning team and should build appropriate AE support into the en route structure. The AE planner should interface with medical planners to ensure appropriate medical capability along airlift routes. Comprehensive planning will ensure a coordinated effort in providing timely and effective AE.

a. AE Planning Factors. AE planners must take many factors into account to select the best or most appropriate means of executing each AE mission. Airlift routes must be identified to establish potential AE plans. Based on planning directives, the CCMD OPLANs/concept plans will include bed down of AE capable airlift, strategic APODs and/or APOEs, planned mission routing, availability of intratheater/intertheater retrograde airlift for AE missions, and planned PM requirements (evacuees) by C-Day (the unnamed day on which a deployment operation commences or is to commence).

b. Airframe Considerations. It is critical to identify airframe availability and capability based on patient load and the clinical requirements of the patients expected to be moved. Organic aircraft are airframe assets that have been obtained primarily through mission tasking or through en route diversion and mission reprioritization for AE use. Organic airlift is the major airframe component of expeditionary AE. Requirements can vary from obtaining seat space to move ambulatory patients, to procuring a pallet position to move litter patients, to tasking an entire aircraft to perform a single mission or routine channel mission. The airlift operations centers have visibility of airlift operating in the JOA and may divert a mission, in-system select, to support the patient request.

c. Airfield Capability. The mobility en route structure and proximity of MTFs to the airfield determines AE laydown. Proposed onload, en route, and offload airfields must be able to support the operation. Mission planners must consider flight line security, secured launch, and Phoenix Raven requirements for designated airfield locations.

d. **Potential Hostile or Terrorist Locations.** The requirements for security forces to support aircraft during AE missions must be considered in the planning process. The Phoenix Raven program provides these specially trained security forces personnel to protect AMC aircraft and will be included on all AE missions to locations designated “Ravens required.” AE crews will carry weapons, when appropriate and authorized, to protect themselves and their patients.

e. **Base Operating Support.** AE operations depend on integration with the line of the USAF and the joint host Service to provide base operating support. This support is needed for AE units attached to specific locations, as well as en route transient support during patient evacuation through the system and must be coordinated with appropriate agencies prior to deployment. These requirements include, but are not limited to, transportation (including patient transportation); messing; and other consumable materials, water, fuels, cryogenics, liquid oxygen and other gases (obtained from fuels or on a contract basis), billeting, latrines, showers, laundry, and security. Additional requirements include alternate generator support, fire protection, vehicle maintenance support, vehicle decontamination, maintenance and logistics, life support, contracting, supportive information/communications systems maintenance, waste management, and personnel decontamination.

f. **Biomedical Equipment Repair Technician Support.** Equipment repair is essential in the theater for routine maintenance and minor repair. Deployed MTFs (and potentially civilian and multinational facilities) can support AE equipment repair and maintenance. Therefore, the AE planner, in conjunction with the MEDLOG planner, should insert AE medical equipment technician capability into airlift hubs and align with local MTFs to ensure AE equipment is processed to meet mission requirements.

g. **Communications.** Planners must ensure AE communication capability is integrated with the mobility airlift and communication squadron network. Communication must be maintained with subordinate deployed AE elements that may not be on or near a USAF wing.

h. **Ground Transportation.** Most AE units deploy with integral transportation capability specifically designated for the movement of assigned equipment packages with limited capability to transport AE personnel. AE planners should ensure proper aircraft support equipment is available at the airfield, such as support pallets and loading systems. The MTF is responsible for transport to the aircraft. Medical planners should determine the availability of other Service ambulances, other vehicles and, if necessary, establish contracts or obtain HNS.

ANNEX B TO APPENDIX A PATIENT MOVEMENT ITEMS

1. Patient Movement Items System

a. The objective of the PMI system is to sustain the PM/evacuation system without diminishing the capability of forward medical units. This is done by pre-positioning or providing in-kind exchange of equipment for treatment continuity or by using Service-specific, Global Patient Movement Joint Advisory Board-approved PMI equipment. Determination of the specific items that make up the PMI asset pool are identified by the Services as medical equipment items required for PM and facilitated through the USTRANSCOM Surgeon's Office. Equipment listings are maintained by the Service MEDLOG agencies. Prompt recycling of PMI is essential for minimal inventory investment. The PMI system, managed by HQ AMC/SGXM, comprises the management of PMI equipment and materiel. The PMI system will provide a seamless in-transit equipment management process from initial entry to the equipment's final destination. The PMI system will deploy with the USAF AE system, be managed and supplied through the USAF AE system, be collocated with AE intratheater and/or intertheater interfaces to provide initial AE operational capability and sustainment of AE operations, minimize equipment turnaround time, and prevent degradation of capabilities of forward medical units due to an outflow of PMIs through the ERC system.

b. USTRANSCOM is the PMI system manager. HQ AMC/SGXM is the program management office. All Services will fund their original initial quantities of approved PMI in-kind assets. PMI in-kind assets are defined as the exact medical equipment by type and model approved for AE PM. All Services will maintain initial quantities of approved PMI in-kind equipment in their medical assemblages, kits/sets/outfits, table of allowance, or allowance standards. This will ensure equipment standardization and the PMI program's ability to seamlessly support PM. This capability is critical to enabling the PMI system to properly recycle/replace medical equipment in medical assemblages and to ensure their designed operational capability is not diminished due to equipment shortfalls. The USAF manages and receives Defense Health Program funds to support DOD operational plan PM requirements and is responsible for life-cycle management of those equipment assets that reside in the PMI centers.

c. The PMI center levels are based on projected casualty flow and recycling of PMI assets. Timely recycling is essential to maintain and manage the total inventory investment. Key to successful patient treatment and movement is ensuring PMI medical equipment assets are available for patient treatment, tracked during in-transit, and recycled to MTFs. All Services are responsible for tracking, funding return, and shipping PMI assets to the closest PMI center and providing shipment and tracking information to the receiving PMI center and HQ AMC/SGXM.

d. PMI equipment is tested and certified for use on applicable Service rotary-wing and fixed-wing aircraft by Service testing agencies and utilize joint testing standards.

e. Service ERC teams (i.e., USAF AE crews and CCATTs, Army en route critical care nurses, and critical care flight paramedics) will be trained to operate PMI equipment items.

f. The USAF is the PMI program execution agency responsible for resourcing, maintaining, and recycling PMI to support contingency operations for PM. HQ AMC/SGXM is the program management, execution, and action office for the USAF. Pre-positioned PMI equipment is placed on the patient by the sending MTF. PMI centers will recycle or replace particular PMI equipment removed from the Service medical facilities to support a PM event. The PMI system provides the capability to track medical equipment from initial entry to the patient's final destination. This is accomplished by responsible personnel scanning out the PMI with hand-held scanners at the originating MTF and scanning it back in at the receiving MTF to update the Patient Movement Items-Asset Tracking System (PMI-ATS). If the equipment is not scanned as it leaves one MTF and scanned again when it arrives at the next location, in-transit visibility is lost. The PMI system will deploy with the USAF AE system, be managed and supplied through the USAF AE system, and co-locate with AE intratheater and/or intertheater interfaces to provide initial AE operational capability, sustainment of AE operations, and minimize equipment turnaround time. Levels will be established based on the worst three days of PM, either based on planning factors for initial setup or six-month historical data for continuous operations.

g. The PMIs are tracked using PMI-ATS. The use of PMI-ATS is mandatory for asset visibility and tracking of PMIs to provide information to allow proactive support to deployed organizations. The HQ AMC/SGXM is responsible for PMI-ATS OPCON, advice, and counsel and will provide instruction on the use of tracking equipment. Specific instructions/training are located within the automated tracking system. All personnel involved with oversight or support of PMI or the PMI program must complete the PMI-ATS Web-based training. The radio-frequency identification tags and other technologies scan or capture PMI movement and/or location and share PMI data with other authorized users of the system. The PMI tags, radio frequency identification tags, and other technologies labels will hereafter be referred to as "PMI tags." The PMI tags will be issued only at PMI centers and designated units or by HQ AMC/SGXM using established PMI guidelines in accordance with PMI Tag Methodology and Codes. All users will ensure bar PMIs are attached to all PMI equipment assets prior to use and/or PM. The PMI tag should have the HQ AMC/SGXM phone number, 1-877-286-1931, for easy return, if found. If the PMI tag is worn or does not have a phone number, contact the nearest PMI center or HQ AMC/SGXM to obtain a new tag immediately. Non-PMI equipment will not be tracked in this system unless coordinated with the USTRANSCOM Command Surgeon and HQ AMC/SGXM.

h. The PMIs must be returned promptly, particularly from US MTFs to the closest PMI center, to prevent equipment shortages in theater. Once patient care is transferred from the PM system to a MTF or other such provider, it is critical the PMI equipment be immediately returned for inspection and redistribution. Services must ensure all medical personnel are trained to not only recognize PMIs but also to understand and execute recycling back to PMI centers. The MTFs decontaminate and clean PMI equipment in

accordance with local infection control guidance before returning to a PMI center, PMI cell, or transportation point. To reduce medical equipment shortfalls in the theater, the JFC must ensure detailed procedures are established to resupply, refurbish, and properly recycle PMIs. The MTFs recycling PMIs to PMI centers will obtain the transportation access code to pay for shipping from their Service MEDLOG office.

i. PMI for DSCA operations is provided at the APOE (ERPSS) and flows with the patient to the destination hospital. It is a cooperative effort of the hospital and teams to return the PMI to a PMI cell for processing and reuse.

2. Patient Movement Item Centers

a. Establishment of theater PMI centers is a Service and CCMD responsibility. The USAF has established six PMI centers to support worldwide AE operations based on theater requirements. Service PMI centers should be located at ports of embarkation and/or debarkation within the US and outside that best support PM/evacuation/treatment plans as identified in CCMD OPLANs and Service/agency support plans (e.g., NDMS activation). PMI centers are responsible for the overall management, in-transit visibility, tracking, and recycling of PMIs. These centers receive, refurbish (i.e., technical inspection, calibration, repair), provide one day of expendable supplies, redistribute, and quickly return PMIs collected from MTFs to their origination. The US Army Medical Materiel Agency may be required to provide the same level of maintenance support in the US if required. PMI centers can be augmented with personnel and equipment from the other Services in the event of surge and sustained requirements. Service liaison personnel can also be assigned. Intratheater movement of PMI equipment is the responsibility of the GCC.

b. Contingency PMI cells can also be established and augmented with personnel from all Services in the event of surge and sustained requirements. These cells are equipped to provide the same maintenance and tracking support capability as permanent PMI centers. If required, Services can coordinate with USTRANSCOM and HQ AMC/SGXM to request a deployable medical maintenance package (equipment only) to outfit a contingency PMI cell with required maintenance test equipment assets.

3. Patient Movement Item Teams

a. PMI teams are composed of medical material and medical equipment repair specialists. Combined, this logistics team provides manpower for operational management of a PMI center. Medical material teams will manage PMI equipment and supplies, maintain asset accountability, acquisition replacement material, and facilitate equipment recycling/tracking. Equipment repair teams support regional maintenance and repair capability for equipment in PMI centers and/or cells. These teams provide scheduled preventive maintenance and calibration, provide repair and maintenance services, and update the PMI information system.

b. The host medical equipment maintenance activity may request repair-and-return maintenance support from the geographic TLAMM, PMI center, or cell, using approved

business practices. Locations with organic biomedical electronics technicians (BMETs) will perform maintenance of PMI equipment.

c. The medical equipment maintenance activity ensures AF Form 4033 (PMI/AE Certification Label) and AF Form 4368 (Scheduled Maintenance and Certification), or DOD Form 2163 (Medical Equipment Verification Certification), are affixed to each PMI medical equipment item to designate its airworthiness certification and maintenance record.

d. During any maintenance of PMI equipment, the servicing BMET coordinates with the closest PMI center to verify equipment ownership, ensures the equipment location is current in the PMI-ATS, and provides the latest calibration date for update in the tracking system.

e. The closest medical equipment maintenance activity performs all corrective maintenance required for equipment being used on a patient mission. The medical equipment maintenance activity documents the work performed on a manual work order and forwards it to the owning activity who will update the accountable records and PMI-ATS.

f. The local BMET who works on equipment belonging to another organization records it as an unscheduled work order with no index number/equipment control number to account for time and parts.

4. United States Air Force Patient Movement Items Centers

a. HQ AMC/SG PMI Center - Scott AFB, IL
Shipping Address:

HQ AMC/SG PMI Center - Scott AFB
120 South Adams Street, Building 4020
Scott AFB, IL 62225-5300

DSN Phone: 576-1173
Commercial Phone: (618) 256-1173
Fax: (618) 256-1175

b. 60th Medical Group PMI Center - Travis AFB, CA
Shipping Address:

60th MDG Travis PMI Center
102 Bodin Circle, Building 795
Travis AFB, CA 94535-1800

DSN Phone: 312-799-2379
Commercial Phone: (707) 423-2379
Fax: (707) 423-3638

c. 374th Medical Group PMI Center - Yokota Air Base (AB), Japan
Shipping Address:

374th MDG Yokota PMI Center
Building 4145 Unit 5225
Yokota AB, JAPAN 96328-5225

DSN Phone: 315-225-5234
Commercial Phone: 011-81-311-755-5234
Fax: 011-81-425-30-3352

d. 18th Medical Group PMI Center - Kadena AB, Japan
Shipping Address:

18th MDG Kadena PMI Center
Unit 5268 FM5270 Davis Avenue, Building 626
Kadena AB, AP 96368-5268

DSN Phone: 315-630-4467
Commercial Phone: 011-81-611-730-4467
Fax: 011-481-611-730-4681

e. 86th Medical Group PMI Center - Ramstein AB, Germany
Shipping Address:

86th MDG Ramstein PMI Center
Lincoln Boulevard, Building 2497
Ramstein-Flugplatz, Germany 66877

DSN Phone: 314-479-2437
Commercial Phone: 011-49-6371-46-2437
Fax: 011-49-6371-46-2569

f. 779th Medical Group PMI Center Andrews AFB, MD
Shipping Address:

779th Medical Group Andrews PMI Center
3422 Tennessee Avenue
Andrews AFB, MD 20762-5184

DSN Phone: 857-7957
Commercial Phone: (240) 857-7957
Fax: (240) 857-7951

Intentionally Blank

ANNEX C TO APPENDIX A

TACTICAL CRITICAL CARE TRANSPORT

1. Introduction

a. TCCT refers to the intratheater PM within the continuum of care, for seriously injured critical care patients, usually moving from forward resuscitative surgery and/or care to theater hospitalization capability for further stabilization and care. TCCT primarily concerns intratheater aerial movement from MTFs where the patient received initial treatment to MTFs where the patient will receive follow-on/advanced treatment and/or preparation for intertheater movement/evacuation to definitive care capability facilities but may also include intratheater transfer from a HN facility to a US MTF or from US MTFs to HN facilities for higher role of care.

b. Critical care patient describes a Service member who has suffered injuries or the onset of a critical medical condition (e.g., heart attack, seizure, stroke, pulmonary embolism); received resuscitative care and surgical intervention; or is stabilizing and requires critical care support that may include supportive/resuscitative care of shock, hemorrhage, respiratory failure and multisystem trauma/failure. A post-resuscitative surgery critical care patient, though stable, remains at high risk and requires, during movement, a provision of care as close to equivalent as possible to what is typically provided within a hospital's ICU. This care may include, but is not limited to: continuous life support (ventilation); extensive and advanced skills/intervention, invasive, and non-invasive monitoring and/or interpretation capabilities (i.e., arterial, central venous, pulmonary artery, and intra-cerebral pressures); and advanced pharmacological intervention (i.e., initiation and titration of vaso-active and other intravenous medications). Given that aerial assets (but especially rotary-wing platforms) and advanced medical personnel could potentially be drawn from any Service, it may be desirable to standardize sets of TCCT-related equipment for employment across the joint force.

2. Tactical Critical Care Transport Tracking

a. With the emergence of critical care patients at the tactical level, and the capability to transport them in a standardized, regulated manner, it is necessary to begin to capture, track, and transfer more detailed patient medical information at an earlier, more forward point within the OA. Additionally, the treatment of critical care patients, both forward and en route, may require a revised means of capturing, tracking, and transferring their medical information prior to there being regulated upon arrival at the theater hospitalization capability. For example, treatment of critical care patients may include assisting and monitoring discussions between sending and receiving physicians regarding intratheater aerial movement of critical care patients (e.g., office of the staff surgeon, JPMRC). Currently, these systems are not routinely employed below the theater hospitalization capability.

b. Services possess the aerial platforms and advanced medical capabilities required to conduct TCCT activities in most operational scenarios. For example, the Army's air ambulance company already provides the backbone for the conduct of intratheater rotary-

wing PM, and all Services possess rotary-wing, tiltrotor, and/or fixed-wing platforms capable of supplementing these activities. Additionally, the Air Force has CCATTs for treating critical care patients on fixed-wing platforms and is creating a TCCET capability for use in tactical/rotary-wing activities, and all Services possess teams comprised of the individual medical specialties (i.e., critical care nurses, nurse anesthetists, intensivists and/or emergency medicine physicians) required for treating critical care patients.

APPENDIX B

MEDICAL LOGISTICS SUPPORT

1. Introduction

a. MEDLOG provides life-cycle management for the specialized products and services required to support health services. These products and services are used almost exclusively by the medical system, are critical to its success in delivering health care, and are usually subject to strict standards and practices that govern the health care industry in the US. MEDLOG functions are managed within the health system using DOD standard business processes and medical information systems and are supported by organizations and business processes that are adaptable, scalable, and tailored to the medical mission. Primary MEDLOG functions provided in support of the CCDR include:

- (1) Medical supply chain management (Class VIIIA), including gases.
- (2) Medical equipment and technology management.
- (3) Medical equipment maintenance and repair.
- (4) Optical fabrication and repair.
- (5) Blood storage and distribution (Class VIIIB).
- (6) Medical facility planning and management.
- (7) MEDLOG services.
- (8) Medical contracting support.

b. MEDLOG support requires intensive management and close collaboration among medical logisticians, medical planners, and clinicians throughout all roles of care to ensure MEDLOG is responsive to clinical demands. The vast majority of medical supplies and equipment used in health support are commercial, non-developmental items that are subject to rapid changes in technology and clinical practice. MEDLOG support is characterized by a lean, intensively managed supply chain that extends from the national supplier network to customers deployed far-forward in the theater. Effective management of this supply chain has led to close collaboration and formal partnerships that integrate programs managed by DLA with the Services' operational MEDLOG capabilities.

2. Organization for Medical Logistics Support

a. The Assistant Secretary of Defense (Health Affairs) (ASD[HA]) establishes DOD policies, programs, and standards that govern the provision of military health care. This includes the establishment, in coordination with the DLA and the Service surgeon generals (SGs), of performance standards for the provision of medical materiel support to the MHS.

b. The Military Departments provide fully equipped and provisioned operational medical units, to include the necessary force structure to provide MEDLOG support for their respective Services. The Services also provide the requirements data necessary to forecast and source the types and quantities of medical materiel to be procured by DLA for health support across the range of military operations.

c. The GCC is ultimately responsible for MEDLOG and the required medical materiel and equipment for their assigned and attached units. The GCC assures all support provided to MEDLOG units for Class VIII is viable in support of all medical services within the AOR and that adequate support is provided for ongoing resupply procedures.

(1) A designated CCMD surgeon advises the GCC on all MEDLOG support matters and provides the following MEDLOG functions:

(a) Prepares the detailed MEDLOG guidance, tasks, and joint MEDLOG CONOPS.

(b) Develops the theater pharmaceutical formulary in conjunction with the senior pharmacy officer and other medical materiel policy guidance and planning factors for the GCC, to include:

1. Preparatory requirements for pre-positioning of medical materiel, including medical biological chemical defense materiel, medical countermeasures (such as antimalarial drugs), and terminal prophylaxis.

2. Theater policy for the individual issue of controlled substances, such as diazepam or morphine auto-injectors to appropriate medical personnel.

3. Theater policy for the refill of prescription medications for preexisting chronic medical conditions.

4. Management and disposal of regulated medical waste.

5. Review of and recommendation for approval or disapproval of requests for nonstandard medical equipment beyond unit authorized allowances.

(c) Advises the GCC on the joint application of MEDLOG resources to promote efficiency and minimize the MEDLOG footprint. This includes recommendations for establishment or designation of a SIMLM and coordination with the DLA for designation of a TLAMM.

(d) Maintains liaison with component surgeons and resolves MEDLOG conflicts surfaced by component commands.

(e) Maintains liaison with attached medical units responsible for execution of the MEDLOG mission(s), as well as theater MEDLOG organizations, to include the DLA and its regional command, TLAMM (if designated), the JDDOC, the joint mobility control group, and the MEDLOG management center.

(f) Monitors MEDLOG support, to include status of critical and/or special interest materiel or systems, MEDLOG staffing, and supply chain performance.

(g) Supervises the activities of the AJBPO.

(h) Advises the GCC on the disposition of captured enemy medical materiel in accordance with the Geneva Conventions.

(2) The GCC establishes capabilities for theater MEDLOG by requesting the operational MEDLOG forces required to support the medical plan. To the extent possible, theater MEDLOG leverages distribution capabilities and information technology to minimize layers of storage and MEDLOG management and employs MEDLOG capabilities that support all Service components and designated multinational partners to minimize unnecessary redundancy and promote supply chain efficiency. Theater MEDLOG is employed as part of the integrated medical system typically under the management control of the Service component. MEDLOG support functions are performed at every role of the medical system and depend on integrated plans and processes that are fully synchronized with theater medical operations.

(a) First responder and FRC capabilities are the theater's most far-forward, highly disbursed, and fast-moving medical elements. These units are very limited in the amount of materiel and equipment they carry and are typically self-sufficient for not more than 72 hours of operations. Their primary MEDLOG functions are management of organic medical sets and equipment and initiation and management of requests for replenishment or maintenance support. Management and replenishment of organic medical equipment sets relies heavily on end users who have clinical or other primary responsibilities that are non-logistics functions. FRC also includes limited medical supply and maintenance provided by organic Service component tactical MEDLOG elements. Successful MEDLOG is reliant on processes and supporting systems that are simple to use and reliable. The MEDLOG system also relies heavily on intratheater distribution capabilities that provide time-definite delivery and timely and accurate in-transit visibility. First responder and FRC MEDLOG capabilities are controlled by the medical or maneuver unit of which they are an organic part.

(b) Theater hospitalization units include hospitalization as well as modular, specialty capabilities that comprise an integrated, multifunctional medical system. Theater hospitalization units represent the most complex supply and equipment requirements for MEDLOG. Most of these units include organic MEDLOG capabilities to manage unit-level inventory and medical maintenance, support internal customers, and provide limited area support to external customers or attached medical teams. These units are supported by theater-level and/or strategic MEDLOG units or organizations provided by the Services in response to the GCC's plan.

(c) Theater-level MEDLOG is tailored to the mission, supported force, threat, and geography of the supported theater. It is comprised of operational MEDLOG units requested by the GCC and task-organized within the theater medical system to responsively and efficiently sustain all supported forces. Theater-level MEDLOG

capabilities reach directly into national commercial supplier networks or institutional MEDLOG organizations of the MHS. Theater MEDLOG units are typically under the control of the senior medical commander within a joint medical task force or Service component command tasked with providing theater MEDLOG to supported forces.

d. **SIMLM.** Logistics, including MEDLOG, is a Service responsibility; however, in joint operations, a CCDR or JFC may assign specific common-user logistics (CUL) functions to a lead Service. MEDLOG is an excellent candidate for CUL, and in land operations, the JFC typically tasks the Army Service component command or Army component of a JTF to provide MEDLOG support to other Services and designated multinational partners. The mission to plan and execute MEDLOG as a CUL function is known as SIMLM (management) and the designated Service component is referred to as the SIMLM (manager).

(1) The assignment of SIMLM is mission-specific and depends upon the composition of the supported force (such as one Service versus multiple Service components) and the complexity of intratheater distribution (such as the need to establish intermediate medical storage and distribution nodes to meet health service requirements).

(2) When assigning SIMLM responsibility, the JFC specifies the scope and duration of MEDLOG support to be provided, such as medical supply, medical equipment maintenance, and/or optical fabrication.

(3) The SIMLM, in coordination with the JFS and supporting TLAMM, will develop the MEDLOG support plan and identify to the JFC any additional resources necessary to provide MEDLOG support to all designated customers. The JFC may task other assigned Service components to augment the SIMLM or pass validated requirements for sourcing. This may include forces to augment a supporting TLAMM to expand its capabilities for operational mission requirements.

(4) The scope of SIMLM planning and support responsibilities should address:

(a) Class VIII storage and distribution, to include storage and management of cold chain, controlled substances, and other critical items of special interest to the JFS.

(b) Signal instructions for submission of Class VIIIA requisitions by theater forces.

(c) Medical maintenance and repair support, including support for contracted maintenance services.

(d) Medical assemblage reconstitution, optical fabrication and repair, and medical gas production.

(e) In coordination with the JFS, management of locally sourced materiel that is unavailable from FDA-approved sources, such as regionally unique antivenins.

(f) Monitoring of critical items, such as PMI, blood/blood products, and other items determined by the JFS.

(g) Assessing MEDLOG readiness and advising the JFS.

(h) Redeployment, to include recovery and return of materiel for reutilization and/or disposal through local destruction or transfer to HN or other partners as directed by appropriate authority.

(5) SIMLM responsibilities require close coordination with medical elements of supported Services to ensure mutual understanding of requirements, expectations, and processes for MEDLOG support. The responsible JFS may establish a SIMLM board or cell to coordinate and synchronize MEDLOG requirements and, when necessary, recommend to the JFC priorities for MEDLOG support.

(6) It is important to note that SIMLM does not convey authority to cross-level medical materiel assets across Services components. Such responsibilities are inherent in the CCDRs directive authority for logistics and cannot be further delegated.

(7) SIMLM mission and capability will evolve in relation to the phases of an operation and the needs of supported forces. Initially, the SIMLM coordinates the flow of MEDLOG information and the reception and distribution of materiel received from the TLAMM or other strategic sources. As operations continue and the theater matures, the SIMLM may establish capacity to store materiel and provide other theater MEDLOG capabilities (e.g., optical, medical maintenance). As communication and distribution channels mature, SIMLM capabilities may be reduced or repositioned to achieve efficiency and reduce footprint. When appropriately equipped, the SIMLM maintains total asset visibility/in-transit visibility of all theater Class VIII assets.

e. As the DOD executive agent for medical material, DLA orchestrates the strategic and operational relationships, capabilities, and the system integration necessary for effective and efficient end-to-end Class VIII supply chain support to the CCDR within the following broad operational framework:

(1) The Services organize and equip fully capable medical personnel and may be tasked to deploy Service unique MEDLOG personnel to accomplish medical operations in support of the CCDR.

(2) The DLA provides national contracts with medical prime vendors and other commercial partners that provide access to commercially held materiel and use of the Defense Working Capital Fund to meet immediate inventory requirements and achieve materiel readiness in support of medical operations.

(3) Designated lead agents provide the operational capability to execute executive agent programs and end-to-end supply chain management in support of the CCDR. There are two types of lead agent:

(a) Functional lead agents, such as the Defense Medical Logistics Proponent Committee and the DHA's Medical Logistics Division (formerly the Defense Medical Materiel Program Office), develop functional requirements to support best business processes and promote materiel standardization, respectively.

(b) Recommendations for designations of theater lead agents for medical materiel are provided by DLA, in coordination with the CCDR, Chairman of the Joint Chiefs of Staff (CJCS), and the Secretaries of the Military Departments to provide medical materiel distribution and to assist the CCDR in requirements and medical supply chain planning.

(4) The CCDR, in coordination with DLA, establishes the overall medical supply chain as part of the MEDLOG plan for annex Q (Medical Services). This includes the theater policy for medical requisition and materiel flow, establishment of major Class VIII distribution nodes, and assignment (as required) of a SIMLM mission. The supply chain may incorporate discrete MEDLOG capabilities provided by one or more Services or the joint augmentation of MEDLOG organizations to achieve required capabilities.

f. **TLAMM.** A TLAMM is a Service organization designated to provide theater-level Class VIII supply support to a CCDR for joint forces operating within a specified theater of operations. It serves as the theater's primary distribution point, receiving materiel directly from medical prime vendors and other suppliers in the US. The TLAMM is a critical element of DLA's plan for executing its global medical supply chain responsibilities as the DOD executive agent for medical materiel. A TLAMM operates using DOD standard business processes and systems for medical materiel management that are developed by DLA and MHS to optimize Class VIIIA support to a jointly interoperable health system.

(1) The Director, DLA, in coordination with the supported CCDR, recommends TLAMM designations for the approval of the CJCS. The CJCS may confer TLAMM designation on an existing organization that is part of the institutional MHS (e.g., a MTF or medical materiel center) or a provisional organization established by the CCDR or SIMLM by aggregating deployed MEDLOG units to provide the required theater-level capabilities. Upon designation, the unit serving as the TLAMM has:

(a) Responsibility to provide medical materiel supply chain support to all forces assigned or attached to the CCMD and to a multinational command or other non-US customers specified by the command.

(b) Authority for direct communication with supported customers, DLA, and supporting national-level suppliers.

(c) Authority to request augmentation as validated by the CCMD and CJCS.

(d) Authority to operate within DLA's Defense Working Capital Fund pursuant to formal agreement between DLA and the parent Service.

(2) TLAMMs remain under C2 of their parent Service command or HQ element, which may establish further C2 relationships (e.g., attached, administrative control, or OPCON) as appropriate to meet theater and/or mission specific conditions and requirements.

(3) The TLAMM receives, stores, ships, and/or transships medical materiel from strategic suppliers and coordinates its onward distribution with appropriate transportation management activities. The TLAMM provides the intensive management required to ensure optimal use of distribution resources to meet HSS requirements.

(4) The TLAMM provides support operations that maintain customer and supplier relationships and coordination with theater transportation managers. It also assists the supported JFS and/or SIMLM in developing theater MEDLOG support plans and coordinates with the supported forces to ensure they are integrated into an end-to-end theater medical supply chain.

(5) TLAMM designations and SIMLM responsibilities are complementary but fundamentally different.

(a) A TLAMM is an organization assigned to a Service or Service component that is designated by the CJCS to provide theater-level management and distribution functions within DLA's global, end-to-end medical supply chain.

(b) A SIMLM is a Service component tasked by its CCMD or JFC to provide MEDLOG planning and support as a CUL function within a specific operations or contingency plan.

(6) The TLAMM's primary responsibility is medical supply chain management; however, based on its organizational capabilities and capacity, a TLAMM may provide additional MEDLOG functions such as medical equipment maintenance, optical fabrication, and medical set assembly or reconstitution. As required, the supported CCDR may validate requirements to augment a TLAMM with MEDLOG capabilities necessary to support a theater HSS plan.

For additional information on TLAMM, refer to DODI 5101.15, DOD Medical Materiel Executive Agent (MMEA) Implementation Guidance.

g. Service MEDLOG agencies manage MEDLOG programs that support the projection and sustainment of their respective Services' operational forces. These agencies include the USA Medical Materiel Agency, the USN MEDLOG Command, the USAF Medical Operations Agency, and USMC Systems Command. While each of these agencies has Service-specific responsibilities and chains of command, they perform similar functions that support theater medical operations to:

(1) Forecast and program Service medical materiel requirements.

(2) Acquire and manage medical equipment.

- (3) Manage the production and maintenance of medical assemblages.
- (4) Capture and manage MEDLOG information relative to medical assemblages and equipment.
- (5) Manage medical materiel fielding programs.
- (6) Manage pre-positioned unit sets and sustainment materiel.

h. The MEDLOG Management Center is a USA MEDLOG organization that supports theater MEDLOG operations and ensures end-to-end linkage to strategic MEDLOG readiness programs. Its responsibilities include management of Class VIII inventory held by operational MEDLOG units, monitoring of critical medical items and systems, and assessment of medical supply chain performance. The MEDLOG Management Center maintains close coordination with all theater MEDLOG units, the TLAMM, the JFS and other Service components, as well as with the DLA and its network supplies to facilitate effective MEDLOG support to the CDR.

(1) The USA MEDLOG Management Center is designed to provide centralized theater-level commodity management of Class VIII materiel in accordance with the JFS's policies. It is a modular organization designed to operate in a split-based mode. Its CONUS base provides centralized medical materiel and linkage to national-level capabilities and readiness programs. On order, it deploys a forward support team to each theater to manage and synchronize theater-level MEDLOG support for the JFC. When deployed, the USA MEDLOG Management Center forward support team is assigned to the USA's medical command (deployment support).

(2) The USA MEDLOG Management Center forward support team coordinates with the distribution management center of the USA theater sustainment command or JDDOC established by the GCC to manage theater distribution. This USA MEDLOG Management Center remains under the control of the medical command (deployment support) but works closely with theater distribution and movement managers to coordinate medical requirements and promote efficient and effective use of distribution resources.

(3) The USA MEDLOG Management Center provides technical direction to all Army operational MEDLOG units that comprise the theater MEDLOG system, to include those that fall under the OPCON of subordinate medical HQ. This is to ensure synchronization and visibility of MEDLOG activities throughout the theater and to ensure supply chain management is not fragmented by MEDLOG unit boundaries. Its scope includes all aspects of theater materiel and medical maintenance support, as well as other MEDLOG functions such as optical fabrication and repair, equipment reconstitution, materiel fielding, assemblage management, and provision of medical gasses, and local contracting support for medical materiel and services. It may also plan and coordinate support from local, foreign sources of supply (when required), as well as MEDLOG provided to, or received from, multinational partners.

(4) The MEDLOG planner should address the need for early deployment of a MEDLOG Management Center forward support team into the theater to assist the medical

commander and JFS in establishing, managing, and assessing MEDLOG operations in support of arriving forces.

i. **DLA.** DLA is a DOD combat support agency that provides worldwide logistics support to the Services during all military operations. DLA is responsible for establishing the capabilities and systems integration necessary for effective and efficient Class VIII supply chain support to the CCMDs.

(1) DLA subordinate commands and responsibilities include:

(a) DLA Troop Support manages and executes national-level medical materiel acquisition and distribution programs that provide access to materiel held in commercial inventories at the supplier end of the medical supply chain. These programs include medical prime vendor, Web-based ordering, and multiple forms of contingency programs with manufacturers and distributors to assure access to sufficient materiel to meet forecasted theater requirements. DLA Troop Support also establishes national maintenance contracts for major medical equipment systems, particularly diagnostic imaging, that may be accessed by theater MEDLOG managers. DLA Troop Support is the lead organization within DLA for implementation of DOD executive agent for medical materiel and for synchronizing medical supply chain activities across the Services, other DLA commands, and designated theater lead agents.

(b) DLA distribution centers provide storage and distribution of selected medical materiel that is held in DOD national-level inventory, particularly vaccines and selected military-unique items. DLA distribution centers also provide kitting and assembly operations for the production of medical assemblages and configured supply packages in support of Service MEDLOG.

(c) Defense Logistics Information Service manages DOD MEDLOG data, providing data products used to update MEDLOG catalogs and disseminate MEDLOG catalog information to DOD users. The Federal Logistics Information System is the primary Defense Logistics Information Service information product used by MEDLOG activities.

(2) DLA orchestrates end-to-end Class VIII supply chain support to the CCCR within the framework of the following broad responsibilities:

(a) The Services organize and equip fully capable medical forces, including MEDLOG capabilities appropriate for their operational sustainment.

