

Health Services



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FOREWORD

This document establishes operational doctrine for Air Force health services and outlines the principles for helping airmen maintain health and fitness by integrating prevention-oriented health and fitness and medical intervention. Multiple forces are shaping national and global concepts of health and health care. To meet the demands of this changing environment, Air Force health services and the Air Force Medical Service balance operational demands and delivering world-class health care to airmen, their families, and beneficiaries.

Force health protection is vital to the success of Air Force operational readiness and our ability to support changing mission requirements. Air Force health services and medical personnel organize, train, and equip to ensure a medically ready fighting force capable of supporting national security and military operations. Together, a ready medical force and healthy, fit fighting forces ensure Air Force stability and mission responsiveness.

Although commanders are responsible for the morale, health, and welfare of their personnel and promote daily health and fitness activities, it is every airman's responsibility to maintain individual health and fitness. This philosophy should dictate the individual's approach to duty and permeate the Air Force community.

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INTRODUCTION

PURPOSE

This Air Force Doctrine Document (AFDD) establishes doctrinal guidance for organizing and employing health services capabilities at the operational level across the full range of military operations. It is a critical element of US Air Force operational-level doctrine and as such should form the basis from which Air Force commanders plan and execute their health services. This AFDD implements Air Force Policy Directive (AFPD) 10-13, *Air and Space Doctrine*.

APPLICATION

This AFDD applies to all Air Force military and civilian personnel (includes Air Force Reserve Command [AFRC] and Air National Guard [ANG] units and members). The doctrine in this document is authoritative but not directive. Therefore, commanders need to consider not only the contents of this AFDD, but also the particular situation when accomplishing their missions.

SCOPE

Air Force assets (people, information, and support systems) can be used across the range of military operations at the strategic, operational, and tactical levels of war. This AFDD discusses the fundamentals of organization and employment of Air Force health services required to support the operational missions assigned by commanders in chief (CINCs) and carried out by air component commanders.

CHAPTER ONE OVERVIEW

Doctrine is everybody's business in the Air Force.

Major General I.B. Holley, Jr.
USAFR, Retired

The leading idea, which should be constantly kept in view, is to strengthen the hands of the Commanding General by keeping his army in the most vigorous health, thus rendering it, in the highest degree, efficient for enduring fatigue and privation, and for fighting. In this view, the duties ... are of vital importance to the success of an army, and commanders seldom appreciate the full effect of their proper fulfillment.

Major Jonathan Letterman
Medical Director of the Civil War
Army of the Potomac

AIR FORCE HEALTH SERVICES DEFINITION

Health services form the basis for maintaining a healthy and fit force. All airmen routinely participate in health services activities. These activities are grouped into health surveillance, risk assessment, response to changing occupational and environmental regulation, aeromedical evacuation (AE), prevention, fitness, and health care delivery. Together these activities promote, improve, conserve, or restore individual emotional well-being, physical health, and fitness.

The concept of the individual as a “human weapon system” is critical to attaining the goal of a healthy and fit force. The human weapon system requires the same level of “life-cycle” support and maintenance as other complex Air Force systems. Applying this principle to occupational and operational environments enhances force preparedness and contributes to the force's emotional and physical strength. The following activities work together to minimize force vulnerability to environmental or enemy threats or attacks. (See figure 1.1.)



- ★ Accidental Injury
- ★ Alcohol Abuse
- ★ Atherosclerosis
- ★ Dental Disease
- ★ Environmental Toxin Exposure
- ★ Hearing Loss
- ★ Hypertension
- ★ Infectious Diseases
- ★ Injury/Illness From Hostile Attack
- ★ Operational Demands
- ★ Stress-Induced Disorders
- ★ Suicide
- ★ Tobacco Use

Figure 1.1. Human Weapon System Performance Threats

- ★ Maintaining force health protection (FHP).
- ★ Promoting health and fitness.
- ★ Preventing illness or injury.
- ★ Conducting health threat surveillance activities before, during, and after force deployment.

If the Air Force does not emphasize prevention-oriented programs and health care to the warfighter, weapon systems are merely iron on the ramp.

HISTORICAL PERSPECTIVE

The incidence of disease and nonbattle injuries (DNBI) has exerted a profound effect upon the Air Force readiness posture. The majority of wartime hospitalizations have been DNBI, not combat wounds, that diminished the effectiveness and sustainability of fighting

forces by at least a factor of ten from World War I through Operation DESERT STORM.

In aerospace operations, aircraft losses occurred most often in training, not enemy action. Human factors such as fatigue, loss of situational awareness, and spatial disorientation were the usual causes. On 13 November 1917, Aviation Cadet Sidney J. Brooks, for whom Brooks Air Force Base is named, was killed when his aircraft crashed while attempting to complete his final qualifying flight at Kelly Field. It is thought that he fainted in the cockpit possibly because of an antityphoid serum injection he received earlier in the day. Because of this and other such incidents or needs, the Army Air Corps, (subsequently the Army Air Forces Medical Service) in World War II, began to research noncombat stresses and to implement measures to protect flying personnel. Since 1950, the Air Force Medical Service (AFMS) has steadily reduced the number of DNBI and the amount of time lost to DNBI incidents or conditions.

During the 1980s, inflation of health care costs ran in the double digits. Businesses and unions could not afford to have these costs consume more and more profits or absorb their benefit flexibility. The result was an explosion of managed care principles focused on cost containment through improved use of health care resources with increased emphasis on effective prevention activities. US military medical service leadership realized they too must implement these more efficient managed care principles. This resulted in creating the TRICARE system in the early 1990s and the force tailoring of the direct military medicine system. Through TRICARE, the Military Health System (MHS) partnered with civilian health care providers to focus military medical practice on prevention and on the development of managed-care processes.

For the AFMS, in the past, operational medicine focused on returning fighting forces to duty, requiring a tremendous need for medical intervention. With changes in national security strategy, the Air Force mission has shifted from European or Asian theater of war scenarios to multiple, less predictable regional conflicts. The dramatic drop in projected force losses propelled the AFMS to minimize its deployable materiel and manpower footprints and focus operational medicine on transporting “stabilized” versus “stable” patients and “evacuating and replacing” patients versus “returning them to duty.”

Air Force health services face many challenges today. They must continue to focus on enhancement and sustainment of aerospace operators

in all operational environments. Some of these include high-altitude operations, extended mission deployments, directed energy threats, night-vision requirements, and an advanced aeromedical evacuation capability including critical care air transport teams (CCATTs) that can function in low-light, noisy conditions and limited workspace.