(b) The DLA provides national contracts with medical prime vendors and other commercial partners providing direct access to commercially held materiel, use of the Defense Working Capital Fund to meet immediate theater inventory requirements and promote materiel readiness, and coordinates with USTRANSCOM for movement of Class VIIIA materiel from CONUS commercial partners to OCONUS theater lead agents.

(c) Designated theater lead agents provide the operational capability to provide theater-level Class VIIIA supply chain management in support of the CCCR.

(d) The CCDR, in coordination with DLA, establishes the overall medical supply chain as part of the MEDLOG plan for annex Q (Medical Services).

(3) Defense Logistics Information Service manages DOD MEDLOG data, providing data products used to update MEDLOG catalogs and disseminate MEDLOG catalog information to DOD users. The Universal Data Repository is the primary Defense Logistics Information Service information product used by MEDLOG activities.

j. The resourcing of medical materiel requirements is a key factor in execution of MEDLOG plans, particularly with regard to the acquisition of medical materiel necessary to initially deploy medical units, to pre-position medical materiel in theater for medical sustainment, and to conduct theater supply operations within a working capital fund. DLA Troop Support, in coordination with the Services, provides several contingency programs with distributors and manufacturers that allow the purchase of materiel for deployment and sustainment to be deferred until needed, thereby tremendously reducing the DOD's direct investment in inventory and infrastructure. However, when this materiel is required, resources are required to purchase materiel from commercial partners for delivery to deploying units or for pre-positioning in theater in anticipation of sustainment requirements.

(1) **Service Responsibilities.** The Services equip and provision operational forces provided to the CCMDs. This includes the funding of contingency programs that are specifically intended to provide initial operating capability for deploying units, as well as the direct purchase of materiel and equipment required by deploying forces. The inability to provide Service funding in time to fully provision deploying units has historically contributed to units arriving in theater with immediate demands for large quantities of medical materiel, placing a burden on theater MEDLOG units as well as strategic and theater distribution assets.

(2) **DOD Executive Agent Responsibilities.** DLA, as the DOD executive agent for medical materiel, programs and provides necessary resources to support Class VIII sustainment and secures contingency materiel at commercial sources or preposition materiel in locations to support CCDR requirements. Medical materiel managed by the TLAMM will be financed and owned by the executive agent. The executive agent requirement to preposition medical materiel in theater is determined by the CCDR in coordination with the executive agent and supported Service component, and made a part of the negotiated performance-based agreement between the executive agent and the CCDR. Performance-based agreements are established between DLA, each CCDR, and the Secretaries of the Military Departments formalizing performance standards, metrics, and operational roles and responsibilities for medical supply chain support to the CCDR and medical operations. Refer to DODI 5101.15, *DOD Medical Materiel Executive Agent (MMEA) Implementation Guidance*, for additional information.

3. Theater-Level Medical Logistics

a. Theater-level MEDLOG refers to the functions that manage, coordinate, and synchronize the execution of the MEDLOG plan in support of theater medical operations.

Theater-level MEDLOG typically includes support to all Service components and designated MNFs. MEDLOG functions are usually provided by operational MEDLOG units (including the MEDLOG Management Center) that are tailored and scaled to the mission and phase of the operation and operate in close coordination with a designated TLAMM and the DLA. Theater-level MEDLOG operations may be under the control of the operational medical HQ assigned responsibility for theater MEDLOG support and may be under the oversight of the JFS. These operations include intermediate-level medical supply operations that provide theater storage and distribution of medical materiel. Primary MEDLOG functions accomplished at the theater level that must be addressed in the medical plan include:

- (1) Execution of theater preparatory tasks for MEDLOG.
- (2) Port operations and reception, staging, onward movement, and integration (RSOI).
- (3) Area support to first responders and FRC capabilities.
- (4) Support to theater hospitals.
- (5) Support to the maneuver force.
- (6) Support to redeployment and/or retrograde operations.
- (7) MEDLOG information systems management.

b. Execution of Theater Preparatory Tasks for MEDLOG. Typically the CCDR will develop a list of preparatory tasks that must be accomplished in preparation for anticipated operations. This list may include the pre-positioning of medical materiel and the establishment of theater MEDLOG capabilities necessary to support RSOI and initial entry medical operations. Pre-positioned materiel may include stocks for initial sustainment; medical operations during RSOI; and special medical materiel, such as medical CBRN defense materiel, special vaccines, and other medical materiel under control of the JFS.

c. Port Operations RSOI. Health services must be capable of operations immediately upon arrival of initial entry forces (even with permissive entry); therefore, MEDLOG must be included in planning for port opening and early entry operations. In almost every operation, lessons learned reflect that theater MEDLOG units must also provide Class VIII materiel for unit shortages that were not filled prior to unit embarkation. Planning for MEDLOG operations during early entry/RSOI should address:

- (1) Class VIII supply support to primary medical care (sick call) and area medical support to minimize the use of materiel from arriving units' organic medical equipment sets.
- (2) The issue of medical unit sets from pre-positioned stocks or war reserve materiel.

(3) Coordination for movement of medical materiel, to include medical equipment sets, from the sea or APOD to staging or OAs.

(4) The reception and issue of potency dated, refrigerated, and controlled substances, including push packages of unit configured materiel and just-in-time modernization items.

(5) Storage and security of medical materiel requiring special handling, such as controlled substances, refrigerated materiel, and other items of special interest to the JFS.

(6) Priority for the filling of significant unplanned medical equipment sets or sustainment shortages.

d. Support to Theater Hospitals. Theater hospitals present the most complex medical materiel requirements and may consume materiel at a tremendous rate when providing trauma care in support of combat operations. Specialty care, such as burn, orthopedic, and neurosurgery, often requires materiel and equipment that is not standard and may not have been anticipated or stocked prior to deployment. Whenever possible, theater hospitals should be located at or near APODs to facilitate PM as well as resupply and be made direct customers of the most capable MEDLOG organization at the theater or strategic level.

e. Direct Support to the Maneuver Force. MEDLOG elements organic to maneuver forces are reliant upon supply chain capabilities that are provided by theater level MEDLOG organizations. Theater-level MEDLOG organizations Class VIII support should be tailored to provide Class VIII support with customer wait times that are acceptable to the maneuver forces.

f. Support to Redeployment/Retrograde Operations. The redeployment of forces presents MEDLOG requirements for command policy as well as MEDLOG operations. During prolonged operations with force rotations, redeployment/retrograde operations may occur simultaneously with RSOI during later phases of an operation.

(1) The JFS assists the CCDR in establishing policy and procedures for redeployment processing, to include:

(a) Administration of the post-deployment health assessment and health counseling for redeploying personnel, to include information on the need for terminal prophylaxis and collection of unused personal medications issued in theater.

(b) Collection and appropriate disposition of medical materiel issued to individuals, to include medical CBRN defense materiel and drugs issued for use as medical countermeasures.

(c) Collection and appropriate disposition of medical materiel from units, to include materiel deemed unserviceable, excess to unit needs, or otherwise unsuitable for return to home stations.

(d) Collection and redistribution, as appropriate, of medical equipment purchased with theater funds.

(2) Theater-level MEDLOG units/organizations will support medical units and elements of maneuver units for:

(a) The turn-in of pre-positioned materiel that will remain in theater to be reconstituted and returned to pre-positioned storage.

(b) The technical inspection, refurbishing, and reconstitution of medical equipment and assemblages that will remain in theater as pre-positioned stocks or be transferred to arriving forces.

(c) The transfer of medical materiel and/or equipment to be redistributed to arriving forces (includes equipment-in-place or equipment left behind, as well as retaining equipment purchased with theater funds).

(d) The collection point for medical materiel and equipment identified as no longer required by the DOD for final disposition. Final disposition of medical materiel and equipment from the DOD inventory includes transfers to other governmental agencies, support to US allies and HA missions through DOS programs, transfers to DLA Distribution Services for disposition, or sales onto secondary markets or disposal.

g. **Time Phasing of MEDLOG.** The MEDLOG requirements and capabilities in the theater will usually change over the course of an operation, from the preparatory and early entry phases through redeployment of forces. The MEDLOG plan should permit flexibility to scale capabilities up or down as appropriate to adapt to medical requirements during every phase of an operation. The flexibility to scale MEDLOG will be enhanced by establishing an overarching concept for theater medical supply chain management and placing theater-level MEDLOG capabilities under the control of a senior medical commander charged with execution of the MEDLOG plan. Flexibility may also be achieved by integrating support from all sources to include medical reachback into the MEDLOG plan. Medical reachback allows for medical infrastructure support services that sustain forward-deployed medical forces to transfer products and ideas as they are required in the OA. It also provides a channel to contact SMEs when a technical issue exceeds the joint force's medical SMEs' capability.

(1) Health services must be available to support initial entry forces (even with permissive entry); therefore, MEDLOG must be planned for port opening and early entry operations. During the early phase, Class VIII sustainment may rely upon preconfigured packages shipped from the national level or pre-positioned theater stocks. Preconfigured push packages of Class VIII historically produce a great deal of wasted materiel; therefore, sustainment should transition as quickly as possible to line item requisitions. MEDLOG capabilities will build in the theater with the arrival of forces sufficient to ensure effective support of medical operations.

(2) As communications and movement capabilities mature, theater MEDLOG should be able to leverage more reliable distribution capabilities to satisfy most customer

orders from theater or even from strategic-level stocks. The MEDLOG footprint should be driven by customer wait time; that is, MEDLOG capabilities should be positioned in the supply chain to be able to deliver the support required within a time-definite standard set in the MEDLOG plan and theater performance-based agreements.

(3) Maturing theater communications and distribution channels may allow the MEDLOG footprint to be reduced to achieve greater efficiency. To the extent possible, customer orders should be filled from the highest level of MEDLOG that meets customer requirements. Some functions may also be able to transition from military to contract or civilian capabilities, while remaining under the oversight of the medical JFS. Plans to right-size the theater MEDLOG footprint will be developed by the medical commander charged with executing the MEDLOG plan with the oversight of the JFS.

(4) During retrograde operations, MEDLOG capabilities may have to be increased to effectively manage additional work associated with recovery, inspection, refurbishment, and/or packing for shipment or return to war reserve materiel storage.

4. Distribution of Medical Materiel

a. DLA and USTRANSCOM share responsibility to orchestrate effective supply chain support to the CCDR and collaborate in the development of strategic distribution processes and movement programs.

b. Medical supply chain management is characterized by substantial integration with the health care sector of the national industrial base and by the intensive management of medical requirements and supply chain activities by MEDLOG managers within the theater medical system. The medical system does not own or manage the transportation resources used to distribute medical materiel, which typically flows through the same distribution channels and is subject to the same movement controls as all other classes of supply. MEDLOG managers must work closely with the movement control elements at all levels to make the most effective use of transportation resources to meet medical requirements.

c. National-level distribution of medical materiel is primarily accomplished by commercial partners, including medical prime vendors, manufacturers, and other third-party medical distributors delivering materiel directly to the requesting customer. Medical prime vendors typically deliver materiel from regional distribution centers to each requesting medical facility using owned or leased transportation assets. The local purchase of materiel that is not available through DLA Troop Support prime vendor or Web-based ordering systems is managed by the individual MTFs with materiel typically delivered to the FOB destination.

d. Distribution to overseas theaters is primarily accomplished through commercial tenders arranged by DLA in coordination with the USTRANSCOM. These commercial carriers pick up materiel daily from the prime vendor distribution facility for delivery to the designated TLAMM supporting the theater. Materiel shipped from other commercial partners is delivered to designated military or commercial distribution centers for onward transportation to the supported theater by either military or commercial carrier. In either

case, the TLAMM receives and either stores or reconfigures materiel for further shipment to the customer through intratheater channels.

e. Intratheater distribution relies on transportation capabilities provided by military ground and/or tactical aircraft or contracted commercial carriers under the control of the Deployment and Distribution Operations Center and movement management elements within the theater. MEDLOG units do not provide transportation of materiel. Priorities for movement of Class VIII material are established by the CCDR and supported maneuver commanders. MEDLOG managers must recognize that, historically, Class VIII has had a lower priority for movement than other commodities; therefore, supply chain activity and the medical materiel status of medical units must be closely monitored so movement managers can make informed decisions on the optimum use of transportation resources, and the JFS can assess the impact of supply chain capabilities on medical operations.

f. Special considerations for storage and distribution of medical materiel. These requirements will pose special challenges during early operations when MEDLOG units and storage capabilities are limited and distribution channels are immature:

(1) **Temperature Sensitivity.** Most pharmaceuticals and many medical-surgical items are sensitive to temperature extremes (most require storage between 5 and 30 degrees Celsius [41 and 86 degrees Fahrenheit]). Most laboratory reagents and vaccines as well as blood require storage and transport temperatures are maintained within a specified range. This poses a challenge for storage at operational MEDLOG units, as well as distribution nodes in regions where the ambient temperatures may destroy the effectiveness of unprotected medical materiel. Technologies that monitor the temperature during transit require special quality control procedures by MEDLOG personnel to interpret, report, and act upon the information provided.

(2) **Storage and Shipping.** Most operational MEDLOG units have very limited environmentally controlled storage. Shipping materiel that needs thermal management will require insulated containers as well as sources of wet and/or dry ice. Planning for MEDLOG operations, especially in extreme climates, must address these needs for environmental protection of materiel in storage and in transit. Planning considerations include:

(a) Buildings of opportunity, especially for the pre-positioning of inventory for theater sustainment.

(b) The local leasing of commercial refrigeration trailers or warehouse units (with the necessary power for their operation). Consult the SJA and/or contracting officer to secure a legally sufficient local lease.

(c) Tents, containers, or similar temporary structures. However, planning should include the provision of air conditioners or environmental control units along with the additional power generators or hookups to local power grids.

(d) The availability of MEDLOG personnel appropriately trained in packing procedures for wet and dry ice shipments (improper packing has destroyed many medical shipments).

(e) The training of MEDLOG personnel in the quality control procedures used for shipments monitored with temperature sensing technology.

(3) **Controlled Substances.** Narcotics and other controlled substances are subject to specific physical security, inventory management, and issue control procedures established by federal statute or Service regulations. MEDLOG planning must include the provision of appropriately secure storage; the availability of appropriately trained MEDLOG personnel to serve as controlled substances custodian; and theater policies for the issue of controlled substances, to include issues to individual first responders.

(4) **Distribution Expeditors.** Medical materiel frequently becomes frustrated or backlogged at intermediate distribution nodes. MEDLOG planning should consider the placement of small teams of MEDLOG specialists at critical or problematic nodes to assist transportation personnel in identifying medical materiel and resolving issues that prevent its onward movement. They would also ensure action is taken to prevent its deterioration due to lack of refrigeration or environmental protection, and assist distribution managers in locating and expediting materiel that must be managed by exception.

(5) **Low-Volume Shipments.** Class VIII sustainment shipments for most medical customers typically are relatively low weight/cube. This poses a challenge because aerial ports try to make maximum use of aircraft capacity, leading to Class VIII materiel being held until there is sufficient volume to justify an aircraft. This increases customer wait time and increases the risk that medical materiel will be lost or will deteriorate while being held pending movement. MEDLOG planning should work closely with the Deployment and Distribution Operations Center and aerial port managers, especially for remote/dispersed customers, and establish customer wait time standards. Consideration should also be given to commercial tenders with carriers that will deliver materiel within established standards.

(6) **Commercial Tenders.** The use of commercial carriers, both air and ground, may provide an effective means of meeting the distribution requirements for some customers or types of shipments, such as refrigerated or high-priority items being managed by exception. However, commercial carriers may also pose additional challenges related to customs processing and cost. MEDLOG planners must work closely with the deployed distribution and operations center office to ensure awareness of customer requirements and to develop distribution plans that meet medical requirements of units that are not well served by routine movement plans.

(7) **Customs Clearance.** Cargo and personnel arriving in theater by commercial transportation are usually subject to processing through local customs. Customs processing can delay the availability of materiel and also be subject to additional fees, depending upon agreements between the host government and US forces. Theater MEDLOG planning

should address customs procedures for each country within the OA and include guidance in the medical annex to the applicable OPLAN.

(8) **Hazardous Material.** MEDLOG planning must address the storage and movement of hazardous substances, such as compressed gasses (including oxygen), certain disinfectants, radiographic chemicals, alcohols, and other laboratory products or samples/specimens. Planning must include the provision of materiel safety data sheets and protective clothing/equipment for MEDLOG personnel, as well as appropriate storage facilities and containers/placards for shipment. MEDLOG unit training must include the certification of personnel to sign movement documentation for hazardous cargo. MEDLOG planners and commanders at all levels must understand that safety and regulatory requirements are not waived for most military operations, especially at the theater level, and violations can be a source of friction with an HN as well as unnecessary risk to US personnel.

5. Information Management

a. The theater medical information program provides the suite of DOD standard applications that support theater medical operations. These include medical C2, health care delivery, patient tracking, and MEDLOG. The theater medical information program applications are fielded and maintained by each Service.

b. The DHA, Health Information Technology Directorate, in conjunction with the Joint Operational Medicine Information System program office, provides the DOD standard applications for MEDLOG in both institutional environments and OEs, respectively, integrating national and operational-level business processes, medical information management, and medical information technology. The Defense Medical Logistics Proponent Committee, under the direction of ASD(HA), is the functional proponent for the Defense Medical Logistics Standard Support Automated Information Systems, as well as business process innovations that increase the efficiency and effectiveness of MEDLOG support of health support across the full range of military operations. The Defense Medical Logistics Standard Support applications enable end-to-end management of MEDLOG processes. These include:

(1) The Defense Medical Logistics Standard Support provides medical supply, medical equipment management and maintenance, assembly management, facility management, and customer support functions.

(2) The Defense Medical Logistics Standard Support Customer Assistance Module provides a simple, laptop-based tool for customer order management for tactical medical units. The Defense MEDLOG Standard Support Customer Assistance Module provides tactical customers with a store and forward capability when communications are not available.

(3) The Theater Enterprise Wide Logistics System provides an enterprise-level solution for the total life-cycle management of medical assemblages and Class VIII supply chain management.

(4) The Joint Medical Asset Repository is a Web-based data repository that provides worldwide asset visibility for medical materiel.

c. **Communications.** MEDLOG is highly dependent upon reliable and timely data and voice communications to exchange information among customers, MEDLOG units, commercial suppliers, and transportation systems. Theater MEDLOG operates primarily in a nonsecure environment; however, some customers (such as SOF) and processes (such as joint movement requests) require access to secure communications. A lack of communications connectivity has been frequently cited in lessons learned as a major factor when supply chain performance has not met customer requirements. MEDLOG planning must address the need for reliable data connectivity for MEDLOG customers and organizations, especially during the earliest stages of theater operations before theater communications capabilities are fully mature. MEDLOG planners must coordinate closely with their J-6 and understand the communications plan for the operation. MEDLOG issues that should be considered include:

- (1) Medical units' ability to communicate requirements and receive status.
- (2) Medical units' ability to communicate with customers as well as supporting theater and national-level organizations.
- (3) MEDLOG units' ability to share requirements and movements information with distribution management organizations and provide situational awareness to logistics and/or C2 systems.
- (4) Information security, to include negotiation of firewalls.
- (5) The requirement and/or use of nonstandard communications capabilities, such as satellite communications for medical/MEDLOG support.
- (6) Training, fielding, and in-theater support for hardware and applications.

6. Medical War Reserve Materiel

a. **War Reserve Materiel Requirements.** The DOD programs and maintains war reserve materiel to achieve flexibility and reduce reaction time for sustainment of forces for operations across a spectrum of regional contingencies. CCDRs determine operational requirements based upon planning scenarios approved in the Defense Planning Guidance. The Services, in coordination with DLA, compute war reserve requirements necessary to meet DOD-approved operational requirements. War reserve materiel requirements are programmed and met through five basic methods:

- (1) Pre-positioned equipment sets are Service-managed packages of unit allowances of materiel and equipment that are strategically pre-positioned and rapidly available for operational requirements.
- (2) Standing stocks are war reserve materiel stocks pre-positioned in or near a theater of operations to last until resupply is established.

(3) Swing stocks are war reserve materiel stocks positioned ashore or afloat for meeting requirements of more than one contingency and/or more than one theater of operations.

(4) Industrial-based contingency programs leverage commercial capacity to meet computed requirements with minimum direct DOD investment.

(5) Inventory-based contingency programs provide national stocks of selected medical items. DLA also manages a strategic program to maintain an industrial base capability for the production of military-unique medical products for chemical defense.

b. Service War Reserve Materiel Programs. Each Service computes, programs, funds, and manages Service-specific programs to meet planned operational requirements for medical materiel. Service programming includes pre-positioned equipment sets and war reserve materiel stocks to provide initial operating capability for their operational forces.

(1) **USA.** The USA pre-positioned stock program is comprised of three major components: pre-positioned brigade and equipment sets, pre-positioned operational project stock, and pre-positioned sustainment stock. The USA pre-positioned stock program is stored at strategic, land-based locations and aboard pre-positioned ships. Packages of potency-dated supplies are also provided through vendor managed inventory programs to provide full unit operational capability and initial sustainment upon activation. Army War Reserve Deployment System, Property Book Unit Supply Enhanced, Standard Army Maintenance System-Enhanced, and Standard Army Retail Supply System are automated systems that support Army pre-positioned stocks and are planned for integration or already integrated into Global Combat Support System-Army.

(2) **USN.** The USN Expeditionary Medical Facility Program provides pre-positioned unit sets stored at strategic locations and provides packages of potency-dated supplies through contractor programs to provide full operational capability and initial sustainment upon activation.

(3) **USAF.** USAF starter and resupply stocks are maintained at US and overseas MTFs and other strategic locations. Vendor-managed inventory programs for selected materiel provides full operational capability upon activation. Deployed USAF medical units use expeditionary MEDLOG, a medical reachback system of support, for sustainment of early deployed USAF platforms.

(4) **USMC.** The USMC units are supported by the maritime pre-positioning ships squadrons.

c. Commercially Based Contingency Programs. To the extent possible, DLA manages commercially based contingency programs with numerous manufacturers and distributors to meet medical war reserve materiel requirements. The DLA commercial contingency programs include prime vendor surge capabilities, stock rotation contracts, corporate exigency contracts, and vendor-managed inventories. These programs are especially useful in reducing the need to maintain potency-dated materiel in war reserve

materiel programs and providing flexibility to purchase materiel that more closely matches the operational need of a specific mission at the time it is needed. Careful planning and timely purchase and distribution of contingency materiel from commercial sources ensure delivery into the theater when and where it is needed.

d. Implications for MEDLOG Planning. The availability of medical materiel is critical to the success of the MEDLOG mission. MEDLOG planners must understand the CCDR's operational requirements and how war reserve materiel programs will be applied to meet those requirements. They must also understand the extent to which commercially based contingency programs are being relied upon to provide initial operating capability and sustainment, and how that impacts upon the need for strategic lift to assure timely delivery. Planning considerations must include:

(1) Adequate pre-positioned equipment sets and standing war reserve materiel stocks to meet operational requirements.

(2) TPFDD plans to support the execution of the medical plan.

(3) TPFDD plans to provide sufficient MEDLOG capability to receive, store, and begin distribution operations in support of the medical plan.

(4) Adequate storage to receive swing stocks or other materiel from contingency programs, especially for refrigerated materiel and controlled substances.

7. Medical Equipment Maintenance Considerations

a. Role of Medical Maintenance. Medical equipment maintenance and repair is a core function of MEDLOG and critical to medical operations. Health care delivery at every role of the medical system is highly reliant upon specialized equipment requiring service and repair that can only be provided by appropriately trained medical equipment technicians. Medical equipment technology is characterized by increasing technological sophistication, greater integration with information technology, and rising sensitivity to the balanced delivery of electrical power. Efforts by the Services to standardize both equipment and medical equipment technician training have increased medical capabilities for joint interoperability and support and provided technicians that are exceptionally versatile in supporting the technology demands of health support. In addition to the maintenance and repair of medical equipment, these demands include the set up and distribution of power, the networking of equipment with information systems, the production of medical gasses, and the fielding and training of clinical personnel in new equipment technology.

b. Medical Maintenance Capabilities. The effective treatment of injured patients cannot tolerate interruption in the availability of essential medical equipment. The cost, complexity, and multiplicity of medical equipment items, as well as the dispersion of medical units in the theater, make simple exchange of unserviceable equipment an unrealistic basis for maintaining equipment operational availability. MEDLOG planners must understand the organic medical equipment technician capabilities of medical units

and ensure medical equipment maintenance capabilities at the theater level are appropriately scaled to adequately support the medical plan and CONOPS.

(1) At forward locations, medical equipment repair technician capabilities are limited to first response diagnosis, component exchange, and relatively simple repair.

(2) Theater hospitalization capabilities normally have a medical maintenance shop capable of providing unit-level maintenance and repair of organic equipment. Limitations may exist with highly specialized systems used in laboratory and diagnostic imaging services.

(3) Theater medical maintenance capabilities are provided by the TLAMM and/or operational MEDLOG units employed as part of the theater medical system. These organizations have personnel and expertise to provide support to medical units on a direct support or area basis, to maintain theater equipment assets for equipment exchange, to calibrate highly sophisticated equipment such as anesthesia machines and imaging systems, and to manage critical repair parts needed to maintain equipment used in the theater. Theater medical maintenance functions include both shop operations and the provision of contact teams to support forward units and manage/coordinate contractor support provided by theater or national-level contracting activities.

(4) National-level medical maintenance capabilities are provided by the Services' MEDLOG agencies and by DLA Troop Support, all of which have a close, habitual working relationship. National capabilities include equipment acquisition and integrated logistics support, Service-level maintenance operations (that also support new equipment acquisition and fielding), coordination with original equipment manufacturers and third-party maintenance vendors, and provision of national contracts and/or one-time contracts for maintenance and repair services. The MEDLOG agencies also are able to project medical equipment maintenance assistance teams into the theater at the request of the CCDR.

c. Under the single integrated MEDLOG manager, the CCDR may direct one Service to provide theater medical equipment support to all supported Service components and direct other Services to provide medical equipment technician augmentation necessary to accomplish this mission if required. This provides the medical commander with a single support organization for all theater MEDLOG, as well as a single POC for national-level support agencies. While medical equipment maintenance is not a responsibility of DLA, the theater-level medical organization that is designated as TLAMM normally provides all core MEDLOG functions, to include medical equipment maintenance. Therefore, organizations designated as TLAMM will normally provide theater-level medical equipment maintenance, as well as medical supply chain management and other MEDLOG functions directed by the CCDR.

d. **Other Considerations for Medical Equipment Maintenance.** The concept of support for theater medical equipment maintenance should be scaled to meet medical requirements with the smallest possible theater footprint. The SIMLM may be employed to reduce theater redundancy and more efficiently synchronize the use of MEDLOG

resources, including medical maintenance. Theater- and national-level capabilities may be employed when possible to provide necessary services when and where needed, particularly as the theater matures, distribution channels become stable, and FP allows greater use of contract or other national-level support.

(1) When supporting a SIMLM mission, the TLAMM would provide all medical components with on-site contact repair team support for equipment calibration and repairs, as well as medical equipment for maintenance exchange, critical repair parts stockage, and coordinating contract support when required.

(2) Many US medical equipment manufacturers have foreign distributors and service engineers to support those distributors. Equipment manufacturers' websites usually list their worldwide service networks. When available, theater contracting activities may be able to negotiate as-required service agreements with local or regional distributors.

(3) DLA Troop Support provides national contracts with the original equipment manufacturers and third-party vendors for the repair of major medical end items, especially for diagnostic imaging modalities. Equipment or components can be returned to contractor facilities or, in some cases, the contractor may provide a service technician to a site in theater. When a technician is provided, the theater must provide travel clearance and ensure CCDR requirements for predeployment processing and individual protection are met.

8. Chemical, Biological, Radiological, and Nuclear Hazards

a. **MEDLOG Considerations.** The threat of CBRN hazards against US military personnel constitutes a tremendous medical planning challenge. Planned medical countermeasures range from the routine management of medical materiel used for individual protection to planning responses for events that may produce catastrophic numbers of casualties. The level of investment in materiel and other countermeasures for anticipated response to a CBRN incident will depend upon the CCDR's assessment of the threat and directives for planning and materiel readiness. MEDLOG considerations may include:

- (1) Management of medical CBRN defense materiel.
- (2) CBRN response sets.
- (3) Disruption of distribution channels.
- (4) Threats to medical units.
- (5) Reconstitution of MEDLOG capabilities.
- (6) Partnership with other USG departments and agencies.

(7) Disruption of electrical power, systems, and equipment. Alternate means of power may be necessary. Some systems and equipment may not function after a nuclear event.

(8) Severe increase in the demand for water required for CBRN decontamination operations. CBRN decontamination operations will require additional clean water.

b. Medical CBRN Defense Materiel. The MEDLOG plan may have to provide theater storage for individual medical biological chemical defense materiel and provisions for its rapid distribution. These include military-unique autoinjectors for chemical agent antidotes and pre-positioned stocks of antibiotics for various possible biological agents and radioprotectants for possible radiological hazards. CCDR guidance will specify the conditions for its issue, particularly the issue of pyridostigmine bromide tablets, and controlled substances. Provisions may also have to be made for the issue of medical biological and chemical defense materiel to contractors, embedded reporters, and other non-DOD personnel.

c. CBRN Response Sets. The medical plan may require theater storage and plans for distribution of preconfigured packages of medical materiel developed for CBRN response. Information on the composition of CBRN response sets and their availability should be coordinated through the TLAMM and the Service MEDLOG agencies.

d. Disruption of Distribution Channels. CBRN incidents may make targeted distribution nodes unusable and destroy medical materiel in storage or in transit. MEDLOG managers must work closely with movement control activities in adjusting the flow of medical materiel and be prepared to use asset and in-transit visibility tools to assess the impact on medical assets if distribution nodes are compromised.

e. Threats to Medical Units. The deliberate or accidental introduction of chemical, biological, or radiological agents into water sources, subsistence, or other supplies used by theater hospitals may occur. Medical personnel must be prepared to protect themselves, patients, medical equipment, and supplies throughout the OA. This includes the physical security of units' stocks of water, food and supplies, stockage or access to prepackaged (sealed) subsistence and bottled water, and close coordination with managers of other supply classes.

f. Reconstitution of MEDLOG Capabilities. CBRN incidents may require the reconstitution of medical capabilities. This could involve the release of medical equipment items being held by the TLAMM or other MEDLOG units or the fielding of new equipment sets from war reserve materiel or national sources.

g. Collective Protection. In the event of a CBRN incident, medical personnel must be ready to conduct medical operations in a safe and protected environment. Adequate collective protection capabilities, able to withstand all types of expected hazards, must be available and prepared to operate.

h. Individual Protection. Patient protection during evacuation must be maintained. Patients that have been decontaminated at the MTF patient decontamination site will have

had their mission-oriented protective posture (MOPP) ensemble removed. The forward-deployed MTFs will not have replacement MOPP ensembles for the patients. These patients must be placed in a patient protective wrap (PPW) before they are removed from the clean treatment area for evacuation. The PPW provides the same level of protection as the MOPP ensemble. Adequate PPWs must be available at each MTF to support transport of patients in a CBRN environment.

i. **Partnership With Other USG Departments and Agencies.** DLA, as the DOD executive agent, coordinates with federal agencies that maintain strategic capabilities for a CBRN response. These include the VA, DHS, DHHS, and the CDC. Strategic assets include the Strategic National Stockpile, which is comprised of caches of medical materiel strategically pre-positioned in the US, as well as materiel maintained through vendor managed inventory programs. The possible employment of these resources to meet urgent DOD requirements, or the employment of DOD personnel to assist non-DOD personnel in delivery/distribution in support of a national response to a CBRN event, is a new dimension to the range of military operations. MEDLOG planners would coordinate materiel management issues through the TLAMM, if the CCDR is directed by the President or SecDef to support or obtain support from non-DOD agencies.

9. Other Medical Logistics Planning Considerations

a. **Foreign Sources of Materiel.** The JFS and MEDLOG planner must be aware that there are DOD policy limitations that may constrain the use of non-FDA-approved pharmaceuticals and medical devices. This issue must be addressed whenever the local purchase of medical materiel is considered. This may occur when urgent needs cannot be met in time by distribution from approved sources or needed materiel is available only from foreign sources. An example of materiel available only from foreign sources is antivenin for snakebites or stinging animals that exist only in those regions.

b. **Commercial Packaging and Marking.** Nearly all Class VIII supplies and equipment are commercial, nonstandard products obtained by Service MEDLOG organizations through DLA acquisition programs directly from commercial sources. These acquisition programs leverage commercial best business practices that impose few government-unique requirements on commercial partners in the fulfillment of DOD orders. Commercial suppliers use their own methods for product identification and packaging that, in many cases, do not meet all Defense Transportation System requirements for the labeling of packages destined for DOD customers. When packages that are marked and packaged by commercial suppliers are routed through Defense Transportation System distribution hubs, they are frequently undeliverable.

(1) MEDLOG managers should monitor distribution hubs for backlogs of undeliverable Class VIII shipments and consider assigning a MEDLOG liaison to critical hubs to serve as medical freight expeditors, if the situation warrants.

(2) MEDLOG planners should coordinate with the TLAMM to route shipments from commercial vendors in the US through designated commercial activities serving as a “medical air bridge.” These are prime vendors under contract with DLA acting as

consolidation points for medical shipments originating from other industry sources. These consolidated shipments are then moved with prime vendor shipments to the TLAMM for further handling and distribution in theater.

(3) Commercial suppliers are required to appropriately package and label shipments that have special handling requirements due to their fragility, need for temperature control, or hazardous properties. Improper marking may pose a risk to DOD transportation or logistics personnel and/or lead to product deterioration in transit. MEDLOG managers who receive material not properly packaged or marked should submit discrepancy reports through theater channels for corrective action with the industry source.

c. Captured Medical Materiel. Captured medical materiel will not be used for treatment of US personnel without specific approval from the CCDR in coordination with the command surgeon. After clearance for safety and potential military medical intelligence exploitation, captured medical supplies and equipment may be used to treat detainees and provide FHA for indigenous populations. Medical materiel is protected by the Geneva Conventions from intentional destruction.

d. Disposal of Medical Materiel. The collection and disposal of excess and unserviceable medical materiel can be a major challenge, especially during the retrograde/redeployment portion of an operation. The medical plan must include command policy for reporting, handling, and disposition of excess or unserviceable medical materiel, to include approved methods for its destruction.

(1) Serviceable medical materiel can be returned to stock or redistributed by the TLAMM or other theater MEDLOG units.

(2) Serviceable and unserviceable pharmaceuticals may be able to be returned through the TLAMM to commercial companies under contract with DLA Troop Support that in many cases credit funds to DOD.

(3) Serviceable excess materiel may be made available to HN or NGOs for FHA consistent with CCDR policy and direction.

(4) The local destruction of excess or unserviceable materiel must comply with HN laws and DOD policy. The MEDLOG planner should coordinate with the command FHP officer as well as supporting engineer and contracting officer.

e. MEDLOG Support to Contractors. Medical and MEDLOG planners must understand the GCC's responsibility and policy for medical support to contract personnel operating in the OA. This population frequently has health requirements that are not typically found in the military forces. Specific issues that directly affect MEDLOG support include the provision of prescription refills for chronic conditions and the provision of prescription eyewear.