ROLES AND RESPONSIBILITIES

A healthy and fit force increases resiliency to overcome adversity. All personnel should make every effort to promote emotional and physical health and fitness, both individually and as a unit. Health awareness can affect individuals in all operational and domestic lifestyles and activities, extending from the work place (i.e., safety, occupational and environmental hazards) to the home (i.e., leisure activities, recreation, environmental factors).

Airmen

As the core component of the organization, airmen ensure their unit succeeds in its mission. Airmen:

- ✦ Maintain individual health and fitness.
- ✦ Encourage peers, families, and organizations to lead healthy, fit lifestyles.
- ✦ Seek appropriate health care when required.
- ✦ Recognize occupational and environmental health risks.

Participation in local base health, wellness, sports, and fitness programs can assist airmen to maintain emotional and physical fitness.

Supervisors

As an intermediate level of leadership, supervisors monitor subordinates to ensure application of standards and take corrective actions. Supervisors:

- ✦ Promote an organizational climate conducive to good health and fitness concepts.

- ✦ Emphasize individual health and fitness maintenance.
- ✦ Provide time for airmen to maintain health and fitness standards.
- ✦ Recognize factors that negatively impact human performance.
- ✦ Improve the work environment and equipment design.
- ✦ Reinforce or reward individuals or units for healthful behaviors and performance enhancements.
- ✦ Ensure individuals receive health care when required.

Base agencies play an active role in promoting the health and wellness of warfighters, family members, and other beneficiaries. Supervisors are aware of these agencies or the availability of local programs to help and encourage subordinates to participate. These include, but are not limited to, health promotion programs, family support and services, fitness centers, recreation centers and activities, chaplain services, childcare, and the health and wellness centers (HAWCs).

Commanders

Commanders are ultimately responsible for the morale, health, and well being of their troops. Commanders:

- ✦ Balance individual and organizational health and fitness with unit mission requirements.
- ✦ Ensure timely response to the needs of airmen and their families.
- ✦ Ensure personnel are aware of health threats and that they participate in prevention programs.
- ✦ Ensure troop fitness by applying programs to prevent DNBI.
- ✦ Ensure individuals receive health care when required.
- ✦ Ensure human performance measures are in place that develop and maintain a healthy and fit force.

The necessary tools, such as prevention-oriented health programs and population-based health care delivery, are in place to support the forces across the entire spectrum of military operations. All commanders should ensure participation in periodic physical, medical, and dental assessments to achieve optimal compliance with health and fitness standards.

CHAPTER TWO

OPERATIONS

To develop anything the underlying thought and reason must govern, and then the organization must be built up to meet it.

Brigadier General William “Billy” Mitchell

We must be ready to support Combat Arms and operations. If we can't be ready, there's no reason to be in uniform. It's as simple as that.

Lieutenant General Charles H. Roadman II
Air Force Surgeon General

FORCE HEALTH PROTECTION OVERVIEW

Force Health Protection (FHP) addresses all health-related threats affecting the combat force and the supporting community before, during, and after deployment. FHP is the life-cycle maintenance program for the human weapon system. The life cycle in figure 2.1 represents a continuous health surveillance program of disease and casualty prevention, health promotion, and medical intervention. The perfor-

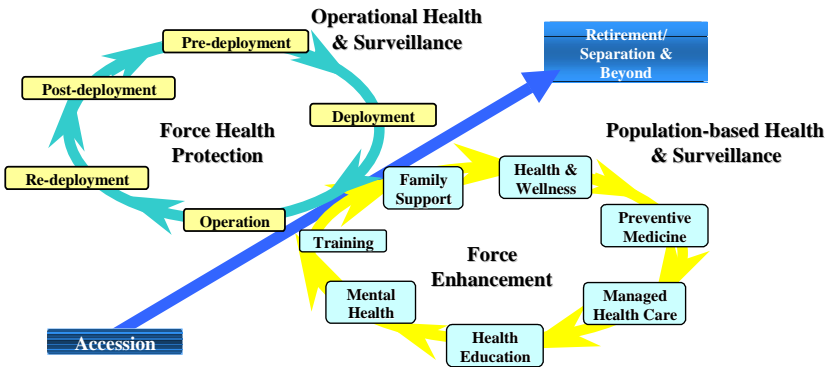


Figure 2.1. Human Weapon System Life-Cycle

mance, enhancement, and sustainment of the human weapon system require the same level of care as any other weapon system.



FHP encompasses three interrelated elements: a **healthy and fit force, casualty prevention, and casualty care management.**

Healthy and Fit Force



A healthy and fit force is the necessary precondition for all other elements of FHP.

A healthy and fit force focuses on the preventive components of psychological, physical, and occupational health requiring a number of programs and components for its success. Physical fitness training, health promotion programs, family support services, occupational health programs, periodic health assessments, stress management, and managed care programs for Department of Defense (DOD) beneficiaries are the **building blocks for a healthy community.**

Casualty Prevention

Casualty prevention concentrates on countering two types of threats: health threat and enemy threat. The **health threat** is composed of a complex set of environmental and operational factors that combine to produce DNBI—the largest number of military casualties. The **enemy threat** usually produces smaller numbers of more serious casualties. Fail-

ure to counter either threat jeopardizes mission accomplishment and ultimately impacts achieving operational objectives. **Medical readiness provides the means to mitigate these threats.**

Casualty Care Management

Casualty care comprises a continuum of essential care to stabilize a casualty in theater. This begins with providing health care for DNBI and combat casualties as quickly and as close to the injury location as possible. **The AFMS deploys tailored field medical units and two primary support systems to accomplish en route care in a theater of operations: the air transportable hospital (ATH) and aeromedical evacuation (AE).**



The air transportable hospital provides flexibility in conventional or chemically hardened (CHATH) packages.

- ✪ The ATH is a modular, tailorable, incrementally deployable asset providing prevention, stabilization, and AE preparation, sustainment, and specialty care. It is designed to support deployed forces, or specific requirements of a select population group, across the entire spectrum of contingency operations. This modular approach provides the commander flexibility to tailor a health support package while reducing the airlift requirements for medical forces in theater. The ATH can be used in chemical or conventional environments.



The C-9 Nightingale is the only airframe designed for the sole purpose of aeromedical evacuation.

- ✪ Fixed-wing AE supports the entire spectrum of global patient movement and medical sup-

port: from contingency and wartime to peacetime operations. The global AE system is a key component of a patient's en route care from point of origin to destination, moving both the stabilized and the stable patient. AE enables patients



to be rapidly evacuated and transported to the most appropriate level of care. Movement of patients in peacetime is a derivative of the wartime training requirement and an integral part of the total DOD health care delivery system.