Intentionally Blank

APPENDIX C

CASUALTY PREVENTION

1. Introduction

a. FHP provides the conceptual framework to optimize health readiness and protect military personnel from all health threats associated with military service. Casualty prevention seeks to prevent casualties from environmental, occupational, operational, CBRN hazards, and infectious disease pathogens.

b. An effective, fit, and healthy force provides the JFC with forces capable of withstanding the physical and behavioral rigors associated with combat and other military operations. The ability to remain healthy and fit in a deployed setting despite being subjected to a multitude of health threats is a force multiplier. It reduces the logistic support tail required to sustain the fighting force by decreasing the need for medical care and for replacement personnel. During deployment, the enemy and the total environment both generate threats to the force. The adversary threat produces most combat-related casualties commonly called BIs, while the total environmental threat produces DNBI casualties. DNBIs historically have accounted for three-quarters or more of battlefield hospital admissions (69 percent in Vietnam, over 95 percent in World War II and Somalia).

c. Prevention of DNBI casualties requires unwavering command emphasis at every level. Mission success is dependent on all facets of casualty prevention, from providing bed nets to the force to conducting environmental and disease surveillance in the OA. Historical data indicates contaminated food and water, disease vectors, and climatic conditions pose the greatest risk to forces. Industrial and occupational exposures pose significant risks as well.

d. Prevention of casualties is a continuous process conducted during predeployment, deployment, and post-deployment phases. Comprehensive, continuous deployment health surveillance, including collection, analysis, and recording of objectively determined occupational and environmental monitoring data and when possible, actual exposure levels, is necessary to identify these non-enemy threats, which can dramatically affect the health of deployed personnel.

2. Deployment Health Surveillance

a. Deployment health surveillance involves: the routine, standardized tracking of disease and injury incidence; reporting incidences in the format of meaningful rates; and analyzing and responding to that data. Deployment health surveillance requires standardization of methods, rates, data, and communication across Services. Effective surveillance relies on collection and recording of health care, personnel, environmental, and operations data. Analysis requires data to be accurate and linked to appropriate information systems, including daily military personnel location information to enable integration of that data and assignment of exposure to specific personnel. Support automation and data collection should begin at the lowest echelon possible. DODD

6490.02E, *Comprehensive Health Surveillance*, discusses medical surveillance and OEH surveillance.

b. Deployment health surveillance activities are critical to FHP. These activities identify the PAR, detect and assess potential OEH hazards, document OEH and CBRN risks and possible or suspected exposures, use specific risk management countermeasures, monitor real-time health outcomes (medical surveillance), and report DNBI and BI rates and other measures during deployments in a timely manner. Commanders are highly encouraged to accomplish deployment health surveillance activities for all operations.

c. The AFHSB is the central, integrated, customer-focused epidemiologic and global health surveillance resource for the US Armed Forces. Analytical reports are provided to policy makers, medical planners, and researchers to help recognize medical and public health threats in DOD. The AFHSB, through the Defense Medical Surveillance System, provides DOD with a centralized DOD epidemiological capability. Each Service public health center provides Service-specific deployment health information and epidemiological analysis that is focused on the Service mission.

d. No single surveillance system fits every situation. For instance, many biological agents also cause disease in animal populations. Depending on the route of exposure and degree of susceptibility, illness or death within animal populations may precede illness in humans. Depending on the specific scenario, other types of surveillance may provide an early indication of potential human health threats. Examples of complementary DOD health surveillance systems, and their parent organizations, include medical intelligence (NCMI); sentinel mortality surveillance (Armed Forces Medical Examiners System); and laboratory-based surveillance to identify emerging, re-emerging, or changing pathogens, such as the DOD Global Influenza Surveillance program (part of the Global Emerging Infections Surveillance and Response System within the AFHSB). For additional information about health surveillance in DOD, both in garrison and deployed settings, refer to DODI 6490.03, *Deployment Health*; DODD 6490.02E, *Comprehensive Health Surveillance*; and MCM 0028-07, *Procedures for Deployment Health Surveillance*.

3. Identifying Preventable Threats and Implementing Countermeasures

a. PVNTMED competencies and training must elicit continuous command interest to ensure support for deployment operations. CCDRs should ensure PVNTMED supplies and equipment are provided and maintained to support implementation of their prevention responsibilities. Additionally, they should maximize the use of joint training to exploit existing joint environmental health, occupational health, and PVNTMED expertise.

b. PVNTMED training should become an integral part of pre-deployment preparations. Wide dissemination of any PVNTMED knowledge gained during deployment will prove invaluable in sustaining the health of the force and in preparing for future deployments. The AFHSB is the central, integrated, customer-focused epidemiologic and global health surveillance resource.

c. PVNTMED units broadly need five types of equipment: automated information, equipment for rapid field detection and evaluation of environmental and biologic threats, vector surveillance equipment, personal protective equipment, and response equipment for any detected threats. In addition, PVNTMED units also require dedicated transportation assets and access to deployable information systems that enable processing of environmental exposure data and unit locations.

d. PVNTMED teams should be highly mobile, light, and rugged and, whenever possible, have intuitive, direct-reading, sampling, and analysis equipment, to accurately and timely baseline routine and incident-specific OEH sampling. The teams will also continue to collect samples of potentially hazardous materials for any laboratory analysis and threat assessment that must be provided by joint theater health surveillance laboratories deployed to the operating theater.

e. All required medical equipment and supplies (mosquito bed netting and poles, permethrin treated-uniforms, and so on) to support FHP should be issued or made available in theater for all deploying personnel.

f. All required individually issued medical defense materiel to support FHP must be issued and documented in the individual's medical record.

4. Infectious Disease Prevention

a. Infectious disease threats should be identified during predeployment, utilizing all available medical intelligence and comprehensive health surveillance resources. NCMI can provide country- and region-specific environmental and industrial threat information, HN health system assessments, and infectious disease risk assessments, assisting with medical countermeasure and response planning. Common communicable diseases such as acute respiratory infection and diarrheal diseases can have tremendous impact on the readiness of both garrison and deployed forces. It is important to monitor health to gauge the predeployment health status of units and to identify preexisting (base-line) health characteristics of individuals. Unit health status is a measure of unit readiness. The identification of preexisting health characteristics ensures individuals who should be classified non-deployable are identified before deployment. Infectious diseases should be prioritized and monitored according to the threat each poses to the fighting force and the accomplishment of the force's mission. Countermeasures should be employed according to this established risk management process.

b. During deployment, vigilant monitoring of medical diagnoses, and of DNBI reporting categories and rates (such as sick calls, outpatient treatment, and hospital admissions), as well as surveillance of disease-carrying vectors and existing local pathogens, is required for effective planning and refinement of countermeasures to infectious disease. Furthermore, development of enhanced DNBI predictive models based on historical data, type of deployment, location of deployment, duration of deployment, and level of support are highly recommended.

c. Throughout the deployment life cycle, potential and emerging infectious diseases need to be addressed in a timely manner. Appropriate infectious disease countermeasures must be implemented, particularly in the following areas:

- (1) Food and water vulnerability.
- (2) Waste management and disposal.
- (3) Advanced surveillance of endemic zoonotic and foreign animal disease.
- (4) Control of disease carrying vectors, including feral animals.
- (5) Personal protection measures (such as immunizations, chemoprophylaxis, insect repellents, and uniforms impregnated with preventive compounds).

(6) Infectious disease resulting from deployment may not be immediately apparent upon an individual's return, and previously deployed individuals may develop chronic conditions years after return. Returning military personnel require post-deployment health debriefings, post-deployment health assessments, serum collections, and when indicated, referral for clinical evaluations to screen for infectious diseases and other development related health conditions acquired during deployment. Members returning from deployment are required to complete a post-deployment reassessment survey. The post-deployment surveys serve as a tool to evaluate the member for any infectious diseases, injuries, and other medical conditions obtained during deployment.

(7) Contagious diseases can be a threat to forces. As an FHP measure, isolation and quarantine may be useful in preventing disease from being directly introduced into theater or to delay the spread of disease within a theater. Isolation separates sick persons with a contagious disease from those who are not sick and lasts the duration of communicability of the disease. Quarantine is generally applied to individuals who have been exposed to a disease but are not symptomatic. Quarantine lasts as long as necessary to ensure the individuals are not infectious to others. Restriction of movement can be used to protect a group of unexposed people from interacting with contagious or potentially contagious and contaminated individuals. Restriction of movement may be useful in ensuring key capabilities are maintained during outbreaks. Theater PM planning must consider and support restrictions on movement. Isolation and quarantine are legal actions. Legal advice should be sought when considering isolation and quarantine measures. Further guidance can be found in DODI 6200.03, *Public Health Emergency Management within the Department of Defense*, which implements the federal human quarantine regulations.

d. When directed, all military personnel returning from theater will participate in necessary diagnostic/vaccination/chemoprophylaxis programs to minimize the threat and extent of post-deployment illness. All therapies will be posted to the individual's treatment record and to the greatest extent possible to their electronic prescription profile.

e. In addition to the restrictions on movement, isolation and quarantine, Service personnel and DOD civilian employees who have been assigned to duties that may have

exposed them to highly infectious diseases such as Ebola, may be subject to controlled monitoring. Controlled monitoring is a process where trained health care professionals or other appropriately trained DOD personnel directly observe those who have returned from deployment for symptoms consistent with a specific disease.

For additional information on controlled monitoring, see CJCSI 4220.01, Post-Deployment Policy for 21-Day Controlled Monitoring of DOD Service Members and Civilian Employees Returning from Ebola Virus Disease Outbreak Areas in West Africa.

5. Behavioral Health Casualty Prevention

a. Behavioral health problems and appropriate medical intervention throughout all phases of deployment are critical to mission success. Individuals identified at high risk for developing behavioral health problems are often associated with dual-military personnel families, use of psychoactive medications, frequent disciplinary problems, and domestic problems. Units at high risk include those anticipating a highly intense combat mission, a CBRN hazard, or a long deployment and units with poor morale and unit cohesion, including units that have recently had a change in command. Several factors may signal a developing behavioral health problem. Four key indicators are increased use of health services, use of medication, disciplinary problems, and increased absences.

b. Behavioral health intervention may be critical to mission success. Preventive interventions for individuals and units include:

- (1) Voluntary and command-referred counseling.
- (2) Family support services.
- (3) Support from family and friends through available media.
- (4) Activation of an existing spouse support network.
- (5) Personnel input into rest and recuperation policies and schedules.
- (6) Traumatic event management debriefings.

(7) Proactive command commitment optimize both the quality and quantity of sleep and maintain a stable sleep cycle to mitigate the known detrimental effects of sleep debt on human performance and combat effectiveness. This should be balanced with operational needs and requirements.

c. Historically, post-deployment behavioral health interventions for personnel returning from theater have remained a low priority. To change this, the stigma of behavioral health interventions must be minimized. Educational briefings aimed at mitigating the stress and anxieties that often follow a unit's return from theater are suggested. Those briefings may address personal finances, combat stress prevention, repatriation issues, general behavioral health issues (such as stress indicators and stress

reduction), rest and recuperation suggestions, and positive information regarding the accomplishment of mission objectives.

6. Health Risk Communication

Effective health risk communication is essential to casualty prevention, including threat identification, predeployment health debriefings, and any medical follow-up indicated. All significant risks must be clearly and accurately communicated to deploying military personnel and to the chain of command. Command emphasis is an integral part of injury prevention. Commanders should receive feedback throughout the deployment life cycle from PVNTMED and veterinary staff regarding preventable threats and countermeasures. Medical staff should ensure the range of preventable threats is prioritized and commanders are made aware of the risks that could affect operations. Medical personnel should be given all available information to enable them to deliver high-quality care to individuals during deployment and upon their return from theater. It is essential DOD, the VA, and civilian health care providers be alerted to possible diseases that may have been contracted by deployed personnel. Candid information concerning actual and probable DNBIIs resulting from a deployment should be provided to all appropriate individuals.

For additional guidance, see DODI 6200.03, Public Health Emergency Management within the Department of Defense.

APPENDIX D

INTELLIGENCE SUPPORT TO JOINT HEALTH SUPPORT

1. Aspects of Medical Intelligence

a. Medical planners and providers must consider the entire scope of the threat to effective medical support. Intelligence support to health support must address all aspects of the threat. Considerations range from the potential impact of enemy combat operations on medical personnel, lines of communications, and materiel to the types of weapons (and their consequent health effects) that may be employed against friendly forces, as well as other health and environmental threats. Continuous coordination by medical planners with the command J-2 is a key element in the effort to maintain awareness of the threat.

b. Medical intelligence is that intelligence produced from the collection, evaluation, and analysis of information that includes the medical aspects of foreign areas that have an immediate or potential impact on policies, plans, and operations. The NCMI has the sole responsibility within the DOD for producing finished intelligence on foreign military and civilian medical capabilities, infectious diseases and environmental health risks, and scientific and technical developments in biotechnology and biomedical subjects of military importance. Medical intelligence data is critical to provide the JFC with early warning of biological warfare attacks, as well as prompt detection and identification of biological attacks or naturally occurring disease outbreaks. Bio-intelligence is closely related to but not a true subset of health surveillance or biosurveillance. It is the regular or repeated collection, analysis, and interpretation of data specifically related to extremely virulent biological organisms or toxins that have the potential, either naturally or after modification, to produce mass casualties either as a local area contamination hazard or through highly contagious spread of disease. The data includes the identification and characterization of select agents, the identification and monitoring of facilities capable of handling select agents, and the identification and monitoring of personnel capable of researching and/or modifying select agents. The purpose of bio-intelligence is to provide assurance that select agents are not accidentally released into the environment or transferred to unlicensed facilities or actors to prevent select agents from being used as WMD. Bio-intelligence, therefore, utilizes both open-source health surveillance and biosurveillance data and classified intelligence, the combination of which is useful to both health professionals and law enforcement officials. The health surveillance aspect of bio-intelligence is sufficient to detect an event of human cases of disease being caused by select agents.

c. To develop medical intelligence, information is gathered, evaluated, and analyzed on the following subjects:

(1) Endemic and epidemic diseases, public health standards and capabilities, and quality and availability of health services. Medical intelligence data concerning endemic and epidemic disease rates in the JOA is required to establish a medical surveillance baseline. Health support must establish baseline rates of disease and illness to detect deviations that warrant a timely investigation to determine if the increase is due to biological warfare agent attacks or naturally occurring disease outbreaks. This is accomplished through medical surveillance.

- (2) OEH threats in the JOA.
- (3) MEDLOG, to include blood products, MTFs, and the number of trained MEDLOG personnel.
- (4) The location, specific diseases, strains of bacteria, lice, mushrooms, snakes, fungi, spores, and other harmful organisms (toxic flora and fauna) which are likely to impact the health of the force or mission objectives.
- (5) Foreign animal and plant diseases, especially diseases transmissible to humans.
- (6) Health problems relating to the use of local food and water supplies.
- (7) Health risks and effects of CBRN hazards and recommendations for countermeasures.
- (8) Possible casualties that can be produced by newly developed foreign weapon systems.
- (9) The health and fitness of the enemy's force and use of antidotes and immunizations.
- (10) Factors associated with the JOA (such as altitude, extremes of temperature, and difficult terrain [swamps, mountains, deserts, or urban areas]) that in some way may affect the health of the command or the conduct of medical operations.
- (11) The detectors and sensors for personnel, environmental, and sample-based analysis to use scientific biological, chemical, and electromagnetic, acoustic, and visual technologies to aid in the detection and/or identification of threats.
- (12) The use of informatics includes data mining, correlation, and nodal analyses to identify and tie together events of medical significance. These sources provide information about industrial products, imports, exports, travel and shipping, financial transactions, news, websites, databases, and intelligence reports. It is possible that the informatics' analysis of industries, transport, and sales of precursor or finished products result in a threat posture that may require action or countermeasure.

2. Significance of Medical Intelligence

- a. At the strategic level, the objective of medical intelligence is to contribute to the formulation of national and international policy. The policy will be predicated in part on foreign military and civilian capabilities of the medical or biological scientific community.
- b. At the operational level, medical intelligence is used to develop medical plans that:
 - (1) Detect and/or identify the health threat.

- (2) Counter the health threat.
- (3) Respond to the unique aspects of a particular theater.
- (4) Enable the commander to conduct the operation.
- (5) Conserve the fighting strength of friendly forces.

3. Sources of Medical Information

a. The first place to search for information is in the office of the CCMD surgeon with geographic responsibility for the area into which the joint force is being deployed. Each GCC maintains FHP policies that address known persistent medical issues within their respective AORs. Additionally, they will be able to provide updated policy on new, seasonal, or dynamic issues.

b. NCMI produces a wide range of intelligence that can assist in the JIPOE process. NCMI publications available on the country's page within the NCMI website include:

- (1) Environmental Health Risk Assessment.
- (2) Industrial Facility Health Risk Assessment.
- (3) Health Service Assessment.
- (4) Infectious Disease Risk Assessment.
- (5) Infectious Disease Alerts.

c. The Navy and Marine Corps Public Health Center, AFHSB, USA Medical Research and Materiel Command, USAF School of Aerospace Medicine, Army Public Health Center, and others can be of tremendous assistance in identifying and analyzing threats in a JOA. This information is also available at the NCMI website: <https://www.ncmi.dia.smil.mil>.

Note: Only medical personnel with specific authorities are authorized to collect against medical intelligence requirements and produce medical intelligence products. Medical personnel who collect medical intelligence without the proper authorization jeopardize their protected status under the law of war and are required to follow intelligence oversight regulations and policies.

d. There are numerous sources of medical information, including the Defense Pest Management Information Analysis Center of the Armed Forces Pest Management Board. This organization publishes an excellent series of disease vector ecology profiles on many foreign countries and regions of the world. The profiles include information regarding disease risks, infectious agents, mode of transmission, geographic and seasonal incidence,

and prevention and control recommendations. Some of its other publications are also available online. A compact disc of operational entomology references is also available.

e. The AFHSB produces the *Medical Surveillance Monthly Report* and the *AFHSB Health Surveillance Update*, a weekly update provided by the Integrated Biosurveillance Section. It identifies disease outbreaks worldwide. Additionally, Walter Reed Army Institute of Research quickly responds to ad hoc queries and provides timely regional medical assessments.

f. Another military source is the USA Research Institute of Environmental Medicine. The USA Research Institute of Environmental Medicine publishes an excellent series of “deployment manuals” which address soldier health and performance in a wide variety of environments.

g. Still other sources of medical information are available from agencies external to DOD. DOS publishes *Background Notes*, a series of publications on selected countries and regions.

h. The CDC publishes *Health Information for International Travel*, a document often referred to as the “Yellow Book,” which identifies current vaccination requirements, immunization and prophylaxis recommendations, and regional health threats. This information is also accessible online at <http://www.nc.cdc.gov/travel/>.

i. The World Health Organization (WHO) publishes *International Travel and Health*, a document that is similar to the “Yellow Handbook.” The WHO also publishes the Weekly Epidemiological Record.

APPENDIX E

FEDERAL COORDINATING CENTERS AND PATIENT RECEPTION AREAS

1. Purpose

The purpose of this appendix is to provide guidance for military health forces in homeland defense/DSCA missions for the assistance to the federal coordinating center (FCC) in developing patient reception SOPs and maintaining the support of hospitals and area agencies for the assigned PRAs plan.

2. Responsibilities

The FCC director ensures the development, exercise, and evaluation of local PRA plans. The FCC area coordinator assists the FCC director, ensuring a patient reception team is developed for each PRA and each patient reception team remains viable through training and exercises. The FCC coordinator maintains contact with appropriate authorities in each PRA and includes contact information in each PRA plan. The FCC coordinator notifies all agencies involved as soon as activation of the FCC is anticipated.

3. Plan Development

The development of local plans is critical if the NDMS is to be a viable national system to support the local communities. The key to success is the thoroughness and effectiveness of local level planning. Each local community in which the NDMS is organized is unique. The degree of sophistication of current community contingency/disaster planning and the availability of local resources that can be incorporated into the PRA plan will vary among communities. Each PRA plan must be tailored to its community; thus, local planning cannot be accomplished without the support, involvement, and coordination of the local areas medical community. Most communities have an airport disaster plan or a similar mass casualty incident plan. In many instances, this can be used as a basis for the PRA plan. In fact, it is advisable that the PRA plan be based on existing plans where possible. In few circumstances, is it envisioned that a PRA plan would have to be developed from the ground up. At a minimum, the same people and organizations that developed existing emergency response plans should help develop and manage the PRA plan. Each PRA plan should address the following areas:

a. CONOPS

- (1) Provide a concise mission statement.
- (2) Define the geographic PRA.
- (3) Briefly define the roles and responsibilities of principle agencies, teams, and individuals.
- (4) Identify any applicable references, including the NRF, as well as any applicable state and local disaster plans.

(5) Identify applicable state and local governmental and nongovernmental bodies, including local emergency medical system agencies.

(6) Identify primary and alternate airfields, rail and bus terminals, or other local identified patient reception sites.

(7) Identify local resources for transporting patients.

(8) Identify local resources for definitive medical treatment.

b. Patient Reception Plan Activation

(1) Define the processes for NDMS activation of the local PRA.

(2) Define the local processes for alerting and augmenting the FCC staff.

(3) Define the processing and provide a checklist for notifying local agencies of activation.

c. FCC Operations

(1) Define FCC staff roles, responsibilities, and shift schedules.

(2) Define FCC internal communications, logs, reports, and so on.

(3) Define control of access to the FCC.

d. Bed Availability Reporting

(1) Provide definitions of terms, including a list of medical categories.

(2) Define the processes for collecting at the local level initial and recurring bed reports, including “throughput.”

e. Medical Regulating and Patient Evacuation to the PRA

(1) Define the role of the DOD PM System.

(2) Define the processes and procedures for coordinating patient missions between DOD PM System and the FCC area of operations.

f. Patient Reception and Staging

(1) Describing the local patient reception site(s). Patients arriving from distant disaster sites or from military contingencies will generally be received at a single reception site in the PRA (such as an airfield, rail, or bus terminal). The site should facilitate the off-loading of patients, the immediate evaluation and triage of patients, and the staging of litter and ambulatory patients prior to transport to local medical facilities. Close coordination is required with DOD, civil airport authorities, emergency medical services providers, city

emergency planners, and other agencies and organizations as appropriate to ensure access to the site, adequate staffing, security, environmental control (heat, water, light), provision of food and drink, and communications.

(2) Define the roles and responsibilities of a patient reception team. The patient reception team is a multifunction group and consists mainly of clinical staff but should also include appropriate support from medical administration and communications personnel, logistics personnel, and people acting as litter bearers and drivers. The team leader can be a physician or other person with appropriate medical expertise. This team can be based out of a federal facility (VA or DOD) or comprised of volunteers from community organizations. DHHS disaster medical assistance team staffs make exceptional patient reception team members if they are available to the DHHS response. Local emergency medical services volunteers who perform dispatch and ambulance transportation can also be helpful.

g. Transportation

(1) Define resources, procedures, and contact information to obtain vehicles, drivers, and other personnel to transport patients from the reception site(s) to local NDMS member hospitals. It is important all vehicles be assessed for their patient carrying capability, inventoried, and tabulated in the patient transportation plan. Additionally, coordinate in advance with the authorities providing the vehicles and personnel for transportation. Military vehicles that are scheduled to move to an overseas theater of operations early in mobilization, or are committed to a potential military mobilization effort, should not be included as patient transportation assets during military contingencies. Resources might include:

(a) Ambulances, other vehicles, and personnel from local emergency medical services.

(b) Military, VA, and/or local hospital ambulances and ambulance buses.

(c) Commercial, governmental, or other vehicles available that are wheelchair accessible or otherwise configured to accommodate litter patients.

(d) Other commercial vehicles (such as airport limousines or buses).

(e) Military and other governmental general use trucks, vans, school buses, and so on.

(2) Define the roles, processes, and procedures for managing and tracking the use of local transport resources.

(3) Identify primary and alternate routes from the patient reception site(s) to local medical facilities. Ensure advance coordination with local law enforcement agencies is made in the event traffic control and additional security are needed.

h. Patient Administration

(1) Define the roles and responsibilities of the FCC area coordinator. The FCC area coordinator assumes administrative responsibility for patients. This responsibility begins upon a patient's arrival and continues until the patient is transferred to a gaining facility and/or returned home or, in the case of military patients, returned to the responsible military personnel system for processing and assignment to a military unit or discharge from active duty, as appropriate.

(2) Define the roles and responsibilities of the GPMRC liaisons, if available, and military patient administration team, if available.

(3) Identify current contact information for each participating NDMS hospital.

(4) Define the roles and responsibilities of each participating NDMS hospital. The medical staff of that hospital will accomplish the patients' day-to-day medical management and care. The hospital will provide medical care using internal procedures and forms. The NDMS member hospitals should provide information to the FCC coordinator, to include a daily admission and disposition list (indicating the expected length of stay) and a narrative summary upon discharge of the patient.

(5) Define the roles, processes, and procedures for tracking patients in the PRA. Ensure the following information is included in the tracking system adopted by the FCC:

(a) Patient name.

(b) Social Security or other identification number.

(c) Medical regulating/diagnostic category.

(d) Type of patient (such as directly injured/victimized by disaster or relocated/dislocated by the disaster).

(e) Home address (if available).

(f) Next of kin, address, and telephone number (if available).

(g) Admitting hospital, admission date, address, POC, and telephone number for inpatients.

(h) Local domicile (such as hotel or shelter), address, POC, and telephone number for outpatients.

(6) Define policies and procedures for disposition of records. The FCC area coordinator generally retains patient data for the minimum period required by statutory law, but never less than one year after the last patient has been returned home. The FCC director will submit records to a central repository. All appropriate patient confidentiality procedures, including protection of Social Security numbers, must be followed.

i. Patient Discharge and Return

(1) Define roles and responsibilities for individual patient discharge planning.

(2) Define the processes and procedures for transporting patients who require continuing medical treatment.

(3) Define the processes and procedures for transporting patients who do not require continuing medical treatment.

j. Financial Claims Processing

(1) Define basic procedures for data collection, claims processing, and reimbursement.

(2) Define roles and responsibilities of the FCC coordinator and NDMS participating hospitals.

k. Training and Exercises

(1) Identify the requirements and objectives for annual training of individuals.

(2) Identify the requirements and objectives for annual training of teams.

(3) Identify the requirements and objectives of annual comprehensive PRA exercises.

l. Public Relations and Media Information

(1) Identify local agencies and individuals authorized to release information.

(2) Define rules, limitations, and processes for preparing information for release.

(3) Identify local media resources.

m. Communications

(1) Identify primary and alternate means of communication and provide a detailed contact list for the following:

(a) The FCC.

(b) Appropriate HQ elements or agencies.

(c) GPMRC.

(d) Local authorities and agencies.

(e) Patient reception site authorities.

(f) Patient reception teams.

- (g) Patient transport agencies.
 - (h) All local participating NDMS hospitals.
 - (i) Others as required.
- (2) Provide an inventory of primary and alternate communications equipment and supplies.

APPENDIX F BLOOD MANAGEMENT

1. The Armed Services Blood Program

a. Established by the ASD(HA), the Armed Services Blood Program (ASBP) provides transfusion products when required to US forces worldwide. The Secretary of the Army, through the SG, serves as the DOD executive agent for the Armed Services Blood Program Office (ASBPO) in accordance with DODD 6000.12E, *Health Service Support*. Tri-Service cooperative efforts between the USA, USN, and USAF enable blood and blood products to be collected, tested, processed, and shipped to military MTFs throughout the world. The planning and execution for the effective management of blood and blood products is a continuing, dynamic process requiring a coordinated, highly responsive system that extends from the US to the battlefield. The various aspects of this coordination are depicted in Figure F-1.

b. The ASBPO

(1) The ASBPO is chartered by DOD to coordinate the provision of blood products throughout the Services to meet medical requirements during national emergencies and overseas military operations. The ASBPO coordinates implementation of the ASD(HA) policies and DOD procedures for the ASBP. The ASBPO is under the policy guidance of the ASD(HA).

(2) The ASBP adheres to ASD(HA) policies; meets FDA regulations published in the Code of Federal Regulations; and follows the procedures of the American Association of Blood Banks as established in TM 4-02.70/NAVMED P-5150/AFMAN 41-111-IP, *Standards for Blood Banks and Transfusion Services*. The CJCS reviews and provides guidance on all matters pertaining to blood support in joint operation planning and execution, as well as activation of the ASBPO for contingencies and war. The ASBPO:

(a) Coordinates the day-to-day activities of the ASBP in accordance with the policies established by the ASD(HA) and the plans, programs, standards, and procedures established by DOD, the CJCS, the CCMDs, and the Services. As required, serves as the DOD direct liaison for coordination and policy recommendations.

(b) Serves as a military POC for blood bank matters for other USG and civilian agencies having an interest in blood products and related items. That includes, but is not limited to, the CCMDs and the following federal agencies:

1. The FDA, Center for Biologics Evaluation and Research.
2. The DHHS Office of Emergency Preparedness and/or NDMS and the Blood Safety Committee.
3. The DLA for activation of the contingency blood contracts, blood equipment, and supply procurement contracts.

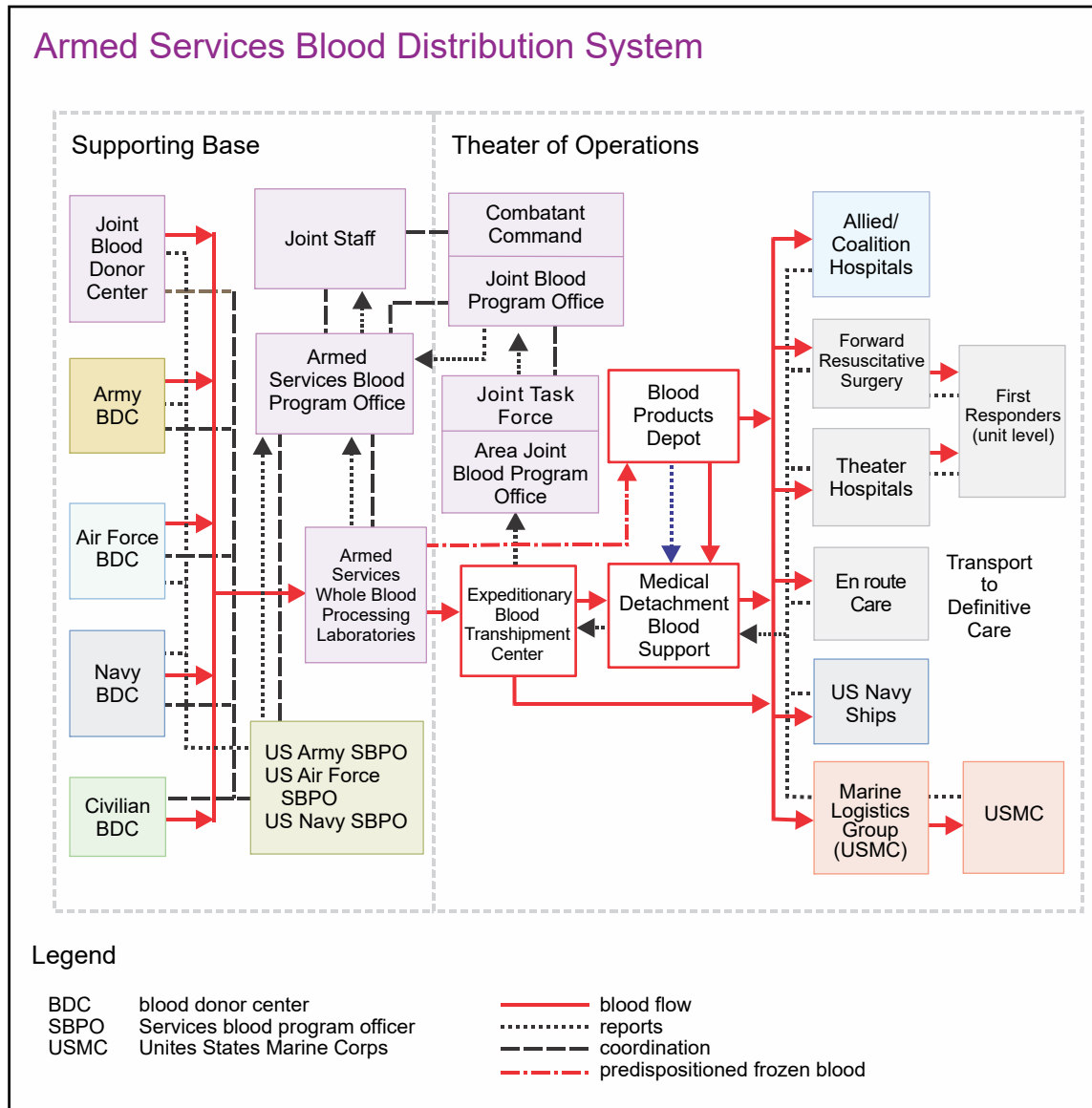


Figure F-1. Armed Services Blood Distribution System

4. The Defense MEDLOG Division on the development of essential characteristics of equipment, supplies, policies, and procedures associated with military blood banks.

(c) Directs the ASBPO, which is staffed by a minimum of three officers (Medical Service Corps [Army, Navy] and Biomedical Sciences Corps [Air Force]) in the grade of O-4 or above. One of the officers serves as the director and the others as deputy directors. All ASBPO members carry out their ASBPO assignments as their primary duty.

(d) Receives and takes appropriate action on military requirements for blood products that exceed Service resources.

(e) Coordinates the preparation of written guidelines for blood bank policies to be used as minimum standards by the Services.

(f) Coordinates the development of technical aspects of blood research programs, conveying requirements through the ASD(HA) to DHA.

(g) Collates DOD emergency and mobilization blood product requirements and ensures plans are in place to meet those requirements.

(h) Establishes contingency blood product quotas to be maintained at the two Armed Services Whole Blood Processing Laboratories and assigns requirements to the military Services to meet those quotas.

(i) In coordination with the CJCS, oversees the operations of the ASBP during contingencies.

(j) Coordinates theater blood program issues with the CCMDs through the CJCS. That includes the following:

1. OPLAN and contingency plan blood support review, to include sourcing of blood requirements.

2. Pre-positioning of frozen blood products, to meet contingency theater blood product requirements.

3. Direct liaison with partner nation programs.

c. **Service Blood Programs.** The USA, USN, and USAF operate separate blood programs to meet normal peacetime requirements. Services maintain their respective FDA licenses for blood establishments. Each Service blood program office has ultimate responsibility for ensuring its blood facilities meet or exceed federal regulations and national standards for the blood industry. To meet ASBP contingency requirements, the Services' direct expansion of their blood donor centers rapidly increases their blood collecting capabilities. Additional responsibilities of the Services with regard to the ASBP are described in DODI 6480.04, *Armed Services Blood Program Operational Procedures*.

d. **CCMDs.** Each CCMD's JBPO serves as the Class VIIIB manager. The JBPO coordinates blood products requirements with regard to the theater's capabilities with the ASBPO.

(1) **JBPO.** The JBPO is under the staff supervision of the CCMD surgeon. This office is responsible for the joint blood program management in the JOA. The organization of the JBPO depends on the overall command mission. Personnel are assigned from all Service components, as necessary, to meet the blood operational requirements.