AIR FORCE MEDICAL SERVICE OPERATIONS

The AFMS faces greater challenges today than 50 years ago. Economic, technologic, sociologic, and unconventional challenges at home and abroad are putting extreme pressures on the medical system as it prepares to support Air Force medical missions and our national interests. In order to be strong and flexible enough to meet these challenges, the AFMS has modernized its mission capabilities into five operational components: building healthy communities, managing health care, tailoring the medical force structure, ensuring medical readiness, and customer satisfaction. Customer satisfaction is the AFMS overarching primary goal and end state. Through total re-engineering these interrelated components form one infrastructure—one medical service (see figure 2.2).

The AFMS operational focus is built upon a strong partnership foundation among DOD and civilian health care professionals, line leadership, and beneficiaries. This partnership centers on a population-based health care delivery system that directly supports the FHP missions.

The AFMS integrates two distinct but interdependent missions supporting FHP: delivering population-based health care and providing wartime or contingency operational health support in a theater of operations. The Air Force ensures FHP by promoting the health of MHS beneficiaries through the best clinical and business practices. Implementation of these best-practice health care measures ensures efficient and effective responsiveness to readiness missions, personnel readiness requirements, and optimal beneficiary health needs.

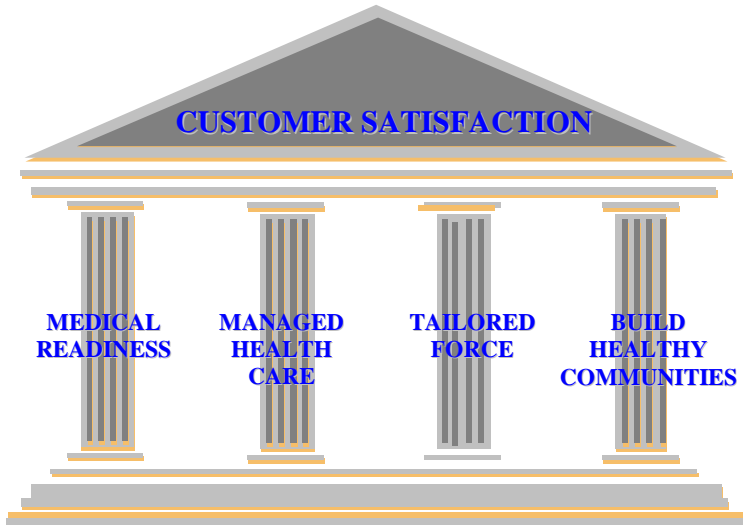


Figure 2.2. Air Force Medical Service Operational Focus

BUILDING HEALTHY COMMUNITIES

Building healthy communities ensures the health and readiness of all airmen during wartime, contingency, and garrison operations. Population-based health care in concert with DOD and civilian health care professionals integrates a prevention-oriented focus with world-class health care delivery and AE systems. This along with civilian and other base support agencies, such as family services, chaplain, and HAWCs are vital to building healthy communities. Population health and force enhancement programs, such as physical health assessments (PHAs), can identify health risk factors and reduce stress in the work place and the environment. They improve the morale and general well-being of the force and provide additional coping mechanisms to handle stress.

Population Health

Population health improvement of active duty members is the cornerstone of FHP. Population health encompasses caring for individuals with acute, one-time illnesses or injuries as well as caring for patients with chronic diseases or conditions. Total employment of preventive and health promotion programs is key to population health. Population health includes:

- ✦ Describing the demographics, needs, and health status of the population enrolled to a medical treatment facility (MTF). Understanding the needs of this population can improve the entire community's health status as well as the Air Force's ability to measure system efficiency and effectiveness.



- ✦ Proactively delivering health-oriented preventive services through education and training, conducting physical health assessments, and putting prevention into practice.

A total community approach to population health reduces unhealthy risk factors and provides opportunities to enhance health and fitness. Evaluating population health improvement and health care delivery promotes effectiveness and efficiency through support from established data systems (see figure 2.3).

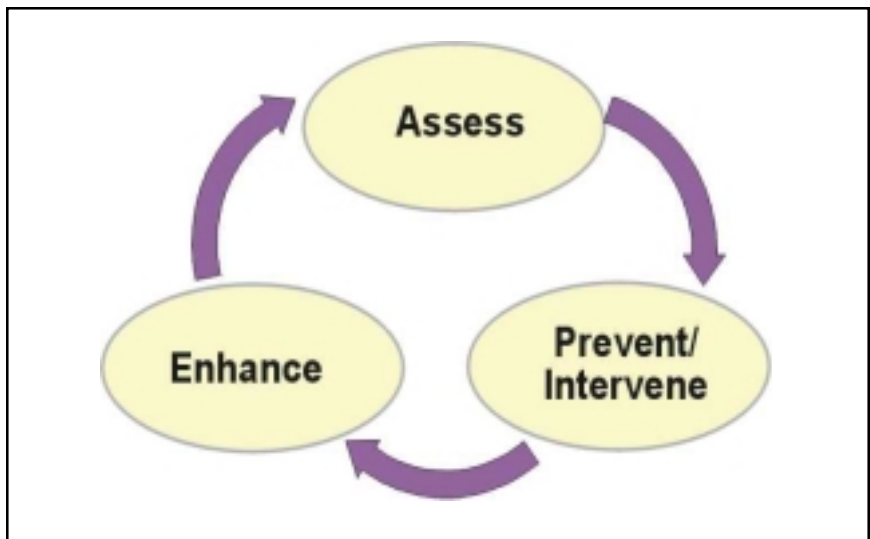


Figure 2.3. Preventive Health Assessment

Force Enhancement

Prevention-oriented programs in peacetime strengthen force performance during wartime, contingency, and MOOTW and decreases combat casualties and DNBI. Participation in stress reducing recreational activities and regular physical fitness programs enhances performance and minimizes limitations caused by illness and injury. Assuring garrison or deployed forces that their families have access to health care increases force effectiveness and decreases emotional stress.

Environmental safety and occupational health issues are included in prevention-oriented health programs. The health of the human weapon system in the work place and of the community is a vital part of force enhancement. Anticipating, evaluating, and controlling risks that impact the health of the population optimizes productivity and performance in mission accomplishment. The AFMS's direct involvement with human performance and the design and operation of military weapon and support systems can increase effective airman-weapon system integration.

MANAGED HEALTH CARE

Managed care is evolving to primarily focus on prevention-oriented health care as a result of changing technology and health care industry standards. Prevention-oriented, population-based health care is vital to supporting combat arms. Managed care is designed to meet peacetime operational demands and deliver world-class



health care to Air Force and DOD communities. It enables AFMS personnel to maintain the necessary skills and experience to mitigate disease and injury and render casualty management and treatment in support of military operations, humanitarian assistance, and MOOTW.