(2) **AJBPO.** The functions of an AJBPO are similar to a JBPO, but in a limited geographical area. The AJBPO:

(a) Coordinates blood requirements and distribution of blood and blood products to support all the MDBSs and MTFs in the AJBPO area regardless of Service component. This includes defining the distribution system for blood and blood products at all roles from the supporting expeditionary BTC or MDBS/blood supply detachment down to the MTF.

(b) Evaluates in-theater emergency blood collecting activities, blood products depot, expeditionary BTC, MDBS, and MTF transfusion services within the OA to ensure the requirements of the JBPO are supported or addressed in the CCMD and/or JTF OPLAN.

2. Blood Support Care Capabilities

a. **Blood Distribution System.** Blood and blood products (Class VIIIB) are more than just another commodity of medical supply. Blood is a living tissue and, as such, requires handling by individuals specially trained in blood movement and storage.

(1) Blood support in a JOA containing actual combat operations is a dynamic and ever-evolving process, heavily influenced by:

- (a) Stringent storage and handling requirements.
- (b) Inventory management constraints.
- (c) Limited potency periods.
- (d) Available technology.
- (e) Evolving transportation systems and routes.

(2) To be successful, blood support must be an organized and cooperative effort on the part of MDBS, MEDLOG company, laboratory and blood bank personnel, transportation personnel, and primary health care providers.

(3) Theater blood support during wartime is provided to US military facilities and, as directed, multinational military and indigenous civilian medical facilities.

(4) Theater blood support may consist of a combination of shipped liquid, frozen blood components, or in-theater collected whole blood or platelets. The actual amount of liquid and frozen blood components is determined by the urgency of need and availability of resources within the JOA. (Collection of fresh whole blood in theater is a procedure that should only be used as a last resort when no fully tested blood products are available or when full component therapy is not available.)

(5) Blood services in a JOA containing actual combat operations consist of a combination of operational capabilities. Of importance are the following:

- (a) Receiving blood components from the supporting base.

(b) Moving, storing, and distributing blood components to primary users.

(c) Storing, processing, and distributing previously frozen blood components pre-positioned within the theater.

(d) In-theater collecting of whole blood and apheresis platelets. (This procedure should be used only as a last resort when no fully tested blood products are available or when full component therapy is not available.)

(e) Tracking/maintaining pertinent information for donor/unit testing and follow-up requirements and patient transfusion information, to include non-FDA compliant transfused products.

(6) The Armed Services Blood Distribution System from the supporting base to the MTF is depicted in Figure F-1. The JBPO or AJBPO will be responsible for the joint blood distribution system within their geographic area. The JBPO works for the CCMD surgeon. The AJBPO, when formed, establishes blood support for the JTF. The AJBPO mission is based on a geographic area as well as a specific command. Therefore, AJBPO plans and trains for joint operations and coordinates with the JBPO for all blood operations. CCMD, subordinate unified command, and JTF OPLANs include projected blood requirements developed by the JMPT. These requirements are documented in appendix 2 (Joint Blood Program) to annex Q (Medical Services) of OPLANs as prescribed in CJCSM 3130.03, *Adaptive Planning and Execution (APEX) Planning Formats and Guidance*.

(7) Theater MTFs

(a) Maintain an amount of blood products on hand necessary to meet operational requirements, yet minimize waste due to out-dating. Some MTFs have limited capability to collect whole blood and apheresis platelets in emergencies. These emergency/in-theater collections result in blood products that are considered non-FDA compliant. Non-FDA compliant blood products should only be used as a last resort. When non-FDA compliant blood must be transfused, it carries the risk of transmitting infectious diseases. To adequately mitigate this risk, proper controls must be applied to ensure every emergently collected blood product is retrospectively tested and proper follow-up of the blood recipient is accomplished. Patient follow-up also applies to US patients transfused in HN health care facilities.

1. When emergency blood collections are required, donors are selected from among the following groups, in order:

a. Donors who have been pre-screened within the last 90 days by a Clinical Laboratory Improvement Amendments of 1988 (CLIA)- or Clinical Laboratory Improvement Program (CLIP)-certified laboratory using all the current FDA-required blood donor infectious disease screening tests. The CLIA regulations include federal standards applicable to all US facilities or sites that test human specimens for health assessment or to diagnose, prevent, or treat disease. CDC, in partnership with the Centers for Medicare and Medicaid Services, and FDA supports the CLIA program and clinical laboratory quality.

b. Donors who report being repeat blood donors and who have not been deferred for a transfusion transmitted disease. (Donation cards may serve as evidence of this.)

c. Donors who have not been pre-screened with FDA licensed tests, nor have been a blood donor in the past.

2. To the maximum extent possible, MTFs and USN ships will establish and maintain rosters of pre-screened donors and repeat the screening at regular intervals (not to exceed 90 days). Retrospective testing following an emergency blood donation may serve as a pre-screen for a subsequent donation.

a. All blood donors must be US personnel—military, DOD civilians, DOD contractors, or beneficiaries (non-theater donation). MNF personnel may be used by exception if US personnel are not available. Foreign national donors should be used as a last resort.

b. All prospective donors are screened for eligibility on the day of donation using ASBP-approved donor history screening protocols and ASBPO/CCDR-approved infectious disease rapid screening test kits. Note: Use of infectious disease rapid screening test kits is not equivalent to testing with an FDA licensed screening test for donor eligibility.

c. Specimen sample tubes are collected and labeled with a unique International Society of Blood Transfusion donor identification number at the time of blood donation and sent to a designated CLIP- or CLIA-certified donor testing laboratory for retrospective testing. Results of all pre-screening and retrospective testing are provided to the theater JBPO.

d. Donor collection information is submitted to the theater JBPO within 48 hours of collection. The required information is determined by the theater JBPO but should at minimum include donor's full name, unique identifier/Social Security number, unique donation identification number, organizational unit assigned, date of donation, location of donation, unit disposition (transfused, destroyed), unit disposition date, and any testing results (rapid or retrospective) available.

e. All records of emergency blood donation are maintained in accordance with ASBP, Service, and/or GCC policies.

f. Follow-up notification and counseling is provided to any donor who tests positive on the pre-screen, rapid, or retrospective test panels as follows:

(1) Document, track, and follow up blood donors with positive infectious disease testing results, regardless of whether the unit was transfused.

(2) The donor will be deferred from subsequent blood donations, notified of the test results, and offered counseling.

(3) A PVNTMED or infectious disease agency will be utilized for ensuring all donors have been notified of their retrospective test results and the appropriate follow-up is completed (i.e., notification, counseling, and treatment referrals).

(b) Submit required blood reports to their supporting blood distribution unit, as designated by the JBPO or AJBPO. This blood distribution unit may be from any Service component. In certain joint operations MTFs may deploy with blood if a requirement to use blood prior to establishment of the resupply chain is anticipated. In this case, the Service-specific service blood program office should be notified to coordinate the provision of the necessary blood products before the unit's deployment.

(8) The MDBS is a modular unit that can usually support several MTFs, depending on the operation, and may include supporting forces afloat. The JBPO determines the number of MTFs that an MDBS supports. The mission of the MDBS is to receive, store, process, and distribute blood products to its supported MTFs, collect whole blood and apheresis platelets on an emergency basis, and perform limited testing. An MDBS:

(a) To the maximum extent possible, maintains a 100 percent resupply of the blood products based on its supported MTF requirements or as designated by the JBPO. Maximum storage capacity is 4,080 units of RBCs.

(b) Is deployable with blood products when the operation involves immediate conflict.

(c) Is modularly tailored to force packages for contingency operations.

(d) Can be tasked by the JBPO to manage a blood products depot or expeditionary BTC.

(e) Can provide a consolidated blood report (from its supported MTFs) to the AJBPO or JBPO, as required. The commander, MDBS, can serve as the area joint blood program officer.

(9) The blood products depots have been built into some CCMDs to provide frozen blood products such as frozen RBCs, FFP, and cryoprecipitate.

(a) Are pre-positioned to offset strategic shortages of blood products during the initial stages of an operation until the liquid RBC units can be shipped into the theater.

(b) Provide frozen blood products to ships offshore.

(c) Have the capabilities to thaw and distribute frozen products as well as deglycerolize frozen RBCs.

(d) Issue blood and blood products to MDBS, as directed by the JBPO.

(e) Act as an MDBS and distribute blood and blood products to MTFs.

(f) Provide required blood report to their respective AJBPO or JBPO.

(g) The blood product depot ensures proper maintenance of the frozen inventory, rotating products back to the US, as necessary for utilization within MTFs. This helps keep inventories current and helps minimize outdate rates.

(10) CCDRs are responsible for ensuring blood products depots are maintained, manned, equipped, and supplied during peacetime operation.

(11) The expeditionary BTCs are managed by the USAF at various airfields. They receive blood products from the Armed Services whole blood processing laboratories or other expeditionary BTCs, store, re-ice, and distribute the products to other expeditionary BTC, MDBSs, or MTFs when required. They provide required blood reports to their respective AJBPO or JBPO. The expeditionary BTC may be airlifted to designated airports or landing zones (LZs) to maximize blood distribution and to provide for transshipment operations not otherwise available in theater. An expeditionary BTC can store and process up to 3,000 units of blood weekly.

(a) The current configuration of the expeditionary BTC provides a maximum storage of 7,200 units of blood daily.

(b) The goal of the expeditionary BTC is to maintain 50 percent of the established inventories of its supported MDBS.

b. Available Blood Products. Blood products may be pushed down to lower care capabilities if the proper staffing and equipment are available for storage, transport, and use of the products.

(1) The storage temperature for liquid RBCs is 1 to 6 degrees Celsius. During transport from one facility to another, the shipping temperature of liquid RBCs is 1 to 10 degrees Celsius.

(2) FFP has a one-year shelf life when stored at -18 degrees Celsius or colder. When shipping FFP, it must be kept in the frozen state using dry ice or a system that can sustain a -18 degrees Celsius temperature or colder. FFP can be maintained for up to five days as thawed plasma. FFP outdating can be modified/extended by in-theater policy (if converted to thawed plasma). FFP stored at -65 degrees Celsius has a seven-year expiration. Plasma frozen within 24 hours (or PF-24) of phlebotomy has the same storage requirements of FFP. Once FFP is thawed, it must be transfused within 24 hours unless it is converted to thawed plasma which has a five-day shelf life. Thawed FFP and thawed plasma must be stored at 1-6 degrees Celsius.

(3) Platelets are stored at 20-24 degrees Celsius with continuous agitation. The temperature during shipment must remain as close to 20-24 degrees Celsius as possible. The maximum time platelets can be stored without agitation is 24 hours. Platelet shelf life is five days but may be extended to seven days in theater.

(4) Cryoprecipitate has a 12-month shelf life when stored at -18 degrees Celsius or colder. Once thawed, cryoprecipitate units that were pooled in an open system have a four-hour shelf life, units pooled using a sterile connection have a six-hour shelf life, and units that were never pooled (single units) have a six-hour shelf life. Cryoprecipitate must remain in a frozen state during transport.

(5) Frozen RBCs have a 10-year shelf life when stored frozen at -65 degrees Celsius. Once thawed and deglycerolized, shelf life is 14 days when processed through a closed system and stored at 1-6 degrees Celsius. Liquid plasma and low titer Group O whole blood may be available as well. Units processed through an open system, have a 24-hour shelf life.

3. Planning for Effective Blood Management

a. **Coordination.** Continuous planning for mobilization, combat operations, and other contingencies enables the Services to rapidly respond to situations requiring blood support.

(1) A coordinated effort between the theater JBPO, the theater plans/operations officer, and transportation officer is required for successful planning. The JBPO must be integrated early into the planning process. OPLANs dictate blood management CONOPS. Some issues include:

- (a) Will blood be required immediately upon arrival of the combat units?
- (b) Should blood be brought into the JOA with the initial medical units?
- (c) Will there be multinational operations, and will the JBPO be responsible for blood requirements of MNFs?
- (d) Do the storage capabilities of the expeditionary BTCs, MDBSs, and blood products depots support the blood product requirements?
- (e) Will blood products depot capabilities to deglycerolize frozen RBCs meet blood requirements prior to shipments of liquid RBCs from the supporting base?
- (f) Are transportation assets readily available for emergency blood product distribution?
- (g) Where will the main supply routes be?
- (h) Where are the strategic and tactical supply and air evacuation routes and airports located?
- (i) Where are local sources of wet ice for refrigerated shipments and dry ice for frozen shipments of blood?

(j) What are the logistical shortfalls that will affect blood operations (reagents, test kits, consumable supplies, and blood boxes)?

(k) Are theater-wide policies and procedures in place for blood support, emergency collection SOPs, policies on who can donate blood (US military, NGOs, civilians, government contractors)?

(l) What cultural barriers must be overcome to provide blood support in the AOR?

(m) How will emergency blood collections occur in the theater of operations (who are potential donors, how will they be prescreened, are blood types known, are staff trained in proper procedures, are collections being reported)?

(2) The locations of the expeditionary BTCs depend on the location of the air terminals and operational necessity. Depending on the requirements within the CCMD, the expeditionary BTC needs to be able to appropriately manage a varied throughput of blood products. Current capacity is 7,200 units of RBCs per day. The JBPO and/or AJBPO must provide the expeditionary BTC personnel with their supported blood program elements, types, DOD activity address codes, and location of MTFs within the OA to allow proper distribution planning.

(3) Timely communication with the next higher echelon of support usually ensures adequate supplies of blood and blood products are available.

b. Blood Planning

(1) **Product Availability.** Liquid RBCs and FFP/PF-24 are available for use. Platelets may be available if supporting MTFs possess the necessary apheresis equipment. Theater blood policy will dictate availability of products.

(2) **Shipping RBCs.** Subject to availability, RBCs shipped from the US are packed with the unit group and type distributions as determined by the JBPO and AJBPO.

(3) **Blood Planning Factors.** Blood planning factors are programmed in the MPTk to help the JBPO and the CCMD determine the estimated requirements and subsequently used by the respective CCMD medical planners to generate daily blood product requirements for the JOA.

Note: Assets to meet anticipated detainee, civilian, and valid partner-nation personnel workload must be included in the TPFDD as documented in accordance with CJCSM 3130.03, *Adaptive Planning and Execution (APEX) Planning Formats and Guidance*. Additionally, a five-day safety factor will normally be added to blood requirements in the combat zone to take into account line of communication disruption, damage, and in-transit spoilage.

(4) **Blood Support for Rhesus (D antigen) (Rh[D]) Negative Patients.** Most available RBC units will be Rh(D) positive; 10 to 20 percent will be Rh(D) negative.

Rh(D) negative RBCs will be provided to both female and male Rh(D) negative patients. Transfusing Rh(D) positive RBCs to a Rh(D) negative female can result in future complications if she develops an antibody to Rh(D) and her future fetus is Rh(D) positive. Therefore, it is paramount to avoid the transfusion of Rh(D) positive RBCs to Rh(D) negative females of child-bearing age. The impact of antibody production in males is not as significant, thus priority for Rh(D) negative blood is given to females. In the event that there is not enough Rh(D) negative blood to meet all patient needs, transfusing Rh(D) positive RBCs to Rh(D) negative patients becomes an emergency requirement in saving the patient's life and should be thoroughly documented in the patient's medical record.

(5) **Pre-Positioned Frozen Blood Products.** Frozen RBCs are pre-positioned at various locations within the CCMDs. These pre-positioned products are intended as a stop gap to ensure blood products are available at the onset of hostilities until the US blood system is fully activated and shipping products into theater. To ensure rotation of frozen RBC inventory stocks, the use of thawed deglycerolized RBCs should be incorporated routinely into available MTF blood inventories. Deglycerolized frozen RBCs have a 14-day expiration.

(6) **ASBPO Reaction Time.** The reaction time of the AJBPO or other supporting JBPO must be considered. Optimally, receipt by the requesting command of blood or blood products for sustainment of operations should take approximately 72 hours, depending on flight arrangement. Within some CCMDs, blood products depots with pre-positioned frozen blood products have been constructed to provide blood products in anticipation to receiving liquid blood products from the US. There are also limited blood donor operations outside the US, which will be able to provide products prior to receiving them from the US. This is especially important in theaters where the command anticipates short notice or no notice of impending combat operations where large numbers of casualties can be expected. Most MTFs should plan to keep a three-day supply of blood and blood products on hand based on the requirements. To the maximum extent possible, MDBS should have a 100 percent replacement goal. Realistically, a planner may expect a four- to five-day resupply response time from outside the theater, dependent on at least two factors:

- (a) Availability of air transportation.
- (b) Location of the operational needs.

(7) **RBCs Shelf Life.** Currently, the health service personnel can expect RBCs to be at least 10 to 14 days old upon receipt. This is due in part to increased FDA testing requirements on all blood donors. Another factor is the resupply times from the US. This will be based upon the current requirements with the JOA. Blood collected in CPDA-1 [citrate, phosphate, dextrose, and adenine-formula 1] (an anticoagulant preservative solution) and stored at 1 to 6 degrees Celsius expires 35 days after collection. Blood collected in additive solutions has an extra 7 days of shelf life for a total of 42 days after collection.

(8) **Needs for Information.** The best source for operational information is the J-3. The J-3 can provide insight to future operations that will require blood planning. The

J-2 can facilitate that the best current intelligence be provided to assist the JBPO. Once located in the JOA, it is necessary for the JBPO to maintain current information on the combat situation and on the anticipated actions of friendly and adversary forces. The best sources of this information are the joint force intelligence officer and the operations officer. As required, the JBPO can anticipate increasing requirements for the JOA as a whole or may reallocate resources within the JOA to support specific operations using the following questions as guidelines:

- (a) How much blood is in the command?
- (b) Where is it concentrated?
- (c) Is the blood where it is most likely needed?
- (d) How can the blood be cross leveled?

c. HNS

(1) **HN Blood Bank Support.** The ASBPO with approval of the ASD(HA) determines the acceptability and comparability for HN blood supplies. Medical intelligence and the AJBPO will provide additional information upon which to base a decision on the comparability of HN blood with reference to required FDA level of blood testing and the willingness and ability of the HN to provide blood bank support. This support could take the form of blood products such as platelets, additional refrigerators in local hospitals or hotels, ice-making capability, or sources for dry ice to store FFP or frozen RBCs.

(2) **Obtaining Alternative Ice Sources.** Blood distribution assets and MTFs should develop alternative sources for wet and dry ice and refrigeration in case of equipment failure. These alternative sources can include other military units in the area or HN sources.

d. Logistical Considerations for Blood Support

(1) After the decision has been made on where to locate the blood distribution units and the CONOPS for blood support have been established, plans must be coordinated to effect the timely distribution of blood and blood products throughout the JOA. Prior planning must be accomplished with the joint movement center to establish procedures for the emergency movement of blood. Specific information required when shipping blood by air includes weight, whether wet or dry ice is required, number of units, number of boxes, and DOD activity address codes of the receiving facility.

(2) After transportation requirements and priorities have been established, planning consideration must be given to maintaining adequate levels of emergency blood collection and basic testing supplies for the planned operational scenario. If the USA is the dominant user, a MEDLOG company could be augmented to perform Class VIIIIB management functions and if tasked, could assume the role of the SIMLM for the JOA. A cell from a USA blood support detachment may be collocated with a MEDLOG company

to provide blood products to supported medical units. MTF coordination with the SIMLM is imperative. The SIMLM should have LNOs from supported Services to assist in coordinating logistic support requirements during joint or multinational operations. Examples of required supplies include:

- (a) Whole blood collection sets.
- (b) Rapid diagnostic viral screening test kits.
- (c) Blood typing system grouping and Rhesus (Rh) factor typing antiserum/gel cards.
- (d) Test tubes.
- (e) Blood shipping boxes and labels.
- (f) Plastic bags.
- (g) Adequate supply of wet and dry ice for maintenance of required blood temperature during transit.

4. Blood Report

a. **Purpose of Standardized Blood Reporting.** The purpose of the standardized blood report is to enable the JBPO to effectively manage blood and blood products, project blood requirements, request blood, report blood inventories, and provide information on the overall blood element operations of all Service components in the JOA. The JBPO will establish the report format and reporting frequencies based upon operational factors. Examples of blood reports are shown in Figure F-2 and Figure F-3.

b. Blood Reporting

(1) Each facility with blood products submits required blood reports to the next higher organization as follows:

(a) MTF (lowest level with blood) to MDBS/blood products depot. For first responder care capability and FRC capability units, the JBPO may direct that the report be sent to the supporting theater hospitalization capability MTF.

(b) MDBS (to include roll up of all MTFs), blood products depot, and expeditionary BTC to AJBPO, if established, or directly to the JBPO if no AJBPO.

(c) AJBPO (to include roll up of all lower reporting facilities) to joint program office.

(d) JBPO to ASBPO.

(2) The time of reporting should be determined by the supported commander, but should be a consistent time each day.

- (3) The following minimum information is required as part of the blood report:
 - (a) Number of blood components by the blood typing system and Rh factor.
 - (b) Number of RBCs due to expire within next seven days by the blood typing system and Rh factor.

Example Blood Report Message Format

```

*** UNCLASSIFIED ***
PRIORITY
TO RUEAUSA/ASBPO WASHINGTON DC
INFO RUEOLIA/ASWBPL MCGUIRE AFB NJ
RULYOGB/RHEVAZZ/CJTF ONE EIGHT ZERO//J4/SURG MAIN/FT BRAGG//
UNCLAS
OPER/UPHOLD DEMOCRACY//
MSGID/BLDREP/CJTF-180 JBPO/BLD/OCT/A//
ASOFDTG/150001OCT94//
REPUNIT/32NDMED BN (LOG) BLDPLT/G/CAMP DEMOCRACY HAITI//
BLDINVT/32NDMED BN (LOG) BLDPLT/G/115JS/31JT/3JU//
BLDREQ/30JQ//
BLDEXP/32NDMED BN (LOG) BLDPLT/G/49JS/24JT//
BLDEST/32NDMED BN (LOG) BLDPLT/G/45JS//
CLOSTEXT/REQUEST 30JQ FOR DELIVERY ON 20OCTOBER AND
2NOVEMBER. CHANGE
STANDING ORDER TO 45JQ FOR DELIVERY ON 14TH OF EACH MONTH//
*** UNCLASSIFIED ***

```

Figure F-3. Example Blood Report Message Format

(c) Number and type of components transfused since last report by blood typing system and Rh factor. MTFs should also include patient transfusion data.

(d) Immediate requirements with required delivery date.

(e) 72 hours projected estimated need.

(f) Calculated days of supply as determined by the JBPO.

(4) The JBPO establishes the blood report format. One method is spreadsheet sent via e-mail (see Figure F-2). Another method is message text format sent through current military message programs such as the Global Command and Control System. Secure voice messages may also be used. Additional reporting tools utilizing Internet database type programs that may reside on unsecure or secure channels.

(5) The JBPO may assign brevity codes and designate specific lines to be utilized in the required reporting.

(6) Requests for RBCs should normally be based on a random distribution of blood groups and types (that is, 40 percent O positive, 10 percent O negative, 35 percent A positive, 5 percent A negative, 8 percent B positive, and 2 percent B negative). At theater hospitalization and definitive care capabilities, group and type-specific RBCs and plasma should be transfused whenever possible. First responder and FRC capabilities will require group O RBCs only. Upon activation, each MTF should request a base load of blood components.

c. Transmission of the Blood Report

(1) **Method.** The method of blood report transmission will be by means designated by the JBPO. The method should be outlined in the appendix 2 (Joint Blood Program) to annex Q (Medical Services).

(2) **Frequency.** The JBPO determines the frequency of MTF reporting. Key factors in determining frequency include the type and/or level of military operation and the rate of blood product transfusions. This should be detailed in the appendix 2 (Joint Blood Program) to annex Q (Medical Services).

d. Blood Report Policies

(1) Information copies should be kept to a minimum and be specifically required by the respective OPLAN. Increased quantities of information copies overload the message channels.

(2) Blood shipment reports are used within the ASBP to report blood shipments.

Intentionally Blank

APPENDIX G

SERVICE COMPONENT TRANSPORTATION AND MEDICAL EVACUATION ASSETS

1. General

This appendix provides a listing of the evacuation capabilities of Service component transportation assets and also includes rail transport resources. Although railway transportation assets are not Service-owned or within the DOD inventory, it is important to know their capacities in the event they become available as evacuation platforms through wartime HNS agreements. The majority of the Service transportation assets listed in Figure G-1 to Figure G-5 are not dedicated PM platforms, and when they are employed for PM, their crew must be augmented with medical personnel to provide in-transit care.

Service Component Fixed-Wing and Tiltrotor Aircraft Transportation Assets					
Nomenclature	Service	Configuration	Litter	Ambulatory (Seated)	Attendants
C-5 Galaxy	USAF	Maximum	Not Equipped	70	2 Flight Nurses 3 Aeromed Evac Techs
KC-135 Stratotanker	USAF	Maximum	8	24	2 Flight Nurses 3 Aeromed Evac Techs
KC-10 Extender	USAF	Maximum	8	24	2 Flight Nurses 3 Aeromed Evac Techs
C-21 Learjet	USAF	Maximum	1	2	1 Flight Nurse 1 Aeromed Evac Tech
C-130 Hercules	USAF USMC	Maximum Combined	74 50	92 24	2 Flight Nurses and 3 Aeromed Evac Techs
C-17 Globemaster	USAF	Maximum	36	54	2 Flight Nurses 3 Aeromed Evac Techs
MV-22 Osprey	USAF USMC,USN	Maximum Maximum	6	12	2 Medical Attendants
C-12 Huron	USAF, USA USN/USMC	Maximum Combined	2 Not Equipped	8 8	1 Medic
C-2 (COD)	USN	Maximum	Not Equipped	28	2 Corpsmen
P-8 (Sub Hunter)	USN	Maximum	10	19	2 Corpsmen
C-40A Clipper C-40C	USN USAF	Maximum Maximum	Not Equipped Not Equipped	121 111	as required as required

Legend

AEROMED aeromedical COD carrier onboard delivery Evac evacuation Techs technicians	USA United States Army USAF United States Air Force USMC United States Marine Corps USN United States Navy
---	---

Figure G-1. Service Component Fixed-Wing and Tiltrotor Aircraft Transportation Assets

A listing of the recommended augmented medical personnel is provided for each transportation asset.

SECTION A. SUPPORTING UNITED STATES AIR FORCE AEROMEDICAL EVACUATION ELEMENTS AND TRANSPORTATION ASSETS

2. Air Force Airlift Resources

a. Preplanned AE can be scheduled as either preconfigured or retrograde (opportune) airlift at the discretion of the GCC and the theater's joint movement center. When using retrograde (opportune), the aircraft flies into an airfield, off-loads the cargo and/or passengers, and then is quickly reconfigured for AE on the return, or retrograde, leg.

Service Component Rotary-Wing Aircraft Transportation Assets					
Nomenclature	Service	Configuration	Litter	Ambulatory (Seated)	Attendants
UH-1N Iroquois	USMC	Maximum Combined	6 3	12 5	1 Corpsman
CH-53D Sea Stallion CH53E Super Sea Stallion	USMC/USN	Maximum Combined	12 12	37 (55 with Center Line Seating) 19	2-4 Corpsmen
UH-60A/L/M	USA	Maximum Combined	2 1	11 4	2 Crewmembers
Uh-60A Blackhawk Air Ambulance Carousel Equipped	USA	Maximum Combined	6 3	7 1	1 Medic
HH-60L/M Blackhawk Air Ambulance	USA	Maximum Combined	6 3	6 3	1 Medic
UH-1H/V Iroquois Air Ambulance	USA	Maximum Combined	6 3	9 4	1 Medic
CH-47 Chinook	USA	Maximum Combined	24 8	31 19	1 Medic
UH-72 Lakota	USA	Maximum Combined	2 1	4 2	1 Medic
UH-1Y	USMC		6	12	

Legend

USA United States Army USN United States Navy
USMC United State Marine Corps

Figure G-2. Service Component Rotary-Wing Aircraft Transportation Assets

Retrograde aircraft utilize litter configuration equipment organic to the aircraft. To use preplanned airlift, the GCC must apportion airlift for the AE mission. These aircraft can then be configured for AE prior to mission origination. Preconfigured preplanned aircraft enable AE mission planners to use the same aircraft to make multiple stops, facilitate scheduling of the mission(s) to meet AE requirements (such as increased flexibility with

Service Component Medical Ground Vehicles Transportation Assets

Nomenclature	Service	Configuration	Litter	Ambulatory (Seated)	Attendants
M996 Truck, 4x4 Ambulance Armored HMMWV-mini	USA	Maximum Combined	3 1	6 3	2 Medics
M997 Truck, 4x4 Ambulance Armored HMMWV-maxi	USA	Maximum Combined	4 2	8 4	2 Medics
M1035 Truck 4x4 Ambulance Soft-top HMMWV-mini	USMC	Maximum Combined	2 1	3 3	Driver Only 1 Corpsman
M113 Carrier, Personnel, Full-tracked Armored, With Litter Conversion Kit	USA	Maximum Combined	4 2	10 4	1 Driver, 1 Medic, 1 Track Commander
M1133 Stryker-Medical Evacuation Vehicle	USA	Maximum Combined	4 2	6 3	1 Driver, 1 Medic, 1 Track Commander
MRAP Maxx Pro-pluse (Ambulance)	USA	Maximum Combined	2 2	4 1	1 Driver, 1 Medic, 1 Track Commander
MRAP RG33I HAGA	Not Service-unique	Maximum Combined	3 1	6 3	1 Driver, 1 Medic, 1 Track Commander
MRAP Cougar (Ambulance) CAT2A2	USMC	Maximum Combined	2 1	3 3	1 Driver, 1 Medic, 1 Track Commander
Bus, Ambulance	Not Service-unique	Maximum Combined	20 Capacity Varies by Size of Bus	44	2 Medics

Legend

HAGA heavily armored ground ambulance
HMMWV high mobility multipurpose wheeled vehicle

MRAP mine-resistant, ambush-protected
USA United States Army
USMC United States Marine Corps

Figure G-3. Service Component Medical Ground Vehicles Transportation Assets

APOD and/or its selection), and permit an increased litter AE configuration and decreased ground times. However, using preconfigured preplanned AE does reduce the number of airframes available to the GCC for other missions. In environments where there is significant risk to mobility crews, aircraft and patients, there may not be time to reconfigure the aircraft and patients requiring urgent evacuation, which will require floor loading of patients. To the greatest extent possible, these missions should be minimized and pre-coordinated with the appropriate PMRC VFS. In higher threat scenarios, urgent patients may need movement without dedicated AE support.

Service Component Nonmedical Ground Vehicles Transportation Assets

Nomenclature	Service	Configuration	Litter	Ambulatory (Seated)	Attendants
LAV [Light Armored Vehicle] 25	USMC	Maximum	0	4	Crew Only
LAVL [Light Armored Vehicle, Logistics] Variant	USMC	Maximum	4	7	1 Corpsman
AAV [Amphibious Assault Vehicle], Landing Vehicle, Personnel	USMC	Maximum	6	21	1 Corpsman
M998 4X4 Truck Cargo/troop Carrier	USA, USMC	Maximum	5	6	1 Medic or Corpsman
M1078 LMTV [Light Medium Tactical Vehicle] 4X4 2.5 Ton Cargo Truck	USA	Maximum	7	12	1 Medic
M1083 MTV [Medium Tactical Vehicle] 6X6 5 Ton Cargo Truck	USA	Maximum	8	14	1 Medic
M1083 MTV, Long Wheelbase	USA	Maximum	12	22	1 Medic
M813, M923 5-Ton 6X6 Cargo Truck	USA	Maximum	12	32	1 Medic or Corpsman
M977 HEMTT [Heavy Expanded, Mobility Tactical Truck] 8X8, Cargo	USA, USMC	Maximum	9		1 Medic or Corpsman

Legend

USA United States Army

USMC United States Marine Corps

Figure G-4. Service Component Nonmedical Ground Vehicles Transportation Assets

Service Component Rail Transportation Assets

Nomenclature	Service	Configuration	Litter	Ambulatory (Seated)	Attendants
Sleeping Car	NATO/host-nation Support (HNS) (Capacity Varies By Nation)	Maximum	32	32	1 Nurse
Ambulance Railway Car	NATO/HNS (Capacity Varies by Nation)	Maximum	24	30	1 Nurse
Ambulance Railway Car, Personnel	NATO/HNS (Capacity Varies by Nation)	Maximum	21	21	2 Ward Attendants
Rail Bus	Germany	Combined	40	16	2 Ward Attendants

Legend

NATO North Atlantic Treaty Organization

Figure G-5. Service Component Rail Transportation Assets

b. Patient stability may dictate changes in the mix of patients to crew members, crew augmentees, and medical attendants affecting standard planning assumptions. Aircraft characteristics for theater support aircraft are outlined as follows:

(1) The C-130 is the primary USAF intratheater AE capable airlift aircraft available to support the GCC. This is a high wing, four engine turboprop cargo aircraft that can be fully pressurized, heated, and air conditioned. The C-130 aircraft can maintain a sea-level cabin altitude at an ambient altitude of 19,000 feet and an 8,000 foot cabin altitude at an ambient altitude of 35,000 feet. It can land and take off on short runways, which allows rapid transportation of personnel and equipment. The C-130 aircraft can be readily configured for AE by using seat and litter provisions stowed in the cargo compartment. The AE planning factor is for 50 patients. The C-130 aircraft poses several constraints for AE operations. These include cabin noise, which can make patient evaluation difficult, and inadequate lighting for many patient care activities. The aircraft oxygen system needs to be supplemented by a self-contained AE system for therapeutic oxygen delivery. The single lavatory is on the cargo ramp and is impossible for some otherwise ambulatory patients to use. During engines-running on load and off-load operations at unimproved airfields, blown objects and dust can present eye hazards and stress to crew and patients.

(2) The C-17 aircraft has three AE stations stowed on the sidewall to accommodate nine litters. If additional litter stanchions are added to the aircraft, the C-17 aircraft can transport a total of 36 litter patients. The C-17 aircraft can also be configured with patient support pallets. Five therapeutic oxygen outlets are provided, and there are 12 designated AE utility receptacles for electrical power.

(3) KC-135 tanker aircraft are also routinely used to conduct AE missions. While the number of patients able to be transported is limited, the extended range makes it possible to fly non-stop to the US from many theaters of operation. The KC-135 has no inherent capability to convert to an AE configuration. It requires either patient support pallets or stacking litter systems to be configured for AE.

(4) Instances may occur that require the use of aircraft other than those normally used to support AE operations (C-5, KC-10, and C-21 aircraft). AE missions can be flown on these aircraft with careful consideration for the loading and unloading of patients and placement of patients during flight. On occasions when AE crew members may be required to accompany patients on nontraditional aircraft, AE crew members should work closely with the flight crew and receive, at a minimum, a briefing on emergency egress, oxygen, and electrical system capability as it relates to patient and/or emergency use. Guidelines followed on other AE missions should be observed as much as possible. AE crew members should refer to AE regulations for further guidance on using specific aircraft.

3. Ambulance Bus

The ambulance bus is organic to the table of allowance for contingency hospitals and aeromedical staging squadrons. The ambulance bus has an inherent capability to transport 12 litters or a combination of litter and ambulatory patients from four litters and 24 ambulatory or up to 12 litters and zero ambulatory.

SECTION B. SUPPORTING NAVY/MARINE CORPS/COAST GUARD EVACUATION ELEMENTS

4. United States Navy

a. Currently, the USN has no dedicated AE resources at theater-level MTFs to go forward and retrieve casualties. Evacuation continues to be provided by lifts of opportunity from USN as well as other resources as identified during the planning process.

b. **Casualty Receiving and Treatment Ships.** Designated ships of the ATF can provide FRC capability and medical and dental support to the LF. Amphibious assault ships (multipurpose) are suitable for use as casualty receiving and treatment ships when augmented by additional medical personnel. Aeromedical to casualty receiving and treatment ship is by USN or USMC lift of opportunity or in some cases by USA helicopter.

c. **Hospital Ships.** Two hospital ships operated by Military Sealift Command are designed to provide emergency, on-site care for US forces during military operations. No USN- or USMC-dedicated evacuation support currently exists for USN ships. The *United States Naval Ship (USNS) Mercy* (Hospital Ship [T-AH] 19) and *USNS Comfort* (T-AH

20) each contain up to 12 fully equipped operating rooms and up to a 1,000-bed hospital facility, digital radiology, clinical laboratory or clinical diagnostic laboratory, pharmacy, optometry lab, CAT [computerized axial tomography] scan, and two oxygen-producing plants. Both ships have a helicopter deck capable of landing large military helicopters, as well as side ports to take on patients at sea. The actual patient capacity varies based on the type and severity of casualties anticipated, as well as mission tasked. For further information, see OPNAVINST 3501.161, *Required Operational Capabilities and Projected Operational Environment for the T-AH 19 Mercy Class Hospital Ships*.

For more information on hospital ship capabilities, see NTTP 4-02.6, Hospital Ships.

d. The USN currently has no dedicated AE resources at definitive care capability MTFs. Therefore, USN doctrine relies on the collocation of a staging facility with FHP elements to facilitate patient evacuation. Although movement assets are primarily provided by the USAF, Figure G-1 depicts fixed-wing USN assets could be employed on a case-by-case basis.

5. United States Marine Corps

The USMC depends on USN and other evacuation assets for support. The USMC has no theater hospitalization capability assets.

6. United States Coast Guard

The United States Coast Guard (USCG) depends on USN and other evacuation assets for support. The USCG has limited first responder care capability and no FRC capability or theater hospitalization capability.

SECTION C. SUPPORTING UNITED STATES ARMY EVACUATION ELEMENTS AND REQUEST PROCEDURES

7. General

a. The USA typically is the primary provider of air and ground MEDEVAC assets to the CCDR. The USA has dedicated assets specifically organized to provide this function. USA MEDEVAC provides forward PM to members of the joint force, as well as the HN, interagency partners, NGOs, detainees, and DOD and non-DOD civilians and contractors.

b. USA MEDEVAC in a theater may be provided in a general support or direct support role based on the requirements of the joint force. If available and allocated, team or company sized elements of USA air or ground ambulances can be tasked to directly support elements of the joint force that do not have sufficient organic evacuation assets.

c. The support roles and allocation of MEDEVAC units are directed through the CCMD joint PM system (appendix 1 [Joint Patient Movement System] to annex Q [Medical Services] of the OPLAN or OPORD). The plan is based on many factors, including casualty estimates based on supporting the HN, DOD and interagency

populations, MTF locations, air and ground ambulance maintenance support locations, supported joint force units, missions, and theater geography.

d. USA air and ground ambulance units are dedicated medical units and are afforded the protection of the Geneva Conventions. In compliance with the Geneva Conventions, these units may only perform the MEDEVAC mission (and other associated medical missions). Personal weapons are carried for self-defense and the defense of patients. All platforms are marked with a red cross or equivalent symbology.

8. Evacuation Through the Joint Roles of Care

a. Within the JOA, patients are collected, triaged, treated, and returned to duty as far forward as possible. The patients are evacuated to the MTF most capable of providing the required treatment in the shortest possible time. The amount of evacuation activity depends on combat intensity, environmental conditions, terrain, and special circumstances.

b. USA patient evacuation of casualties in the JOA occurs from POI or point of illness to the appropriate capability of care. The USA uses this system to move its patients from POI through theater hospitalization capabilities of care and coordinates with the PMRC to ensure a seamless and cogent integration with the joint intertheater patient system. CASEVAC is a part of the USA doctrine. However, when utilized, it requires deliberate and distinct planning when dedicated PM assets are overwhelmed.

9. United States Army Medical Evacuation Units

a. Air Ambulance Company

(1) **Configuration.** An air ambulance company consists of 15 MEDEVAC HH-60s or 8 UH-72As and assigned personnel. An air ambulance company is assigned to a general support aviation battalion.

(2) **Search Helicopter/MEDEVAC HH-60 Air Ambulance.** Each MEDEVAC HH-60 is capable of carrying either six litter patients and one ambulatory patient, seven ambulatory patients, or some combination thereof. A litter-only configuration for 15 MEDEVAC HH-60 aircraft results in a total lift capacity of 90 litter or 84 ambulatory patients.

(3) **UH-72A Air Ambulance.** Each UH-72 is capable of carrying two litter patients, resulting in a total lift capacity of 16 litter patients.

(4) **Mission.** The air ambulance company's mission is to conduct MEDEVAC within an OA.

(5) **Capabilities.** A typical air ambulance company provides the following:

(a) Evacuation of patients from POI or point of illness to the required capability of care.

(b) The ability to task organize into four forward support MEDEVAC teams of three air ambulances each and one area support MEDEVAC platoon consisting of three aircraft.

(c) Air crash rescue support, less fire suppression, in combat SAR support.

(d) Rapid delivery of blood and blood products, biologicals, and medical supplies to meet critical requirements.

(e) Rapid movement of medical personnel and their accompanying equipment and supplies in response to mass casualties, reinforcement and/or reconstitution, or emergency situations.

(f) Movement of patients between MTFs, airheads, and/or ships.

b. Ground Ambulance Company

(1) **Configuration.** A ground ambulance company is 100 percent mobile and normally consists of 24 ground ambulances and assigned personnel.

(2) **Mission.** The ground ambulance company's mission is to provide ground evacuation of patients within the OA.

(3) **Capabilities.** There are a variety of Army ground ambulances. For light or varied operations, high-mobility multipurpose wheeled vehicle and high-mobility multipurpose wheeled vehicle derivatives are used. Each has a four-litter or eight ambulatory patient capacity. For airborne or high-mobility operations, the mechanized M996 derivative is used, with a two-litter capacity. For heavy (armor) operations, an armored personnel carrier (M113) derivative is used in some units. The Stryker MEDEVAC vehicle is a highly mobile armored evacuation vehicle and is the newest USA ground evacuation platform. The ground ambulance company provides the following:

(a) Evacuation of patients (consistent with evacuation priorities and operational considerations) from POI or point of illness.

(b) Movement of patients between MTFs, airheads, or seaports.

(c) Emergency movement of medical supplies.

10. Evacuation Request Procedures

a. **General Instructions.** Procedures for requesting MEDEVAC are derived from an established joint PM system (appendix 1 [Joint Patient Movement System] to annex Q [Medical Services] of the OPLAN or OPORD). The same format is used for requesting both air and ground evacuation. Before initiating an evacuation operation, a unit must have an established MEDEVAC plan. The plan may be an SOP or it may be designed for a particular operation.

b. Unit Responsibilities in Evacuation. A request for MEDEVAC places certain responsibilities on the requesting unit. To prepare for and assist evacuation operations, the unit must ensure the following:

(1) The tactical situation permits evacuation and patient information is ready when the request is submitted.

(2) An English-speaking representative at the pickup site when the evacuation is requested for non-US personnel.

(3) Patients are moved to the safest aircraft approach and departure point or ground ambulance exchange point.

(4) Unit personnel are familiar with the principles of helicopter operations. The unit typically:

(a) Prepares the landing site.

(b) Loads and unloads the helicopter according to the crew's instructions.

(c) Briefs the pilot on the location of enemy troops.

(d) Guides the helicopter using hand signals.

c. MEDEVAC Request Formats and Procedures. The MEDEVAC request is used for requesting evacuation support for both air and ground ambulances. There are two established MEDEVAC formats and procedures: one for operational use and one for peacetime use. Under all non-conflict conditions, clear text transmissions of MEDEVAC requests are authorized. During operational, evacuation requests are transmitted by secure means, if possible.

d. Commanders may determine that additional information is required when submitting a MEDEVAC request. The major concern on adding additional requirements to a MEDEVAC request is that the addition does not delay the evacuation mission. Commanders should consult with their staff surgeon section to assess the requirement to provide additional information. The addition of information beyond the original format of the 9-line MEDEVAC request should be based on the medical benefit it provides to the condition of the patient being evacuated.

e. Some multinational partners may require/request additional information on the MEDEVAC request. This additional information may be included into MEDEVAC request to US MEDEVAC units. An example of this information would be the incorporation of the mechanism of injury, injury type, signs, treatment (MIST) report into the MEDEVAC request.

f. The MIST information is additional information and is sent as soon as possible after the 9-line MEDEVAC request has been sent. MEDEVAC missions should not be delayed while waiting for the MIST information.

g. **Transmission of the Request.** MEDEVAC requests should be made to the unit that controls evacuation assets, by the most direct communications means available. The communications means and the channels used will depend on factors such as the organization, location on the battlefield, distance between units, and communications means available at the time. Primary and alternate channels to be used are specified in the unit evacuation plan.

(1) **Transmission Security.** Operational conditions dictate all requests be transmitted by secure means if possible. Regardless of the type of communications equipment used in transmission, it is necessary to:

- (a) Make the proper contact with the intended receiver.
- (b) Use accurate call signs and frequencies from the unit at the pickup site.
- (c) Provide the opening statement: "I have a MEDEVAC request."

(d) The unit requesting the MEDEVAC must monitor the frequency they provided in the 9-line request to receive contact from the evacuation vehicle.

(2) **Receiver Acknowledgment.** After the opening statement is made, the transmitter breaks for acknowledgment.

Intentionally Blank

APPENDIX H

IMPACTS OF THE LAW OF WAR AND MEDICAL ETHICS

1. General

a. The conduct of armed hostilities is regulated by the law of war. This law is derived from two principal sources:

(1) Treaties or conventions (such as The Hague and Geneva Conventions).

(2) Customary international law (resulting from a general and consistent practice of states following the law from a sense of legal obligation).

b. Under the US Constitution, treaties ratified by the Senate constitute part of the supreme law of the land, and thus must be observed by both military and civilian personnel. The unwritten, or customary, law of war is part of international law as recognized by the US. As such, it is binding upon the US, citizens of the US, and persons serving the US.

c. Recent and future conflicts within the joint operating environment are likely to pose additional issues because adversaries within non-state organizations are neither signatories nor adherents to the Geneva Conventions. Some irregular tactics of adversaries include purposeful attacks against military and civilian health and humanitarian personnel and assets. Even within this environment, the US military adheres to and honors the law of war at all times.

d. Additional ethical issues arise in the treatment of civilians as part of health support operations. Delivery of direct health care and Western/US standard health care and health services may exceed that required by law. Further exceeding local standards of care by too much may result in negative health sector effects. Local resources may never be able to support Western programs in the long-run, or the services may competitively damage local health system components. Careful thought and analysis of OE objectives should guide all significant health sector support.

2. The Geneva Conventions

a. The US is a party to numerous conventions and treaties pertinent to warfare. Collectively, these treaties are often referred to as The Hague and Geneva Conventions. Whereas the Hague Conventions concern the methods and means of warfare, the Geneva Conventions concern the victims of war or armed conflict. The Geneva Conventions are four separate international treaties, signed in 1949. The Conventions are very detailed and contain many provisions that are tied directly to the medical mission. Advice should be sought from the SJA as to which provisions of the Geneva Conventions are applicable to the medical mission. These Geneva Conventions are titled:

(1) GWS.

(2) GWS Sea.

(3) GPW.

(4) GC.

b. All medical personnel should thoroughly understand the provisions of the Geneva Conventions that apply to medical activities. Violation of the Geneva Conventions can result in the loss of the protection afforded by them. The consequences can include the following:

(1) MEDEVAC assets subjected to attack and destruction by the adversary.

(2) Medical capability degraded.

(3) Captured medical personnel becoming POWs rather than retained personnel. They may not be permitted to treat fellow prisoners and would not be repatriated before the end of hostilities even if surplus to the POW population's needs.

(4) Loss of protected status for medical unit, personnel, or evacuation platforms (to include aircraft on the ground).

3. Protection of the Wounded, Sick, and Shipwrecked

a. The essential and dominant idea of the GWS is that the combatant on the battlefield who has been wounded or who is sick, and for that reason, is out of the combat in a disabled condition, known as hors de combat, is from that moment protected. Friend or foe must be tended with the same care. From this principle, numerous obligations are imposed upon parties to a conflict.

b. **Protection and Care.** Article 12 of the GWS imposes several specific obligations regarding the protection and care of the wounded and sick persons who fall within groups defined in Article 13.

(1) The first paragraph of Article 12, GWS, states "Members of the armed forces and other persons mentioned in the following Article, who are wounded or sick, shall be respected and protected in all circumstances."

(a) The word "respect" means "to spare, not to attack," as explained in the International Committee of the Red Cross's *Commentary of 1952, I Geneva Convention*, and "protect" means "to come to someone's defense, to lend help and support." These words make it unlawful to attack, kill, ill-treat, or in any way harm a fallen adversary combatant who has ceased to fight and laid down arms (weapons) as a result of injuries. At the same time, these words impose an obligation to come to the enemy person's aid and give such care as their condition requires.

(b) This obligation is applicable in all circumstances. The wounded and sick are to be respected just as much when they are with their own Service or in no man's land as when they have fallen into the hands of the adversary.

(c) Combatants and noncombatants, as well as civilians, are required to respect the wounded. The obligation also applies to civilians; Article 18, GWS, specifically states: “The civilian population shall respect these wounded and sick, and in particular abstain from offering them violence.”

(d) Military personnel who are at sea and are wounded, sick, or shipwrecked, by whatever cause, are entitled to the same respect and protection.

(e) The GWS does not define what “wounded or sick” means, nor has there ever been any definition of the degree of severity of a wound or a sickness entitling the wounded or sick combatant to respect. Any definition would necessarily be restrictive in character and would thereby open the door to misinterpretation and abuse. The meaning of the words “wounded and sick” is thus a matter of common sense and good faith. It is the act of laying down of arms (weapons) because of a wound or sickness, which constitutes the claim to protection.

(f) The benefits afforded the wounded and sick extend not only to members of the armed forces, but to other categories of persons as well, classes of whom are specified in Article 13, GWS. Even though a wounded person is not in one of the categories enumerated in the Article, we must still respect and protect that person. There is a universal principle that states any wounded or sick person is entitled to respect and humane treatment and the care that their condition requires. Wounded and sick civilians have the benefit of humanitarian safeguards. It is the best practice to treat all sick or wounded adversary citizens as detainees, entitled to treatment, until their status can be determined otherwise.

(2) The second paragraph of Article 12, GWS, provides that the wounded and sick “...shall be treated humanely and cared for by the Party to the conflict in whose power they may be, without any adverse distinction founded on sex, race, nationality, religion, political opinions, or any other similar criteria...”

(a) All adverse distinctions are prohibited. Nothing can justify an adversary in making any adverse distinction between wounded or sick that require attention, whether they are friend or foe. Both are on equal footing in the matter of their claims to protection, respect, and care. The foregoing is not intended to prohibit concessions, particularly with respect to food, clothing, and shelter, which take into account the different national habits and backgrounds of the wounded and sick.

(b) The wounded and sick shall not be made the subjects of biological, scientific, or medical experiments of any kind that are not justified on medical grounds and dictated by a desire to improve their condition.

(c) The wounded and sick shall not willfully be left without medical assistance, nor shall conditions exposing them to contagion or infection be created.

(3) The only reason that can justify priority in the order of treatment are reasons of medical urgency. This is not so much an exception to the principle of equality of treatment of the wounded as it is recognition of the legitimacy of triage. So long as adversary patients are triaged on an equal footing with allied patients, triage is justified.

An adversary can never refuse to care for adversary wounded on the pretext that the adversary has abandoned them without medical personnel and equipment.

(4) Paragraph 5 of Article 12, GWS, provides that if we must abandon wounded or sick, we have a moral obligation to, “as far as military considerations permit,” leave medical supplies and personnel to assist in their care. This provision is in no way bound up with the absolute obligation imposed by paragraph 2 of Article 12 to care for the wounded.

(5) In the case of a noninternational armed conflict where the sick and the wounded do not fall within the groups specified in Article 13, the provisions of Article 3 must be followed as a minimum. This Article concerns those taking no active part in hostilities, including members of the armed forces who have laid down their arms and those placed ‘hors de combat.’ Such persons benefit from a number of protections, including the prevention of violence to life and person, and specifies that the wounded and sick shall be collected and cared for. International armed conflicts occur when one or more states have recourse to armed force against another state, regardless of the reasons for or the intensity of this confrontation. Conversely, noninternational armed conflicts are armed conflicts that oppose a state party against a non-state party or that exclusively oppose non-state organized armed groups. For noninternational armed conflicts to exist, they must involve parties demonstrating a certain level of organization and the armed violence must reach a certain level of intensity.

c. Adversary Wounded and Sick. The protections afforded the wounded and sick apply to friend and foe alike without distinction. Certain provisions of the GWS, however, specifically concern adversary wounded and sick. There are also provisions in the GPW, which because they apply to POWs generally, also apply to adversary wounded or sick if they are entitled to POW status by falling within one of the groups defined in Article 4 of the GPW.

(1) Article 14 of the GWS states that the wounded and sick of a belligerent who are captured have the status of POWs. However, that wounded adversary is also a person who needs treatment. Therefore, a wounded enemy belligerent who falls into the hands of an adversary who is a party to the GWS and the GPW, such as the US, will enjoy protection under both conventions until the wounded enemy belligerent is recovered.

(2) Article 16 of the GWS requires the recording and forwarding of information regarding adversary wounded, sick, or dead.

(3) When intelligence indicates that large numbers of EPWs may result from an operation, medical units may require reinforcement to support the anticipated additional EPW patient workload.

(4) In the case of adversaries in a noninternational armed conflict who are not entitled to POW status, the provisions of Article 3 should be applied as a minimum, as indicated above.

d. **Search for and Collection of Casualties.** Article 15 of the GWS imposes a duty on combatants to search for and collect the dead and wounded and sick as soon as circumstances permit. It is left to the tactical commander to judge what is possible and to decide to commit medical personnel to this effort. If circumstances permit, an armistice or suspension of fire should be arranged to permit this effort.

e. **Assistance of the Civilian Population.** Article 18, GWS, addresses the civilian population. It allows military authorities to ask the civilians to collect and care for wounded or sick of whatever nationality. This provision does not relieve the military authorities of their responsibility to give both physical and moral care to the wounded and sick. The GWS also reminds the civilian population that they must respect the wounded and sick, and in particular, must not injure them.

f. **Adversary Civilian Wounded and Sick.** Certain provisions of the GC are relevant to the medical mission.

(1) Article 16 of the GC provides that civilians who are “wounded and sick, as well as the infirm and expectant mothers, shall be the object of particular protection and respect.” The Article also requires that, “as far as military considerations allow, each Party to the conflict shall facilitate the steps taken to search for the killed and wounded (civilians), to assist...other persons exposed to grave danger, and to protect them against pillage and ill-treatment.”

(a) The “protection and respect” to which wounded and sick adversary civilians are entitled is the same as that afforded to wounded and sick adversary military personnel.

(b) While Article 15 of the GWS requires parties to a conflict to search for and collect the dead and wounded and sick members of the armed forces, Article 16 of the GC states that “as far as military considerations allow, each Party to the conflict shall facilitate the steps taken to search for the killed and wounded, to assist the shipwrecked and other persons exposed to grave danger, and to protect them against pillage and ill-treatment.” This recognizes the fact that saving civilians is the responsibility of the civilian authorities rather than of the military. The military is not required to provide injured civilians with medical care in an OA. However, if we start providing treatment, we are bound by the provisions of the GWS.

(2) In occupied territories, the occupying power must afford the inhabitants numerous protections as required by Part III, Section III, GC. The provisions relevant to medical care include the:

(a) Requirement to bring in medical supplies for the population if the resources of the occupied territory are inadequate.

(b) Prohibition on requisitioning medical supplies except for use by occupation forces and administration personnel unless the requirements of the civilian population have been taken into account. Fair value must be paid for the requisitioned goods.

(c) Duty of ensuring and maintaining, with the cooperation of national and local authorities, the medical and hospital establishments and services, public health, and hygiene in the occupied territory.

(d) Requirement that medical personnel of all categories be allowed to carry out their duties.

(e) Prohibition on requisitioning civilian hospitals on other than a temporary basis and then only in cases of urgent necessity for the care of military wounded and sick and only so long as suitable arrangements are made for the civilian patients in due time. Prohibition on requisitioning the material and stores of civilian hospitals so long as they are necessary for the needs of the civilian population.

(f) Requirement to provide adequate medical treatment to detained persons. Requirement to provide adequate medical care in internment camps.

4. Protection and Identification of Medical Personnel

a. Article 24 of the GWS provides special protection for “[m]edical personnel exclusively engaged in the search for, or the collection, transport, or treatment of the wounded or sick, or in the prevention of disease, and staff exclusively engaged in the administration of medical units and establishments....” Article 25 provides limited protection for “[m]embers of the armed forces specially trained for employment, should the need arise, as hospital orderlies, nurses, or auxiliary stretcher-bearers, in the search for or the collection, transport, or treatment of the wounded and sick...if they are carrying out these duties at the time when they come into contact with the enemy or fall into his hands.”

b. **Protection.** There are two separate and distinct forms of protection.

(1) The first is protection from intentional attack if medical personnel are identifiable as such by an adversary in a combat environment. Normally this is facilitated by medical personnel wearing an arm band bearing the distinctive emblem (a red cross, red crescent, or red crystal on a white background), or by their employment in a medical unit, establishment, or vehicle (including medical aircraft and hospital ships) that displays the distinctive emblem. Persons protected by Article 25 may wear an armband bearing a miniature distinctive emblem only while executing medical duties.

(2) The second protection provided by the GWS pertains to medical personnel who fall into the hands of the adversary. Article 24 personnel are entitled to “retained personnel” status. They are not deemed to be POWs, but otherwise benefit from the protections of the GPW. Under Article 28, they are authorized to carry out medical duties only, and “shall be retained only in so far as the state of health...and the number of POWs require.” Article 25 personnel are POWs, but shall be employed to perform medical duties in so far as the need arises. They may be required to perform other duties or labor, and they may be held until a general repatriation of POWs is accomplished upon the cessation of hostilities.

c. **Specific Cases.** Personnel assigned to medical units fall into the category identified in Article 24 provided they meet the “exclusively engaged” criteria of that article. While it is not a violation of the GWS for Article 24 personnel to perform nonmedical duties, it should be understood, however, that Article 24 personnel lose their protected status under that article if they perform duties or tasks inconsistent with their noncombatant role. Should those personnel later take up their medical duties again, a reasonable argument might be made that they cannot regain Article 24 status since they have not been exclusively engaged in medical duties and that such switching of roles might at best cause such personnel to fall under the category identified in Article 25.

(1) Article 24 personnel who might become Article 25 personnel by virtue of their switching roles could include the following:

(a) A medical company commander, executive officer, or a physician detailed as convoy march unit commander with responsibility for medical and nonmedical unit routes of march, convoy control, defense, and repulsing attacks.

(b) Helicopter pilots who are permanently assigned to a dedicated medical aviation unit to fly MEDEVAC helicopters, but fly helicopters not bearing the Red Cross emblem on standard combat missions during other times.

(2) The GWS does not itself prohibit the use of Article 24 personnel in perimeter defense of nonmedical units such as logistics areas or base clusters under overall security defense plans, but the policy of DOD is that Article 24 personnel will not be used for this purpose. Adherence to this policy should avoid any issues regarding their status under the GWS due to a temporary change in their role from noncombatant to combatant. Medical personnel may guard their own unit without any concurrent loss of their protected status.

d. **Identification Cards and Armbands.** Medical personnel who meet the “exclusively engaged” criteria of Article 24, GWS, are entitled to wear an armband bearing the distinctive emblem of the Red Cross and carry the medical personnel identification card authorized in Article 40, GWS (in the US Armed Forces, the common access card marked as Geneva Conventions Identity Card Medical). Article 25 personnel and medical personnel serving in positions that do not meet the “exclusively engaged” criteria of Article 24 are not entitled to carry the medical personnel identification card or wear the distinctive emblem armband. Such personnel carry a common access card and, under Article 25, may wear an armband bearing a miniature distinctive emblem when executing medical duties.

5. Protection and Identification of Medical Units, Establishments, Buildings, Materiel, and Medical Transports

a. **Protection.** There are two separate and distinct forms of protection.

(1) The first is protection from intentional attack if medical units, establishments, or transports are identifiable as such by an adversary in an OE. Normally, this is facilitated by medical units or establishments flying a white flag with a red cross and by marking buildings and transport vehicles with the distinctive emblem.

(a) It follows that if we cannot attack recognizable medical units, establishments, or transports, we should allow them to continue to give treatment to the wounded in their care as long as this is necessary.

(b) All vehicles employed exclusively on medical transport duty are protected on the battlefield. However, if they fall into enemy hands, they are subject to the law of war. Medical vehicles being used concurrently for both military and medical purposes, such as moving wounded personnel during an evacuation and carrying retreating adversaries, are not entitled to protection.

(c) Medical aircraft, like medical transports, are protected from intentional attack, but with a major difference—they are protected only “while flying at heights, times, and on routes specifically agreed upon between the belligerents concerned” (Article 36, GWS). Such agreements may be made for each specific case or may be of a general nature, concluded for the duration of hostilities. If there is no agreement, flights over enemy or enemy-occupied terrain receive no special protection.

(d) Article 37, GWS, specifies that “medical aircraft of Parties to the conflict may fly over the territory of neutral Powers, land on it in case of necessity, or use it as a port of call.” The medical aircraft will “give the neutral Powers previous notice of their passage over the said territory and obey all summons to alight, on land or water.” The aircraft will be “immune from attack only when flying on routes, at heights, and at times specifically agreed upon between the Parties to the conflict and the neutral Power concerned.” It further states that “the neutral Powers may, however, place conditions or restrictions on the passage or landing of medical aircraft on their territory,” so long as those “conditions or restrictions shall be applied equally to all Parties to the conflict.”

(e) According to GWS Sea, Article 28, “should fighting occur on board a warship, the sick-bays shall be respected and spared as far as possible. Sick-bays and their equipment shall remain subject to the laws of warfare, but may not be diverted from their purpose so long as they are required for the wounded and sick. Nevertheless, the commander into whose power they have fallen may, after ensuring the proper care of the wounded and sick who are accommodated therein, apply them to other purposes in case of urgent military necessity.”

(f) According to GWS Sea (Chapter III) hospital ships may not be attacked or captured, provided their names and descriptions have been provided to the adversary at least ten days before they are deployed (Article 22). Hospital ships lose protection if they are used for any military purpose or commit acts harmful to the adversary (Article 34). Per Article 34, possession of secret codes for radios or other means of communication by a hospital ship is considered an act harmful to the adversary, but US policy has been to equip its hospital ships with encrypted communication to allow for communication between the hospital ship and other naval vessels or commands. However, such systems must not be used for military purposes in any way harmful to an adversary.

(g) The second paragraph of Article 19, GWS, imposes an obligation upon commanders to “ensure that the said medical establishments and units are, as far as

possible, situated in such a manner that attacks against military objectives cannot imperil their safety.” Hospitals should be sited alone, as far as possible from military objectives. The unintentional bombardment of a medical establishment or unit due to its presence among or in proximity to valid military objectives is not a violation of the GWS. Legal protection is certainly valuable, but it is more valuable when accompanied by practical safeguards.

(2) The second protection provided by the GWS pertains to medical units, establishments, materiel, and transports that fall into the hands of the adversary.

(a) Captured mobile medical unit materiel is to be used first to treat the patients in the captured unit. If there are no patients in the captured unit, or when those who were there have been moved, the materiel is to be used for the treatment of other wounded and sick persons.

(b) Generally, the buildings, materiel, and stores of fixed medical establishments will continue to be used to treat wounded and sick. However, after provision is made to care for remaining patients, tactical commanders may make other use of them. All distinctive markings must be removed if the buildings are to be used for other than medical purposes.

(c) The materiel and stores of fixed establishments and mobile medical units are not to be intentionally destroyed, even to prevent them from falling into adversary hands.

(d) Medical transports that fall into adversary hands may be used for any purpose once arrangement has been made for the medical care of the wounded and sick they contain. The distinctive markings must be removed if they are to be used for nonmedical purposes.

(e) A medical aircraft must obey a summons to land for inspection. If it is performing its medical mission, it is supposed to be released to continue its flight. If examination reveals that an act “harmful to the enemy” (for example, if the aircraft is carrying munitions) has been committed, it loses the protections of the Geneva Conventions and may be seized. If a medical aircraft makes an involuntary landing, all aboard, except the medical personnel (who will be retained personnel), will be POWs. A medical aircraft refusing a summons to land does so at its own risk and may become a lawful target.

b. **Identification.** The GWS contains several provisions regarding the use of the Red Cross emblem on medical units, establishments, and transports.

(1) Article 39 of the GWS reads as follows: “Under the direction of the competent military authority, the emblem shall be displayed on the flags, armlets, and on all equipment employed in the Medical Service.”

(a) There is no obligation of an adversary to mark units with the emblem. Sometimes a commander may order the camouflage of medical units to conceal the

presence or real strength of their forces. The adversary must respect a medical unit if its presence is known, even one that is camouflaged or not marked. The absence of a visible red cross emblem, however, coupled with a lack of knowledge on the part of the adversary as to the unit's protected status, may render that unit's protection valueless.

(b) The distinctive emblem is not a red cross alone; it is a red cross on a white background. Should there be some good reason, however, why an object protected by the GWS can only be marked with a red cross without a white background, adversaries may not make the fact that it is so marked a pretext for refusing to respect it.

(c) Some countries use a red crescent on a white background in place of a red cross. This emblem is recognized as an authorized exception under Article 38, GWS. This showed compliance with the general rule that the wounded and sick must be respected and protected when they are recognized as such, even when not properly marked.

Note: The Geneva Conventions and Additional Protocol III authorize the use of the following distinctive emblems on a white background: Red Cross; Red Crescent; Red Crystal; and Red Lion and Sun, which was once employed by Iran but is no longer used. In operations conducted in countries using an emblem other than the Red Cross on a white background, US personnel must be made aware of the different official emblems. US forces are authorized to display the Red Cross. However, commanders have authorized the display of both the Red Cross and the Red Crescent to accommodate HN concerns and to ensure confusion of emblems would not occur. Such use of the Red Crescent must be of a smaller size than the Red Cross.

(d) Article 39 states that it is the military commander who controls the emblem and can give or withhold permission to use it. The commander is at all times responsible for the use made of the emblem and must see that it is not improperly used by the troops or by individuals.

(2) Article 42 of the GWS specifically addresses the marking of medical units and establishments.

(a) "The distinctive flag of the Convention shall be hoisted only over such medical units and establishments as are entitled to be respected under the Convention, and only with the consent of the military authorities" (Paragraph 1, Article 42, GWS). Although the GWS does not define "the distinctive flag of the Convention," what is meant is a white flag with a red cross in its center. Also, the word "flag" must be taken in its broadest sense. MTFs are often marked by one or several red cross emblems painted on the roof. Finally, the military authority must consent to the use of the flag (see the above comments on Article 39) and must ensure the flag is used only on buildings entitled to protection.

(b) "In mobile units, as in fixed establishments, it [the distinctive flag] may be accompanied by the national flag of the Party to the conflict to which the unit or establishment belongs". This provision makes it optional to fly the national flag with the

Red Cross flag. It should be noted that on a battlefield, the national flag is a symbol of belligerency and is therefore likely to provoke attack.

Note: There is no such thing as a camouflaged red cross. When camouflaging a medical unit or ambulance, either cover up the red cross or take it down. A black cross on an olive drab or any other background is not a symbol recognized under the Geneva Conventions.

6. Loss of Protection of Medical Establishments and Units

Medical assets lose their protected status by committing acts “harmful to the enemy” (Article 21, GWS). A warning must be given to the offending unit and a reasonable amount of time allowed for ceasing such activity.

a. **Acts Harmful to the Adversary.** The phrase “acts harmful to the enemy” is not defined in the GWS, but should be considered to include acts that the purpose or effect of which is to harm the adversary, by facilitating or impeding military operations. Such harmful acts would include, for example, the use of a hospital as a shelter for able-bodied combatants, as an arms or ammunition dump, or as a military observation post. Another instance would be deliberately locating a medical unit in a position where it would impede an adversary attack. Treating wounded and sick military personnel is not considered an act “harmful to the enemy” for purposes of the GWS.

b. **Warning and Time Limit.** The adversary has to warn the unit to put an end to the harmful acts and must fix a time limit on the conclusion of which they may open fire or attack if the warning has not been complied with. The phrase “in all appropriate cases” recognizes that there might obviously be cases where no time limit could be allowed. A body of troops approaching a hospital and met by heavy fire from every window would return fire without delay.

c. **Use of Smoke and Obscurants.** The use of smoke and obscurants during MEDEVAC operations for signaling or marking LZs does not constitute an act harmful to the adversary. However, employing such devices to obfuscate a medical element’s position or location is tantamount to camouflaging; it would jeopardize its entitlement privilege status under the GWS.

7. Conditions Not Depriving Medical Units and Establishments of Protection

a. Article 22 of the GWS reads as follows: “The following conditions shall not be considered as depriving a medical unit or establishment of the protection guaranteed by Article 19:

(1) That the personnel of the unit or establishment are armed, and that they use the arms in their own defense, or in that of the wounded and sick in their charge.

(2) That in the absence of armed orderlies, the unit or establishment is protected by a picket or by sentries or by an escort.

(3) That small arms and ammunition taken from the wounded and sick and not yet handed to the proper service, are found in the unit or establishment.

(4) That personnel and material of the veterinary service are found in the unit or establishment, without forming an integral part thereof.

(5) That the humanitarian activities of medical units and establishments or of their personnel extend to the care of civilian wounded or sick.”

b. These five conditions are not to be regarded as acts harmful to the adversary. These are particular cases where a medical unit retains its character and its right to immunity, in spite of certain appearances that might lead to a contrary conclusion or, at least, create some doubt.

(1) Defense of Medical Units and Self-Defense by Medical Personnel. A medical unit is granted a privileged status under the law of war. This status is based on the view that medical personnel are not combatants and their role is exclusively a humanitarian one. In recognition of the necessity of self-defense, however, medical personnel may be armed for their own defense or for the protection of the wounded and sick under their charge. To retain this privileged status, they must refrain from all aggressive actions and may only employ their weapons if attacked in violation of the Geneva Conventions. They may not employ arms against adversary forces acting in conformity with law of war and may not use force to prevent the capture of their unit by the adversary (it is, however, perfectly legitimate for a medical unit to withdraw in the face of the adversary). Medical personnel who use their arms in circumstances not justified by the law of war expose themselves to penalties for violation of the law of war and, provided they have been given due warning to cease such acts, may also forfeit the protection of the medical unit or establishment which they are protecting.

(a) Medical personnel may carry only small arms, such as rifles, pistols, squad automatic weapons, or authorized substitutes.