Leadership provides the foundation for managed care delivery through a coordinated and cooperative effort from the Air Force community. Warfighters and their families must have personalized health care that considers the military member's working environment and the stresses

involved at work and in the home. The right number and specialty mix of health care providers for individuals are essential to optimizing personalized health care. Evaluation and assessment of this “whole environment” approach improve or modify health services to meet customer needs.



TAILORED FORCE

Health services assets may fill a supporting role for aerospace missions, may operate in humanitarian or civic actions, or operate in conjunction with a multinational effort, a contingency, or war. **To meet operational and peacetime requirements, the AFMS organizes, trains, and equips to provide a ready medical force.** The AFMS



The Critical Care Air Transportation Team is specifically designed to augment aeromedical evacuation crews when transporting stabilized patients.

provides an infrastructure designed to promote and sustain a medically ready force throughout the entire spectrum of military operations.

AFMS assets are tailored to meet these specific operational and environmental requirements and include specialized medical units, expandable ATH modules, and a fixed-wing AE system. Two examples of these specialized packages are the air transportable clinic (ATC) and the CCATT.

Total Force Management

The AFMS uses total force management and tailors resources to meet military unique missions through mobile, lighter, and tailored equipment and personnel unit type codes (UTCs). The focus is on having the right force size and specialty skills mix, at the right place, at the right time. From accessions to retirement, professional standards need to be met to achieve the right force structure of health professionals.

Special Operations Medical Capabilities

Special operations health services personnel and equipment interface with traditional medical assets providing an interoperable combat support capability. Air Force special operations medical resources provide support outside the boundary of traditional medical infrastructure. These capabilities are usually in areas of higher health and operational threat. Special operations medical missions provide:

- ✦ Operational medical flights with special operations forces medical elements (SOFME).
- ✦ Special tactics personnel such as pararescuemen providing advanced care for survival and recovery assistance.



The Mobile Ophthalmic Surgical Team (MOST) medically and surgically evaluated and treated eye disorders in the indigent population of rural Ecuador during Operation SOUTHERN HOPE.

- ✦ Psychological preselection screening.
- ✦ Comprehensive medical and operational flight training to support deep operations casualty evacuation via special operations aircraft.
- ✦ Focused medical logistics capability.
- ✦ Rapidly deployable, modular, small footprint equipment packages.

MEDICAL READINESS

National security and military strategies impact health services support requirements by driving new war-time scenarios and assumptions. **The AFMS organizes, trains, and equips to provide rapid response in support of theater commanders, to manage peacetime health services, and to support the increasing demands of MOOTW.**



The total force should possess the necessary technology, field and clinical skills, AE, professional training, and education to maintain medical readiness in support of military operations and population-based health care.

Total Force Partnership

National military strategy requires reserve and guard assets be integrated into Air Force war-fighting capability. In 1973, DOD adopted a total force policy that acknowledges all active, guard, reserve, and civilian personnel would be utilized to provide US defense. **Total force partnership provides a blueprint for medical personnel to organize, train, and equip as one seamless team** thus optimizing medical readiness capability and total force utilization. Active, guard, and reserve force capabilities are integrated through:

- ✦ Sharing values and principles.
- ✦ Optimizing a total force strategy.

- ✦ Using technology effectively and efficiently.
- ✦ Training for joint taskings.
- ✦ Creating a dynamic environment to maximize force readiness and sustainability.

Education and Training

FHP addresses health-related threats affecting combat forces and the supporting community, emphasizes disease and casualty prevention, and includes health promotion, education, and medical intervention. Formal technical and professional training is needed to ensure force readiness and occupational, technical, and professional skills. Specialized training, such as self-aid, buddy care, and trauma life-support assist total force airmen and civilians in casualty care and management. Planners should design realistic training, exercises, and simulations to include health services support during military operations.

Technology Modernization

Integration of new technologies is vital to force readiness. The accelerated pace of technological change and revolution in national strategy brings great pressure to bear on reducing infrastructure and demands continuous review and analysis of health services support. New drug therapies, diagnostics, and modernization initiatives, such as filmless radiology, noninvasive vital signs monitoring, telemedicine, and hemorrhage-stopping bandages will continue to ensure a light, mobile, expeditionary medical force. This modernization, integrated with war skills and health care protocols, enhances force survivability.

Employ the Force

During the transition to war or contingency operations, airmen perform intense set-up operations in a new environment where they must initially adapt. Special attention to FHP and health and safety risks must be considered. As operational forces are received into the theater of operations, medical, civil engineering, and services personnel should advise commanders on the proper setup of drinking water systems, food preparation and storage facilities, waste storage and disposal, fitness, recreational facilities, housing, industrial operations infrastructure, and other

public health and safety issues. This critical guidance on, and assistance in, bed-down planning activities help mitigate DNBI.

AFMS personnel provide theater commanders with a medical estimate comprised of risk assessments and analyses on potential or actual health related environmental threats and the effectiveness of preventive measures. This information should be used as guidance at the start of force employment planning. The medical estimate provides the commander:

- ✦ Information on indigenous and enemy threats such as biological weapons, dangerous animals, plants, and microorganisms that may adversely affect the health of the deployed force.



- ✦ Description of all national medical resources in the deployment area to include availability and capabilities of host medical assets.

The medical estimate is a useful tool to identify health threats and help commanders decide the best location for deployed personnel.

- ✦ Description of the human performance impacts and constraints of the physical environment, such as ambient temperature, altitude, and humidity.

- ✦ Information to drive work-rest cycles and other additional countermeasures that can affect command decisions regarding manning and other resources.

Position and Sustain the Force

Commanders and the AFMS plan and prepare to maintain the necessary support to enable continuity of operations throughout the execution of wartime, contingency, MOOTW, or garrison operations. FHP elements, such as health surveillance information gathering and prevention programs, continue throughout the duration of operations. Positioning and sustaining the force includes:

- ✦ Oversight of food, water, disease carrying pests, and other individual, occupational, or environmental health-related factors important to theater commanders.
- ✦ Protection of health records data. Although medical information is not classified, it can become an operations security (OPSEC) indicator depending upon the situation or mission. Eliminating these indicators may entail restrictions on medical information dissemination.
- ✦ Reduction of nuclear, biological, chemical (NBC) and conventional effects on the operational forces. The AFMS employs protection measures and support equipment to detect or counter potential and adverse NBC and conventional threats. In concert with civil engineering personnel, medical support to the commander includes advice regarding chemical and biological detection systems.