(b) The presence of machine guns, grenade launchers, booby traps, hand grenades, light antitank weapons, or mines (regardless of the method by which they are detonated) in or around a medical unit or establishment could seriously jeopardize its entitlement to privileged status under the GWS. The deliberate arming of a medical unit with such items could constitute an act harmful to the adversary and cause the medical unit to lose its protection, regardless of the location of the medical unit.

(2) Guarding Medical Units. As a rule, a medical unit is to be guarded by its own personnel. However, it will not lose its protected status if the guard is performed by a number of armed military personnel. The military guard attached to a medical unit may use its weapons, just as armed medical personnel may, to ensure the protection of the unit. But, as in the case of medical personnel, the armed personnel may only act in a purely defensive manner and may not oppose the occupation or control of the unit by an adversary who is respecting the unit’s privileged status. The status of such armed personnel is that

of ordinary members of the armed forces. The mere fact of their presence with a medical unit will shelter them from attack. In case of capture, they will be POWs.

(3) **Arms and Ammunition Taken from the Wounded.** Wounded persons arriving in a medical unit may still be in possession of small arms and ammunition, which will be taken from them and handed to authorities outside the medical unit. Should a unit be captured by the adversary before it is able to get rid of these arms, their presence is not of itself cause for denying the protection to be afforded the medical unit under the GWS.

(4) **Care of Civilian Wounded or Sick.** A medical unit or establishment protected by the GWS may take in civilians as well as military wounded and sick without jeopardizing its privileged status. This clause merely sanctions what is actually done in practice.

8. Medical Care for Retained and Detained Personnel

Terminology

a. The term “detainee” includes any person captured, detained, or otherwise under the control of DOD personnel. For information concerning detainee operations, refer to JP 3-63, *Detainee Operations*.

b. The term “retained personnel” includes all detainees who fall into one of the following categories:

(1) Designated enemy medical personnel and medical staff administrators who are exclusively engaged in either the search for, collection, transport, or treatment of the wounded or sick, or the prevention of disease;

(2) Staff of National Red Cross and Red Crescent Societies and that of other volunteer aid societies, duly recognized and authorized by their governments to assist medical service personnel of their own armed forces, provided they are exclusively engaged in the search for, or the collection, transport or treatment of wounded or sick, or in the prevention of disease, and provided that the staff of such societies are subject to military laws and regulations;

(3) Chaplains attached to enemy armed forces.

Intentionally Blank

APPENDIX J PLANNING CHECKLISTS

SECTION A. MEDICAL CHECKLIST FOR OPERATIONS DURING DEFENSE SUPPORT OF CIVIL AUTHORITIES

1. General Mission Analysis Considerations

a. What type of operation is being considered?

(1) Is the joint operation a DSCA mission?

(a) Is the DSCA mission for disaster response non-CBRN, or domestic CBRN response?

(b) Is the DSCA mission military assistance to civil law enforcement agencies for counterdrugs, national special security event, combating terrorism, or maritime security operations?

(2) Will the supported population for the operation comprise of USG department and agency employees, government contractors, NGO personnel (American Red Cross workers/volunteers), and/or civilian personnel (victims and rescuers)?

(3) Will medical units provide health support only to military personnel deployed in support of the operation, or will care be provided to the civilian population?

(4) Is there an approved mission assignment thru FEMA?

(5) Has a determination regarding eligibility for care for nonmilitary personnel been established?

b. What agencies are involved in the operation?

(1) What agency has the primary responsibility for the operation?

(2) Will the military chain of command be organized as a JTF?

(3) What is the medical capability of participating agencies?

(4) Will civilian or interagency MTFs be utilized (clinics, health centers, or hospitals)?

(a) What capabilities do they possess?

(b) Will they require augmentation by military medical personnel?

(c) Can medical resources be shared?

c. How is the operation being funded?

- (1) What agency has primary responsibility for funding the operation?
- (2) Are there restrictions on the use of certain funds?
- (3) What record keeping is required to ensure reimbursement?
- (4) What military funds will be utilized to sustain health support?

d. How will the credentialing and scope of practice for medical professionals be managed?

(1) How will military health care professionals that augment civilian MTFs in the JOA be credentialed? Will there be limits to their scope of practice?

(2) Will nonmilitary health care professionals be authorized to assist or augment MTFs in the JOA?

(a) If yes, how will they be credentialed?

(b) Will there be limits to their scope of practice?

e. What is the terrorist threat in the JOA?

2. Preventive Medicine Considerations

a. What is the health threat within the JOA?

(1) What are the endemic or epidemic disease threats?

(2) Are there hazardous flora and fauna in the JOA?

(3) What are the OEH threats?

(4) Is there a threat from the potential use of CBRN weapons or toxic industrial materials?

b. Will there be clinical and environmental laboratory support for the diagnosis of diseases?

(1) What laboratory capabilities will medical units deployed during the operation possess?

(2) If laboratory capability is not sufficient in the JOA, where will this support be obtained?

(3) Are civilian laboratories available in the JOA to process laboratory specimens required to diagnose disease?

c. Will laboratory support provide for the identification and confirmation of biological and chemical hazards and support selected biomonitoring requirements?

(1) Will there be a laboratory in the JOA with the capability and certification to test and provide field confirmation of suspected biological and chemical agents?

(2) If this capability is not available in the JOA, how will this support be obtained?

(3) How will the chain of custody be maintained for these biological and chemical specimens?

(4) Will laboratory support be available in the JOA to support any in-theater biomonitoring requirements for the documentation of selected exposures to chemical, radiological, or other environmental hazards?

d. Will there be requirements for pest management operations in the JOA?

e. Will the lead federal agency require military augmentation for food, water, air, and general sanitation inspections in the JOA?

3. Medical Treatment Facilities and Hospitalization Considerations

a. What deployable medical capabilities and resources are planned for the JOA?

(1) What is the total number of medical and surgical beds and ancillary support services required for the mission?

(2) Will organic dental resources be deployed?

(3) Where will dental resources be located?

(4) Where will pharmacy resources be located?

b. How will MTFs and medical resources document the furnished medical/dental care?

c. What medical resources are already in the JOA? What are their capabilities?

(1) What are the names and locations of supporting NDMS FCCs in the JOA?

(2) What are the total numbers and capabilities of non-NDMS participating civilian MTFs in the JOA?

(3) Will patients require further evacuation for definitive treatment?

d. During disaster relief operations, what behavioral health support will be available for victims, caregivers, and rescuers?

(1) Will the joint force be required to provide behavioral health support to other agencies and individuals supporting the operation?

(2) Will civilian behavioral health organizations be available to provide support to victims, caregivers, and rescuers?

e. Will interpreters be available to translate patient complaints to attending medical personnel?

f. What behavioral health intervention support will be available should a terrorist incident occur?

4. Medical Regulating and Evacuation Considerations

a. What infrastructure is available for patient evacuation?

b. What capabilities exist within the JOA, to include airfields/landing sites, air/local ground transportation assets, and patient staging areas?

c. Will numbers of casualties or the event require formal activation of the NDMS outside the JOA?

d. How will patients be regulated within and if necessary, outside the JOA?

(1) Will casualties go to the same MTF, or will they be dispersed among various facilities in the JOA?

(2) Who will perform the medical regulating function?

e. Who will be responsible for MEDEVAC support? Who will be responsible for AE support?

f. How will MEDEVAC support be requested? How will AE support be requested?

(1) Will communications interoperability and capability issues exist between the evacuation platforms and the medical regulating authority?

(2) How will the supporting MEDEVAC unit be contacted?

(3) What type of MEDEVAC request format will be required?

(4) Will medical regulating support be required at the staging areas? If so, will GPMRC provide augmentation support?

g. How will PMIs be handled?

h. Will a PMI center cell be established?

- i. Will a PMI rotator pool be established to facilitate the immediate exchange and resupply of PMIs?
- j. Will a process be established at strategic PM hubs to recover PMIs and return them to the PMI rotator pool?
- k. When a PMI is recovered, will a technical inspection and maintenance be performed on all PMIs prior to their return to the PMI pool to ensure they are in issue-ready condition?
- l. Will a procedure be established that will facilitate the inclusion of PMI exchange requests with the MEDEVAC requests so that the correct PMI can be replaced when the patient is transferred through the MEDEVAC system?

5. Medical Logistics Considerations

- a. What is the source of Class VIII materiel?
 - (1) Will Class VIII be obtained through conventional military channels?
 - (2) What is the funding source for use of military Class VIII materiel?
 - (3) Will they be provided by other USG departments and agencies or non-DOD entities?
 - (4) Will donated medical items be used in disaster relief operations?
 - (5) If donated items are to be used, what agency will be responsible for receiving, storing, repackaging, and distributing these items? Will this be accomplished by another USG department or agency? Or will the joint force be responsible for this mission?
- b. Will blood and blood products be required by the mission?
 - (1) How will blood support be requested?
 - (2) Who will have primary responsibility for providing blood support to the operation?
 - (3) If the joint force is tasked/authorized to provide blood products to the operation, will the International Committee of the Red Cross be responsible for blood product distribution in the JOA?
- c. Will the GCC's designated TLAMM provide MEDLOG support for the operation?
- d. How will medical equipment maintenance and repair be accomplished?
 - (1) What medical capability can be organized to provide this support?
 - (2) Where will units providing this support be located?

- (3) Is this support available within the JOA?
- (4) Can this support be contracted?

6. Veterinary Service Considerations

a. Will military working dogs, other government-owned animals, or civilian working dogs be used during the operation?

(1) What is the military working dog population to be supported?

(2) Will augmentation of veterinary medicine personnel be required for the operation?

(3) Will veterinary medicine personnel be required to provide care and treatment of other government-owned animals, and civilian working dogs such as SAR dogs?

b. Where will supporting veterinary medicine facilities be located?

c. How will animals requiring evacuation be managed?

(1) Will transportation assets (ground/air) be designated for animal evacuations?

(2) Will dog handlers accompany military working dogs during evacuations?

(3) If handlers are unable to accompany animals, can the animals be sedated before evacuation?

d. What are the zoonotic disease threats to military working dogs and government-owned animals in the JOA?

e. What are the immunization requirements for military working dogs and government-owned animals deploying in the JOA?

f. Will there be a requirement for animal control assistance (stray/feral and ill)?

g. Will there be a requirement for food processing and distribution site assistance?

7. Medical Communications Considerations

a. What is the medical communications system and intelligence plan in the JOA?

b. Can the medical C2 elements communicate with all critical parties?

SECTION B. HEALTH SERVICES CHECKLIST FOR STABILITY ACTIONS

8. General Mission Analysis Considerations

a. What type of operation is being considered?

- (1) Is it a noncombatant evacuation operation, FHA, or peace operation?
 - (a) If a noncombatant evacuation operation is anticipated, has a contact list, to include phone numbers of embassy health officials, been established?
 - (b) Is the operation permissive, uncertain, or hostile, and how best can it be supported?
 - (c) What are the numbers and demographics of noncombatants and civilians, and how many are known to require medical care? Are there high-risk individuals?
 - (d) What is the physical location of the civilians and noncombatants, and is there a published plan addressing their collection prior to evacuation?
 - (e) Are there any civilian casualty projections for the noncombatant operation?
 - (f) What is the MEDEVAC policy for noncombatant operation casualties?
 - (g) What nations are available to provide support for an evacuation?
 - (h) What will be done with pets brought to evacuation control points?
 - (i) Has DOS authorized pets to accompany noncombatant evacuation operation evacuees? Will the US Department of Agriculture or other department or agency prohibit any animals from entry into the US? Can pets be evacuated to another country that has a US military installation?
 - (j) If it is a disaster relief, FHA, or peace enforcement operation, will action be unilateral or multinational? What are the potential countries? What type of health support will they provide?
 - (k) If mission is disaster relief, FHA, or peace enforcement operation, what type of military personnel may be used to resolve the crisis or conflict, and how might they best be supported medically?
 - (l) If it is a noncombatant evacuation operation, disaster relief, FHA, or peace enforcement operation, what other resources are available (civil affairs, International Committee of the Red Cross, interagency community, and so on) to share additional medical information about the threat, crisis, conflict, or region?
- (2) Will the supported population for the operation comprise USG agency employees, government contractors, NGO and international organization personnel (American Red Cross workers/volunteers, USAID workers), allied military personnel, and/or civilian personnel (foreign nationals, victims and rescuers)?
- (3) Will joint force medical units provide medical care only to personnel deployed in support of the operation, or will care be provided to the civilian population?

(4) Has a determination regarding eligibility for care and PM for nonmilitary or multinational military personnel been established?

(5) Are there specific cultural, religious, or social considerations that may impact health support?

b. How is the operation being funded?

(1) Are there restrictions on the use of certain funds?

(2) What record keeping is required to ensure reimbursement?

c. What agencies are involved in the operation?

(1) What agency has the primary responsibility for the operation?

(2) Will the military chain of command be organized as a JTF?

(3) Will SOF operate in the JOA during the operation?

(4) What is the medical capability of participating agencies?

(5) Will civilian or interagency MTFs be utilized (clinics, health centers, or hospitals)?

(a) What capabilities do they possess?

(b) Will they require augmentation by military medical personnel?

(c) Can medical resources be shared?

(d) How will medical credentials and reimbursements be managed?

d. What is the terrorist threat in the JOA?

e. How will MTF and medical resources document the furnished medical care?

9. Preventive Medicine Considerations

a. Have FHP measures been established or considered?

(1) Will military personnel be billeted in military facilities, housed in makeshift facilities, or housed in a field environment? Are there sufficient sanitary facilities?

(2) Have site surveys been conducted for areas to be occupied by joint force military personnel?

(3) If a site survey was conducted, were any areas determined to be hazardous due to sewage overflow, vector borne or other arthropod infestation, or soil contaminated by toxic industrial material? Can adverse environmental conditions at the site be corrected?

(4) Will there be requirements for pest management operations where military personnel will be billeted?

(a) Will aerial spray missions be required?

(b) Will rodent control operations be required?

(5) What sources of water are available to MNF personnel?

(a) What water sources are to be used during the operation?

(b) What established water systems are within the JOA?

(c) Are streams, lakes, ponds, reservoirs, or other natural sources available?

(d) If water is available, will the water require treatment before consumption?

(e) How will wastewater be managed and disposed?

(6) What personal protective equipment and supplies are required for the operation?

(7) Have MNF personnel received personal protective measures training?

(8) Will joint force personnel require acclimation to the environment within JOA? Will work and rest cycles be required to assist with acclimation to the JOA?

(9) What are the deployment health surveillance requirements, and for whom are they indicated?

(10) Have the required deployment health surveillance programs been established for pre-operations, during operations, and post operations?

(11) What PVNTMED support will US military personnel provide to other members of the MNF?

b. Will there be laboratory support for the diagnosis of diseases?

(1) What laboratory capabilities will medical units deployed during the operation possess?

(2) If laboratory capability is not sufficient in the JOA, where will this support be obtained?

(3) Are civilian laboratories available in the JOA to process laboratory specimens required to diagnose disease?

c. How will medical waste be collected and disposed?

d. Are dislocated civilians anticipated?

(1) How will coordination with international organizations be handled (such as United Nations High Commissioner for Refugees, International Organization for Migration)?

(2) Are sufficient PVNTMED resources planned and available to support dislocated civilians?

(3) Are sufficient sanitation facilities planned and available to support dislocated civilians and supported civilian populations?

(4) Has coordination with civil affairs personnel been established?

(5) How will unaccompanied minors be managed?

(6) If a child requires evacuation, will the child's parent and/or other family members be allowed to travel with the child?

e. What is the health threat within the JOA?

(1) What are the endemic or epidemic disease threats?

(2) Are disease outbreaks seasonally related?

(3) Are there hazardous flora and fauna in the JOA?

(4) What are the OEH threats?

(5) What are the arthropod-borne, foodborne, and water-borne disease threats?

(6) Is there a threat from CBRN hazards?

(7) Do all MNF members' health screening processes meet the MNF requirements?

(8) Have any of the participating nations conducted previous operations in the proposed JOA and documented the health threat?

(9) Are immunizations or chemoprophylaxis available to counter the disease threat? Have participating nations of the MNF been immunized and/or provided chemoprophylaxis? Do members of the MNF plan to immunize their personnel to US standards?

10. Health Support Facilities and Hospitalization Considerations

- a. What medications resources are already in the JOA? What is their capability?
 - (1) What is the total number of medical and surgical beds and ancillary support services?
 - (2) Will additional MTFs be phased into the JOA as the operation progresses and the theater matures?
 - (3) Will patients require further evacuation for definitive treatment?
 - (4) What are the capabilities of HN and friendly neighboring nation MTFs? Can they be utilized as a shared resource?
 - (5) Are organic dental resources deployed with the medical resource?
- b. Will non-US physicians and nonmilitary physicians be permitted to treat patients in a US MTF in the JOA?
- c. If non-US physicians and nonmilitary physicians are permitted to treat patients in a US MTF, who will provide credentialing?
- d. Has a formulary been established for prescription drugs?
 - (1) Does it include medications for diseases endemic to the operations area?
 - (2) Does the formulary include medications that may be required for FHA and disaster relief operations?
 - (3) Does the formulary include medications in forms usable for infants and children?
 - (4) Have off-the-shelf options for medications for FHA been considered (such as WHO emergency health kits)?
- e. During disaster relief operations, what behavioral health support will be available for victims, caregivers, and rescuers?
 - (1) Will the joint force be required to provide behavioral health support to other agencies and individuals supporting the operation?
 - (2) Will civilian and/or NGO behavioral health services be available to support victims, caregivers, and rescuers?
- f. What behavioral health intervention support will be available should a terrorist incident occur?
- g. What MTFs will be designated for the care of detainees?

11. Medical Regulating and Evacuation Considerations

- a. What is the theater PM policy?
- b. What infrastructure is available for patient evacuation?
- c. What airfields are available for intratheater and intertheater AE?
- d. How will patients be regulated?

(1) Will casualties go to the same MTF, or will they be dispersed among various facilities in the JOA?

(2) Who will perform the medical regulating function?

- e. Who will be responsible for MEDEVAC support?

- f. How will MEDEVAC support be requested?

(1) Will communications interoperability and capability issues exist between the evacuation platforms and the medical regulating authority?

(2) How will the supporting MEDEVAC unit be contacted?

(3) What type of MEDEVAC request format will be required?

- g. Will an AE team and AE crew be activated for the operation?

- h. Will a JPMRC be activated for the operation?

(1) How will PMIs be handled?

(2) Will a PMI center be established?

(3) Will a PMI rotator pool be established to facilitate the immediate exchange and resupply of PMI?

(4) Will a process be established at strategic PM hubs to recover PMIs and return them to the PMI rotator pool?

(5) When PMIs are recovered, will a technical inspection and maintenance be performed on all PMIs prior to their return to the PMI rotator pool to ensure they are in issue-ready condition?

(6) Will a procedure be established that will facilitate the inclusion of PMI exchange requests with the AE requests so the correct PMI can be replaced when the patient is transferred through the AE system?

- i. Will an ERPSS be established for staging patients awaiting AE aircraft?

- (1) Once patients have arrived at the ERPSS, how long can they be held?
 - (2) If a patient's flight is cancelled, who will pick up the patients and sustain them until the next scheduled flight?
 - (3) If a patient is on medical equipment, will there be an exchange of medical equipment or will the equipment remain with the patient?
 - (4) What medical capability will be established at the APOD or airfield to receive incoming patients and prepare them for further evacuation to the next role of care?
 - (5) If patients are to be moved to a casualty receiving and treatment ship, are AE personnel qualified for deck landing?
- j. Are high capacity air ambulance operations anticipated for MEDEVACs? What will be the requirements for commencing these operations?

12. Medical Logistics Considerations

- a. What is the source of Class VIII materiel?
 - (1) Will Class VIII materiel and resupply be obtained through conventional military channels?
 - (2) What is the funding source for use of military Class VIII materiel?
 - (3) Will they be provided by other USG departments and agencies or non-DOD entities?
 - (4) Will donated medical items be used in disaster relief and FHA operations?
 - (5) If donated items are to be used, what agency will be responsible for receiving, storing, repackaging, and distributing these items? Will this be accomplished by another USG department or agency or NGO? Or will the JTF be responsible for this mission?
- b. Will blood and blood products be required by the mission?
 - (1) Are there any cultural, religious, or social prohibitions on the use of blood and blood products for any of the MNF members?
 - (2) Will the US be required to provide blood and blood products support to MNF members?
- c. Will the GCC's designated TLAMM provide MEDLOG support for the operation?
- d. Will MEDLOG forward distribution teams be considered for seaport of debarkation, APOD, FOBs, intermediate staging bases, forward logistic sites, advanced logistic support sites, bases, and forward staging bases?

e. How will medical equipment maintenance and repair be accomplished?

- (1) What medical capability can be organized to provide this support?
- (2) Where will units providing this support be located?
- (3) Is this support available within the JOA?
- (4) Can this support be contracted?

13. Veterinary Service Considerations

a. Will military working dogs, other government-owned animals, or civilian working dogs be used during the operation?

- (1) What is the military working dog population to be supported?
- (2) Will augmentation of veterinary medicine personnel be required for the operation?
- (3) Will veterinary medicine personnel be required to provide care and treatment of other government-owned animals and civilian working dogs such as SAR dogs?

b. Will animal husbandry programs be established and/or supported during the operation?

c. How are animals requiring evacuation managed?

- (1) Will transportation assets (ground/air) be designated for animal evacuations?
- (2) Will dog handlers accompany military working dogs during evacuations?
- (3) If animals are unable to accompany handlers, can the animals be sedated before evacuation?

d. What are the zoonotic disease threats to military working dogs and government-owned animals in the JOA?

- (1) Will zoonotic disease surveillance be conducted?
- (2) Will epidemiological investigations be conducted when outbreaks of transmissible diseases occur?
- (3) What coordination is required with the HN and/or national contingents?

e. What are the immunization requirements for military working dogs and government-owned animals deploying in the JOA?

f. Will there be a requirement for food processing and distribution site assistance?

g. How will rations operations be conducted?

(1) Will food be procured from local sources?

(2) Will personnel subsist on meals ready to eat or will other types of rations be available?

14. Medical Communications Considerations

a. What is the medical communications system and intelligence plan?

b. Can the medical C2 elements communicate with all critical parties?

15. Medical Civil-Military Operations

a. General Planning Considerations

(1) Will medical personnel conduct or support CMO?

(2) What is the political-military desired end state?

(3) How will MCMO support the commander's intent and the desired political-military end state?

(4) Who has the JFC designated as the lead for MCMO? Civil affairs? JFS? How will civil affairs and JFS efforts be coordinated?

(5) What medical resources do civil affairs have?

(6) Do MCMO interfere with the traditional medical mission?

(7) Has the JFC been advised of the capabilities/limitations and major issues involved in the MCMO?

(8) How will the joint force best support the HN if the HN does not have a clear long-term strategy?

(9) What other USG departments or agencies are involved? Who is "supported" and who is "supporting"?

(10) What multinational agencies are active in the JOA?

(11) What NGOs and international organizations are active in the JOA?

(12) What is the role of other USG and multinational agencies? Are projects better performed by one of these agencies?

(13) Have all restraints and constraints under Title 10, USC, and related DODDs and DODIs been fulfilled?

(14) Has the independence/impartiality/neutrality of the NGO/international organization community been acknowledged and respected to allow for the mutual exchange of information?

b. How will MCMO and activities be coordinated?

(1) Have liaisons with civil affairs personnel been established?

(2) Has a CMOC been established? Has a medical LNO to the CMOC been appointed?

(3) What other civil-military coordination mechanisms are present (United Nation's on-site operations coordination center, humanitarian operations center, and so on)? Do they have medical working groups?

(4) Have projects been coordinated with information operations and the media?

(5) Has coordination with civil engineers been considered for water/sanitation projects?

(6) Have existing projects of other agencies been taken into account to avoid duplication of effort?

(7) Have humanitarian and civic assistance, DOD excess property, and FHA (other) missions been coordinated with the DOS and the HN?

For more information on DOD excess property, see JP 3-29, Foreign Humanitarian Assistance.

c. Are the JFC resources adequate to conduct MCMO?

(1) Does the medical force have the right training/resources/personnel/equipment to conduct MCMO (such as training in CMO, information operations, civil-military/interagency relations, FHA, traditional medicine, cultural issues, language skills, and appropriate medical subspecialties [public health, pediatrics, tropical medicine, geriatrics])?

(2) Do medical personnel have training or experience in CMO (language/cultural skills, civil-military/interagency/humanitarian training, or experience)? Does the joint force have the appropriate personnel to conduct medical CMO (public health, pediatrics, adequate number of female providers, and so on)?

(3) Will other MNF nations conduct or support medical civil-military support operations?

(4) Do projects detract from the MNF's mission of providing security for other humanitarian actors to work (humanitarian space)?

(5) What equipment will be required for the mission (vehicles, radios, specialized equipment for public health, and equipment for pediatric and geriatric care)?

(6) Who will provide security?

(7) Who will provide translation and interpretation support?

(8) If the decision is made to emphasize capacity-building projects for the HN, have off-the-shelf courses for this purpose been considered (Defense Institute for Medical Operations, Defense Medical Training Institute, and so on)?

(9) Have local resources been used to the maximum extent possible?

(10) What funding sources will be used? Title 10, USC; humanitarian and civil assistance; FHA; DOD excess property? Overseas humanitarian disaster and civic aid? Central Emergency Response Fund (United Nations)? Or other funding sources?

(11) What are the restraints/constraints of each funding source?

d. Has a needs assessment preceded MCMO?

(1) What other assessments and surveys by other agencies have been accomplished?

(2) Has the HN been involved in the assessment process?

e. Will there be an equal exchange of information with agencies/NGOs and international organizations?

(1) Will the joint force share information that does not compromise FP but may be useful to civilian agencies?

(2) Have efforts been made to avoid unnecessarily classifying information that may be useful to partner agencies and nations? Has this been discussed with the joint force J-2?

f. Have HN issues been adequately considered?

(1) Will the HN be considered the lead and the joint force the supporting element?

(2) Will projects enhance the legitimacy of the HN?

(3) Will projects boost the population's confidence in the HN?

g. How will projects be selected?

(1) Will projects emphasize capacity building (developing medical societies, training public health personnel, and so on)?

(2) Have local cultural and religious issues been considered (including traditional medicine, female providers for female patients, and so on)?

(3) How will medical CMO projects be tracked?

(4) How will locations of projects be listed and standardized? Map grid references? Street addresses?

h. What standard of care will apply if medical care is delivered to civilians? The HN? International consensus standards? Has the HN been involved in this decision?

i. What measures of effectiveness will be used?

j. Have all potential negative effects of medical CMO been considered?

(1) How will parallel medical systems be avoided?

(2) How will dependency be avoided?

(3) How will duplication of effort be avoided?

(4) What long-term impact will the projects have?

(5) What is the potential economic impact of medical CMO/activities (such as direct food aid may cause market prices to drop and discourage agriculture)?

(6) Do projects raise unrealistic expectations in the HN population?

(7) Does the activity distort the distinction between civilian and military agencies?

(8) Will projects be sustainable by the HN, United Nations, or other agencies?

(9) Who will provide follow-up and continuity of care if direct patient care activities are rendered?

(10) What are the plans to transition responsibility for public health and other medical projects back to the HN or other appropriate authority (US, multinational JTF, and so on)?

SECTION C. HEALTH SUPPORT CHECKLIST FOR MULTINATIONAL OPERATIONS

16. General Mission Analysis Considerations

a. What type of operation is being considered?

(1) If it is stability activities, is it disaster relief, FHA, or peace operations?

(a) If it is disaster relief, FHA, or peace operations, will action be unilateral or multinational? What are the potential countries? What type of health support will they provide?

(b) If mission is disaster relief, FHA, or peace operation, what type of military personnel may be used to resolve the crisis or conflict, and how might they best be supported medically?

(c) If it is disaster relief, FHA, or peace operation, what other resources are available (civil affairs, interagency community, International Committee of the Red Cross, and so on) to collect additional medical information about the threat, crisis, conflict, or region?

(d) Will the supported population for the operation be comprised of federal agency employees, government contractors, NGO and international organization personnel (American Red Cross workers/volunteers, USAID), allied personnel, and/or civilian personnel (foreign nationals, victims, and rescuers)?

(e) Will joint force medical units provide medical care only to personnel deployed in support of the operation, or will care be provided to the civilian population?

(f) Has a determination regarding eligibility for patient care for nonmilitary or allied personnel been established?

(g) How is the operation being funded? Are there restrictions on the use of certain funds? What record keeping is required to ensure reimbursement?

(h) What agencies are involved in the operation? What is the medical capability?

(i) What agency has the primary responsibility for the operation?

(j) Will the military chain of command be organized as a JTF?

(k) Will SOF operate in the JOA during the operation?

(l) Will civilian or interagency MTFs be utilized (clinics, health centers, or hospitals)?

1. What capabilities do they possess?

2. Will they require augmentation by military medical personnel?

3. Can medical resources be shared?

(m) Are there specific cultural, religious, or social considerations that may impact health support during stability activities?

(2) Are major operations being considered as part of an MNF?

- (a) Will combat operations be conducted under the sponsorship of the US?
- (b) Will the US serve as the lead nation of the MNF?
- (c) What is the size and composition of the US force?
- (d) How many other nations will participate? What is the size of each nation's contingent?
- (e) What is the C2 structure of the MNF? Will there be a multinational medical staff to plan for multinational-based medical operations?
- (f) What are the medical capabilities of the MNF? What medical personnel, units, and equipment will other nations of the MNF possess?
- (g) Who has been designated to provide health support to the MNF? Will each nation provide all aspects of health support for their military personnel? What support will each nation require from the joint force?
- (h) Will a multinational medical unit or a single nation be designated to provide health support for all nations in the MNF?
- (i) Will medical tasks/responsibilities be distributed to individual nations (such as MEDEVAC given to nation A, blood given to nation B, ground transportation to nation C)?
- (j) Will each nation provide medical LNOs to participating nations' surgeon's offices?
- (k) Will US military personnel be treated by multinational health support? What are the education, training, and experience levels of multinational health care professionals? How will providers be credentialed? Who has credentialing authority?
- (l) Will members of the MNF be eligible for care at US MTFs within the multinational OA?
 - 1. If members of the MNF are treated at US MTFs, will there be a mechanism in place to return them to their parent nation for continued medical care? How will medical information be exchanged? How will it be safeguarded? How will copies of radiographs, ultrasounds, and so on, be managed and exchanged?
 - 2. Will there be costs associated with MNF personnel that are treated at US MTFs? Or US personnel treated at MNF MTF? How will reimbursements be managed?
- (m) If there are only US MTFs within the MNF AOR, who will evacuate MNF patients to their homeland? What coordination will be required to return MNF patients to their nation's MTFs?

(n) Who will ensure communications equipment compatibility, standardization of radio frequencies, reports formats, treatment protocols, and requirements for equipment with allied multinational medical units?

(o) Has a standardized operational and medical terminology reference guide been established to facilitate the synchronization of medical efforts and minimize misinterpretation with allied multinational medical units?

(p) Will participating nations of the MNF comply with the provisions of the Geneva Conventions?

(q) Are there specific cultural, religious, or social considerations that may impact health support during major operations?

b. How will detainee and HN civilian care be managed?

(1) How will local nationals be transferred from military facilities to HN facilities?

(2) What will be the disposition of EPWs that require more care than the MNF can provide?

(3) How will EPWs who are ready to be released from medical care be dispositioned?

(4) How will deceased HN civilians and EPWs be managed?

c. What is the terrorist threat in the JOA?

d. Will laboratory support provide for the identification and confirmation of biological and chemical hazards and support selected biomonitoring requirements?

(1) Will there be a laboratory in the JOA with the capability to test and provide field confirmation of suspected biological and chemical agents?

(2) Will laboratory support be available in the JOA to support any in-theater biomonitoring requirements for the documentation of selected exposures to chemical, radiological, or other environmental hazards?

(3) If this capability is not available in the JOA, how will this support be obtained?

(4) How will the chain of custody be maintained for these biological and chemical specimens?

(5) Will the US and multinational joint force accept laboratory results from a non-US laboratory?

17. MTFs and Hospitalization Considerations

a. What MTFs and medical resources are planned for the theater/JOA?

(1) What is the total number of medical and surgical beds and ancillary support services required for the mission?

(2) Are interpreters available to translate patient complaints to attending medical personnel?

b. What medical resources are already in the JOA? What is their capability?

(1) What is the total number of medical and surgical beds and ancillary support services?

(2) Will additional MTFs be phased into the JOA as the operation progresses and the theater matures?

(3) Will patients require further evacuation for definitive treatment?

(4) What are the capabilities of HN and friendly neighboring countries MTFs? Can they be utilized as a shared resource?

(5) Are organic dental resources deployed with the medical resource?

c. What units will provide dental service for the MNF?

(1) Will organic dental resources be deployed?

(2) Where will dental resources be located?

(3) Will each nation have field dental services deployed in the MNF JOA?

(4) Will one nation provide dental support to the MNF?

(5) Will a preventive dentistry program be implemented for US military personnel and/or multinational military personnel in the theater?

(6) What dental conditions will necessitate the evacuation of patients from the theater?

(7) How will dental patients be evacuated for emergency and essential comprehensive treatment?

d. What behavioral health support will be available for MNF operations?

(1) Will US military personnel be required to provide behavioral health support to members of the MNF or other agencies and individuals supporting the operation?

(2) During stability activities (FHA, disaster relief), will civilian and/or NGO behavioral health be available to provide support to victims, caregivers, and rescuers?

(3) What behavioral health intervention support will be available should a terrorist incident occur?

e. What MNF MTFs will be designated for the care of detainees?

f. What notification procedures are required when a MNF member is admitted to a US MTF?

(1) Who notifies the member's national contingent?

(2) How and when will the patient be transferred to their national contingent?

SECTION D. CHECKLIST FOR HEALTH SERVICE SUPPORT PLANNING

18. General Considerations

a. Are the medical tasks, functions, and responsibilities delineated and assigned?

b. Are comprehensive deployment health surveillance activities identified and resourced in accordance with DOD and component policy and publications? Are predeployment health assessments (e.g., serum sample collections, preliminary hazard assessment conducted, and PVNTMED countermeasures integrated into the plan), deployment OEH surveillance (e.g., environmental baseline surveys, OEH site assessments, routine and incident-specific occupational and environmental monitoring, and DNBI/BI statistics), and post-deployment health assessments (e.g., serum sample collection actions) fully planned, with responsibility delineated and task assigned?

c. Are there any specific plans, policies, agreements, or treaties to consider?

d. Are provisions made to provide emergency medical assistance to US nationals (federal government employees, contractors, retirees, civilians, NGOs, international organizations) in the JOA and to detainees, dislocated civilians, and any others?

e. Has the theater PM policy been established? If so, have requirements for hospitals and PM workload been identified?

f. Are all units on the TPFDD and scheduled for timely arrival, including sufficient PVNTMED assets to protect health of the personnel as they begin to arrive in theater (time of highest health risk)?

g. Are procedures in place to obtain PAR data from the personnel community at least once weekly for the calculation of DNBI workload?

h. Has a theater-level laboratory been established/designated (i.e., clinical and/or environmental)?