Aeromedical Evacuation System

The aeromedical evacuation system is the rapid fixed-wing intertheater and intratheater transportation of sick or injured personnel under medi-



From Operations BABY LIFT to DESERT STORM, and from MOOTW to major theater wars, aeromedical evacuation has been in the forefront of global patient movement.

cal supervision to appropriate levels of health care. Movement of patients normally requires specially qualified AE crewmembers to accompany the patient, specific air traffic control considerations to comply with patient driven altitude and pressurization restrictions, and special medical equipment. This robust and responsive system is highly capable of en route treatment of stabilized and stable casualties. It is designed to quickly evacuate patients who require more care than is available in theater, or longer recovery than the theater evacuation policy mandates.

- ✦ Intertheater AE—Redesignated or dedicated military AE aircraft are used during daily operations to transport patients between the originating theater and points outside the theater, to include the continental United States (CONUS) and other theaters. Contingency intertheater AE



will normally be accomplished using dedicated Civil Reserve Air Fleet (CRAF) airframes. Redesignated or dedicated military AE aircraft may be used on an urgent or priority basis or when AE CRAF capability is exceeded. Alternatives to AE CRAF or military aircraft may be pursued when competing airlift or evacuee requirements reduce airframe availability. These alternatives could include using other organic military aircraft, even CRAF passenger aircraft, or obtaining authorization for commercial travel for ambulatory patients who do not require in-flight supportive medical care.

- ✦ Intratheater AE—Involves movement of patients within the theater of operations from aeromedical staging facilities (mobile and fixed) to the next level of care facilities. This movement of casualties is usually accomplished using dedicated or scheduled aeromedical aircraft.

Recover the Force

The AFMS plans for and maintains the ability to support postconflict operations. All base services and force protection measures remain until all personnel have departed from a deployment site. Planning begins

prior to deployment and continues throughout the mission or conflict, and includes:

- ★ Reconstituting health records. Health records must document all health-related incidents and occupational and environmental exposures sustained by an individual while deployed. This is critical to follow-up health care of returning forces.
- ★ Preparing for retrograde movement. Units returning to home station must perform decontamination, pack equipment, mark items for refurbishment or disposal, and arrange for disposal of hazardous waste following theater guidance and plans.
- ★ Conducting medical surveillance. Effective, comprehensive, medical surveillance includes collecting relevant postdeployment health information from returning individuals. This ensures a valid database that can be used to provide comprehensive individual health care and ensure a complete and reliable medical intelligence database for future deployments.
- ★ Repatriating. Every major US military conflict includes the possible event of capture and detention of US forces. AFMS personnel must plan for this possibility to provide appropriate follow-up care for repatriated US prisoners of war (POWs), including their families, who also need support during and after the conflict.
- ★ Redeploying. During redeployment activities, Air Force personnel may encounter numerous demands to attend to the needs of the indigenous population. Close coordination and cooperation among military forces and government or nongovernment agencies are particularly critical during the transition period when forces are redeploying and functions begin transferring to nonmilitary organizations.

Focused Medical Logistics

Focused medical logistics is comprised of four elements: joint theater logistics command and control (C2), CONUS reachback, time definite delivery, and velocity instead of inventory. The fusion of positive control, information, and transportation enables the Air Force to rapidly order, ship, track, shift, and deliver medical materiel on time directly to the warfighter. The term “positive control” as it pertains to focused medical

logistics is the direct integration and control of all functions in the supply chain, including procurement, transportation, and distribution. Other Services and the Defense Logistics Agency may provide assistance. Focused medical logistics reduces lead-time, transportation requirements, duplicate orders, overstocking, and the in-theater “footprint” of theater buffer stock. Buffer stock is the minimum quantity of life saving and other critical materiel to sustain operations if the flow of materiel is disrupted.

When considering deployable platform equipment and supplies, or the acquisition of either, emphasis should be placed on multiuse, easily maintainable, and commercially available products. Maximum standardization of pharmaceutical and medical-surgical equipment and supplies among Services should be an important consideration for joint planning.

CUSTOMER SATISFACTION

A customer-focused culture centers on FHP and prevention-oriented health programs and processes. Customer satisfaction, from the theater commander to the family member or beneficiary, is a result of effective communication, leadership, education, and training. Applying the best clinical practices contributes to customer satisfaction and is a result of constant performance measurement and management as well as user evaluation of product delivery, services, and support systems. Commitment to answering the needs of the individual ensures stability and continuity of world-class health care.

The people who make up our Air Force team are the most important thing for our service to focus on. They are the foundation of our strength. We must recruit, train and retain the highest quality force possible. If we are to be successful, then we must take care of our people and their families.

**General Ronald R. Fogleman, USAF, Retired
Air Force Chief of Staff**

CHAPTER THREE

COMMAND AND CONTROL

Health services must support the global responsibilities of the Air Force. The AFMS structure and processes are simple, responsive, and flexible to support joint or multinational operations. They are organized based on the principle of “centralized control and decentralized execution” to exploit asset flexibility and versatility. AFMS commanders ensure the most current health-related information is available to sustain the fighting force. Health information systems and programs required to facilitate this should be in place and fall under the most direct command and control structure possible to ensure timely support to the warfighters.

COMMAND RELATIONSHIPS

Clear and effective command relationships are central to effective operations. Health services C2 requirements are coordinated, integrated, and allocated, as appropriate, at the highest levels of C2 infrastructure. C2 relationships must remain flexible enough to meet any situational need, (i.e., the type of operation, mission objectives, existing host-nation infrastructure, or multinational participation). AFMS communications should be reliable within the theater and from the theater to the CONUS. These communications should also link forward medical elements, through each level of capability, to final destination hospitals. Development of Air Force health systems should incorporate the changing nature of global operations, e.g., emerging telemedicine capabilities. Health information management systems provide:

- ✧ Interoperability with other DOD medical systems.
- ✧ Timely, accurate, and relevant information on blood management, patient tracking and movement, and medical logistics.
- ✧ Status of medical units, evacuation workload, and critical resources.

While commanders might incorporate some limited medical technology support into C2 systems, care must be taken not to violate the Geneva Conventions, and thus cause medical facilities to lose their protected status. For example, medical facilities cannot retain their protected status and house information transfer nodes that will transmit data supporting

military operations, in addition to medical information. System developers must understand these requirements to effectively implement and support aerospace and medical operations.

Chief of Staff of the Air Force and Headquarters, USAF

The Chief of Staff of the Air Force is responsible for organizing, training, and equipping the fighting force. Headquarters, United States Air Force develops policy regarding C2 operations, reporting, training, and maintenance operations, and maintains C2 integrity during military operations by allocating appropriate resources.

Air Force Surgeon General

The Air Force Surgeon General (SG) is primarily responsible for developing and coordinating health care policy for the AFMS. The SG is also responsible for coordinating and aligning health care programs and services to integrate with other Services' medical departments and the Office of the Assistant Secretary of Defense for Health Affairs (OASD-HA). This supports a DOD enterprise-wide health care system.

Major Commands

The Air Force organizes, trains, and equips air forces through major commands (MAJCOMs). The MAJCOMs provide forces to combatant commands for employment. MAJCOM organizations are based on combat, mobility, space, and special operations, and the materiel support required for those operations. For example, Air Mobility Command is the AE proponent for active and air reserve component forces. The MAJCOM Surgeon is responsible for planning and executing health services operations to support wartime or contingency operations.

Air Force Forces

The Commander, Air Force forces (COMAFFOR) serves as the “single-voice” Air Force to the joint force commander, and is responsible for all Air Force forces (AFFOR) assigned or attached to the air component in joint or multinational operations. The COMAFFOR employs and sustains assigned and attached Air Force forces in-theater. A surgeon is a member of the COMAFFOR special staff (see figure 3.1) and is the director of Air Force health services operations. The surgeon is responsible for overall health resources management and provides information on health

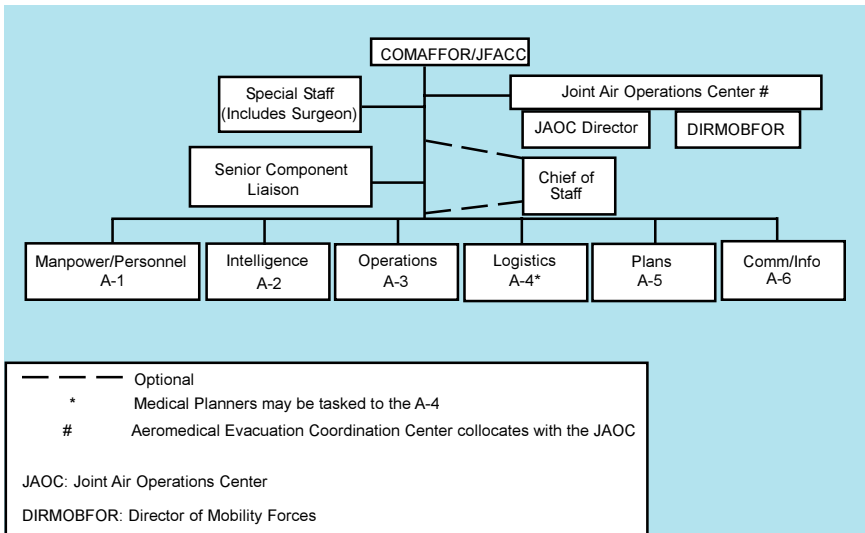


Figure 3.1. Headquarters Organization with COMAFFOR as Joint Force Air Component Commander (JFACC)

surveillance and risk assessments, sustainment, and other force health protection issues.

The surgeon does not exercise direct control but provides a planning, coordination, and oversight role on the COMAFFOR special staff. The organizational structure represented in figure 3.1 is only one example of how a COMAFFOR can organize the staff.

Aerospace Expeditionary Force

The aerospace expeditionary wing (AEW) commander has a medical group commander on staff (see figure 3.2). The medical group commander is responsible for ensuring all health services assets are ready to support a total or partial wing deployment. Some examples of these assets are logistics, surveillance, and other force health protection measures.

Aeromedical Evacuation Command and Control

The Director Mobility Forces (DIRMBOFOR) is responsible for providing effective aeromedical evacuation. The aeromedical evacuation coordination center (AECC) provides operational and communications network control for theater AE elements. The AECC manages the medical aspects of AE mission operations and is the operations center where the

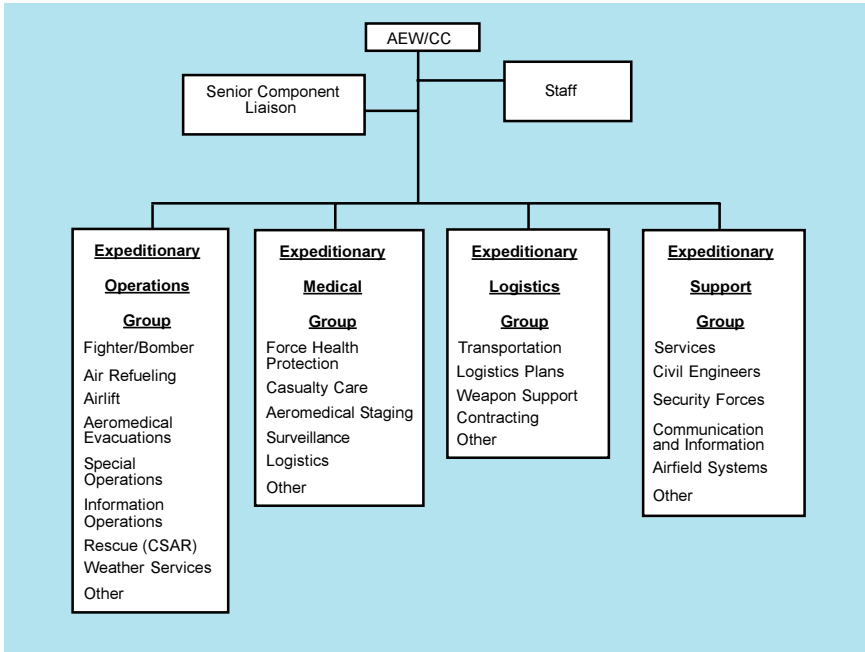


Figure 3.2. Notional Aerospace Expeditionary Wing

overall planning, coordinating and directing of theater AE operations are accomplished. The AECC is responsible for identifying and coordinating AE airlift requirements, notifying the appropriate elements of airlift schedules, and monitoring the execution of AE missions to balance the requirement for theater bed space and evacuation capacity. The AECC serves as the liaison team in the Air Mobility Division for deployed medical units in theater and the tanker/airlift control center for air mobility assets. The AECC should be deployed simultaneously and independently from the joint air operations center (JAOC) but requires collocation with JAOC (see figure 3.1).

The Theater Patient Movement Requirements Center (TPMRC) is responsible to the theater CINC and is the centralized agency that initially identifies evacuee requirements to the next level of care. AE C2 elements act upon patient movement requests identified by theater CINC or US Transportation Command (USTRANSCOM) patient regulating and movement organizations.

The Global Patient Movement Requirements Center (GPMRC) is the single manager for regulating intertheater patient movement to CONUS-based medical treatment facilities. The GPMRC centrally coordinates patient

movement requirements and matches them with available, appropriate transportation.

OTHER CONSIDERATIONS

CONUS Reachback

A seamless data flow from the forward location through the entire support pipeline must be in place to ensure the success of CONUS reachback. Tailored medical support packages with CONUS reachback capability are necessary to fully optimize footprint reduction and minimize the logistics strain placed upon the theater. Early stabilization and evacuation coupled with early reporting and notification for required replacements may also assure successful reachback efforts.

Participation in Joint Operations

The theater CINC or joint task force (JTF) commander has authority to organize in a manner that provides optimum effectiveness for the mission. AF health services assets should be responsive and flexible to support



Prompt, effective, and unified health care services enhance the combat fighting ability of joint forces, providing an effective response to humanitarian and other MOOTW missions.

changing theater operational requirements. Joint participation provides smaller, mobile, flexible, and enhanced elements tailored to provide essential care for missions ranging from major theater wars to MOOTW.

Base Operating Support

Base operating support should provide all necessary infrastructure prior to initiating prevention and other health care programs. Organizational support structures should be in place to enable health services programs to function. This support may be provided from joint, host nation, or coalition resources.

In-transit Visibility

In-transit visibility is the ability to instantaneously track the identity, status, and location of DOD unit and nonunit cargo, passengers, and patients throughout the spectrum of military operations. AFMS personnel should coordinate with logistics functions and Personnel Support for Contingency Operation (PERSCO) to provide timely and accurate information and accountability on all patients and medical materiel.

Resources, Sourcing, and Distribution

The COMAFFOR retains the ability to source, distribute, and redistribute theater force support resources after coordination with the JFC. The surgeon retains the capability to meet AFFOR requirements using CONUS reachback as the primary resupply method, focusing on velocity not inventory; this phrase refers to the requirement for medical logistics support to be responsive, flexible, and precise. It must also deliver a timely flow of material direct to the warfighter.

Retrograde Management

An aggressive retrograde support program adjusts to existing operational demands through flexible procedures and priority movement of assets. The AFMS plans retrograde management to ensure maximum recovery of health services assets.

At the Very Heart of Warfare lies Doctrine

Suggested Readings

Air Force Publications

AFDD 1, *Basic Air Force Doctrine*.

AFDD 2, *Organization and Employment of Aerospace Power*.

AFDD 2.3, *Military Operations Other Than War*.

AFDD 2-4, *Combat Support*.

AFDD 2.4-1, *Force Protection*.

Joint Publications

Joint Pub 4-02, *Doctrine for Health Services Support in Joint Operations*.

Joint Pub 4-02.1, *Joint Tactics, Techniques, and Procedures for Health Services Logistics Support in Joint Operations*.

Joint Pub 4-02.2, *Joint Tactics, Techniques, and Procedures for Patient Movement in Joint Operations*.

Joint Pub 6-0, *Doctrine for Command, Control, Communications, and Computers (C4) Systems support to Joint Operations*.

Other Publications

Article 21. Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (GSW). 12 August 1949.

Glossary

Abbreviations and Acronyms

AE	aeromedical evacuation
AECC	aeromedical evacuation coordination center
AFDD	Air Force doctrine document
AFFOR	Air Force forces
AFMS	Air Force Medical Service
AFRC	Air Force Reserve Command
AMC	Air Mobility Command
ATC	air transportable clinic
ATH	air transportable hospital
C2	command and control
CCATT	Critical Care Air Transport Team
CHATH	chemically hardened air transportable hospital
CINC	commander in chief; commander of a combatant command
COMAFFOR	Commander, Air Force forces
CONUS	continental United States
CRAF	Civil Reserve Air Fleet
DIRMOBFOR	Director Mobility Forces
DNBI	disease and nonbattle injury
FHP	force health protection
GPMRC	Global Patient Movement Requirements Center
HAWC	health and wellness center
JAOC	joint air operations center
JFACC	joint force air component commander
JP	joint publication
JTF	joint task force
MAJCOM	major command
MHS	Military Health System
MOOTW	military operations other than war
MOST	Mobile Ophthalmic Surgical Team
MTF	medical treatment facility

NBC	nuclear, biological, and chemical
OASD-HA	Office of the Assistant Secretary of Defense for Health Affairs
OPSEC	operations security
PERSCO	Personnel Support for Contingency Operation
PHA	physical health assessment
POW	prisoner of war
SG	Surgeon General
SOFME	special operations forces medical elements
TPMRC	Theater Patient Movement Requirements Center
USTRANSCOM	United States Transportation Command
UTC	unit type code

Definitions

aeromedical evacuation. The movement of patients, under medical supervision, to and between medical treatment facilities by air transportation. Also called **AE**. (JP 1-02)

aeromedical evacuation coordination center. A coordination center, within the joint air operations center's airlift coordination team, which monitors all activities, related to AE operations execution. It manages the medical aspects of the AE mission and serves as the net control station for AE communications. It coordinates medical requirements with airlift capability, assigns medical missions to the appropriate AE elements, and monitors patient movement activities. Also called the **AECC**. (JP 1-02)

aeromedical evacuation system. A system that provides: a. control of patient movement by air transport; b. specialized medical aircrew, medical crew augmentees, and specialty medical attendants and equipment for inflight medical care; c. facilities on or in the vicinity of air strips and air bases for limited medical care of intransit patients entering, en route via, or leaving the system; d. communication with originating, destination, and en route medical facilities concerning patient transportation. (JP 1-02) *[A system that provides control of patient movement by air. Includes*

specialized medical aircrews, medical crew augmentees, and specialty medical attendants and equipment for in-flight medical care; facilities on or in the vicinity of air strips and air bases for medical care of in-transit patients, and communication with originating, destination, and enroute medical facilities concerning patient transportation. {Italicized definition in brackets applies only to the Air Force and is offered for clarity.}

air force medical service. The title given to the Air Force medical community. Encompasses every health care discipline such as: physicians, nurses, technicians, dentists, bioenvironmental engineers, medical administrators, etc. Also called the **AFMS**.

air transportable clinic. The air transportable clinic (ATC) provides the equipment for aerospace medical support to flying squadrons and a deployed population of 300-500 personnel. Capabilities include very limited outpatient clinical services and initial trauma response for 30 days. The ATC is dependent upon base operating support such as power and transpiration and assumes other medical facilities are available and provides hospital services, aeromedical evacuation, and necessary back-up support. The ATC is generally staffed by a Squadron Medical Element (SME).

air transportable hospital. The air transportable hospital (ATH) is the premier deployable medical system composed of subcomponent building blocks so medical capabilities, airlift, and support requirements can match specific operational requirements. The ATH provides medical services and theater hospitalization throughout the entire spectrum of contingencies from humanitarian operations to major theater wars (MTWs). The ATH can expand up to a 50-bed facility with the ability of supporting 3000-5000 personnel for 30 days, providing second level and limited third level of care capabilities. These capabilities include Advanced Cardiac Life Support (ACLS); Advanced Trauma Life Support (ATLS); emergency services; outpatient services; limited in-patient holding capability; resuscitative, general, and orthopedic surgery; laboratory services; x-ray services; pharmacy services; dental services; medical maintenance, and administration. It also provides the capability to stabilize casualties for return to duty or evacuation.

casualty. Any person who is lost to the organization by having been declared dead, or by duty status-whereabouts unknown, missing, ill, or injured. (JP 1-02)

chemically hardened air transportable hospital. The chemically hardened ATH (CHATH) shelter is formed of sections of TEMPER tents in which a chemical/biological protective liner is installed and an over-pressure environment is created. Airlocks allow the movement of medicine, food, water, and waste in and out of the CHATH without compromising hospital cleanliness or chemical and biological protection. A chemically hardened air management plant (CHAMP) is a major component of the CHATH, and is used to create the required “over-pressure” and air filtering capability for the hospital.

en route care. Enroute care requires the use of state of the art, lightweight critical care equipment to ensure the evacuation system is able to successfully transport a patient from the point of injury or illness to definitive care. (JP 4-02)

equipment. In health services, to prevent health threats caused by the environment, appropriate monitoring and control materiel should be made available to prepositioned health services personnel prior to deployment and employment of forces.

evacuation. The process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities. (JP 1-02)

focused medical logistics. Consists of four elements: 1. *Joint Theater Logistics Command and Control.* Ensures clear lines of authority for responsive logistics support and allows the commander in chief (CINC) to prioritize and allocate scarce Service resources to eliminate redundancy in theater. 2. *CONUS Reachback.* Requests for logistics support are forwarded from the theater directly to a sustaining base, usually CONUS. Reachback provides complete electronic commerce abilities, ensuring full integration with industry, total asset visibility, and seamless integration of information systems. 3. *Time Definite Delivery.* “Just enough” required materiel is delivered just before needed at precisely the right time and place. 4. *Velocity Not Inventory.* Logistics support must be responsive, flexible, and precise. It must deliver a constant and rapid flow of materiel direct to the warfighter.

focused medical logistics distribution. *Tactical:* This level of focused medical logistics takes place at the deployed unit and joint theater levels. It requires fully integrated systems and processes in the form of a joint medical logistics distribution and management element. *Operational:* This

level of focused medical logistics is currently located at Fort Detrick, MD, in the form of a Global Medical Logistics Operations Center whose purpose is to plan and to prepare to support the CINC's medical requirements. *Strategic:* This level of focused medical logistics provides for an agile and flexible procurement and distribution system for the medical community. It is responsive to rapidly changing requirements that moves without interruption or organizational barriers from industry to the field.

force health protection. Force health protection (FHP) is the term used to describe the integrated preventive, surveillance, and clinical programs that are designed to protect the "total force." The goal of FHP is to provide a fit and healthy force when and where the mission requires, while simultaneously adapting the medical forces to a technologically advanced force that is smaller and more mobile. FHP is about preventing medical threats from affecting military forces. It is designed to improve existing health, proactively address health threats, and finally provide care for any illness or injury that does occur.

forward aeromedical evacuation. That phase of evacuation which provides airlift for patients between points within the battlefield, from the battlefield to the initial point of treatment, and to subsequent points of treatment within the combat zone. (JP 1-02)

health threat. Health threats include potential enemy actions or environmental conditions that might act to reduce the effectiveness of fighting forces. Medical intelligence is key to countering medical threats and is produced from the analysis of information concerning medical aspects of foreign areas that have potential impact on operations.

in-transit visibility. The ability to track the identity, status, and location of Department of Defense units, and nonunit cargo (excluding bulk petroleum, oils, and lubricants) and passengers; medical patients; and personal property from origin to consignee or destination across the range of military operations. (JP 1-02)

managed care. A system of health care delivery integrating quality, access, and cost that provides world-class service.

medical regulating. The actions and coordination necessary to arrange for the movement of patients through the echelons of care. This process matches patients with a medical treatment facility which has the necessary health service support capabilities, and it also ensures that bed space

is available. (JP 1-02) [*Process of selecting destination medical treatment facilities with the necessary medical services support capability for patients being medically evacuated, between, into, or out of different theaters of geographic combatant command and CONUS, or routine missions supporting population-based health care.*] {Italicized definition in brackets applies only to the Air Force and is offered for clarity.}

patient. A sick, injured, wounded, or other person requiring medical/dental care or treatment. (JP 1-02)

population-based health care. The process of improving the overall health of a defined population through needs assessment, proactive delivery of preventive services, condition management, and outcomes measurements. Needs assessment describes the characteristics and needs of individuals and groups in the population. It forms the basis for prevention/intervention program development, delivery, and effectiveness. Proactive delivery of preventive services is the foundation for improving population health. Prevention can be considered part of the set of individual and population conditions to be managed. Condition management is the efficient delivery of evidence-based interventions. Outcomes measurements evaluate the population's health-status improvement and the delivery system's effectiveness and efficiency.

population health. The health of defined populations and what determines their health status. This includes the aggregate effect of individual physiological, behavioral, and physical characteristics; economic and social factors; external forces impinging upon the population, such as chemical and physical environmental factors; and the effect of resource investment of those multiple determinants.

population needs assessment. The process of collecting, analyzing, and describing individual and group characteristics (age, gender, occupation, educational level, domicile, etc.) and health needs and practices (currency for preventive services, risk factors, health-care utilization, etc.) within a defined population.

special operations forces medical element. The Special Operations Forces Medical Element (SOFME) personnel provide quality medical care to special operations warfighters. Prevention and treatment of disease and illness is a mission requirement and recognized as a force multiplier. When required, SOFME personnel are trained to provide medical care aboard special operations aircraft, for the movement of patients from

forward areas in or near the combat zone, to other points of definitive medical care.

squadron medical element. The Squadron Medical Element (SME) is a team of two independent medical technicians (IDMT) and one flight surgeon assigned to a flying squadron. The SME deploys with and provides general medical support to that flying squadron. See **air transportable clinic**.

stabilized patient. A patient whose airway is secured, hemorrhage is controlled, shock treated, and fractures are immobilized. (JP 1-02.)

stable patient. A patient for whom no inflight medical intervention is expected but the potential for medical intervention exists. (JP 1-02.)