- i. Have estimates of medical sustainability and anticipated resupply requirements been established?
- j. Has a JPMRC been established to coordinate movement of patients within and out of the assigned JOA?
- k. Has a blood program system been established?
- l. Has a JBPO been activated to plan and coordinate the handling, storage, and distribution of blood and blood products within the assigned JOA and consolidate and forward resupply requirements to the ASBPO?
- m. Have medical personnel augmentation packages been identified and requirements submitted? Do hospitals have enough personnel and equipment to support movement of critical patients? Are there sufficient litters, straps, blankets, and other supplies as required, to support anticipated workload?
- n. Has a medical PM policy been established?
- o. Have the numbers, types, and locations of PM conveyances been identified? Are they sufficient to meet the projected workload?
- p. Has an evacuation plan for ground and air ambulances been prepared?
- q. Are noncombatant evacuees a consideration for health support?
- r. Are sufficient AE staging assets planned or in place?
- s. Are AE liaison teams located at key locations within each component's medical system?
- t. Have PVNTMED procedures been established and sufficient personnel identified to ensure protection of the health and well-being of personnel assigned to the joint force?
- u. Have medical communications channels, frequencies to be used by medical personnel, and all medical communications requirements been identified?
- v. What medical and nonmedical threats could impact medical operations and requirements? What finished medical intelligence products are available from the NCMI on the JOA?
- w. Has the supported commander requested that the NCMI be tasked to provide an area medical threat assessment? Have medical planners identified and received all required threat information, medical and nonmedical, needed for effective planning?
- x. What military forces are involved? What are their organic medical capabilities?
- y. Have medical rules of eligibility for HN and MNFs been established?

- z. If other nations are involved, what are their unique medical requirements?
- aa. Are HN medical support systems in place?
- bb. What are the medical reporting requirements and have responsibilities been assigned to meet requirements?
- cc. Should civilian contracts for medical support be considered?
- dd. Is pre-regulation of patients to specific MTFs required?
- ee. Are sufficient supplies and equipment in place; has a program for sustainability and resupply been established; is a single integrated theater MEDLOG system required?
- ff. Has liaison or coordination with other agencies been established?
- gg. Have all other areas of joint health support been addressed, such as dental health, behavioral health, and veterinary support?
- hh. Have special teams been identified and contacted to provide reachback consultation as needed?
- ii. Ensure religious support teams are in place to provide service to staff as well as sick and injured persons.

SECTION E. HEALTH SUPPORT CHECKLIST FOR PLANNING

19. Planning in a Crisis Phase I: Situation Monitoring

- a. Monitor the situation and maintain situational awareness.
 - (1) What is the nature of the crisis? Noncombatant evacuation operation? Possible FHA operation? International CBRN response? Combat? Terrorism?
 - (2) If noncombatant evacuation operation is anticipated, has a list of phone numbers of embassy health officials been established?
 - (3) Will action be unilateral or multinational? What are the potential countries? What type of health support will they provide?
 - (4) What is the current situation (who, what, when, where, and why)?
 - (5) What military personnel are available?
 - (a) Who is ready?
 - (b) What is their actual readiness status?
 - (c) Do they meet deployment requirements?

(6) What type of military personnel may be used to resolve the crisis or conflict, and how might they best be supported medically?

(7) If combined action is possible, what type of medical support could be required or provided by other nations?

(8) Are there any major constraints on employment of military personnel? What is the environmental assessment?

(9) What staff actions are being taken?

(10) What COAs are being considered?

(11) What is the expected time for earliest commitment of military personnel?

(12) Have communications requirements been identified to include nonsecure and secure channels, frequencies for medical personnel, and any medically dedicated or unique communications nets, operating procedures, or requirements?

(13) Are there any medical communications systems that are already available in the AOR and JOA? If so, what are their capabilities and how are the systems accessed?

(14) How will the communications system support the passing of medical information, reports, and requests?

b. Evaluate the event and incoming reports.

(1) When alerted by the J-2, review intelligence for medical significance.

(2) Review operational report for medical significance.

(3) Review existing OPLANs and CONPLANs for applicability to the area or situation.

(4) Review and evaluate actions of the CCMD.

(5) Evaluate disposition of assigned and available military personnel.

(6) Evaluate status of theater transportation assets.

(7) What nations are available to provide support for evacuation?

(8) What infrastructure is available for patient evacuation?

(9) Have deployment health surveillance requirements and PVNTMED procedures and countermeasures been established?

(10) If authority to coordinate with in-place and out-of-JOA MTFs has been granted, has coordination already begun?

c. Gather medical information and review available options.

(1) Have intelligence offices been coordinated with to provide appropriate medical intelligence?

(2) Coordinate with the J-2 to ensure medical requirements are included in the collection plan?

(3) What other resources are available (civil affairs, interagency community, and so on) to collect additional medical information about the threat, crisis, conflict, or region?

(4) Are any in-place MTFs available for use, including US military assets, HN support, allied assets, or contracts with civilian organizations (such as the International Committee of the Red Cross)?

(5) Review and assess environmental conditions with medical implications that could adversely affect operations.

d. Furnish required information to appropriate staff directorates and provide support as needed.

e. Provide input (as required) to the commander's assessment.

f. Have medical units and personnel resources been identified?

20. Planning in a Crisis Phase II: Planning

a. Review warning order for specified and implied tasks.

b. Conduct parallel planning.

c. Review and consider environmental conditions with medical implications that could adversely affect operations.

d. Evaluate available medical resources.

(1) What medical military personnel are available?

(2) What type of foreign military or civilian medical infrastructure is established within the JOA? What and where are its key elements?

(3) Has the medical supply and resupply status of each Service component been reported?

(4) Have provisions for emergency resupply been established?

(5) Have medical sustainability and resupply requirements been identified?

(6) Have provisions been made within the AOR/JOA to provide support to US nationals, detainees, dislocated civilians, non-entitled civilians, and other persons?

(7) Has AE support been properly requested and coordinated, and does the proposed AE support include sufficient crews, equipment sets, staging facilities, and medical supplies?

e. Review status of strategic lift assets.

(1) Has a supportable PM policy been established?

(2) Has a JPMRC been established?

(3) What airfields are available for intratheater and intertheater AE?

f. Evaluate PM from POI to the US.

g. Act to improve force readiness and sustainability.

(1) Have medical procedures and countermeasures been established?

(2) Has the MIPOE information been provided to the J-2 for inclusion in JIPOE?

h. If a noncombatant evacuation operation is anticipated, the JFS and joint medical planner should consider the following:

(1) How many of the noncombatants and civilians are known to require medical care?

(2) What is the current condition of the noncombatants and civilians to be evacuated? Are there existing medical conditions?

(3) Where are these noncombatants and civilians, and is there a published plan addressing their collection before evacuation?

(4) Is a noncombatant evacuation operation anticipated, and how best can it be medically supported?

(5) Are there any civilian casualty projections for the noncombatant evacuation operation?

(6) What is the MEDEVAC policy for noncombatant evacuation operation casualties?

(7) Has the DOS authorized pets to accompany noncombatant evacuation operation evacuees? Does the US Department of Agriculture or other department or agency prohibit any animals from entry into the US?

(8) What will be done with pets brought to evacuation control points?

i. Other Medical Considerations

(1) If foreign governments have made any humanitarian, civil, or security assistance medical requests, how can they be supported?

(2) Are there any treaties or legal, HN, or status-of-forces agreements between the US and involved foreign governments that have medical significance?

(3) Are there any OPLANs or CONPLANs for the area or situation?

(4) Has direct liaison with embassy health officials been authorized and established?

j. Develop and evaluate COAs using Joint Operation Planning and Execution System (JOPES) automated data processing.

(1) Are all medical units, to include AE liaison team and air crews, on the time-phased force and deployment list and scheduled for timely arrival?

(2) Identify operational and sustainment military personnel and generate medical requirement estimates using the MPTk.

(3) What reception and operations support facilities are required and available? Who will provide health support for JRSOI?

(4) If an intermediate staging base is required, what medical units should be positioned there?

k. Coordinate involvement of subordinates.

(1) Who are the Service component surgeons?

(2) Have medical tasks, functions, and responsibilities been delineated and assigned to the joint force Service component medical units?

(3) Has required medical coordination with allies and the HN been conducted?

(4) Have joint force Service components identified and requested medical personnel augmentation for the medical units and MTFs?

l. Review existing OPLANs for applicability.

(1) What medical assets are provided for in the OPLAN?

(2) What medical assets are provided for in the draft OPORD?

m. Provide input (as necessary) to commander's estimate to CJCS.

(1) What precisely must be accomplished in the crisis to strengthen the objectives established by the President?

(2) What precisely must be accomplished in the crisis to support the objectives established by the President?

n. Analyze COAs, as directed.

(1) Review and determine what specific medical factors affect the COA under consideration.

(2) Identify military personnel.

(3) What types and amounts of logistic support are available from friendly and allied nations?

(4) What military personnel are readily available and when could they arrive on the scene?

(5) Is the selected COA medically supportable with currently available medical assets?

(6) If not, will required medical assets be available before mission execution?

(7) If not, has the CCCR/JFC been made aware of the risks?

o. Assist in creating deployment database in JOPES for each COA.

p. Coordinate medical sustainment calculations and movement requirements.

(1) Are all medical units, to include AE liaison team and air crews, on the time-phased force and deployment list and scheduled for timely arrival?

(2) What airports and seaports are available to friendly military personnel? What medical support will be required at these locations?

q. Review CCCR's COAs.

(1) Is available health support adequate to support planned operations? If not, what additional assets are required and how will the joint force request them?

(2) What specific medical factors affect the actions under consideration?

r. Identify limitations and deficiencies in the preferred COA that must be brought to the commander's attention.

s. Assist in refining medical requirements.

t. Prepare medical deployment estimate for each COA.

- u. Ensure medical input into deployment estimate to supported commander.
- v. Monitor COA development. (What is the backup COA?)
- w. Plan for medical sustainment.
 - (1) Has a TLAMM been considered?
 - (2) Has an AJBPO been established?
 - (3) Have the handling, storage, and distribution of blood and blood products been planned and coordinated with the appropriate entities?
 - (4) How will Class VIIIA and B (Blood) be sustained? Theater MEDLOG management center/TLAMM? Accounts established?
- x. Provide medical input to OPORD for approved COA.
 - (1) Is the medical portion of the OPORD ready to be published?
 - (2) Does the OPORD address assistance to US nationals, detainees, and dislocated civilians?
 - (3) Does the OPORD provide medical guidance?
- y. Review force and unit-related support requirements.
 - (1) What is the status of communications? Have any dedicated or medically unique nets, procedures, or requirements been properly identified and requested?
 - (2) Have multiple means of communications been addressed?
 - (3) What country clearances are required for overflight, landing, or staging for evacuation aircraft? What are the existing (or needed) agreements for overflight; staging, transit, and refueling for evacuation aircraft; and basing rights?
- z. Confirm first increment of movement requirements and fully functional AJBPO.
 - (1) Identify and resolve medical shortfalls and limitations.
 - (a) Have Class VIII responsibilities been established?
 - (b) Have Class VIII channels been established?
 - (2) Review the TPFDD.
 - (3) Identify early deploying military personnel and assign tasks.
 - (a) Who will provide health support for JRSOI?

- (b) Have medical procedures and countermeasures been established?
- (c) Has the MIPOE information been provided to components and early deploying military personnel?
- (4) Identify and plan for PM requirements.
 - (a) Is the JPMRC fully functional?
 - (b) Is the theater AE system planning complete?
 - (c) Are sufficient theater AE assets in place or programmed for early arrival?
 - (d) Have primary and secondary AE airfields been identified?
 - (e) Are AE LNOs ready to locate at key locations within each joint force Service component medical system?
 - (f) Do Service components understand that they are required to move patients to supporting AE staging facilities, and will they be able to do so?
- (5) Ensure adequate transportation for health support is available to support approved COA.
- (6) Coordinate changes caused by conflicts and shortfalls.
- (7) Provide medical input to CCDR's draft execute order.

21. Planning in a Crisis Phase III: Execution

- a. Review CCDR's/JFC's execute order to ensure medical guidance to components.
- b. Monitor medical force deployment.
- c. Validate medical movement requirements as required.
- d. Coordinate with appropriate staff directorates and resolve reported shortfalls.
- e. Coordinate employment of medical units as required.
- f. Consider issuance of fragmentary orders to reiterate key medical themes and countermeasures, and publish medical CONOPS to joint force personnel.
- g. Report movement requirements as required.
- h. Coordinate medical sustainment for components.

**SECTION F. HEALTH SUPPORT CHECKLIST FOR HUMANITARIAN
ASSISTANCE SURVEY TEAM AND ADVANCED ECHELON TEAM**

**22. Foreign Humanitarian Assistance Survey Team and Advanced Echelon Team
Planning Considerations**

a. Team—Personnel Planning Considerations

(1) Research and gather applicable country medical intelligence and establish medical guidance.

(2) Ensure all personal protective equipment is obtained.

(3) Ensure all recommended chemoprophylaxis and immunizations are obtained.

(4) Ensure orders correctly reflect personal data and authorized appropriate mission-related travel variations.

(5) Pack appropriately for climate and duration of deployment.

(6) Pack necessary professional gear and reference materiel.

(7) Research and gather predeployment country intelligence data (JIPOE).

(8) Establish local POCs to deployment country (such as listing phone numbers of US embassy health officials).

(9) Establish listing of infrastructure sites/locations to survey.

(10) Establish reachback POCs.

(11) Obtain a FP threat analysis of the local area (source J-2).

(12) Establish charter for mission accomplishments and deliverables.

(13) Ensure a security and emergency evacuation plan is in place for the HAST.

b. Pre-Advanced Echelon and Employment Reception

(1) Is medical site survey being performed?

(2) During the site survey, ensure the following issues are coordinated for deploying medical personnel before their arrival at the deployment country:

(a) Billeting/accommodations: _____

(b) Phone number at accommodations: _____

(c) Phone number at AOR or work phone: _____

(d) Cell phone: _____

(e) Radios: _____ Frequencies: _____ Call sign: _____

(f) Dedicated transportation: _____

(g) Translator (with a medical background preferred): _____

c. General Survey Information

(1) Surveyor: _____

(2) Unit of assignment: _____

(3) Date of survey: _____

(4) Name of site and location: _____

(5) Country: _____

(6) Map grid location: _____

(7) Global Positioning System latitude/longitude: _____

(8) Nature of contingency: _____

(9) Summary of population affected (such as demographics, size, origin):

d. Mission

(1) Objective 1:

(2) Objective 2:

(3) Objective 3:

(4) Anticipated duration of potential mission: _____

(5) Desired end state: _____

e. US Embassy Information

(1) US embassy on site? YES NO

(2) POC numbers for US embassy: _____

(3) Does the US embassy have a clinic and medical staff? YES NO

(4) If yes, describe personnel and capabilities: _____

(5) If no, where does staff obtain medical care? Describe: _____

(6) Does the US embassy have access to a periodic regional medical officer?

(7) If yes, list location and POC numbers: _____

f. Military Personnel Strength to Be Supported

(1) US military personnel.

(a) USA _____

(b) USN _____

(c) USAF _____

(d) USMC _____

(2) Multinational military personnel (if authorized).

(a) NATO _____

(b) United Nations _____

(c) Other/origin _____

(3) Number of American citizens _____

(4) USAID on site? YES NO

(5) International organizations, NGOs, and so on on-site?
YES NO

(6) Third-country nationals of interest to DOS?
YES NO

(7) If yes, list:

(8) What is the general feeling toward working with US military?

(9) Any other US and NATO civilians?

NO YES, approximate # _____

(10) Any potential EPWs? NO YES, approximate # _____

(11) If mission is FHA, list number of:

(a) Refugees _____

(b) Internally displaced persons _____

(c) Other dislocated civilians

(12) Identify key indigenous officers and population leaders:

g. Demographics

(1) Attach FP threat analysis of the local area (source J-2).

(2) General description of local civilian population:

(3) Are there any medically significant treaties or legal HNs or status-of-forces agreements?

(4) If yes, list potential impacts:

(5) List any religious/social/political factors of medical significance:

(6) List any public health laws of significance:

(7) Identify regional and local endemic diseases:

(8) Problematic seasonal diseases in the region and local population:

(9) What is the occurrence of illnesses and deaths caused by temperature extremes?

(10) Are there occurrences of the following diseases (check)?

- (a) Malaria.
- (b) Diarrhea.
- (c) Cholera.
- (d) Measles.
- (e) Polio.
- (f) Hemorrhagic fevers.
- (g) Plague.
- (h) Dengue fever.
- (i) Encephalitis.
- (j) Meningitis.
- (k) Tuberculosis.
- (l) Hepatitis.
- (m) Leptospirosis.

(n) Yellow fever.

(o) Influenza.

(p) Human immunodeficiency virus.

(q) Acquired immune deficiency syndrome.

(r) Zika virus.

(s) Ebola.

(t) Other _____

(11) Prevalence of sexually transmitted diseases. High Average Low

(12) What are the most common sexually transmitted diseases?

(13) Are there any sexually transmitted disease education/prevention programs?
YES NO

(14) If yes, describe:

(15) Are there any unexplained or undiagnosed illnesses/deaths among:

(a) A significant population concentration.

(b) Dislocated civilians.

(16) If deaths are unexplained, include report on location, condition of area, number of ill/dead, demographics on affected population, and symptoms. Also, include occurrences of simultaneous deaths on livestock, if applicable.

(17) Gender ratio/ethnicity composition: _____

(18) Description of overall nutritional status: _____

(19) Is there a significant population without proper amounts of food and water?
YES NO

(20) Description of population hygiene: _____

(21) Is prostitution legal? YES NO

(22) If yes, describe requirements for legal status (health cards, regular checkups, and so on):

(23) Illegal drug type and availability: _____

(24) Is there a significant population experiencing an unusually high number of maternal or infant deaths? NO YES
 If YES, which population? _____

(25) What is the vaccination program available to the general public?

(26) List measures to control outbreaks of diseases: _____

(27) Number of medical military personnel trained/treating people to control outbreaks:

(28) List number and capabilities of MTFs used to control outbreaks:

(29) List of common accepted medical countermeasures used to prevent, treat, and halt disease outbreaks of:

(a) Malaria.

(b) Diarrhea.

(c) Cholera.

(d) Measles.

(e) Polio.

(f) Hemorrhagic fevers.

(g) Plague.

- (h) Dengue fever.
- (i) Encephalitis.
- (j) Meningitis.
- (k) Tuberculosis.
- (l) Hepatitis.
- (m) Leptospirosis.
- (n) Yellow fever.
- (o) Influenza.
- (p) Human immunodeficiency virus/acquired immune deficiency syndrome.
- (q) Rabies.
- (r) Other _____

(30) Do common treatments seem to control outbreaks? Are accepted evidence-based medical countermeasures available and practicable in this setting? If not, what measures can be implemented?

(31) Number and capabilities of mobile medical teams qualified to deal with disease outbreaks:

(32) Provide list of international organizations/NGOs operating in the OA (include capabilities and contact numbers):

h. Environmental Health

- (1) Topography: Mountains Rainforest Desert
- (2) Climate: Tropical Humid Arctic Temperate
- (3) Temperature ranges (degrees in Fahrenheit):
 - (a) Summer _____ to _____
 - (b) Winter _____ to _____

on): (4) Significant seasonal variants (monsoon season, rainy season, winter, and so

(5) Typical and extreme climate conditions possible during operations: _____

(6) Include brief description and number of each:

(a) Military airfields _____

(b) Civilian airfields _____

(c) Helicopter pads _____

(d) Rail heads _____

(e) Seaports/beach sites _____

(7) Standard of living of the local population:

Excellent Average Poor Destitute

(8) Typical housing of local population: _____

(9) List local utility companies: _____

(10) What is the primary source of power? _____

(11) Is power available for:

(a) Heat.

(b) Light (electricity).

(c) Hot water.

(12) Status of power distribution grids: _____

(13) Are environmental standards stated and enforced in the AOR?

YES NO

If yes, include copies of environmental monitoring reports, if available.

(14) Acceptable levels of contaminants set by OA (if available):

(a) Water _____

(b) Soil _____

(c) Air _____

(15) List water sources (tanks, spring, groundwater, and so on):

(16) What is the water quality? _____

(17) List systems, if any, used to treat local water (include status of each system):

(18) Is there an adequate system to distribute water? YES NO

(19) Is there adequate water pressure? YES NO

(20) List foods most commonly eaten within the OA:

(21) What local food products should be avoided? _____

(22) How is food commonly stored? _____

(23) Do food storage areas provide protection against climate, rodents, insects, other animals, and ultimately, disease? YES NO

(24) How is food commonly prepared? _____

(25) Would food handlers/suppliers meet US standards?

YES NO

(26) Are there any natural foods (berries, nuts) that are poisonous?

YES NO

If yes, what actions/supplies are needed if ingested?

(27) What types of zoonoses are prevalent and potentially transmissible from local insects, rodents, and other animals (such as malaria/mosquitoes, leishmaniasis/flies, rabies/feral dog)?

(28) What type of insect, rodent, or animal control is practiced? _____

(29) What venomous insects, spiders, and reptiles are natural to the area?

(30) Is adequate antivenom readily available? YES NO

If yes, list closest source: _____

(31) Are animal rabies vaccine readily available? What is closest source?

(32) List all discovered and suspected common contaminants in local food and water:

(33) Describe hand-washing facilities, showers, and latrine facilities:

(34) Are septic systems used? YES NO

(35) If YES, what is the condition of the septic tanks and drain fields? _____

(36) What type of liquid waste disposal system is available?

(37) What is the condition of liquid waste drains from buildings?

(38) How is solid waste disposed of (burial, burning, and so on)?

(39) Will the deployed unit have to collect and dispose of solid waste or does the HN provide garbage and refuse disposal?

(40) How is regulated medical waste disposed?

(41) Is there history of accidental or intentional chemical, biological, nuclear releases in the OA? YES NO

(42) If yes, describe (include copies of historical records, if possible): _____

(43) Potential hazards: Chemical Biological Environmental
Occupational

(a) List potential hazards:

1. Type: _____

2. Location: _____

3. Description: _____

4. Source cause (if known): _____

(b) List potential hazards:

1. Type: _____

2. Location: _____

3. Description: _____

4. Source cause (if known): _____

(44) Provide name, rank, and contact information for (titles may be different; identify closest equivalent):

(a) Director, Environmental Protection Agency _____

- (b) Director, FDA _____
- (c) Director, Housing Authority _____
- (d) Director of Utilities _____
- (e) Chief, Waste Disposal and Management _____

i. HN Health Care System

(1) Is there a national health care system? YES NO

If yes, describe (include organizational chart, if possible):

- (2) How does the general public access health care?
- (3) What percentage of the HN gross national product goes toward health care?
- (4) What is the care policy for providing to:
 - (a) Military members
 - (b) General public
 - (c) NGOs
 - (d) Non-state actors
 - (e) Dislocated civilians

(5) Provide name, rank, and contact information for (titles may be different; identify closest equivalent):

- (a) Chief, Department of Health (Ministry of Health)
- (b) Chief, Medical Division
- (c) Chief, Medical Education Division _____
- (d) Chief, Medical Certification Division _____
- (e) Chief, Medical Mobilization Division _____
- (f) Chief, Medical Response Division _____

j. HN Military Medicine/Health Care

(1) Is there a medical department within the military system?

YES NO

If yes, number of medical personnel assigned to the military:

(2) Average level of medical education/training? High Medium

(3) Include a wire diagram/organizational chart of the military medical system.

(4) What services are provided by military medicine?

(5) What is the care policy for providing to:

(a) Military members_____

(b) Dependents_____

(c) NGOs_____

(d) Non-state actors_____

(e) Internally dislocated persons_____

(f) Refugees_____

(6) List any provisions made for medical care during civil unrest

(7) What is the medical capability of the military during deployment/“in the field”? Include design of the MTF layout, medical services, supplies, and bed capacity:

(8) Describe the chain of battlefield evacuation:

k. Physical Condition of Military Personnel from Host/Contributing Nations

(1) Origin of military personnel:

(2) Overall health condition: Excellent Good Average Poor

(3) Overall morale: Excellent Good Average Poor

(4) Overall status of immunizations: Current Not Current/No Record

(5) Possess personal protective equipment: YES NO

(6) Adequacy of clothing/equipment: Excellent Good Average Poor

(7) Adequacy of food/water: Excellent Good Average Poor

(8) What is the available medical care for contributing nation's military?

(9) What human immunodeficiency virus/acquired immune deficiency syndrome prevention programs does the contributing nation's military practice?

(10) Is human immunodeficiency virus/acquired immune deficiency syndrome screened for during recruitment and throughout military service? YES NO

If YES, is human immunodeficiency virus/acquired immune deficiency syndrome a reason for discharge from the contributing nation's military (circle)?

YES NO

1. Management of Disaster/Humanitarian Crises

(1) Attach a list of organizations involved in disaster response and their capabilities.

(2) Attach a diagram of national-level C2.

(3) Who does the HN most frequently call upon in times of crises? _____

(4) How do military and civilian agencies interface during crisis management?

(5) Is there a national disaster preparedness and management plan?

YES NO

(6) Is there a national disaster management-training program? YES NO

(7) Check the steps taken by the HN to prepare for natural or man-made disasters:

- (a) Increased production/stockpiling of food/water/supplies.
- (b) Disaster management training for responding personnel.
- (c) Creation of specialized response teams.
- (d) Crisis management exercises.

(8) Number of personnel on call to respond to disasters:

(a) Civilian: _____

(b) Military: _____

(9) Describe procedure to mobilize personnel on call:

(10) Number and type of MEDEVAC vehicles “on-call” for disaster:

(11) List all AE capabilities. Include procedures for requesting AE:

(12) Describe casualty handling doctrine for:

- (a) Emergency trauma.
- (b) Burns.
- (c) CBRN agents or hazards.

(13) Provide name, rank, and contact information for (titles may be different; identify closest equivalent):

(a) Director, FEMA

(b) Director, Disaster Preparedness and Management _____

(c) Chief, Medical _____

(d) Chief, SAR _____

- (e) Chief, Fire Protection _____
- (f) Chief, Air Evacuation _____
- (g) Chief of Police _____
- (h) United Nations Resident Coordinator _____
- (i) UNOCHA Field Representative _____
- (j) Defense Attaché/US Ambassador _____

(14) Has a CMOC been established? YES NO

(15) If yes, list participating organizations and contact information: _____

m. Local Hospital Data

- (1) Hospital name: _____
- (2) Military or civilian: _____
- (3) Hospital location (street address, Global Positioning System coordinates):

- (4) Primary POC Name: _____
- (5) Title: _____
- (6) Hospital phone and fax numbers (include country code):

- (7) Hospital radio frequencies: _____
- (8) Overall square footage: _____
- (9) Number of hospital beds: _____
- (10) Types of hospital beds:

- (11) Expansion capability:

- (12) Wartime capability:

(13) Burn management capability:

(14) Orthopedic capability:

(15) Neurosurgery capability:

(16) Obstetrics capability:

(17) Intensive care capability:

(18) Trauma capability:

(19) Surgical specialties.

(a) Thoracic: _____

(b) Plastic: _____

(c) Cardiovascular: _____

(20) Nuclear medicine capability.

(a) X-ray: _____

(b) Computed tomography imaging: _____

(c) Magnetic resonance imaging: _____

(d) Ultrasound: _____

(21) Laboratory capabilities.

(a) Biochemical: _____

(b) Microbiological: _____

(c) Hematological: _____

(d) Other: _____

(22) Public health facilities:

(23) Veterinary services:

(24) Other:

(25) Does the facility have disaster preparedness/management plans?

YES NO

(26) Disaster preparedness and disaster management capabilities? YES NO

(27) National disaster preparedness/management responsibilities? YES NO

(28) Describe the facility's role during a disaster:

n. Facility

(1) Describe overall condition of the facility:

(a) Cleanliness: _____

(b) Sanitation: _____

(c) Aseptic techniques: _____

(2) Is there adequate patient privacy? YES NO

(3) Is there access to upper floors? YES NO

(a) If YES, what is used (stairs, elevators, and so on):

(b) Are there other routes of access if primary fails? YES NO

Describe: _____

(4) Are the floors safe and solid? YES NO

(5) Is the facility climate controlled? YES NO

(6) State of repair and evidence of toxic materials present (such as asbestos in ceiling tiles or in boiler/pipe insulation, stored or spilled toxic chemicals):

(7) Evidence of rodents/rodent droppings or other animals, including birds:

(8) Describe the ventilation system (include specialized isolation rooms):

(9) List available buildings, nomenclatures, and room numbers:

(10) Are hand-washing facilities available? YES NO

(11) Are functional toilets close by? YES NO

(12) Describe the bio-waste, infectious waste, and sharps disposal system:

(13) Describe the waste disposal system:

(14) Are there laundry facilities? YES NO

(15) What types of fuel sources are used?

(16) List available facility support infrastructure: adequate fixtures, connected utilities, heat, lighting, electricity, electrical distribution and adaptable sockets, medical gases, and so on):

(17) List voltage, cycle, and phased frequency of electricity:

(18) List type of electrical plug type used and diagram template of prongs:

(19) List alternative (back up) electrical power available and kilowatt capability:

(20) Are there other sources of emergency power? YES NO

(21) Are telephone services available? YES NO

(22) Will the telephone service support:

DSN Fax Data Secure Communication

(23) Is there a medical/fire/crash radio network available? YES NO

If YES, list the crisis response radio frequency: _____

(24) Are radios/cell phones available for medical use? YES NO

(25) Alternative communication used? If yes, what?

(26) Does the facility have an emergency medical system? YES NO

If YES, how is it activated? _____

(27) Overall security in facility:

(28) Number of personnel dedicated to security: _____

Are they armed? YES NO

(29) Number and type of equipment dedicated to security:

o. Personnel

(1) Medical personnel (include education/training, special qualifications, and accreditation):

(a) Physicians:

(b) Nurses:

(c) Dentist:

(d) Technicians:

(e) Other:

(2) Are personnel English speaking? YES NO
If NO, what is their primary language? _____

(3) Physician-to-nurse ratio: _____

(4) What personnel are available to treat deployed US military personnel?

p. Supplies/Materiel

(1) Are approved medical supplies available? YES NO

(2) Obtain the most comprehensive/up-to-date supply inventory (include product names, manufacturer, expiration dates).

(3) Are the medical supplies available for US deployed military personnel use?
YES NO

If yes, is reimbursement required and to whom?

(4) Describe all available supply storage facilities:

(a) Flammable storage: _____

(b) Refrigerator storage: _____

(c) Blood storage: _____

(5) Will cold chain custody be required (blood/medicines)? YES NO
If yes, how will it be established?

(6) Describe the pharmacy capability:

(7) Obtain the most current and up-to-date pharmacy formulary listing.

(8) Describe the blood capability.

(a) Inventory:

(b) Capacity:

(c) Storage:

(d) Screening:

syndrome	<u>1.</u> Human immunodeficiency virus/acquired immune deficiency		
	YES	NO	
	<u>2.</u> Hepatitis B	YES	NO
	<u>3.</u> Hepatitis C	YES	NO
	<u>4.</u> Syphilis	YES	NO
	<u>5.</u> Malaria	YES	NO
	<u>6.</u> Anemia	YES	NO
	<u>7.</u> Other	<hr/>	

(9) Methods of sterilization:

(10) Medical manufacturing facilities:

(11) Availability of disposable needles, syringes, intravenous transfusion bags, catheters, and tubing:

(12) Life support and diagnostic equipment: (number/condition/make and model).

(a) Respirators:

(b) Intravenous equipment:

(c) Defibrillators:

(d) Dialysis equipment:

(e) X-ray capabilities:

(f) Ultrasound:

(g) Computerized axial tomography scan:

(h) Magnetic resonance imaging:

(i) Laboratory equipment:

(j) Other:

(13) Medical materiel storage and distribution nodes:

q. Transportation

(1) Describe road access:

(2) Describe air access:

(3) Describe rail access:

(4) Are there helicopter LZs? YES NO

(a) If yes, has it been surveyed by US airfield specialist in past year?

YES NO

If yes, obtain a copy of survey, to include Global Positioning System coordinates, transit time, and capabilities.

(b) Distance to beachhead: _____

(c) Distance to port: _____

(5) Are ambulances available for use? YES NO

(a) List vehicle types/litter capacity:

(b) Number of medical transport military personnel:

(c) List equipment/supplies aboard:

(d) Radio communication aboard? YES NO

(e) List communications capability and frequencies:

(f) What are the clearances/training required for drivers?

(6) Overview of major transportation nodes/staging facilities:

(7) Does the host base operate rotary-wing AE? YES NO
If yes, how can the US activate and enter the system?

(8) List all flight support/crash rescue services available:

(9) Provide name, rank, and contact information for (titles may be different; identify closest equivalent).

(a) Chief, Medical Transportation Branch: _____

(b) Chief, Ambulance Services: _____

(c) Chief, Air Transportation: _____

r. Summary Evaluation

(1) Assumptions:

(2) What additional medical services would be needed if US military personnel were deployed?

(3) Critical open issues:

(4) Recommended medical COAs.

(a) COA 1:

(b) COA2:

(c) COA3:

(5) Conclusions:

s. Notes. Include in your medical survey report recommendations of all medical requirements necessary to support the mission and population. Each problem identified on the checklist should be addressed. Where several alternatives are viable, identify the recommended best solution. Problems should be worked to the extent possible during the survey while other functional representatives are present on the scene (such as food service, billeting, logistics, communications, security police, procurement, and so on). Discuss problems with other team members, including the site survey mission commander or advanced echelon team chief. Your report should emphasize telephone or written correspondence to answer questions and avoid misunderstandings.

Intentionally Blank

APPENDIX K

REFERENCES

The development of JP 4-02 is based upon the following primary references:

1. Multinational Treaties

- a. *Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field*, 12 August 1949.
- b. *Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea*, 12 August 1949.
- c. *Geneva Convention Relative to the Treatment of Prisoners of War*, 12 August 1949.
- d. *Geneva Convention Relative to the Protection of Civilian Persons in Time of War*, 12 August 1949.

2. Department of Defense Publications

- a. DODD 2310.01E, *DOD Detainee Program*.
- b. DODD 2311.01E, *DOD Law of War Program*.
- c. DODD 3025.18, *Defense Support of Civil Authorities (DSCA)*.
- d. DODD 5101.09E, *Class VIIIA Medical Materiel Supply Management*.
- e. DODD 5101.10E, *DOD Executive Agent (EA) for Subsistence*.
- f. DODD 6000.12E, *Health Services Support*.
- g. DODD 6200.04, *Force Health Protection (FHP)*.
- h. DODD 6400.04E, *DOD Veterinary Public and Animal Health Services*.
- i. DODD 6490.02E, *Comprehensive Health Surveillance*.
- j. DODI 2310.08E, *Medical Program Support for Detainee Operations*.
- k. DODI 3002.03, *DOD Personnel Recovery-Reintegration of Recovered Personnel*.
- l. DODI 3020.41, *Operational Contract Support (OCS)*.
- m. DODI 4515.13, *Air Transportation Eligibility*.
- n. DODI 5101.15, *DOD Medical Materiel Executive Agent (MMEA) Implementation Guidance*.

- o. DODI 6000.11, *Patient Movement (PM)*.
- p. DODI 6040.47, *Joint Trauma System (JTS)*.
- q. DODI 6055.12, *Hearing Conservation Program (HCP)*.
- r. DODI 6200.03, *Public Health Emergency Management within the Department of Defense*.
- s. DODI 6205.4, *Immunization of Other Than US Forces (OTUSF) for Biological Warfare Defense*.
- t. DODI 6480.04, *Armed Services Blood Program Operational Procedures*.
- u. DODI 6490.03, *Deployment Health*.
- v. DODI 6490.05, *Maintenance of Psychological Health in Military Operations*.
- w. DOD Manual 5200.01, Volume 1, *DOD Information Security Program: Overview, Classification, and Declassification*.
- x. DOD 6055.05-M, *Occupational Medical Examinations and Surveillance Manual*.

3. Chairman of the Joint Chiefs of Staff Publications

- a. CJCSI 4220.01A, *Post-Deployment Policy for 21-Day Controlled Monitoring of DOD Service Members and Civilian Employees Returning from Ebola Virus Disease Outbreak Areas in West Africa*.
- b. CJCSM 3130.03, *Adaptive Planning and Execution (APEX) Planning Formats and Guidance*.
- c. CJCSM 3130.06, *Global Force Management Allocation Policies and Procedures*.
- d. CJCSM 3500.11, *The Department of Defense Survival, Evasion, Resistance, and Escape Psychology Program*.
- e. MCM 0028-07, *Procedures for Deployment Health Surveillance*.
- f. JP 1, *Doctrine for the Armed Forces of the United States*.
- g. JP 2-0, *Joint Intelligence*.
- h. JP 3-0, *Joint Operations*.
- i. JP 3-02, *Amphibious Operations*.
- j. JP 3-07, *Stability*.

- k. JP 3-08, *Interorganizational Cooperation*.
- l. JP 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear Environments*.
- m. JP 3-17, *Air Mobility Operations*.
- n. JP 3-18, *Joint Forcible Entry Operations*.
- o. JP 3-27, *Homeland Defense*.
- p. JP 3-28, *Defense Support of Civil Authorities*.
- q. JP 3-29, *Foreign Humanitarian Assistance*.
- r. JP 3-50, *Personnel Recovery*.
- s. JP 3-57, *Civil-Military Operations*.
- t. JP 3-63, *Detainee Operations*.
- u. JP 4-0, *Joint Logistics*.
- v. JP 4-10, *Operational Contract Support*.
- w. JP 5-0, *Joint Planning*.

4. Multi-Service Publications

- a. ATP 3-11.37/MCWP 3-37.4/NTTP 3-11.29/AFTTP 3-2.44, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance and Surveillance*.
- b. ATP 4-02.7/MCRP 4-11.1F/NTTP 4-02.7/AFTTP 3-42.3, *Multi-Service Tactics, Techniques, and Procedures for Health Service Support in a Chemical, Biological, Radiological, and Nuclear Environment*.
- c. TM 4-02.70/NAVMED P-5150/AFMAN 41-111_IP, *Standards for Blood Banks and Transfusion Services*.
- d. AR 190-8/OPNAVINST 3461.6/AFJI 31-304/MCO 3461.1, *Enemy Prisoners of War, Retained Personnel, Civilian Internees and Other Detainees*.

5. United States Army Publications

- a. AR 40-61, *Medical Logistics Policies*.
- b. ATP 4-02.1, *Army Medical Logistics*.

- c. ATP 4-02.5, *Casualty Care*.
- d. ATP 4-02.8, *Force Health Protection*.
- e. ATP 4-02.55, *Army Health System Support Planning*.
- f. ATP 4-25.13, *Casualty Evacuation*.
- g. FM 27-10, *The Law of Land Warfare*.
- h. *Army Medical Research Institute of Chemical Defense, Medical Management of Chemical Casualties Handbook*.

6. United States Air Force Publications

- a. Air Force Policy Directive (AFPD) 10-21, *Air Mobility Lead Command Roles and Responsibilities*.
- b. AFPD 10-29, *Worldwide Aeromedical Evacuation Operations*.
- c. Air Force Doctrine Annex 3-17, *Air Mobility Operations*.
- d. AFI 11-2AE, Volume 3, *Aeromedical Evacuation (AE) Operations Procedures*.
- e. AFTTP 3-42.5, *Aeromedical Evacuation (AE)*.
- f. AFTTP 3-42.8, *Expeditionary Medical Logistics (EML) System*.

7. United States Marine Corps Publication

- a. MCWP 3-40, *Logistics Operations*.
- b. MCO 4400.201, *Management of Property in the Possession of the Marine Corps, Volume 12, Marine Corps Class VIII Management and Sustainment*.

APPENDIX L

ADMINISTRATIVE INSTRUCTIONS

1. User Comments

Users in the field are highly encouraged to submit comments on this publication using the Joint Doctrine Feedback Form located at: https://jdeis.js.mil/jdeis/jel/jp_feedback_form.pdf and e-mail it to: js.pentagon.j7.mbx.jedd-support@mail.mil. These comments should address content (accuracy, usefulness, consistency, and organization), writing, and appearance.

2. Authorship

a. The lead agent for this publication is the US Army. The Joint Staff doctrine sponsor for this publication is the Joint Staff Surgeon.

b. The following staff, in conjunction with the joint doctrine development community, made a valuable contribution to the revision of this joint publication: lead agent, Mr. Randy Robbins, US Army Medical Command; Joint Staff doctrine sponsor, CDR Stephen Chapman and SGM Kasandra H. Boulier, Office of the Joint Staff Surgeon; Joint Doctrine Analysis Division action officer, Lt Col Nathan Maresh, Joint Staff J-7; and Joint Doctrine action officer, Mr. Mitchell R. Johnson, Joint Staff J-7, Joint Doctrine Division.

3. Supersession

This publication supersedes JP 4-02, *Health Service Support*, 26 July 2012.

4. Change Recommendations

a. To provide recommendations for urgent and/or routine changes to this publication, please complete the Joint Doctrine Feedback Form located at: https://jdeis.js.mil/jdeis/jel/jp_feedback_form.pdf and e-mail it to: js.pentagon.j7.mbx.jedd-support@mail.mil

b. When a Joint Staff directorate submits a proposal to the CJCS that would change source document information reflected in this publication, that directorate will include a proposed change to this publication as an enclosure to its proposal. The Services and other organizations are requested to notify the Joint Staff J-7 when changes to source documents reflected in this publication are initiated.

5. Lessons Learned

The Joint Lessons Learned Program (JLLP) primary objective is to enhance joint force readiness and effectiveness by contributing to improvements in doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy. The Joint Lessons Learned Information System (JLLIS) is the DOD system of record for lessons learned and facilitates the collection, tracking, management, sharing, collaborative resolution, and dissemination of lessons learned to improve the development and readiness

of the joint force. The JLLP integrates with joint doctrine through the joint doctrine development process by providing lessons and lessons learned derived from operations, events, and exercises. As these inputs are incorporated into joint doctrine, they become institutionalized for future use, a major goal of the JLLP. Lessons and lessons learned are routinely sought and incorporated into draft JPs throughout formal staffing of the development process. The JLLIS Website can be found at <https://www.jllis.mil> (NIPRNET) or <http://www.jllis.smil.mil> (SIPRNET).

6. Distribution of Publications

Local reproduction is authorized, and access to unclassified publications is unrestricted. However, access to and reproduction authorization for classified JPs must be IAW DOD Manual 5200.01, Volume 1, *DOD Information Security Program: Overview, Classification, and Declassification*, and DOD Manual 5200.01, Volume 3, *DOD Information Security Program: Protection of Classified Information*.

7. Distribution of Electronic Publications

a. Joint Staff J-7 will not print copies of JPs for distribution. Electronic versions are available on JDEIS Joint Electronic Library Plus (JEL+) at <https://jdeis.js.mil/jdeis/index.jsp> (NIPRNET) and <http://jdeis.js.smil.mil/jdeis/index.jsp> (SIPRNET), and on the JEL at <http://www.dtic.mil/doctrine> (NIPRNET).

b. Only approved JPs are releasable outside the CCMDs, Services, and Joint Staff. Defense attachés may request classified JPs by sending written requests to Defense Intelligence Agency (DIA)/IE-3, 200 MacDill Blvd., Joint Base Anacostia-Bolling, Washington, DC 20340-5100.

c. JEL CD-ROM. Upon request of a joint doctrine development community member, the Joint Staff J-7 will produce and deliver one CD-ROM with current JPs. This JEL CD-ROM will be updated not less than semi-annually and when received can be locally reproduced for use within the CCMDs, Services, and combat support agencies.

GLOSSARY

PART I—ABBREVIATIONS, ACRONYMS, AND INITIALISMS

AB	air base
AE	aeromedical evacuation
AELT	aeromedical evacuation liaison team
AEOT	aeromedical evacuation operations team
AESC	aeromedical evacuation support cell
AF	Air Force (form)
AFB	Air Force base
AFHSB	Armed Forces Health Surveillance Branch (DHA)
AFI	Air Force instruction
AFJI	Air Force joint instruction
AFMAN	Air Force manual
AFPD	Air Force policy directive
AFTTP	Air Force tactics, techniques, and procedures
AJBPO	area joint blood program office
AMC	Air Mobility Command
AMC/SGXM	Air Mobility Command/Surgeon General's Office
AMD	air mobility division
AOC	air operations center
AOR	area of responsibility
APOD	aerial port of debarkation
APOE	aerial port of embarkation
AR	Army regulation
ASBP	Armed Services Blood Program
ASBPO	Armed Services Blood Program Office
ASD(HA)	Assistant Secretary of Defense (Health Affairs)
ATF	amphibious task force
ATP	Army techniques publication
BI	battle injury
BMET	biomedical electronics technician
BTC	blood transshipment center
C2	command and control
CAAF	contractors authorized to accompany the force
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCATT	critical care air transport team
CCDR	combatant commander
CCMD	combatant command
CDC	Centers for Disease Control and Prevention (DHHS)
CJCS	Chairman of the Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff instruction
CJCSM	Chairman of the Joint Chiefs of Staff manual

CLIA	Clinical Laboratory Improvement Amendments of 1988
CLIP	Clinical Laboratory Improvement Program
CMO	civil-military operations
CMOC	civil-military operations center
COA	course of action
COMAFFOR	commander, Air Force forces
CONOPS	concept of operations
CONUS	continental United States
COS	chief of staff
COSC	combat and operational stress control
CPO	chief petty officer
CREstT	Casualty Rate Estimation Tool
CUL	common-user logistics
DHA	Defense Health Agency
DHHS	Department of Health and Human Services
DIRMOBFOR	director of mobility forces
DLA	Defense Logistics Agency
DNBI	disease and nonbattle injury
DOD	Department of Defense
DODD	Department of Defense directive
DODI	Department of Defense instruction
DOEHRS-IH	Defense Occupational and Environmental Health Readiness System – Industrial Hygiene
DOS	Department of State
DSCA	defense support of civil authorities
DSN	Defense Switched Network
E	enhanced
EMRE	Expeditionary Medicine Requirements Estimator
EPW	enemy prisoner of war
ERC	en route care
ERPSS	En Route Patient Staging System
ESEO	environmental science and engineering officer
ESP	Estimating Supplies Program
FCC	federal coordinating center
FDA	Food and Drug Administration (DHHS)
FEMA	Federal Emergency Management Agency (DHS)
FFP	fresh frozen plasma
FHA	foreign humanitarian assistance
FHP	force health protection
FM	field manual (Army)
FMF	Fleet Marine Force (Navy)
FOB	forward operating base
FP	force protection

FRC	forward resuscitative care
FWRA	food and water risk assessment
GC	Geneva Convention Relative to the Protection of Civilian Persons in Time of War
GCC	geographic combatant commander
GFM	global force management
GPMRC	Global Patient Movement Requirements Center
GPW	Geneva Convention Relative to the Treatment of Prisoners of War
GWS	Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field
GWS Sea	Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea
HA	humanitarian assistance
HAST	humanitarian assistance survey team
HN	host nation
HNS	host-nation support
HQ	headquarters
HSS	health service support
ICU	intensive care unit
J-1	manpower and personnel directorate of a joint staff
J-2	intelligence directorate of a joint staff
J-3	operations directorate of a joint staff
J-4	logistics directorate of a joint staff
J-6	communications system directorate of a joint staff
JAOC	joint air operations center
JBPO	joint blood program office
JDDOC	joint deployment and distribution operations center
JFACC	joint force air component commander
JFC	joint force commander
JFO	joint field office
JFS	joint force surgeon
JIPOE	joint intelligence preparation of the operational environment
JMOC	joint medical operations center
JMPT	Joint Medical Planning Tool
JMWG	joint medical working group
JOA	joint operations area
JOPEs	Joint Operation Planning and Execution System
JP	joint publication
JPG	joint planning group

JPMRC	joint patient movement requirements center
JRSOI	joint reception, staging, onward movement, and integration
JTF	joint task force
LF	landing force
LM	light maneuver
LNO	liaison officer
LZ	landing zone
MARFORSOC	Marine Forces Special Operations Command
MCM	military committee memorandum (memorandum issued in the name of the Chairman)
MCMO	medical civil-military operations
MCO	Marine Corps order
MCRP	Marine Corps reference publication
MCWP	Marine Corps warfighting publication
MDBS	medical detachment, blood support
MEDEVAC	medical evacuation
MEDLOG	medical logistics
MHS	Military Health System
MIPOE	medical intelligence preparation of the operational environment
MIST	mechanism of injury, injury type, signs, treatment
MNF	multinational force
MNFC	multinational force commander
MOPP	mission-oriented protective posture
MPTk	Medical Planners' Toolkit
MRO	medical regulating officer
MTF	medical treatment facility
NATO	North Atlantic Treaty Organization
NAVMED	Navy medicine
NAVSO	Navy special operations forces
NAVSPECWARCOM	Naval Special Warfare Command
NBI	nonbattle injury
NCMI	National Center for Medical Intelligence
NCO	noncommissioned officer
NDMS	National Disaster Medical System (DHHS)
NG	National Guard
NGO	nongovernmental organization
non-CAAF	contractors not authorized to accompany the force
NRF	National Response Framework
NTTP	Navy tactics, techniques, and procedures
OA	operational area
OCONUS	outside the continental United States

OE	operational environment
OEH	occupational and environmental health
OPCON	operational control
OPLAN	operation plan
OPNAVINST	Chief of Naval Operations instruction
OPORD	operation order
P	publication
PAD	patient administration director
PAR	population at risk
PCOF	Patient Condition Occurrence Frequency
PECC	patient evacuation coordination cell
PJ	pararescue jumper
PM	patient movement
PMI	patient movement item
PMI-ATS	Patient Movement Items-Asset Tracking System
PMR	patient movement request
PMRC	patient movement requirements center
POC	point of contact
POI	point of injury
POW	prisoner of war
PPW	patient protective wrap
PRA	patient reception area
PVNTMED	preventive medicine
RBC	red blood cell
RFA	request for assistance
RFF	request for forces
Rh	Rhesus
Rh(D)	Rhesus (D antigen)
RSOI	reception, staging, onward movement, and integration
618 AOC (TACC)	618 Air Operations Center (Tanker Airlift Control Center)
SAR	search and rescue
SecDef	Secretary of Defense
SG	surgeon general
SIMLM	single integrated medical logistics manager
SJA	staff judge advocate
SME	subject matter expert
SO-ATP	special operations-advanced tactical practitioner
SOCM	special operations combat medic
SOF	special operations forces
SOP	standard operating procedure
T-AH	hospital ship
TCCC	tactical combat casualty care
TCCET	tactical critical care evacuation team

TCCT	tactical critical care transport
TLAMM	theater lead agent for medical materiel
TM	technical manual
TPFDD	time-phased force and deployment data
TPMRC	United States Transportation Command patient movement requirements center
TRAC2ES	United States Transportation Command Regulating and Command and Control Evacuation System
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USA	United States Army
USAF	United States Air Force
USAID	United States Agency for International Development
USC	United States Code
USCG	United States Coast Guard
USG	United States Government
USMC	United States Marine Corps
USN	United States Navy
USNORTHCOM	United States Northern Command
USNS	United States Naval Ship
USTRANSCOM	United States Transportation Command
UTC	unit type code
VA	Department of Veterans Affairs
VFS	validating flight surgeon
WHO	World Health Organization (UN)
WIA	wounded in action
WMD	weapons of mass destruction

PART II—TERMS AND DEFINITIONS

aeromedical evacuation. The movement of patients under medical supervision to and between medical treatment facilities by air transportation. Also called **AE**. (DOD Dictionary. Source: JP 4-02)

aeromedical evacuation unit. None. (Approved for removal from the DOD Dictionary.)

aviation medicine. The special field of medicine that is related to the biological and psychological problems of flight. (Approved for incorporation into the DOD Dictionary.)

battle injury. Damage or harm sustained by personnel during or as a result of battle conditions. Also called **BI**. (DOD Dictionary. Source: JP 4-02)

biosurveillance. The process to gather, integrate, interpret, and communicate essential information related to all-hazards, threats, or disease activity affecting human, animal, or plant health to achieve early detection and warning, contribute to overall situational awareness of the health aspects of an incident, and to enable better decision making at all levels. (Approved for inclusion in the DOD Dictionary.)

buddy aid. Acute medical care (first aid) provided by a nonmedical Service member to another person. (Approved for replacement of “buddy-aid” and its definition in the DOD Dictionary.)

case fatality rate. As it applies to trauma, a calculation used to measure the lethality of combat operations for those who are wounded, which compares the number of personnel killed in action and died of wounds to those wounded in action. (Approved for inclusion in the DOD Dictionary.)

casualty. Any person who is lost to the organization by having been declared dead, duty status—whereabouts unknown, missing, ill, or injured. (DOD Dictionary. Source: JP 4-02)

casualty evacuation. The unregulated movement of casualties that can include movement both to and between medical treatment facilities. Also called **CASEVAC**. (DOD Dictionary. Source: JP 4-02)

civil-military medicine. A discipline within operational medicine comprising public health and medical issues that involve a civil-military interface (foreign or domestic), including medical defense support of civil authorities, medical elements of security cooperation activities, and medical civil-military operations. (Approved for incorporation into the DOD Dictionary.)

combat and operational stress. The expected and predictable emotional, intellectual, physical, and/or behavioral reactions of an individual who has been exposed to stressful events in military operations. (Approved for incorporation into the DOD Dictionary.)

combat and operational stress control. Programs developed and actions taken by military leadership to prevent, identify, and manage adverse combat and operational stress reactions in units; optimize mission performance; conserve fighting strength; prevent or minimize adverse effects of combat and operational stress on members' physical, psychological, intellectual, and social health; and to return the unit or Service member to duty expeditiously. Also called **COSC**. (Approved for incorporation into the DOD Dictionary.)

combat lifesaver. Nonmedical Department of Defense person who has received additional trauma training and equipment, providing enhanced medical treatment beyond self-aid/buddy aid. (Approved for inclusion in the DOD Dictionary.)

definitive care. Care rendered to conclusively manage a patient's condition, such as full range of preventive, curative acute, convalescent, restorative, and rehabilitative medical care. (DOD Dictionary. Source: JP 4-02)

deployment health surveillance. The regular or repeated collection, analysis, archiving, interpretation, and distribution of health-related data used for monitoring the health of a population or of individuals, and for intervening in a timely manner to prevent, treat, or control the occurrence of disease or injury, which includes occupational and environmental health surveillance and medical surveillance subcomponents. (DOD Dictionary. Source: JP 4-02)

disease and nonbattle injury. All illnesses and injuries not resulting from hostile action or terrorist activity or caused by conflict. Also called **DNBI**. (Approved for incorporation into the DOD Dictionary.)

end item. A final combination of end products, component parts, and/or materials that is ready for its intended use. (DOD Dictionary. Source: JP 4-02)

en route care. Care provided during transport to optimize patient outcomes. Also called **ERC**. (Approved for incorporation into the DOD Dictionary.)

essential care. Medical treatment provided to manage the casualty throughout the roles of care, which includes all care and treatment to either return the patient to duty (within the theater evacuation policy), or begin initial treatment required for optimization of outcome, and/or stabilization to ensure the patient can tolerate evacuation. (DOD Dictionary. Source: JP 4-02)

evacuation. 1. Removal of a patient by any of a variety of transport means from a theater of military operation, or between health services capabilities, for the purpose of preventing further illness or injury, providing additional care, or providing disposition of patients from the military health care system. (JP 4-02) 2. The clearance of personnel, animals, or materiel from a given locality. (JP 3-68) 3. The controlled process of collecting, classifying, and shipping unserviceable or abandoned materiel, United States or foreign, to appropriate reclamation, maintenance, technical intelligence, or disposal facilities. (JP 4-09) 4. The ordered or authorized departure of noncombatant evacuees from a specific area to another in the same or different

countries by Department of State, Department of Defense, or appropriate military commander. (DOD Dictionary. Source: JP 3-68)

expendable supplies. Supplies that are consumed in use, such as ammunition, paint, fuel, cleaning and preserving materials, surgical dressings, drugs, medicines, etc., or that lose their identity, such as spare parts, etc., and may be dropped from stock record accounts when it is issued or used. (DOD Dictionary. Source: JP 4-02)

first responder. Anyone who provides initial and immediate treatment to self or others. (Approved for incorporation into the DOD Dictionary.)

first responder care. None. (Approved for removal from the DOD Dictionary.)

Fleet Marine Force. A balanced force of combined arms comprising land, air, and service elements of the United States Marine Corps, which is an integral part of a United States fleet and has the responsibility to man, train, and equip the Marine operating force. Also called **FMF**. (Approved for incorporation into the DOD Dictionary.)

food and water risk assessment. A program conducted under specific circumstances by veterinary or public health personnel to assess food operations to identify and mitigate risk from intentional and unintentional contamination. Also called **FWRA**. (Approved for inclusion in the DOD Dictionary.)

force health protection. Measures to promote, improve, or conserve the behavioral and physical well-being of Service members to enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. Also called **FHP**. (DOD Dictionary. Source: JP 4-02)

forward area. None. (Approved for removal from the DOD Dictionary.)

forward resuscitative care. Care provided as close to the point of injury as possible based on current operational requirements to attain stabilization, achieve the most efficient use of lifesaving and limb-saving medical treatment, and provide essential care so the patient can tolerate evacuation, which is known as Role 2 care in the North Atlantic Treaty Organization doctrine. Also called **FRC**. (Approved for incorporation into the DOD Dictionary.)

Global Patient Movement Requirements Center. A joint activity reporting directly to the Commander, United States Transportation Command, which provides medical regulating and aeromedical evacuation scheduling for the continental United States and intertheater operations, provides support to the theater patient movement requirements centers, and coordinates with supporting resource providers to identify available assets and communicates transport to bed plans to the appropriate transportation agency for execution. Also called **GPMRC**. (DOD Dictionary. Source: JP 4-02)

health care provider. Any member of the Armed Forces, civilian employee of the Department of Defense, or personal services contract employee under Title 10, United

States Code, Section 1091 authorized by the Department of Defense to perform health care functions. Also called **DOD health care provider**. (DOD Dictionary. Source: JP 4-02)

health service support. All services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel. Also called **HSS**. (Approved for incorporation into the DOD Dictionary.)

health surveillance. The regular or repeated collection, analysis, and interpretation of health-related data and the dissemination of information to monitor the health of a population and to identify potential health risks, thereby enabling timely interventions to prevent, treat, reduce, or control disease and injury, which includes occupational and environmental health surveillance and medical surveillance subcomponents. (DOD Dictionary. Source: JP 4-02)

health threat. A composite of ongoing or potential enemy actions; adverse environmental, occupational, and geographic and meteorological conditions; endemic diseases; and employment of chemical, biological, radiological, or nuclear weapons (to include weapons of mass destruction) that have the potential to affect the short- or long-term health (including psychological impact) of personnel. (Approved for incorporation into the DOD Dictionary.)

injury. 1. A term comprising such conditions as fractures, wounds, sprains, strains, dislocations, concussions, and compressions. 2. Conditions resulting from extremes of temperature or prolonged exposure. 3. Acute poisonings (except those due to contaminated food) resulting from exposure to a toxic or poisonous substance. (DOD Dictionary. Source: JP 4-02)

intertheater patient movement. Moving patients between, into, and out of the different theaters of the geographic combatant commands and into the continental United States or another supporting theater. (DOD Dictionary. Source: JP 4-02)

intratheater patient movement. Moving patients within the theater of a combatant command or within the continental United States. (Approved for incorporation into the DOD Dictionary.)

joint force surgeon. A Department of Defense medical department officer appointed by the joint force commander to serve as the joint force special staff officer to establish, monitor, or evaluate joint force health services support. Also called **JFS**. (Approved for incorporation into the DOD Dictionary.)

joint patient movement requirements center. A joint activity established to coordinate the joint patient movement requirements function for a joint force operating within an operational area. Also called **JPMRC**. (Approved for incorporation into the DOD Dictionary.)

joint patient movement team. None. (Approved for removal from the DOD Dictionary.)

lead agent. 1. An individual Service, combatant command, or Joint Staff directorate assigned to develop and maintain a joint publication. (CJCSI 5120.02) 2. In medical materiel management, the designated unit or organization to coordinate or execute day-to-day conduct of an ongoing operation or function. Also called **LA**. (DOD Dictionary. Source: JP 4-02)

life cycle. The total phases through which an item passes from the time it is initially developed until the time it is either consumed in use or disposed of as being excess to all known materiel requirements. (DOD Dictionary. Source: JP 4-02)

mass casualty. Any number of human casualties produced across a period of time that exceeds available medical support capabilities. (Approved for incorporation into the DOD Dictionary.)

medical civil-military operations. All military health- and veterinary-related activities in support of a commander that establish, enhance, maintain or influence relations between the force and host nation, multinational governmental and nongovernmental civilian organizations and authorities, and the civilian populace to facilitate military operations, achieve United States operational objectives, and positively impact the health, agriculture, and economic sectors. Also called **MCMO**. (Approved for incorporation into the DOD Dictionary.)

medical intelligence preparation of the operational environment. A systematic continuing process, used by the National Center for Medical Intelligence, that analyzes information on medical and disease threats, enemy capabilities, terrain, weather, local medical infrastructure, potential humanitarian and dislocated civilian situations, transportation issues, and political, religious and social issues for all types of operations. Also called **MIPOE**. (Approved for incorporation into the DOD Dictionary.)

medical logistics support. Class VIII medical supplies (medical material to include medical peculiar repair parts used to sustain the health service support system), optical fabrication, medical equipment maintenance, blood storage and distribution, and medical gases. Also called **MEDLOG support**. (Approved for incorporation into the DOD Dictionary.)

medical regulating. The actions and coordination necessary to arrange for the movement of patients through the roles of care and to match patients with a medical treatment facility that has the necessary health service support capabilities and available bed space. (DOD Dictionary. Source: JP 4-02)

medical surveillance. The ongoing, systematic collection, analysis, and interpretation of data derived from instances of medical care or medical evaluation, and the reporting of population-based information for characterizing and countering threats to a population's health, well-being, and performance. (Approved for incorporation into the DOD Dictionary.)

medical treatment facility. A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. Also called **MTF**. (DOD Dictionary. Source: JP 4-02)

medical treatment protocol. Directive issued by competent military authority that delineate the circumstances and limitations under which United States medical forces will initiate medical care and support to those individuals that are not Department of Defense health care beneficiaries or designated eligible for care in a military medical treatment facility by the Secretary of Defense. (Approved for replacement of “medical engagement protocols” and its definition in the DOD Dictionary.)

Military Health System. Provides direction, resources, health care providers, and other means necessary to foster, protect, sustain, and restore health to Service members and other beneficiaries. Also called **MHS**. (Approved for replacement of “military health system” and its definition in the DOD Dictionary.)

military van (container). None. (Approved for removal from the DOD Dictionary.)

nonbattle injury. A person who becomes a casualty due to circumstances not directly attributable to hostile action or terrorist activity. Also called **NBI**. (DOD Dictionary. Source: JP 4-02)

occupational and environmental health surveillance. None. (Approved for removal from the DOD Dictionary.)

occupational and environmental health threats. None. (Approved for removal from the DOD Dictionary.)

occupied territory. None. (Approved for removal from the DOD Dictionary.)

operational testing. None. (Approved for removal from the DOD Dictionary.)

opportune lift. None. (Approved for removal from the DOD Dictionary.)

originating medical treatment facility. A medical facility that initially transfers a patient to another medical facility. (DOD Dictionary. Source: JP 4-02)

patient movement. The act or process of moving a sick, injured, wounded, or other person to obtain medical and/or dental care or treatment, which include medical regulating, patient evacuation, and en route medical care. Also called **PM**. (Approved for incorporation into the DOD Dictionary.)

patient movement items. The medical equipment and supplies required to support patients during aeromedical evacuation, which is part of a standardized list of approved safe-to-fly equipment. Also called **PMIs**. (DOD Dictionary. Source: JP 4-02)

patient movement policy. Command decision establishing the maximum number of days that patients may be held within the command for treatment. (DOD Dictionary. Source: JP 4-02)

patient movement requirements center. 1. A joint activity that coordinates patient movement by functionally merging of joint medical regulating processes, Services' medical regulating processes, and patient movement evacuation requirements planning (transport to bed plan). 2. Term used to represent any theater, joint, or the Global Patient Movement Requirements Center function. Also called **PMRC**. (Approved for incorporation into the DOD Dictionary.)

population at risk. The strength in personnel of a given force structure in terms of which casualty rates are stated. Also called **PAR**. (DOD Dictionary. Source: JP 4-02)

preventive maintenance. Care and service of equipment and facilities in satisfactory operating condition by systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects. (Approved for incorporation into the DOD Dictionary.)

preventive medicine. The anticipation, communication, prediction, identification, prevention, education, risk assessment, and control of communicable diseases; illnesses; and exposure to endemic, occupational, and environmental threats. Also called **PVNTMED**. (Approved for incorporation into the DOD Dictionary.)

prolonged field care. The continued delivery of medical care prior to patient movement beyond the holding capability of that role of care. (Approved for inclusion in the DOD Dictionary.)

rehabilitative care. Therapy that provides evaluations and treatment programs using exercises, massage, or electrical therapeutic treatment to restore, reinforce, or enhance motor performance and restores patients to functional health allowing for their return to duty or discharge from the Service. Also called **restorative care**. (DOD Dictionary. Source: JP 4-02)

resuscitative care. Advanced emergency medical treatment required to prevent immediate loss of life or limb and to attain stabilization to ensure the patient could tolerate evacuation. (DOD Dictionary. Source: JP 4-02)

roles of medical care. The characterization of health support for the distribution of medical resources and capabilities. a. **Role 1.** Provides medical treatment, initial trauma care, and forward resuscitation, not including surgical care. Also known as unit-level medical care. b. **Role 2.** Provides medical treatment, advanced trauma management, emergency surgery, and resuscitative care. c. **Role 3.** Provides emergency and specialty surgery, intensive care, medical specialty care, and extended holding capacity and capability augmented by robust ancillary support. d. **Role 4.** Provides the full range of preventive, acute, restorative, curative, rehabilitative, and convalescent care found in United States base hospitals and robust overseas facilities. (Approved for inclusion in the DOD Dictionary.)

stabilized patient. A patient whose airway is secured, hemorrhage is controlled, shock treated, and fractures are immobilized. (DOD Dictionary. Source: JP 4-02)

stable patient. A patient for whom no inflight medical intervention is expected but the potential for medical intervention exists. (DOD Dictionary. Source: JP 4-02)

standardization. The process by which the Department of Defense achieves the closest practicable cooperation among the Services and Department of Defense agencies for the most efficient use of research, development, and production resources, and agrees to adopt on the broadest possible basis the use of: a. common or compatible operational, administrative, and logistic procedures; b. common or compatible technical procedures and criteria; c. common, compatible, or interchangeable supplies, components, weapons, or equipment; and d. common or compatible tactical doctrine with corresponding organizational compatibility. (DOD Dictionary. Source: JP 4-02)

tactical combat casualty care. A set of trauma management guidelines focused on the most common causes of preventable deaths resulting from hostile action or terrorist activity. Also called **TCCC**. (Approved for incorporation into the DOD Dictionary.)

telemedicine. Rapid access to shared and remote medical expertise by means of telecommunications and information technologies to deliver health services and exchange health information for the purpose of improving patient care. (DOD Dictionary. Source: JP 4-02)

theater hospitalization capability. Essential care and health service support capabilities to either return the patient to duty and/or stabilization to ensure the patient can tolerate evacuation to a definitive care facility outside the theater, which is known as Role 3 in North Atlantic Treaty Organization doctrine. (DOD Dictionary. Source: JP 4-02)

throughput. 1. In transportation, the average quantity of cargo and passengers that can pass through a port on a daily basis from arrival at the port to loading onto a ship or plane, or from the discharge from a ship or plane to the exit (clearance) from the port complex. (JP 4-01.5) 2. In patient movement and care, the maximum number of patients (stable or stabilized) by category, that can be received at the airport, staged, transported, and received at the proper hospital within any 24-hour period. (DOD Dictionary. Source: JP 4-02)

United States Transportation Command patient movement requirements center. A United States Transportation Command activity responsible for intratheater patient movement management (medical regulating and aeromedical evacuation scheduling), the development of theater-level patient movement plans and schedules, the monitoring and execution in concert with the Global Patient Movement Requirements Center. Also called **TPMRC**. (Approved for replacement of “theater patient movement requirements center” and its definition in the DOD Dictionary.)

unit type code. None. (Approved for removal from the DOD Dictionary.)

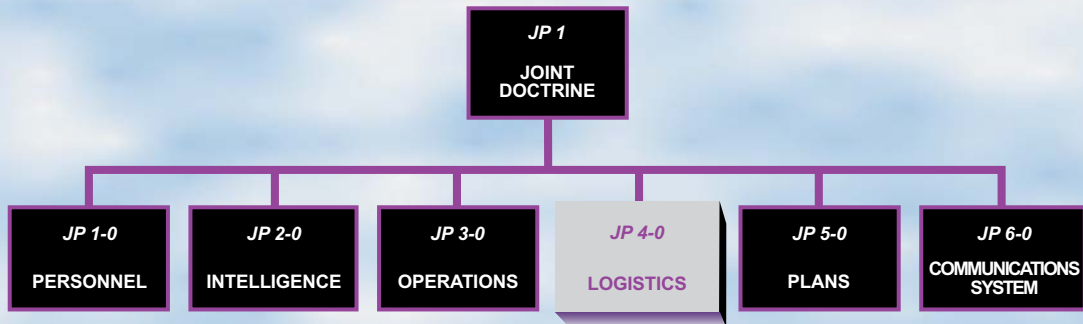
unstable patient. A patient whose physiological status is in fluctuation and for whom emergent, treatment, and/or surgical intervention are anticipated during treatment or evacuation, and the patient's rapidly changing status and requirements are beyond the standard en route care capability and requires medical/surgical augmentation. (Approved for incorporation into the DOD Dictionary.)

war reserve materiel requirement. None. (Approved for removal from the DOD Dictionary.)

wellness. Force health protection program that consolidates and incorporates physical and mental fitness, health promotion, and environmental and occupational health. (DOD Dictionary. Source: JP 4-02)

Intentionally Blank

JOINT DOCTRINE PUBLICATIONS HIERARCHY



All joint publications are organized into a comprehensive hierarchy as shown in the chart above. **Joint Publication (JP) 4-02** is in the **Logistics** series of joint doctrine publications. The diagram below illustrates an overview of the development process:

