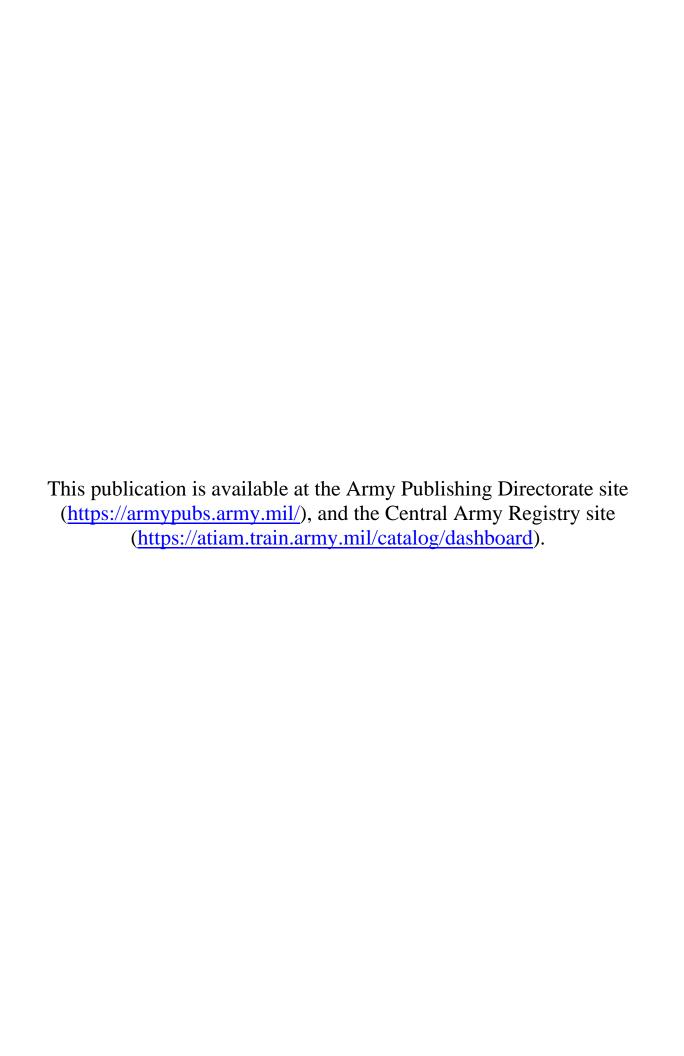
CASUALTY CARE

MAY 2013

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Headquarters, Department of the Army



Change 1 Army Techniques Publication No. 4-02.5 Headquarters
Department of the Army
Washington, D.C, 14 August 2020

Casualty Care

1. Change Army Techniques Publication (ATP) 4-02.5, dated 10 May 2013, as follows:

Remove Old Pages	Insert New Pages
Cover	Cover
pages i through ix	i through v
pages 1-1 through 1-10	1-1
pages 2-1 through 2-8	2-1
pages 3-1 through 3-27	3-1
pages 5-1 through 5-12	5-1
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pages B-1 through B-17	B-1
page Source Notes-1	Source Note-1
pages Glossary-1 through Glossary-5	Glossary-1 through Glossary-4
pages Reference-1 through Reference-4	Reference-1 through Reference-3
pages index-1 through index-4	index-1 through index 2

- 2. New or changed material is indicated by a star (\bigstar) .
- 3. File this transmittal sheet in front of the publication.

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CASUALTY CARE

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^{*} This publication supersedes FM 4-02.10, dated 3 January 2005; FM 4-02.24, dated 28 March 2003; FM 4-02.56, dated 29 April 2003; paragraphs 1-3—5, 1-18, 1-30—31, 1-36—45, 2-1—3, 2-6—18, 2-20—21, 2-23—56, 3-11—15, 3-28—46, and Appendix B of FM 4-02.19, dated 31 July 2009; and Chapters 8, 9, and 11 of FM 4-02.51, dated 6 July 2006.

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Preface

This Army Techniques publication (ATP) is a consolidation of currently existing publications which address the treatment aspect of the Army Health Systems (AHS). The publications being consolidated in this ATP publication include: Field Manual (FM) 4-02.10, 3 January 2005; FM 4-02.19, 31 July 2009; FM 4-02.25, 28 March 2003; FM 4-02.51, 6 July 2006; and FM 4-02.56, 6 July 2006. This publication is intended for use by commanders their staffs, command surgeons, AHS planners, and Army Medical Department personnel and units.

This publication address the casualty care aspects of the health service support mission under the sustainment warfighting function. It describes the various organizational designs for the units providing this support and doctrinal guidance on the employment of these organizations and their functional capabilities.

The staffing and organizational structures and positions presented in this manual are established in table's organization and equipment (TOEs). These tables were current at the time this manual was published. The organization of these units is subject to change in order to comply with manpower requirements criteria outlined in Army regulation (AR) 71-32. These organization are also subject to change at the unit level in order to meet wartime requirements and changes are reflected in the units' modified table of organization and equipment (MTOE).

This publication implements or is in consonance with the following North Atlantic Treaty Organization (NATO) International Standardization Agreements (STANAGs) and American, British, Canadian, Australian and New Zealand (ABCA) standards and publication:

Title	NATO STANAG	ABCA STANDARD	ABCA PUBLICATION
Coalition Health Interoperability Handbook			256
Levels of Medical Support		423	
Blood supply in the Area of Operations		815	
Emergency Alarms of Hazard or Attack (CBRN			
And Air Attack Only)	2047		
Identification of Medical Material for Field Medical			
Installations	2060		
Requirement for Training in Casualty Care and			
Basic Hygiene For all Military Personnel	2122		
Documentation Relative to Initial Medical Treatment	-		
And Evacuation	2132		
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Operations and in Emergency Situations	2136		
Basic Military Medical Records	2348		
Road Movements and Movement Control	2454		
Emergency Supply of Water in Operations	2885		
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Requirements of Operational Rations for Military Us	e 2937		
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The proponent and preparing agency of ATP 4-02.5 is the United States Army Medical Center of Excellence. Send comments and recommendations on DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, United States Army Medical Center of Excellence, ATTN: MCCS-FD (ATP 4-02.5), 2377 Greeley Road, Suite D, JBSA Fort Sam Houston, TX 78234-7731; by e-mail to

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<u>usarmy.jbsa.medical-coe.mbx.ameddcs-medical-doctrine@mail.mil</u> or submit an electronic DA Form 2028. A rational for each proposed change is required to aid in the evaluation and adjudication of each comment.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

The use of trade names of trademarks in this publications is for illustrative purposes only and does not imply Endorsement by the Department of Defense (DOD).

This publication applies to the Active Army, the Army National Guard/Army National guard of the U.S., and the U.S. Army Reserve, unless otherwise stated.

Introduction

The AHS is comprised of a system of interrelated and interdependent systems synchronized to provide a seamless continuum of care from the point of injury, wounding, or illness in a deployed area of operations (AO), through successive increments of greater capability and complexity to definitive, convalescent, and rehabilitative care in the continental United States (CONUS)-support base. Historically, the systems have been referred to as medical functions and include: medical mission command; medical treatment (area and organic support); hospitalization; dental services; preventive medicine services; veterinary services; combat and operational stress control (COSC); medical evacuation (to include medical regulating and en route medical care); medical logistics (to include blood management); and medical laboratory services.

With the publication of FM 3-0 in February 2008, now ADP 3-0, the missions of the AHS were placed under two different warfighting functions, where previously they had only been included in the combat service support battlefield operating system. The two warfighting functions which now contain AHS missions are the sustainment warfighting function and the protection warfighting function. The transition from the battlefield operating systems to the warfighting functions required a new approach in describing the capabilities of the Army Medical Department.

Under the sustainment warfighting function, the mission to provide health service support is comprised of three major components—casualty care, medical evacuation, and medical logistics. Casualty care encompasses medical treatment (organic and area support), hospitalization, the treatment aspects of dental services and combat and operational stress (behavioral health and neuropsychiatric care), and clinical laboratory services. It also includes the treatment of chemical, biological, radiological, and nuclear (CBRN)-contaminated patients.

Under the protection warfighting function, the mission to provide force health protection is comprised of preventive medicine, veterinary services, the preventive aspects of dental services (preventive dentistry) and combat and operational stress control, and the area medical laboratory.

The essential care in theater concept enabled the Army Medical Department to decrease the deployed medical footprint in the AO by shifting the definitive, convalescent, and rehabilitative phases of patient treatment to the CONUS-support base and retaining only those medical care resources required to provide essential care to decrease morbidity, mortality, and long-term disability, to stabilize patients for further evacuation, and/or to return to duty those patients who could recover within the stated theater evacuation policy.

In the aftermath of the Battle of the Black Sea conducted in Mogadishu, Somalia in October 1993, a study of first responder care was undertaken by the U.S. Special Operations Command. This study revolutionized the military's approach to providing Roles 1 and 2 medical care while under hostile fire. The resulting tactical combat casualty care guidelines and procedures are now the standard of care used by all Services in a deployed joint operational area.

Additional initiatives, such as the Joint Theater Trauma Registry, electronic medical records, and new documentation for recording point of injury care, improved combat tourniquets, and hemorrhage control bandages/products have evolved from current operations to increase Soldier survivability and to ensure all medical encounters and exposures to operational hazards are documented.

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★ Chapter 1 Operational Considerations

This chapter has been superseded by ATP 4-02.10.



★ Chapter 2 Medical Treatment (Organic and Area Support)

This chapter has been superseded by ATP 4-02.10.



★ Chapter 3 Hospitalization

This chapter has been superseded by ATP 4-02.10.



Chapter 4

Treatment Aspects of Combat and Operational Stress Control

This chapter discusses the treatment aspects of the combat and operational stress control medical function. This chapter establishes Army doctrine and provides guidance for providing neuropsychiatric treatment and treatment for behavioral health disordered patients in an AO. The information provided in this chapter will assist commanders and their staffs to operate efficiently at all levels of command and throughout unified land operations. The preventive aspects of the combat and operational stress control medical function are discussed in-depth in Army medical doctrine which addresses the force health protection mission under the protection warfighting function. This chapter does not discuss the organizational structure and capabilities of combat and operational stress control units but rather focuses on the triage process and differential diagnosis of other medical conditions which may initially present with behavioral health signs and symptoms. Refer to Army medical doctrine for additional information on the organizational structure of deployed combat and operational stress control organizations.

SECTION I — COMBAT AND OPERATIONAL STRESS CONTROL TRIAGE

TRIAGE PROCESS

- 4-1. The triage process for combat and operational stress control is used to sort Soldiers depending upon the symptoms/needs, capabilities available, and location where they can best be managed in keeping with the combat and operational stress control principles of brevity, immediacy, contact, expectancy, proximity, and simplicity (BICEPS). These principles apply to all combat and operational stress control interventions or activities throughout the AO, and are followed by behavioral health personnel. These principles may be applied differently based on a particular role of care and other factors pertaining to mission, enemy, terrain and weather, troops and support available, time available, and civil considerations.
- 4-2. Assessment is an evaluation of the Soldier's physical and behavioral health needs, potential medical emergencies, and other safety risks. Assessment is performed by behavioral health personnel according to their professional training, expertise, and standards.
- 4-3. Disposition is the combat and operational stress control intervention plan to address the needs identified in the assessment. Disposition has two components that include—
 - Determining what intervention techniques best address the Soldier's needs and functional capabilities.
 - Selecting the best location where the Soldier can be managed. The personnel conducting combat
 and operational stress control triage should consider the needs, abilities, and the safety of the
 Soldier. They should also consider the unit's capacity to provide combat and operational stress
 control interventions based on its mission, resources, response to prior consultations, and
 willingness to participate in combat and operational stress control interventions.

TRIAGE ALGORITHM

4-4. Like surgical triage categories, combat and operational stress reaction also uses triage categories. Each of the combat and operational stress control triage categories are discussed in detail in the following

paragraphs. The combat and operational stress control triage algorithm presented in Table 4-1 uses some of the triage categories with the exception of the *refer* category. *Refer* category cases are discussed in paragraph 4-10.

Table 4-1. The combat and operational stress control triage algorithm

Step 1	Is this a medical emergency?				
	Yes	Refer to nearest medical treatment facility.	No	Go to Step 2.	
Step 2	Does the Soldier require medical/behavioral observation?				
		Go to Step 3 A. No		Does the presumptive operational str behavioral hea	Soldier have combat and ess reaction or alth disorder?
	Yes		NO	Yes	Go to Step 3 B.
			No	Help-in-place	
Step 3	A. Can the Role 2 medical treatment facility or combat and operational stress control Soldier restoration center provide adequate evaluation and intervention?		B. Can the Soldier's unit support the 5 R's ¹ or other treatment interventions?		
	Yes	Hold ²	Yes	Unit	
	No	Refer	No	Is there a suitable support unit?	
				Yes	Rest
				No	Hold ²
Step 4	Has the Soldier improved after appropriate duration of intervention? (Use on subsequent triages.)				

Notes:

TRIAGE CATEGORIES FOR COMBAT AND OPERATIONAL STRESS REACTION CASES

4-5. The following are triage categories that may be used for combat and operational stress reaction cases. The categories of *help-in-place*, *rest*, *hold*, and *refer* cases are discussed below.

Help-In-Place Cases

4-6. *Help-in-place* is used to identify those cases that do not have severe combat and operational stress reactions or behavioral health disorders. These Soldiers are provided combat and operational stress control consultation and education, as appropriate, and remain on duty. These interactions may occur in any setting (for example, dining facility or workplace). Individual identifying information is not retained or documented. There is no implicit or explicit therapist-patient or therapist-client relationship in *help-in-place* interactions.

¹The term 5 R's is defined in the glossary.

²When deciding between two or more potential Role 2 medical treatment facilities or combat and operational stress Soldier restoration centers, refer the Soldier to the one closest to his unit that meets his combat and operational stress control needs.

4-7. The unit identifies those cases that remain with or return to their original unit, either for full duty with their section/platoon or for light duty with extra rest and replenishment within a headquarters element. This option depends on the unit's mission, resources, and the Soldier's symptoms. Personnel performing triage must, therefore, be familiar with the unit's situation and take that into account. When the Soldier's condition improves, the Soldier and/or unit may not feel that additional triage is necessary.

Rest Cases

4-8. *Rest* identifies those cases that are provided rest and replenishment in a nonmedical support unit, usually one that is in support of their unit. These Soldiers do not require close medical or behavioral health observation or treatment. They are unable to return immediately to their own unit either because their unit cannot provide an adequate environment for the 5 R's; or transportation is not available for at least a day; or the 5 R's can best be coordinated from the nonmedical support unit. This option depends on the resources and mission of the available movement and maneuver units, as well as on the Soldier's symptoms. The Soldier's unit must designate an individual within the unit to assist the Soldier and ensure that the 5 R's are provided. The unit must provide or arrange for transportation to return the Soldier to his original unit. When the Soldier's condition improves and he is returned to his unit for duty, the Soldier and unit may or may not feel that additional triage is necessary.

Hold Cases

4-9. Hold refers to those cases that require close medical/behavioral health observation and evaluation at a Role 2 MTF or combat and operational stress control Soldier restoration center because the Soldier's symptoms are potentially too disruptive or burdensome for any available sustainment unit or element. The Soldier's symptoms may be caused by a behavioral health disorder that could suddenly turn worse and require emergency treatment. The Role 2 MTF or combat and operational stress control Soldier restoration center must have the capability to provide the necessary medical observation, diagnostic tools, and adequate stabilization for emergency treatment. When deciding among capable Role 2 MTFs or combat and operational stress control Soldier restoration centers, refer the Soldier to the one closest to his unit that meets his combat and operational stress control needs. Assessment of closeness considers speed and reliability of transportation to and back from the MTF or Soldier restoration center. Consider transferring to another Role 2 MTF or combat and operational stress control Soldier restoration center with increased capabilities before changing a Soldier's triage category to refer. All hold cases will be triaged again by behavioral health personnel or other trained medical personnel after they have been placed in this category. Refer to Army medical doctrine for additional information on the combat and operational stress control Soldier restoration center.

Refer Cases

4-10. *Refer* cases are similar to the *hold* cases, except that *refer* cases are too disruptive and burdensome for the MTF or the combat and operational stress control Soldier restoration center that is not resourced to care for this particular type of case. The MTF or combat and operational stress control Soldier restoration center cannot provide the necessary level of diagnostic and treatment capabilities. *Refer* cases requiring care at a combat and operational stress control reconditioning center, a Role 3 MTF, or possible evacuation out of the theater, will be triaged by behavioral health or other trained medical personnel prior to being transferred to these facilities. For a discussion of the combat and operational stress control reconditioning center, refer to Army medical doctrine for additional information on the combat and operational stress control reconditioning center.

TRIAGE PERSONNEL

4-11. All behavioral health personnel participate in the triage process according to their professional training, experience, and standards. Familiarization training among behavioral health disciplines extends the effectiveness of all behavioral health personnel in triage skills. Medical care providers must be mentored to use the combat and operational stress control triage process. A commander, without consulting BH personnel, providing the 5 R's and placing a Soldier in a support unit for a temporary break does not equate to the Soldier undergoing combat and operational stress control triage.

Triage Considerations

- 4-12. Triage should be initiated when the—
 - Soldier is a self-referral.
 - Chaplain has referred the Soldier.
 - Medical personnel have requested a combat and operational stress control consultation and referred the Soldier.
 - Unit member/buddy has referred the Soldier.
 - Leader has requested an informal referral.
 - Soldier is a command-directed referral (see DODD 6490.1 and DODI 6490.4).
 - Combat operational stress control personnel observe a Soldier's behavior which indicates possible combat and operational stress reaction or a behavioral health disorder.
- 4-13. Factors that influence an assessment may vary in depth and duration due to several other factors. These factors may include the—
 - Referral source.
 - Nature of the complaint.
 - Observed needs.
 - Medical/psychiatric history.
 - Availability of resources.
 - Amount of privacy for conducting assessment.
 - Environmental conditions.
 - Professional training of the person making the assessment.
 - Command interest.
 - Soldiers' cooperation.

Note. Regardless of these factors, behavioral health personnel are responsible for conducting the assessment in a timely manner with professional standards of practice.

Documentation

- 4-14. An assessment is documented according to AR 40-66 whenever the Soldier—
 - Is diagnosed with a behavioral health disorder.
 - Has a condition (or suspected condition) requiring emergency medical evaluation or treatment.
 - Is prescribed psychotropic medication.
 - Is assessed to be a high safety risk (for example, homicidal or suicidal, cognitive impairment, substance abuse, and/or impulsivity).
 - Requests that documentation of his assessment be made in his medical records.
 - Is evacuated beyond a Role 2 MTF or Soldier restoration center for further assessment or treatment.
 - Is command-referred for a behavioral health evaluation.

TRANSFER AND EVACUATION

4-15. All behavioral health personnel are responsible for knowing the transfer/evacuation policies and procedures within their AO. Policies and procedural information are available through the command surgeon, medical regulating officer of the senior medical headquarters, or supporting Role 3 MTF. All relevant background and/or clinical documentation must accompany the Soldier during the transportation or evacuation process.

Mode of Transportation

4-16. Nonambulance transport is the preferred mode of transportation for combat and operational stress reaction and nonurgent behavioral health cases. Examples of nonambulance transportation include the Soldier's unit vehicles, and supporting supply/logistics vehicles. Ambulances convey patient status on Soldiers and often must be reserved for medical emergencies. Under the provisions of the Geneva Conventions, ambulances must be used exclusively in the performance of humanitarian duties, therefore, they cannot be used to return Soldiers to duty and transport must be provided by the supported unit. Neuropsychiatric and behavioral health disorder patients are normally evacuated using ambulances and not nonmedical vehicles of opportunity.

Escorts

4-17. Depending on a Soldier's condition, an escort (either medical or nonmedical) may be necessary to provide safety, monitoring, and accountability during transportation or evacuation. The escort should be a noncommissioned officer or officer of equal or greater rank/grade as that of the escorted Soldier. Escorts must be emotionally mature, responsible, and capable of conducting their escort duties. Frequently escorts carry the Soldier's clinical documentation to the destination MTF. The attending physician at the originating medical facility will determine and administer any medications and/or restraints required prior to evacuating the patient. (See paragraph 4-47 below.)

Feedback

4-18. Good communication is essential for effective continuity of care during the transportation/evacuation process. The Soldier's unit must be informed about his location and status throughout the process. The originating medical facility must provide sufficient documentation about the Soldier's condition, history, and administered interventions. The destination medical facility must provide feedback to the originating medical facility regarding receipt of the Soldier and his documentation.

SECTION II — PRECAUTIONS AND DIFFERENTIAL DIAGNOSTIC PROBLEMS ASSOCIATED WITH COMBAT AND OPERATIONAL STRESS CONTROL TRIAGE

PRECAUTIONS FOR COMBAT AND OPERATIONAL STRESS CONTROL TRIAGE

4-19. Medical emergencies must be identified during combat and operational stress control triage. Medical emergencies consist of physical illnesses or injuries and/or behavioral health disorders that can result in permanent injury, disability, or death. Early identification of a medical emergency avoids unnecessary delay in treatment. Medical emergencies can cause emotional and/or behavioral health changes and may resemble combat and operational stress reactions in presentation. The following conditions and behaviors could be medical emergencies. Therefore, it is important to ensure medical examinations and disposition of Soldiers are completed when they display the following conditions:

- Psychosis.
- Mania.
- Alcohol withdrawal.
- Substance intoxication.
- Delirium.
- Suicidal gesture, attempt, or high risk for suicidal behavior.
- Catatonia.
- Significant paralysis, partial or incomplete paralysis, and/or sensory loss.

4-20. Assessing for physical illnesses or injuries is a critical part of combat and operational stress control triage. The behavioral health personnel must always consider physical illnesses or injuries that resemble

combat and operational stress reactions or behavioral health disorders. Physical illnesses or injuries may not reach the threshold of a medical emergency, but must be recognized and appropriately treated. Assessing for physical illnesses or injuries requires an adequate review of body systems and a quick physical examination. The examination includes vital signs, examination of head, eyes, ears, nose, throat, chest, abdomen, and extremities with simple testing of reflexes and muscle strength. In field situations (Roles 1 and 2), negative or normal findings need to be documented on DD Form 1380 (Tactical Combat Casualty Care (TCCC) Card (instruction)) and/or DA Form 7656 (Tactical Combat Casualty Care Card). Refer to AR 40-66 for detailed information on patient accountability and management of individual health records. Any positive findings from the physical examination must be evaluated further. If the examiner has not checked various body systems, it is not reassuring to tell a Soldier that his physical or behavioral health complaints are only combat and operational stress reactions. All behavioral health personnel should receive familiarization training on basic medical examination techniques and in documenting medical information. Whenever a physical illness or injury is suspected, personnel should consult with their medical peers for further assistance. Some cases will require direct medical examination by a physician or physician assistant. The behavioral health personnel should not order tests or procedures that do not directly influence case management. Medical tests may promote the patient role in the mind of the Soldier. Needless tests may delay a Soldier's return to duty and encourage secondary gains.

DEFER DIAGNOSIS OF BEHAVIORAL DISORDERS

4-21. During assessment, behavioral health personnel must always consider behavioral health disorders that resemble combat and operational stress reactions, but defer making the diagnosis. The behavioral health personnel favor this default position to preserve the Soldier's expectations of normalcy (according to BICEPS). This is also done to avoid stigma associated with behavioral health disorders and to prevent the Soldier identifying with a patient or sick role. Deferral is also preferred because some diagnoses require extensive medical history collection or documentation that is unavailable during deployment situations (such as personality disorders and attention deficit hyperactive disorder). It is possible that a Soldier can have a combination of combat and operational stress reactions, behavioral health disorders, and physical illnesses/injuries (such as mild traumatic brain injury) at the same time. In such cases, behavioral health personnel must rely on their clinical experiences, training, and consultation with peers and medical personnel to distinguish among these sometimes overlapping conditions. Physical injuries/illnesses are treated at an MTF, however, the Soldier may return for further combat and operational stress control interventions and activities. Deferral of diagnosis is preferred, but diagnosis can be considered if the Soldier—

- Presents for reemerging symptoms of a previously diagnosed and/or treated behavioral health disorder
- Presents for refill prescription of psychotropic medication.
- Has a medical condition or behavioral health disorder listed above in paragraph 4-19.
- Is enrolled in a reconditioning program.
- Fails to improve after having received four to five days of continuous combat and operational stress control interventions and activities in a *hold* (paragraph 4-9) or *refer* (paragraph 4-10) status.
- Requires individual behavioral health treatment.
- Is referred for multiple episodes of combat and operational stress reaction.

DIAGNOSTIC CONSIDERATIONS FOR DIFFERENTIAL DIAGNOSTIC DISORDERS

Low-Grade Environmental or Stress-Related Illnesses

4-22. Low-grade environmental or stress-related disease and nonbattle injuries/illnesses can drain the Soldier's strength and confidence. For example, chronic diarrhea and slight fever may exhaust, demoralize, and contribute to combat and operational stress reactions among Soldiers. These conditions should be treated medically, concurrently with physical replenishment, rest, reassurance, and organized activities, which restore the Soldier's confidence. If they persist in spite of rest and symptomatic treatment, a more aggressive workup and treatment may be indicated.

Dehydration

4-23. Dehydration deserves special mention because it can be very insidious. Soldiers under combat or heavy work conditions can become extremely dehydrated without feeling thirsty. This is especially likely in CBRN protective equipment or in a desert/arctic environment. Refer to Army doctrine for additional information on the prevention and first aid measures for dehydration.

Hyperthermia

4-24. Hyperthermia (overheating) in an otherwise healthy individual often first causes mild elation and excessive energy. This may be followed by irritability, disorientation, and confusion. When core body temperature climbs above 106 degrees Fahrenheit (°F) or 41 degrees Celsius (°C), the Soldier may become belligerent, combative, and have visual hallucinations. If brain temperature rises further, the Soldier collapses and convulses in heatstroke. Refer to Army medical doctrine for additional information on the prevention and first aid measures for heat injuries.

Hypothermia

4-25. Hypothermia may cause an individual to become disoriented when core body temperature falls below 95°F (34.6°C). The person may move and speak slowly. His skin looks and feels warm, leading him to take off clothing. He becomes disoriented, then unresponsive, and may appear to be dead. Hypothermia is as likely in cool or even warm, wet climates as it is in extremely cold ones. Refer to Army medical doctrine for additional information on the prevention and first aid measures for hypothermia.

Overuse Syndromes

4-26. Overuse of muscles, joints, and bones that have not been prepared for the strain of field duties can lead to persisting stiffness, pain, swelling, and orthopedic injuries. If severe, these injuries may require evacuation to a hospital for evaluation. Even if these injuries are avoided, the unfit person who overexerts has days of stiffness, aching, and weakness. Such cases are likely to develop combat and operational stress reactions if further demands are made on them.

Rhabdomyolysis

4-27. Rhabdomyolysis is one potentially dangerous complication of severe muscle overuse (and of heatstroke or crush injuries) in which myoglobin from damaged muscle cells injures the kidneys. It can cause fatigue, seizures, muscle tenderness, and muscle aches. A warning sign is dark (tea-colored) urine, but without laboratory testing, this is not easily distinguished from the concentrated urine of dehydration.

WARNING

Rhabdomyolysis is a medical emergency.

Mild Traumatic Brain Injury/Concussion

4-28. Mild traumatic brain injury (mTBI)/concussion may stun the individual and cause amnesia, residual confusion, and/or impulsive behavior. For any case of suspected head trauma or for any case of significant memory loss (especially for a discrete period of time), check scalp, eyes, ears, nose, signs and symptoms of cranial nerve abnormalities, and vital signs. If a head injury is suspected, monitor mental status and vital signs periodically, especially respiration, even though physical findings are negative. Awaken the Soldier periodically to check mental status and pupil size (allowing sufficient time to recover from any grogginess on awakening). Continuous monitoring is appropriate if there are serious concerns about the risk. Refer to Appendix C for additional information on mTBI.

WARNING

Cases with deteriorating mental status are medical emergencies. If one pupil becomes larger than the other. It is an extreme emergency requiring immediate hospitalization. Left untreated, the condition can progress rapidly to coma and respiratory arrest within hours.

Spinal Cord Trauma

4-29. Pressure, bruising, and hematomas of the spinal cord, as well as severing of the spinal cord, can cause spinal shock, with loss of sensory and/or motor functions below the level of the injury in the affected dermatome and muscle group patterns. The loss of function may be bilateral, unilateral, or partial. These cases could be confused with paralysis or sensory loss presentations of combat and operational stress reaction. Further manipulation of a fractured spine can worsen or make permanent the spinal cord damage. Information from the history of onset, a cautious physical and neurological examination, or complete relief of symptoms following hypnosis or strong positive suggestions could demonstrate convincingly that this is only a combat and operational stress reaction. It is best to be cautious and keep the spine immobile during care and transportation.

Postconcussion Syndromes

4-30. Postconcussion syndromes may persist weeks to months beyond the period of acute concussion (mTBI). Postconcussion syndromes may include perceptual or cognitive impairment, poor impulse control, and difficulty in planning ahead. These are often accompanied by cranial nerve deficits or soft neurological signs.

Abdominal Trauma

4-31. Ruptured spleen or other intraperitoneal bleeding may cause shock. The Soldier may arrive in a fetal position and be unresponsive but have reflex guarding due to peritonitis.

Air Emboli and Focal Brain Ischemia

4-32. High blast overpressures from incoming high explosive ordnance can produce air emboli (bubbles in the blood) and focal brain ischemia (small areas in the brain which cannot get oxygen because the blood flow has been interrupted). Nuclear explosions can do this, as can high explosives when shock waves are magnified by reflection within bunkers, buildings, and trenches. Ruptured eardrums, general trauma, and evidence of pulmonary damage should be detectable. Cases may have stroke symptoms (loss of muscle strength, loss of sensation in parts of the body, and/or speech disturbances), which may be subtle and mistaken for combat and operational stress reaction.

Laser Eye Injury

4-33. Laser range finders/target designators cause small burns on the retina if they shine directly into the eye, even at great distances and especially if viewed through optics. If the laser beam causes a small retinal blood vessel to bleed inside the eyeball, the person will see red. If blood inside the eye is confirmed on examination, the Soldier should be evacuated to a MTF with verbal reassurance that he may return to duty soon. If the laser does not hit a blood vessel, the Soldier may see only flashes of light, followed quickly by some painless loss of vision. If the laser damages areas of the eye responsible for peripheral vision, the Soldier may never recognize a visual deficit. If the Soldier was looking directly at the laser source however, there will likely be a major loss of visual clarity. With simple retinal burns in the retina's periphery, most of the visual symptoms recover with hours to days of rest, reassurance, and nonspecific treatment the same as with combat and operational stress control reaction. Calm, professional treatment at each role of medical care should emphasize that the injury is not vision-threatening and the chances for

some, if not total, recovery is good. Soldiers with the simple retinal burns should provide self-care to decrease the risk of assuming a patient mind-set and to promote their chances of returning to duty. For additional information on the management of laser eye injuries, refer to Army medical doctrine on laser eye injuries.

Middle Ear Injuries/Diseases

4-34. Temporary loss of hearing can be caused by a decreased acoustic sensitivity following a brief extremely intense noise (explosive) or less intense, longer duration noise. Tinnitus (ringing in the ears) can also result from acoustic nerve damage or irritation, as well as from high doses of certain drugs, such as aspirin. Distinguishing physiologic from psychogenic hearing loss may require consultation with an otolaryngologist (ears, nose, and throat specialist).

Peripheral Neuropathies

4-35. Peripheral neuropathies include compression neuropathies, which are especially likely in military settings (for example, *rucksack palsy*). Depending on severity, they may require temporary job reclassification during convalescence. As these injuries are not life-threatening, a hasty diagnosis should not precede a trial of Soldier restoration treatment.

Uncommon Endemic Neurologic Disorders

4-36. These physical diseases can first manifest with cognitive emotional and/or behavioral symptoms. A comprehensive neurological examination is required for the definitive diagnoses. Examples include—

- Guillain-Barre Syndrome which manifests with muscle paralysis, usually without sensory loss, which ascends the legs and arms, then the trunk, over hours to days. It is sometimes triggered by immunizations, as might be given to troops deploying overseas. It often progresses to a life-threatening situation as the muscles of respiration become involved. This requires evacuation to the CONUS-support base. Fortunately, recovery is usually complete, but it may take months to years.
- Multiple sclerosis which is a disease that can mimic many types of combat and operational stress
 reactions and behavioral health disorders with its sometimes transitory, shifting motor, sensory,
 speech, and cognitive/emotional symptoms. It is made worse by stress and may be difficult to
 diagnose. Once confirmed, multiple sclerosis cases should be evacuated to CONUS, as should
 other rare, progressive diseases like Lou Gehrig's disease (amyotrophic lateral sclerosis).
- True convulsive seizure which can manifest after head injury or a sublethal or chronic nerve agent
 exposure. These are treated with normal anticonvulsant medications. Fear of nerve agent exposure
 may lead some Soldiers to experience psychogenic seizures. These psychogenic seizures are also
 called pseudo-seizures. In addition to falling unconscious and convulsing, urinary and fecal
 incontinence can occur during a pseudo-seizure.

SUBSTANCE ABUSE/DEPENDENCE

ALCOHOL

- 4-37. Substance abuse is an example of misconduct stress behaviors and not necessarily combat and operational stress reactions. Drug and alcohol abuse may occur in active combat zones and nearby areas where use is explicitly prohibited and severely punished. Personnel performing the combat and operational stress control assessment should be familiar with evaluation and treatment of substances abuse and dependency. Behavioral health providers should consider the following:
 - Heavy habitual use of alcohol, even by otherwise capable officers and noncommissioned officers, may go unnoticed in peacetime. However, alcohol abuse may degrade necessary mission performance demanded by combat and may result in withdrawal symptoms when access to alcohol is interrupted. Alcohol withdrawal is a potential medical emergency; consultation with medical personnel is essential.

 Intoxication or withdrawal from alcohol, barbiturates, and tranquilizers may be mistaken for combat and operational stress reaction or another behavioral health disorder. Intoxication or withdrawal requires medical treatment. Withdrawal seizures or impending or ongoing delirium tremens need emergency medical treatment.

OVERUSE OF STIMULANTS

4-38. Stimulants may cause panic attacks, hyperactivity, mania, rage attacks, psychosis, or paranoia. Cessation of amphetamines after prolonged use causes a crash characterized by extreme sleepiness, lethargy, overeating, depression, and suicidal thinking. This condition may require one to two weeks of hospitalization to assure safe recovery.

HALLUCINOGENIC DRUGS

4-39. Hallucinogenic drugs cause sensory distortion, panic, bizarre thoughts, and potentially dangerous behaviors. These drugs may be employed by the enemy as chemical or biological warfare agents. Phencyclidine hydrochloride (PCP) is especially problematic since it also blocks pain and tends to make those under its influence paranoid, violent, and abnormally strong. Hallucinogenic drug psychosis should not be treated with antipsychotic drugs. Physically restrain and sedate patients as necessary.

INHALATION OF FUMES

4-40. Inhalation or huffing of fumes (either by accident or as deliberate abuse) and carbon monoxide poisoning can cause disoriented and abnormal behavior. Supportive treatment and specific antidotes/medication may be needed.

ANTICHOLINERGIC DELIRIUM

4-41. In combat, atropine delirium may occur. Soldiers are equipped with atropine injectors to use as first aid against nerve agents. Two milligrams (mg) (one atropine injector) without nerve agent challenge can cause rapid pulse, dry mouth, slightly dilated pupils, decreased sweating (hot, dry, and flushed skin), and urinary retention. In some individuals, 6 mg of atropine (equal to three atropine injectors) may cause hallucination and disorientation in the absence of a nerve agent challenge. Such side effects may be more pronounced in sleep-deprived Soldiers. Overheated Soldiers are more susceptible to the atropine side effects. Atropine compounds the complications of overheating by diminishing the body's ability to lose heat through sweating. One dose (2 mg) of atropine can reduce the efficiency of heat-stressed Soldiers. Two doses (4 mg) will sharply reduce combat efficiency, and 6 mg will incapacitate troops for several hours. Some plants can also cause anticholinergic delirium when eaten.

ANTICHOLINESTERASES

4-42. A nerve agent is an anticholinesterase similar to many insecticides. Low-dose nerve agent exposure may produce miosis (pinpoint pupils) without other signs. Miosis decreases vision except in very bright light and may cause eye pain when attempting to focus. This miosis may take hours to days to improve spontaneously, depending on the degree and type of exposure. Evidence gathered from farm workers poisoned by insecticides suggests that mild personality changes, insomnia, nightmares, and chronic persistent depressive symptoms may be seen even after use of an antidote. Low-dose nerve agent exposure may lower the seizure threshold of many Soldiers. True epileptic seizure cases must be distinguished from those Soldiers who may have pseudo-seizures.

BEHAVIORAL HEALTH DISORDER PATIENTS IN THE AREA OF OPERATIONS

PRIMARY BEHAVIORAL DISORDERS

4-43. Primary behavioral health disorders (especially schizophrenic-form/schizophrenic disorder, major depression, and bipolar disorder) will continue to occur at approximately the same rate as in peacetime. Some Soldiers may hide their disorders by receiving care through civilian channels. Once in the theater they may experience a relapse or self-refer to an MTF when their medication supply is exhausted.

PERSONALITY DISORDERS

4-44. Preexisting personality disorders may make a Soldier unable to adapt to military life. However, studies have failed to show a relationship between personality disorders and the likelihood of breakdown in combat. Once Soldiers with personality disorders have developed a combat and operational stress reaction or a behavioral health disorder, they may have greater difficulty recovering and returning to duty. Diagnosis should never be made in haste; diagnostic criteria must be supported with adequate historical information.

SECTION III — COMBAT AND OPERATIONAL STRESS CONTROL STABILIZATION

EMERGENCY STABILIZATION

4-45. Emergency stabilization is the acute management of disruptive behavior resulting from combat and operational stress reaction and/or a behavioral disorder. The disruptive behavior severely impacts unit functioning by posing a danger to self and/or others. In some cases, an underlying medical condition leads to the disruptive behavior and may present an additional threat to the Soldier's life. Emergency stabilization consists of interventions that temporarily reduce a disturbed Soldier's threat to self or others, thereby allowing further medical evaluation and/or treatment. Some behavioral disorders are associated with violent behavior, such as psychotic disorders, bipolar manic disorders, antisocial personality disorder, and borderline personality disorder. Violent behavior is also associated with disruption of brain functioning due to organic factors such as intoxication, hyperthermia, metabolic imbalance, or CBRN exposure.

4-46. The combat and operational stress control triage process will be repeated throughout the emergency stabilization and will determine the disposition of the Soldier. After emergency stabilization, subsequent triage could result in an immediate return to duty, transfer to a combat and operational stress control Soldier restoration program for observation, or further evacuation.

METHODS USED FOR EMERGENCY STABILIZATION

- 4-47. Methods that may be used for emergency stabilization include—
 - Providing verbal reassurance and reorientation. These are the best methods for controlling an agitated or disruptive Soldier. If these fail, a nonthreatening show of strength or force may suffice or sedating medications may be offered to the Soldier. If all other means fail to reduce the threat to self and/or others, physical restraint must be considered. Given the risk for violence, it is inadvisable to attempt the subdue/restraint method one-on-one.
 - Applying physical restraints. This is reserved for subduing and restraining agitated or disruptive Soldiers who fail to respond to safer and less restrictive forms of restraint (for example, verbal warnings or show of strength). Placing a disturbed Soldier into physical restraint increases the risk of injury to the Soldier and restraint team. Prolonged or improper application of physical restraint can cause injury to the disturbed Soldier. Given the potential for injury, it is paramount that behavioral health personnel receive training in proper physical restraining methods as they

- may be required for safe evacuation by ground medical evacuation (preferred) or air medical evacuation.
- Chemical restraints (such as medication). These can be administered to a disturbed Soldier to reduce the risk of harm to self or others. Medication may be offered to the Soldier in conjunction with verbal reassurances and reorientation. Chemical restraints may only be ordered by a medical professional who is authorized to prescribe medication when a Soldier is incompetent to make medical decisions for himself and/or when the Soldier's behavior places himself or others in danger. Once administered, medical personnel must observe for side effects and adverse reactions and must consider administering additional medications as needed. When a Soldier is in physical restraints, medication may no longer be essential, but may serve to reduce the risk of escape, limb damage, and overheating. As a secondary benefit, once the medications reduce the Soldier's agitation, others in the vicinity may feel safer and calmer. Before prescribing an antipsychotic medication, there are a few things to consider. First, some antipsychotic drugs may take several hours or days to take effect. Second, early administration of an antipsychotic drug may confuse the clinical picture for the next evaluator in the evacuation chain. The recommendation for most cases is to use no medication unless it is truly necessary for management.

4-48. Regardless of the method, the restrained Soldier must be checked frequently to guard against nerve injuries or impaired circulation, which may lead to skin ulcers or gangrene. It is important to check periodically to ensure the Soldier is not secretly escaping from restraints. The Soldier is provided verbal reassurances with positive expectations for his recovery each time he is checked.

FULL STABILIZATION

- 4-49. Full stabilization is normally the mission of the Role 3 MTF specialty clinic's psychiatric service. Full stabilization goes beyond securing the safety of the Soldier and those around him. It provides a safe environment for the Soldier to receive treatment interventions, continued evaluation, and assessment for return to duty potential. If return to duty within the evacuation policy is not feasible, the full stabilization process helps to prepare the patient for a safe, long-distance evacuation. If a Role 3 MTF is not available, full stabilization may be accomplished by behavioral health personnel when appropriately supported or by using equipment diverted from the combat and operational stress control Soldier restoration capability. Considerations for full stabilization may include—
 - Conducting full stabilization for neuropsychiatric patients is desirable for the sake of the Soldier's
 future treatment and for the potential of returning some Soldiers to duty. However, full
 stabilization is personnel-intensive with a relatively low return to duty payoff. Providing only
 sufficient stabilization to allow evacuation from the AO may be acceptable in order to maintain
 the other combat and operational stress control functions.
 - Ensuring appropriate timely evacuation of Soldiers with neuropsychiatric/behavioral disorders
 according to the theater evacuation policy. It is preferred that full stabilization is achieved for all
 neuropsychiatric patients to facilitate appropriate and timely evacuation according to the theater
 evacuation policy.
 - Assessing and triaging of combat and operational stress reaction Soldiers undergoing full stabilization. This is an ongoing process. In subsequent triages, if a Soldier becomes stable and has the potential for return to duty, he may be transferred to a combat and operational stress control Soldier restoration or reconditioning program, or may be returned to duty directly.

TENETS OF FULL STABILIZATION

4-50. The combat and operational stress control full stabilization includes ongoing evaluation of return to duty potential. This requires assessment of mental status and performance capability overtime without excessive drug effects or limitation on activity. Contact with the Soldier's unit may be needed to get information on prior history and functioning. The further from the unit the Soldier has been evacuated, the more difficult it may be to contact the Soldier's unit. Full combat and operational stress control stabilization normally takes several days. To the extent compatible with safety, the stabilization program

should adhere to the principles and methods for treating combat and operational stress reactions and behavioral disorders (such as BICEPS and 5 R's).

- 4-51. During full stabilization, special efforts should be made to maintain and reinforce the Soldier's identity as a Soldier. Techniques that may be helpful in maintaining the Soldier mind-set include—
 - Keeping Soldiers in duty uniform, not pajamas, as soon appropriate.
 - Maintaining rank distinctions and appropriate military courtesy.
 - Encouraging self-care and helping behaviors.
 - Engaging in military work activities appropriate to the Soldier's level of function and military occupational specialty/area of concentration.
- 4-52. Initial and ongoing assessments are essential to tailor the treatment to the Soldier's individual needs. It is essential that clinical documentation is available for these assessments. The Soldier's condition is an evolving one and must be monitored throughout full stabilization. If the Soldier is assessed as capable to return to duty, efforts should be made to return the Soldier to duty as soon as is practical.
- 4-53. Ongoing treatment and/or therapeutic modalities are essential to improving a Soldier's chances to return to duty whether in the AO or after evacuation. Therapeutic modalities are similar to those used on inpatient units, but must remain consistent with combat and operational stress control principles. These modalities include medication, individual psychotherapy, group psychotherapy, and appropriate therapeutic occupations. Observed responses to therapeutic modalities allow informed recommendation for return to duty status.

FULL STABILIZATION FACILITIES

- 4-54. Full stabilization is commonly conducted in the combat support hospital. The combat support hospital can provide more sophisticated procedures, laboratory, and x-ray capabilities than are available at a Role 2 MTF. If a medical detachment (combat and operational stress control) is providing emergency or full stabilization, the Soldier must be kept separate from other Soldiers in combat and operational stress control Soldier restoration or reconditioning programs.
- 4-55. If the combat support hospital cannot provide sufficient inpatient psychiatric treatment for Soldiers requiring stabilization and preparation for evacuations, the AO combat and operational stress control consultant may recommend up to two temporary courses of action until the shortfalls resolve. He can recommend to the higher medical headquarters that behavioral health personnel from one or more medical company (combat and operational stress control) augment the Role 3 MTF psychiatric service until the caseload decreases or until replacements or additional behavioral health personnel are brought into the AO or the MTF. Lastly, the senior medical headquarters may direct that a combat and operational stress control Soldier restoration or reconditioning asset be collocated with the Role 3 MTF to provide an *overflow* ward, as well as augmenting staff.
- 4-56. The combat support hospital has a psychiatrist, a psychiatric/behavioral health nurse, one behavioral noncommissioned officer, and one behavioral health specialist assigned to provide clinical services and patient care. The hospital does not have an organic neuropsychiatric ward. Neuropsychiatric patients are normally admitted to an intermediate care ward for emergency or full stabilization, although a few with serious medical complications could require admission to the intensive care ward. An intermediate care ward may be temporarily designated as a neuropsychiatric ward to accommodate patient care requirements. The ward may require additional staffing augmentation from a medical detachment (combat and operational stress control).
- 4-57. Full stabilization facilities in the AO can be categorized into two types:
 - Mobile facilities which use general purpose large or medium tents as used in the medical detachment (combat and operational stress control). They can also use a combat support hospital or a DEPMEDS TEMPER tent as used in a combat support hospital.
 - Fixed facilities which use buildings that were previously hospitals or buildings converted to hospitals.
- 4-58. The adaptation of these facilities have both advantages and disadvantages that include—

- The climate control capability of the (hospital) TEMPER tents, as assembled into DEPMEDS hospitals. This may be a significant safety advantage for treating seriously disturbed patients in restraints with high-dose medication, which can disrupt the body's ability to regulate normal body temperature. The TEMPER and standard tents both pose greater problems for security than do fixed facilities. The staff may, therefore, have to rely more than is ideal on physical restraints and medications for sedation of some cases. Blankets or screens can be used to isolate or segregate problem patients from others. Such partitions reduce mental contagion but provide little true protection.
- Standard hospital beds which are on high, lightweight metal legs with wheels. For full stabilization purposes, these should be replaced with standard low, stable cots to hold strong, agitated patients in restraints. The cots also make a more *military* setting and can be used as seats for group activities.
- A separate *closed* (high security) and *open* (moderate/minimal) security area. The latter could be a standard general purpose large tent. Hospital personnel could be provided with additional training in supervision and military group activities for the moderate/minimum security cases.

SECTION IV — BEHAVIORAL HEALTH TREATMENT

BEHAVIORAL HEALTH CARE

TREATMENT FOR BEHAVIORAL HEALTH DISORDERS

4-59. Behavioral health treatment exists when there is an explicit therapist-patient or therapist-client relationship. Behavioral health treatment is provided for Soldiers with behavioral health disorders to sustain them on duty or to stabilize them for referral/transfer. This is usually brief, time-limited treatment as dictated by the operational situation. Behavioral health treatment includes counseling, psychotherapy, behavior therapy, occupational therapy, and medication therapy. Treatment assumes an ongoing process of evaluation and may include assessment modalities such as psychometric testing, neuropsychological testing, laboratory and radiological examination, and behavioral health providers' discipline-specific evaluations.

BEHAVIORAL HEALTH TREATMENT PROTOCOLS AND MEDICATIONS

BEHAVIORAL HEALTH TREATMENT FOR SOLDIERS

4-60. Behavioral health treatment is provided to Soldiers with diagnosed behavioral health disorders and who require more intentions for their diagnoses. It is both inappropriate and detrimental to treat Soldiers with combat and operational stress reactions as if they are behavioral health disordered patients. A therapeutic relationship may promote dependency and foster the *patient* role. Likewise, medication therapy and the highly structured treatment modalities imply the *patient* role. Medication for transient symptom relief (insomnia or extreme anxiety) may not be detrimental if there is no expectation that medication will continue to be prescribed.

STANDARDS OF TREATMENT

4-61. Treatment standards are the same in the deployed environment as in garrison. When operational requirements dictate that clinical standards of treatment/care are waived or relaxed, it must be approved by the AO combat and operational stress control consultant. Treatment should be tailored to the anticipated availability of the Soldier and behavioral health provider. Short-term interventions are more practical than long-term commitments. If longer term treatment is necessary, design the intervention in time-limited modules. Under no circumstances should treatment diminish the Soldier's ability to provide self-care and to defend himself. Exceptions include emergency stabilization and preparation for evacuation. In addition, the Department of Veterans Affairs (VA)/DOD Clinical Practice Guidelines website

(http://www.oqp.med.va.gov/cpg/cpg.htm) offers clinicians evidence-based assessment and treatment algorithms for acute stress disorder, posttraumatic stress disorder, and many other behavioral health disorders.

ARMY REGULATIONS GOVERNING EVALUATIONS

4-62. Fitness for duty evaluations are conducted as necessary within the priorities of the supported commanders according to AR 40-501; psychiatrists should not initiate a medical evaluation board without first ensuring the Soldier has received adequate treatment. This treatment may not be available in AO. Command-directed evaluations are conducted as necessary within the priorities of the supported commanders according to DODD 6490.1. Clinical documentation should be safeguarded according to AR 40-66 and local command policy. Treatment should be conducted in a location that is as private as possible. Information can be released to a third party if the Soldier consents. Combat and operational stress control providers need to notify command when the Soldier's safety is in question (suicidal, homicidal) or if the Soldier is removed from his unit for medical observation. Additional release of information to command is on a need-to-know basis. For any questions on release of information on combat and operational stress reaction and neuropsychiatric patients, consultation with supporting judge advocate general's office is advised. Also, maintaining the Soldiers health record with clinical data is required and accomplished according to AR 40-66 and supplemental AO policy as appropriate. Treatment should occur throughout the evacuation process and follow-up is expected at home station.



★ Chapter 5 Treatment Aspects of Dental Services

This chapter has been superseded by ATP 4-02.19.



★ Appendix A Planning Factors

This appendix has been superseded by ATP 4-02.10.



★ Appendix B Nutrition Care Operations

This appendix has been superseded by ATP 4-02.10.



Appendix C

Mild Traumatic Brain Injury/Concussion

- C-1. Mild traumatic brain injury/concussion is an invisible injury resulting from not only the signature weapons of Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn—improvised explosive devices and rocket-propelled grenades—but also from blows to the head during activities or contact sports. Mild traumatic brain injury/concussion is a disruption in brain function as a result of an external force, typically from a blow or jolt to the head. Mild traumatic brain injuries/concussions are usually treatable and the overwhelming majority of Soldiers fully recover; however, receiving prompt care regardless of injury severity is essential in maximizing recovery. The diagnosis of concussion is made when two conditions are met. In the absence of documentation, both conditions are based on self-reported information. An injury event must have occurred and the individual must have experienced one of the following:
 - Alteration of consciousness lasting less than 24 hours.
 - Loss of consciousness, if any, lasting for less than 30 minutes.
 - Memory loss after the event, called posttraumatic amnesia, that lasts for less than 24 hours.
 - Normal structural neuroimaging.
- C-2. The brain needs rest and time to recover after a concussion and it is extremely important to avoid a second injury while the brain is healing. Recovery time after concussion varies based on injury circumstances, the Soldier's medical history, and recovery from prior injuries. Leaders at all echelons need to recognize the effects of mTBI/concussion and how factors such as sleep-deprivation, nutrition, emotional trauma, and musculoskeletal injury influence concussion recovery.
- C-3. Early intervention, education, and treatment are the cornerstones to maximizing full recovery. Mild traumatic brain injury/concussion symptoms can significantly impact not only personal and unit safety, but also operational effectiveness. Table C-1 describes how the symptoms of mTBI/concussion can affect the Soldier and impact the combat mission.

Table C-1. How mild traumatic brain injuries/concussions can affect the Soldier and combat mission

Symptoms	Manifestation	Operational impact
Headache	Decreased energy	Marksmanship difficulties
Sleep disturbance	Difficulty sleeping	Decreased awareness
Difficulty finding words	Slower reaction time	Difficulty performing quickly under time pressures
Balance difficulties	Change in walking patterns	Difficulty navigating uneven terrain
Light sensitivity, ringing in the ears	Easily distracted	Difficulty multitasking
Slowed thinking, poor concentration	Difficulty processing multiple sources of information	Difficulty performing in certain operational environments
Irritability, mood swings, anxiety	Interpersonal problems	Performance difficulties can affect confidence and self-esteem

ARMY ENTERPRISE MANAGEMENT STRATEGY FOR MILD TRAUMATIC BRAIN INJURY/CONCUSSION

C-4. In 2009, the Army implemented a comprehensive mTBI/concussion management strategy and trained the 101st Airborne Division and U.S. Marine Corps on line and medical responsibilities prior to deployment to Afghanistan. The 1st Cavalry, 82nd Airborne, and 10th Mountain Divisions have

subsequently advanced mTBI/concussion care based on the *Educate, Train, Treat,* and *Track* strategy (see Figure C-1).

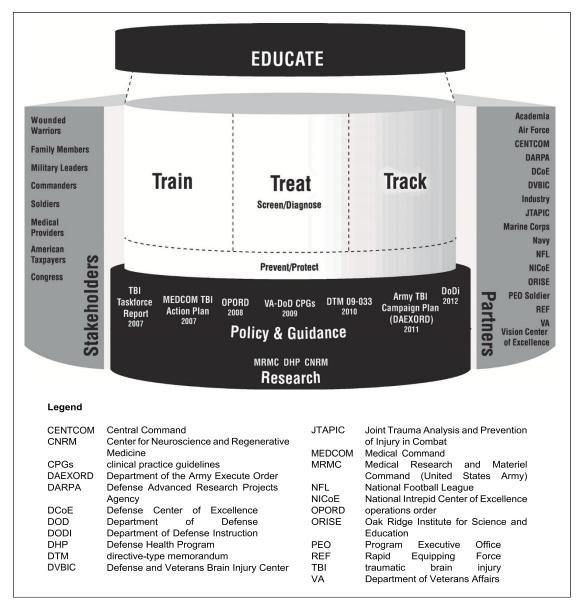


Figure C-1. Army mild traumatic brain injury/concussion management strategy

EDUCATE

- C-5. Education is the overarching line of effort in the mTBI management strategy to increase awareness and decrease the stigma of seeking care for invisible injuries. In June 2011, the Army published Department of the Army (DA) Execution Order (EXORD) 242-11, Warrior Concussion/Mild Traumatic Brain Injury Campaign, to mandate mTBI education for all Army personnel.
- C-6. Extensive educational materials are available from Defense and Veterans Brain Injury Center (DVBIC), Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE), and the Office of The Surgeon General's Rehabilitation and Reintegration Division. The Rehabilitation and Reintegration Division and DVBIC have multiple educational documents and graphics cards for the Soldiers and their Families. The DVBIC provides their educational reference materials on their Web site at www.dvbic.org. The Rehabilitation and Reintegration Division's educational reference materials are also

listed on their Web site at www.armymedicine.army.mil. Education and positive expectation for recovery is well supported in the literature for treating mTBI/concussion patients. Other educational efforts and opportunities include—

- Traumatic brain injury conferences hosted by the VA and DOD to share information and increase care for the Soldier.
- Annual DVBIC conference.
- Army Medical Department-sponsored *State of the Science* workshops that have taken place at major medical centers and medical workshops/conferences.

TRAIN

C-7. Specialized training is provided to medics and health care providers both for deployed and garrison settings, as well as to senior leaders for general traumatic brain injury awareness and leadership expectations. Traumatic brain injury training required by the DA EXORD 242-11 is available via Army Training Network Rehabilitation and Reintegration Division. The Rehabilitation and Reintegration Division staff validates traumatic brain injury training for deploying medics in the brigade combat team trauma training course.

TREAT

C-8. The goal of treatment programs is to deliver integrated care and services from the point of injury or wounding to return to duty or transition from active duty and maximizing function and quality of life. Numerous initiatives are under development to treat and manage mTBI/concussed patients including—

- Implementation of deployed medical algorithms and dissemination of clinical practice guidelines.
- Designation of providers and special clinics to support the mTBI mission at some Role 2 and 3 facilities in Operation Enduring Freedom.
- Dissemination of the mTBI rehabilitation toolkit to assist providers with assessment and treatment.
 Rehabilitation toolkits and other information sources can be located at the Defense Centers of Excellence Web site at www.dcoe.health.mil/ForHealthPros/TBIInformation.aspx.
- Evaluation by a Role 4 facility of all medically evacuated patients for mTBI.
- Employment of interdisciplinary mTBI teams at high troop density installations.
- Provision of state-of-the-art equipment for assessment and treatment.
- Collaboration with the VA and local resources to meet individual Soldier needs.
- Implementation of traumatic brain injury telehealth programs to ensure patients have access to professionals from remote sites. The Mobile Care (mCare) Program provides Soldiers mobile phones for our community-based Warriors in transition unit programs to facilitate communication with their health care team. The deployed providers can send e-mail inquiries to contact a subject matter expert in the continental U.S. support base or other locations to tbi.consult@us.army.mil.

TRACK

C-9. The goal of tracking mandatory events (mTBI exposure events requiring command evaluations and reporting of exposures) is to facilitate identification of Soldiers at potential risk, provide awareness to health care providers and leaders, and improve medical care with knowledge of involvement in potentially concussive events.

C-10. Mild traumatic brain injury clinical practice guidelines and medical algorithms describe the requirements for commanders to document mandatory events in a significant activity report. This information is transferred through command channels to the Combined Information Data Network Exchange (CIDNE®) in the Blast Exposure and Concussion Incident Report module. This information is then transferred to the Joint Trauma Analysis and Prevention of Injury in Combat (JTAPIC) System where the information is declassified and pushed to the DCoE. The Army ensures that the data is available in the

Medical Protection System database during the postdeployment health assessment. The DCoE then provides the Services with the data.

C-11. Benefits of mTBI tracking include—

- Identifies Soldiers at potential risk.
- Provides medical personnel awareness of an individual's history of proximity to blast events.
- Provides visibility to leaders on the unit's exposure to blast events.
- Provides documentation to support line of duty investigations for Reserve Component and National Guard personnel.
- Provides better medical care through knowledge of exposure.

DEPARTMENT OF DEFENSE POLICY GUIDANCE

C-12. The DOD policy guidance and clinical practice guidelines establish policy, assign responsibilities, and provide procedures for mTBI/concussion in the deployed setting. It standardizes terminology, procedures, leadership actions, and medical management to provide maximum protection of the Soldier.

C-13. The policy guidance and clinical practice guidelines are as follows:

- The DOD shall identify, track, and ensure the appropriate protection of Service Members exposed to potential concussive events, including blast events, to the maximum extent possible.
- Leaders shall direct a medical evaluation for any Service Member exposed to possible concussive
 events.
- Leaders shall identify, treat, and manage concussion in Service Members by following approved clinical guidance.
- Recurrent concussions shall be addressed in a manner appropriate to its emerging clinical significance.

REPORTING REQUIREMENTS

C-14. Mandatory events reported in the Blast Exposure and Concussion Incident Report are reviewed by the command surgeon and are subsequently forwarded in the following order to the combatant commander, the JTAPIC, DCoE, and then to each of the Services, as appropriate. The Army ensures that this information is available to medical providers by displaying it on all of the DD Form 2795 (Pre-deployment Health Assessment) and DD Form 2796 (Post-deployment Health Assessment) completed throughout a Soldier's career. The command surgeon conducts additional analyses to assess compliance with the DODI 6490.11 and the DCoE conducts analyses to support policy updates.

COMMAND AND MEDICAL RESPONSIBILITIES

C-15. The DOD policy guidance and clinical practice guidelines provide clear guidance that all leaders within the DOD share responsibility for ensuring that Soldiers exposed to possible concussive events are medically evaluated and provided treatment, if required.

C-16. Line commanders must establish a command climate that is supportive of Soldiers seeking medical treatment for potential mTBI/concussion exposures. They must also make it a priority within their command that Soldiers and leaders are educated on the signs and symptoms of potential mTBI/concussion and on the importance of early identification and treatment of Soldiers who have been exposed to potential mTBI/concussive events. All leaders must be aware of the mandatory reporting events and ensure that all reporting requirements are completed at the earliest possible time following the incident. Leaders and Soldiers alike must be active participants in ensuring that all Soldiers potentially exposed to an mTBI/concussive event are evaluated by medical personnel and provided the mTBI/concussion educational information. The educational documents provide the Soldier with information on mTBI, its symptoms, how the mind heals, and what the Soldier can expect to experience during the healing process. It also discusses the importance of rest and sleep as part of the healing process. This information reinforces the training the Soldier has received prior to the incident and helps to allay the concerns and stress the Soldier might feel dealing with an invisible injury.

C-17. Medical personnel must be proactive in educating individual Soldiers and units on mTBI/concussion prior to deployment and throughout the duration of the deployment. All medical personnel must be cognizant of the signs, symptoms, and red flags for potential mTBI/concussion exposure and be observant of patient behaviors or verbal clues for mTBI/concussion even though the Soldier may not be seeking medical assistance for an mTBI/concussion. Medical personnel must also ensure patient encounters are recorded in the patient's electronic medical record (if available) or through written records. Medical personnel taking a patient's medical history should address any potential mTBI/concussion exposures prior to the potentially concussive event, which might have been the result of an automobile accident, sports injury, or other combatrelated exposure. A well documented chronological listing of past and current mTBI/concussion exposures will assist in developing an effective treatment plan based upon risk exposure and severity of the injury.

C-18. A synchronized and thoroughly coordinated effort between the Soldier, his command, and the medical personnel providing treatment is required to mitigate the adverse effects of exposure to concussive events and to enhance the Soldier's prognosis for full recovery. All Soldiers are required to complete a predeployment neurocognitive assessment 12 months prior to deployment. Soldiers use the Automated Neuropsychological Assessment Metric, a computer-based tool, to detect speed and accuracy of attention, memory, and thinking ability. The Automated Neuropsychological Assessment Metric tool establishes a baseline and can be used to identify and monitor changes in function after an mTBI/concussion event. Additional screening for Soldiers that may have experienced an mTBI/concussion event occurs during the postdeployment health assessment. A simple four-question survey is presented to the Soldier and a positive response on all four questions indicates that the Soldier should receive an immediate clinical review for a thorough evaluation for a possible mTBI/concussion.

C-19. DODI 6490.03 mandates that a postdeployment health reassessment be conducted for all Service Members and DA Civilians deployed outside the continental U.S. for 30 days or more. It is a comprehensive health screening conducted 90 to 180 days postdeployment that examines the Soldier for physical and behavioral health concerns. Conducting the postdeployment health reassessment is critical as research indicates this is when symptoms may appear.

SECTION I — PLANNING AND TASK-ORGANIZATION

OPERATIONAL FORCE PLANNING CONSIDERATIONS

C-20. C-20. Army Health System operational planners plan for both maneuvering and surviving in the operational area, as well as the impact that the operational environment will have on patient-care activities. Although these are diverse topics, both are essential elements in providing medical care to our deployed Soldiers. The planner must maintain a thorough knowledge of the threats (general and health) present in the AO. Military planning is guided by mission, enemy, terrain and weather, troops and support available, time available, and civil considerations factors. The AHS planner must synchronize the operational and health care delivery aspects of the mission to facilitate the effective and efficient provision of medical care and mitigate the adverse effects of the operational environment on sound patient care.

PREDEPLOYMENT PLANNING

C-21. During the predeployment planning phase, the AHS planner familiarizes himself with the operational characteristics of the proposed AO. The greater his depth of knowledge about the operational area, the better he will be able to anticipate and plan for issues which may arise, synchronize operational and clinical considerations, and develop a comprehensive but flexible AHS support plan.

C-22. The AHS planner must develop the patient estimate (medical workload) which is derived from the casualty estimate prepared by the assistant chief of staff, personnel. Factors influencing the development of the patient estimate include, but are not limited to historical and current experience on—

- Health threat in the operational area.
- Occurrence and frequency of endemic and epidemic diseases within the operational area, as well
 as within multinational forces. (The status of immunizations within U.S. and multinational forces
 will also affect the disease and nonbattle injury rate.)

- Presence of disease vectors and/or breeding grounds for pests.
- Anticipated level of violence, duration of the operation, and the primary weapons systems and tactics most likely to be employed by the enemy.
- Physiological and mental stressors.
- Size of the force.
- Type of terrain on which operations will be conducted.
- Availability, type, and use of personal protective equipment.

TASK-ORGANIZATION

C-23. Military units are made up of organic components. Organic parts of a unit are those listed in its table of organization and equipment. Commanders can alter an organization's organic and assigned unit relationships to better allocate assets to subordinate commanders. They also can establish temporary command and support relationships to facilitate mission command. This process of allocating available assets to subordinate commanders and establishing their command and support relationships is called *task-organizing*.

COMMAND AND SUPPORT RELATIONSHIPS

C-24. Establishing clear command and support relationships is fundamental to organizing for any operation. These relationships establish clear responsibilities and authorities between subordinate and supporting units. Knowing the inherent responsibilities of each command and support relationship allows commanders to effectively organize their forces.

C-25. Commanders designate command and support relationships to weight the decisive operation and support the concept of operations. Task-organization also helps subordinate and supporting commanders understand their roles in the operation and support the commander's intent. Command and support relationships carry with them varying responsibilities to the subordinate unit by the parent and the gaining units. Commanders consider these responsibilities when establishing command and support relationships. Commanders consider two organizational principles when task-organizing forces—

- Maintain cohesive mission teams.
- Do not exceed subordinates' span of control capabilities.

MISSION TEAMS

C-26. When possible, commanders maintain cohesive mission teams. Where this is not feasible and *ad hoc* organizations are formed, commanders allow time for training and establishing functional working relationships and procedures. Within the medical arena, special care requirements may necessitate task-organizing clinical assets into multidisciplinary teams to treat specific medical conditions. As occurred in Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn, a specific pattern of injuries emerged associated with high numbers of casualties resulting from the types of weapons and tactics used by the enemy. To mitigate the effects of exposure to concussive events, it was recognized that early identification and treatment initiated as close to the time of injury of the potential casualties made a significant difference in the prognosis and recovery of these casualties. Through innovative task- organization, medical providers with the required skill sets from within the various medical units deployed were organized into multidisciplinary teams and, with the assistance of the maneuver commanders, these medical teams were located in maneuver force areas normally restricted from Role 3 augmentation support.

SPAN OF CONTROL

C-27. Commanders are careful not to exceed the span of control capabilities of subordinates. Span of control refers to the number of subordinate units under a single commander. Commanders should not be given more units than they can provide effective mission command. This number is situation-dependent. Although span of control varies with the situation, commanders can effectively command two to five subordinate units. Allocating subordinates more units gives them greater flexibility and increases options and combinations.

MILD TRAUMATIC BRAIN INJURY/CONCUSSIVE CARE

C-28. Whether the force to be task-organized is comprised of many organizations or is a single command/unit, the principles of task-organization remain the same. It is a tool the commander uses to build flexibility into his organizational design in order to fully utilize all of his resources to effectively and efficiently accomplish his mission. The commander must consider the tactical situation, patient estimates for the specific types of injuries to be treated, the anticipated duration of the operation, and the type of operation.

OFFENSIVE AND DEFENSIVE OPERATIONS

C-29. Both the operational medical planner and the clinical staff must ensure continuous coordination is maintained, as the tactical situation may make some treatment options less feasible than others. Both planners and clinicians must thoroughly understand the AHS principles that apply to medical operations (conformity, proximity, flexibility, mobility, continuity, and control). In offensive tasks (to include movement to contact, attack, exploitation, and pursuit) and defensive tasks (to include mobile, area, and retrograde) that are characterized by movement and maneuver; a fluid operation that rapidly covers great distances and large troop movement; it may not be feasible to hold potential mTBI casualties close to their assigned units. The principle of *conformity* refers to the need for the medical plan to conform to the tactical commander's intent, concept of operations, and operations plan. During these types of operations, the supporting medical unit must have the same *mobility*, survivability, and sustainability as the forces it is supporting. The AHS principles of proximity and flexibility refer to medical units being arrayed in the AO so that they are near the units they are supporting but not so close as to interfere with the tactical commander's conduct of the operation; and that the medical plan is sufficiently *flexible* to be able to respond to changes in the tactical situation and still maintain continuous support. The Role 1 MTF established by the medical platoon of a maneuver battalion requires 100 percent mobility and must be capable of rapidly disestablishing operations at one site, moving to a new site, and rapidly reestablishing the facility. The Role 1 MTF does not have an organic holding capability. During offensive and defensive tasks, as discussed above, the Role 1 MTF cannot be augmented with additional medical personnel and equipment (cots), as augmentation would adversely impact the mobility of the unit and the ability of the tactical commander to exploit opportunities as they present during the operation. The Role 2 MTF established by the medical company (brigade support) and/or medical company (area support) is designed, staffed, and equipped to hold patients for up to 72 hours. This holding capacity is limited in the nursing care which can be provided. Holding cots are not staffed and equipped as are hospital beds in the Role 3 MTFs. Patients being held at Role 2 must be cognizant of their surroundings; capable of taking protective measures in the event a threat exists (such as from artillery fire, satchel charges, shoulder-fired missiles and so on); able to perform personal hygiene activities; and have the ability to obtain their own meals at the field feeding site. Medical companies also require 100 percent mobility; although they may not move as frequently as a Role 1 MTF, they must be capable of quickly disassembling the MTF and moving it to another location at a moment's notice. Since the only means for increasing the mobility of medical units is to evacuate the patients the unit is holding, additional augmentation of the holding capability or unit staffing levels may not be feasible if patients are anticipated to be held more than 72 hours. The remaining two AHS principles that must be considered are continuity and control. Continuity of care extends from the point of injury through the successive roles of care within the operational area to evacuation out of the joint operational area. It is facilitated by the provision of en route medical care during medical evacuation from one role of care to a higher role of care. It does not mean that the full breadth of services and facilities are or should be available at every role of care. Control addresses the requirement of ensuring that the scarce medical resources are conserved, that maximum utility of these resources occurs, and that the ten medical functions are synchronized to leverage the capabilities throughout the deployed force to accomplish the health care delivery mission throughout the AO. Control also can refer to the unity of effort required across various Army, joint, and multinational levels of command to ensure the same consistent and standard treatment protocols for the care of all potential mTBI/concussion patients regardless of which facility they receive care.

Stability Tasks

C-30. As major combat operations transition to stability tasks, the tactical environment and the requirement to conduct large, rapid troop movements will begin to stabilize, which increases the options for arraying the medical force throughout the AO. Maneuver units are more likely to begin conducting operations from forward operating bases, rudimentary buildings may be constructed, the level and frequency of violence will diminish, and the tactics used will consist of activities such as patrolling, conducting strikes and raids, providing population control and law enforcement activities, and conducting foreign humanitarian assistance and reconstruction efforts. The change in the tactical situation allows the medical commander to consider options for task-organizing and arraying his medical resources in a manner that is not feasible during offensive and defensive tasks. A discussion of one technique used in a stability task setting is provided in Section III below.

Defense Support of Civil Authorities Tasks

C-31. Defense support of civil authorities is conducted within the U.S. and will not be addressed in this publication. Although the principles, treatment protocols, and clinical practice guidelines are the same, the level of sophistication and the availability of medical resources in both the military and civilian communities limit the need to discuss these operations in this publication. Within the U.S., significant numbers of mTBI/concussion casualties may result from natural or man-made disasters, explosions, or terrorist incidents.

SECTION II — PLANNING CHECKLIST

C-32. The information in this checklist is written to provoke thought and is not intended or designed to encompass all situations which may arise. Among other factors, the type of operation and anticipated duration, type of terrain upon which it will be conducted, and patient estimates for potential mTBI/concussion injuries dictate how the medical force is arrayed within the AO. In joint and multinational operations, although the considerations are generally similar, differences in force structure, capabilities, treatment protocols, and medical equipment dictate that the medical planner and clinician understand variances between the other Services and the multinational force. It is essential that chain of command and unity of effort issues be clearly articulated and that coordination between the various participants is ongoing.

PLANNING CONSIDERATIONS

GENERAL PLANNING CONSIDERATIONS

C-33. General planning considerations affect the initial factors influencing how the operation will be planned for and implemented. It may include both medical and nonmedical considerations. The following list of questions is provided to assist in the planning process:

- What mission command structure is established for the operation? (Is a joint or multinational task force established? Will specific U.S. Army medical assets be assigned and/or attached to another Service and/or multinational force? Is the command surgeon appointed from the Army assets or is the command surgeon from another Service or country?)
- What is the nature and anticipated duration of the operation? (The information will impact how the medical force is arrayed to provide AHS support to the supported maneuver and sustainment forces.)
- What is the anticipated level of violence to be encountered? (What enemy weapons systems and/or improvised explosive devices will be encountered? What are the types and frequency of injury that can be expected? What is the estimated patient workload for mTBI/concussion injuries? What is the likelihood of mass casualty scenarios?)
- What are the terrain considerations where the operation is to be carried out? (The type of terrain can influence the frequency and severity of potential mTBI exposures. Is the operation going to be conducted in an urban terrain? In urban terrain, the severity of blast injuries can be increased when they are sustained in closely confined spaces. Soldiers rappelling into the

operation and Soldiers navigating in multistoried buildings may be exposed to falls from significant heights. Soldiers may be isolated and/or trapped below, on, or above ground level by rubble and debris. Delays in finding and evacuating Soldiers may increase the severity of the injury and adversely impact their prognosis. Is the operation going to be conducted in mountainous terrain? As in urban terrain, operations in mountainous terrain may have increased fracture, crush, and potential mTBI/concussion injury rates from falls or falling rock. Further, Soldiers can experience altitude illnesses such as high altitude cerebral edema which may coexist with a potential mTBI/concussion from a fall. Each type of terrain should be carefully analyzed to determine the increased risk it presents to potential mTBI/concussion patients.)

- What are the capabilities of the other Services and/or multinational forces within the operational area for evaluating and treating potential mTBI/concussion patients? (Do any of these formations have operational computed tomography scan equipment/capability? What treatment protocols and testing regimens are used by the other Services and/or multinational forces? Are there personnel with specialty skills such as neurology, sports medicine, behavioral health, chaplains, acupuncture, other alternative medicine expertise, physical therapy, or occupational therapy in the other Services or multinational facilities? Where are they located?)
- What is the status of electronic medical records within the AO? (Can the electronic medical record be accessed at all roles of care? If it cannot, what units/facilities do not have the capability? What procedures will be implemented to transfer information from written medical records into the electronic medical record? At what role can this be accomplished? Are standardized intake sheets developed for use by units/facilities without an electronic medical record capability? Is there a standard intake template in use within the operational area or is each facility using its own?)

Note. For U.S. Army units, the first patient administration specialist is located at the Role 2 MTF established and operated by the medical company (brigade support) or medical company (area support).

FACILITIES PLANNING CONSIDERATIONS

C-34. The actual facilities in which potential mTBI/concussive care patients may be managed and/or treated may vary to a great degree depending upon the tactical situation, the actual location, and the anticipated duration of the operation. The following list of questions is provided to assist in the planning process:

- What type of facilities are mTBI/concussive care patients going to be managed in? (Depending on the tactical situation, if potential mTBI/concussive care patients can be held in forward areas close to their units of assignment what type of facility will they be housed in? Tents? Buildings of opportunity [which require inspection by supporting engineer units prior to habitation to ensure they are structurally sound and safe for use and by preventive medicine personnel to determine what health hazards they might pose]? Engineer-constructed temporary/rudimentary buildings? Permanent/semipermanent buildings or International Organization for Standardization shelters?)
- What type of lighting is in the building/shelter? (Since many potential mTBI patients may be photophobic, the internal lighting of the building/shelter must be considered. Does the facility have windows? Can the windows be shaded to decrease the amount of bright sunlight entering the facility? What types of lighting fixtures are used in the building? Are the overhead lights fluorescent? Can alternate lighting be used [such as Christmas lights or shaded lamps]? Can lights be mechanically dimmed [variable/dimmer switch]?)
- Where is the facility physically located? (Is the facility collocated with other medical units? Is the facility located in a sustainment area but not collocated with a medical unit? Is the facility located near a noise hazardous area [potential mTBI/concussion patients may be phonophobic and experiencing sleep issues, so the facility should not be placed near generators, landing zones, motor pools, or other potentially noisy or congested locations]?)

- Does the building have an environmental control system? (Can the temperature within the facility be maintained at a comfortable temperature? If not, what can be done to increase ventilation within the facility?)
- Does the facility have sufficient electrical capability to support computers, medical equipment, or other required equipment? (What is the status of the electric supply capability for the facility? Is electrical support available 24 hours a day or are there scheduled or unscheduled brownouts/blackouts occurring?)

MEDICAL EVACUATION CONSIDERATIONS

C-35. Medical evacuation ensures that the continuity of care is maintained from the point of injury or wounding throughout the successive roles of care within the operational area. Medical evacuation is an integrated system of both rotary-wing air ambulances and ground ambulances. Medical evacuation operations can be affected by numerous factors, such as terrain and weather, air superiority, and navigable road networks. Clinical personnel must advise the medical planner of any issues which might adversely impact the prognosis of patients with potential mTBI/concussion patients to be evacuated (such as altitude restriction or time limitations). The following list of questions is provided to assist in the planning process:

- What is the theater evacuation policy? (The theater evacuation policy determines how long a patient can be held within the operational area for treatment and recovery of wounds, injuries, or illnesses. The theater evacuation policy is normally no more than seven days due to the essential care in theater concept. Is an exception to policy required to retain potential mTBI/concussion patients for a longer period of time than the theater evacuation policy permits?)
- Are there any clinical precautions/considerations when evacuating a potential mTBI/concussion patient? (What is the primary means of evacuation in use in the operational area? Are there any clinical considerations [such as altitude restrictions or length of travel time]? Are there any signs or symptoms that medical personnel providing en route care for these patients should be aware of? Are any medical records [DD Form 1380, DA Form 7656, or other] being transported with the patient?)

MEDICAL LOGISTICS CONSIDERATIONS

C-36. Medical logistics must be well planned and synchronized within the operational area. If augmentation support is provided to Role 1 and Role 2 MTFs, any special requirements for medications, medical equipment, medical equipment maintenance and repair must be planned for and coordinated in advance of deploying the augmentation assets forward. The following list of questions is provided to assist in the planning process:

- What medications are required for concussive care patients? (Are the medications required for the treatment of mTBI/concussion patients in the theater formulary? If they are not, at what level will they be special ordered? Do the Role 1 and Role 2 medical equipment sets contain all of the medications required for the treatment of this category of patients? If not, how will the medications be requisitioned? If line item requisition has not been implemented, will prepackaged medical logistics bundles be assembled to resupply required medications and automatically be pushed forward? How will medications be accounted for? Where will medications be stored? Who will issue the medications?)
- Will additional medical equipment not normally present at Roles 1 and 2 be required? (What types of equipment will be required? Who will perform maintenance on this equipment? How will this equipment be replaced? Does this equipment have expendable supplies associated with it? How will these supplies be replenished?)

PATIENT ADMINISTRATION CONSIDERATIONS

C-37. In addition to medical records (discussed in paragraph C-33 above), other patient administration requirements may include patient accountability, security of weapons and other military equipment, and patients' personal possessions. The following list of questions is provided to assist in the planning process:

- If patients are going to be held at Roles 1 and 2 how will they be accounted for? (Role 1 and Role 2 MTFs do not have an "admission" function, as do Role 3 hospitals. How will patients being held at these roles be accounted for if they are to be held at Role 1 or for more than 72 hours at Role 2? How will the status of these patients be communicated to their parent units? Is there a requirement to report patient status to higher headquarters and/or a supporting hospital? How will this be accomplished [time and frequency of report]? Are patients able to move freely through the area or must they be escorted to and from meals, appointments, and/or other activities?)
- Will patients held at Role 1 and Role 2 be armed? (Will potential mTBI/concussion patients retain their weapons and other military equipment while they are being treated and held? If not, how and by whom will the weapons and equipment be stored and accounted for? If they retain their weapons and equipment, will they be housed in a facility that is marked with the Geneva Emblem? [This may impact the status of the medical unit under the provisions of the Geneva Conventions and deprive the medical unit of the protections afforded under the conventions. Significant numbers of armed combatants housed in facilities identified as protected under the conventions may in fact be viewed by the enemy to be a tactical assembly area and the use of the Geneva Emblem would be a prohibited activity. Refer to Army medical doctrine for additional information on the Geneva Convention. Will the Soldiers retain their protective gear [vest and helmets or other military equipment]? If the equipment is to be turned in, is it returned to the parent unit or does the MTF store and account for it? Where will it be stored and who is responsible for ensuring that it is properly secured from potential theft or loss?)

HOSPITALIZATION CONSIDERATIONS

C-38. The deployed hospital will have the greatest number and variety of trained specialists to be used in the provision of care to mTBI/concussion patients. Additionally, medical equipment for advanced diagnostic testing will also be available. The medical commander must carefully analyze his medical specialty mix, staffing levels and ancillary support personnel to determine the feasibility of developing task-organized mission teams to deploy from and operate away from the Role 3 without adversely impacting the provision of care within the Role 3 facility. The following list of questions is provided to assist in the planning process:

- Does the hospital have a minimal care ward? (Has the hospital been augmented with a medical detachment [minimal care]? What is the bed census for the facility? What is the staffing level of the hospital? Can occupational therapists and physical therapists be used in the treatment of mTBI/concussion patients?)
- Does the facility have a computerized tomography scan? (Has the hospital been augmented with a hospital augmentation team [head and neck] [which has an organic computerized tomography scan]? Has a neurosurgeon/neurologist been deployed?)
- Has the facility been augmented with a hospital augmentation team (special care)? (Do any of the family practice physicians have sports medicine training and/or alternative treatment [such as acupuncture] training?)
- What will the scope of practice for each specialty care provider be in regards to treating mTBI/concussion patients? (If providers have additional skills not represented by their area of concentration how will training be identified? How will the special skills be verified or credentialed? What will be the scope of practice for enlisted personnel [such as combat medics/corpsmen, physical and occupational therapy technicians, and combat and operational stress control personnel]? What procedures, diagnostic testing, and treatments can enlisted personnel perform if a credentialed provider is not present?)

COMBAT AND OPERATIONAL STRESS CONTROL CONSIDERATIONS

C-39. Combat and operational stress control resources should be considered to assist in providing care to mTBI/concussion patients. Although the COSC mission and the treatment of mTBI/concussion patients is different, the skills and experiences of the caregivers have some similarity and may be able to enhance the

care provided to the mTBI/concussion patients. The following list of questions is provided to assist in the planning process:

- Are mTBI/concussive care treatment elements collocated with COSC elements/units? (Are the facilities collocated with or in close proximity to of each other? Are there shared services, treatment areas, and personnel that can be used in the treatment of mTBI/concussion patients? Are COSC personnel available to provide assistance to the mTBI/concussion care treatment area?)
- As many mTBI/concussion patients also are dealing with stress induced reactions, can these patients receive COSC consultation and education at the same time as they are receiving treatment for mTBI/concussion? (Can office hours be established that will accommodate both mTBI/concussion treatment and COSC consultation and education?)
- Are mTBI/concussion patients housed with personnel experiencing combat and operational stress reactions? (Are there separate facilities for these two categories of patients? Are facilities housing combat and operational stress reaction patients marked as a medical facility and displaying the Geneva Emblem? Will combat and operational stress reaction patients be armed? Will mTBI/concussion patients retain their arms and protective equipment?)

MISCELLANEOUS CONSIDERATIONS

C-40. Clinicians and AHS planners will need to be innovative in their approach to treating mTBI/concussion care patients. Although the statistical analysis of numbers and types of mTBI/concussion patients being treated in the current operations is still preliminary, there is an indication that when treatment is initiated as soon as possible after the potential exposure, the prognosis is more favorable. The following list of questions is provided to assist in the planning process:

- Are there any veterinary service units collocated on the same forward operating base as the facility providing mTBI/concussion care? (Does the veterinary unit have any military working dogs undergoing rehabilitative treatment? Is the dog handler also present? Can any of the military working dogs be used as treatment therapy dogs around mTBI/concussion patients?)
- Does the forward operating base have a gymnasium or other recreational facilities? (What restrictions do mTBI/concussion patients have on exercising? What is the Soldier's level of compliance with instructions not to do strenuous exercises? If a Soldier continues to exercise even though instructed not to, how is it affecting his recovery?)

SECTION III — OPERATIONAL TECHNIQUE

C-41. In current operations, a task-organized system of care has evolved for the treatment of mTBI/concussion patients, close to their unit of assignment. These operations are characterized by a preponderance of stability tasks conducted over an extended duration, with fairly stable troop/unit assignments, and limited troop movements and/or maneuvers. The system of care that evolved is the result of specific operational and clinical considerations which may not apply to other types of operations conducted in different environments. Although the principles upon which this system was established may be enduring, the actual facility layout and how it is arrayed in the operational area will vary from scenario to scenario.

COMMON CORE CAPABILITIES

C-42. In order to provide the most responsive care possible to Soldiers exposed to potential mTBI/concussive events, a program was undertaken to educate the line leaders on the importance of rapidly identifying Soldiers with potential exposures and fostering a command climate that encourages and enables the Soldiers to seek medical treatment and comply with the recommended treatment regimen. The coordination and synchronization of activities with the line commanders enhanced the ability of the AHS to undertake some innovative measures to establish treatment sites and holding facilities in areas they normally would not be able to use (such as collocated with a Role 1 MTF established by the maneuver battalion medical platoon). To this end, a system of care facilities was established throughout the operational area in close proximity to troop concentrations at forward operating bases. The range of

services available at each location differed to some extent based upon the level of staffing, availability of medical specialties, and medical equipment on hand. Table C-2 provides the common core capabilities of the various treatment elements.

Table C-2. Common core capabilities

Common Core Capabilities				
Point of Injury and Role 2	Medics and providers screen for red flags and other indicators necessitating medical evacuation.			
	Initial screening using the military acute concussion evaluation.			
	Medics administer the Combat Medic/Corpsman Concussion (Mild Traumatic Brain Injury) Triage (Prehospital/No Medical Officer in the Immediate Area) (Algorithm 1).			
	 Physicians and physician assistants administer the Initial Provider Management of Concussion in Deployed Setting (Algorithm 2). 			
Concussion Care Centers	Medical team provides 24-hour medical supervision in the concussion care center.			
	Occupational therapist, occupational therapy technician, and part-time physician currently staff 7 out of 8 concussion care centers. A nurse, technician, and part-time physician currently staff one facility under multinational force control. Primary care physicians oversee implementation of DOD policy guidance and clinical practice guidelines.			
	Therapists administer combat-related assessments to inform the physician's return-to-duty decision. Patients perform military-specific tasks such as climbing into a mock mineresistant ambush protected vehicle, marksmanship, and other functional activities that simulate combat demands.			
	 Providers offer basic rehabilitative services, exertional testing, and administer neuro- cognitive testing. 			
	 Leverage combat and operational stress control providers and chaplain support for mind-body- spirit interventions during concussion recovery. 			

Table C-2. Common core capabilities (continued)

Common Core Capabilities (continued)				
Concussion Care Restoration Centers	 Provides comprehensive concussion and musculoskeletal care for designated area. 			
	 Combines an intermediate level of concussion care utilizing Algorithm 2 with specific staffing model well-suited to address musculoskeletal injuries. 			
	 Integrates behavioral health with comple- mentary and alternative medicine services such as acupuncture (based on provider availability). 			
	 Staffing: sports medicine-trained family medicine team leader, two family medicine physicians, psychologist, researcher coordinator, nurse, occupational therapist, physical therapist, and 5 Navy Corpsmen. 			
	 Does not fully implement Comprehensive Concussion Algorithm Referral from Role 1 or Role 2 or Polytrauma (Algorithm 3) or Recurrent Concussion (Three Documented Occurrences in a 12-Month Span [Algorithm 4]), but refers Soldiers who require a higher role of care to a Role 3 facility. 			
Concussion Specialty Care Centers	Conducts medical and rehabilitative assessments outlined in the Recurrent Concussion (Three Documented Occurrences in a 12-Month Span [Algorithm 4]) required for those who have sustained 3 documented concussions within 12 months.			
	 Conducts comprehensive evaluations for Soldiers who are refractory to concussion treatment at lower roles of care. Offers neurocognitive assessments and inter- pretations. 			
	 Interdisciplinary treatment teams (led by a neurologist) provide the most comprehensive clinical assessment available in the operational area and offer a wide range of treatment options not available at lower roles of care. 			
	 Has magnetic resonance imaging capability. 			

NEUROLOGY CONSULTANT

C-43. The theater neurology consultant, assigned to the supporting medical brigade (support), serves as the principal staff officer and subject matter expert in the field of neurology and concussion management and provides recommendations for mTBI/concussion care policy and procedures to be implemented within the operational area.

C-44. The duties and responsibilities of the neurology consultant include, but are not limited to—

- Conduct site visits to facilities within the operational area to evaluate the implementation of clinical algorithms as mandated by DODI 6490.11
- Identify and promote best practices across all roles of care.
- Facilitate concussion training and education for deployed providers and disseminate policy updates.
- Share responsibility for supporting concussion care programs and clinical practice guidelines development.

- Participate in concussion specialty care center clinical care and serve as the consulting neurologist for remote sites.
- Actively coordinate within the command and agencies outside the command to include Office of
 the Assistant Secretary of Defense (Health Affairs), DVBIC, National Intrepid Center of
 Excellence, Office of The Surgeon General, other Services representatives on the Quad-Service
 TBI working group, and other interested parties, as appropriate.
- Consult and educate line leaders as needed.
- Track enrollment, length of stay and return to duty metrics for Soldiers treated for concussion at all concussion care centers or coordinate concussion activities within his AO and collect data, analyze trends, and prepare reports.

CONCUSSION CARE CENTERS

C-45. The primary mission for the concussion care centers is to deliver concussion evaluation and care as outlined in clinical practice guidelines and medical Algorithms 1 and 2. The concussion care center provides a holding cot capability for a limited number of self-sufficient patients recovering from potential mTBI/concussion exposure. This holding capability is provided to enable the Soldier to obtain proper rest, sleep, medical evaluation, and basic rehabilitative care in a quiet and relaxing atmosphere. Soldiers who are refractory to concussion treatment are evacuated to a Role 3 MTF.

Note. As discussed previously, when establishing these facilities care must be taken to establish them away from noise hazard area such as assembly areas, motor pools, or other congested areas.

CONCUSSION RESTORATION CARE CENTER

C-46. This facility established at a Role 2 MTF supports the designated mission for the U.S. Marine Corps by providing concussion and musculoskeletal care for a designated area within the operational area. It combines an intermediate level of concussive care with a specific staffing model well-suited to address musculoskeletal injuries. The concussion restoration care center also integrates behavioral health care with complementary and alternative medicine services such as acupuncture and osteopathic services, depending upon the incoming provider's skill set.

CONCUSSION SPECIALTY CARE CENTERS

C-47. The primary mission of the concussion specialty care center is to conduct medical and rehabilitative assessments outlined in the Recurrent Concussion (Three Documented Occurrences in a 12-Month Span [Algorithm 4]) required for those who have sustained three documented concussions within 12 months. The concussion specialty care centers also conduct comprehensive assessments for Soldiers who are refractory to concussion treatment at lower roles of care.

C-48. Interdisciplinary treatment teams provide a more comprehensive clinical assessment and offer a wider range of treatment options not available at lower roles of care. Soldiers reside in dedicated postconcussion quarters, staffed by a medic, while receiving care. If possible, standardization of facilities is recommended.

MILD TRAUMATIC BRAIN INJURY TREATMENT ALGORITHMS

C-49. The DVBIC has developed treatment algorithms for use by deployed forces in evaluating potential mTBI/concussive incidents. As new scientific data is gathered and analyzed and treatment protocols refined, the information in the algorithms is subject to change. Therefore, this appendix will only address these algorithms in general and will not provide the actual algorithms being used. When the information on the algorithm is updated, it may change the other information contained on the algorithm card upon which this appendix is based. Therefore, the information on the most current algorithm card should be followed if it varies from what is contained in this appendix. For additional information concerning the algorithms, e-mail your inquiry to tbi.consultant@us.army.mil. All Soldiers who have experienced a concussive event

and have been diagnosed with an mTBI/concussion should be given the educational information sheet developed by the DVBIC. This information sheet can be obtained at http://www.DVBIC.org.

COMBAT MEDIC/CORPSMAN CONCUSSION (MILD TRAUMATIC BRAIN INJURY) TRIAGE (PREHOSPITAL/NO MEDICAL OFFICER IN THE IMMEDIATE AREA)

C-50. This algorithm was developed for use by the combat medic or medical corpsman when he is operating in a deployed setting away from his supporting Role 1 or Role 2 MTF. The goal is to quickly assess the casualty for red flags and if a Soldier is found to require further consultation, the combat medic/corpsman is given guidance to further discuss the injury with a provider. It includes the mandatory events which require the administration of military acute concussion evaluation (MACE).

C-51. This evaluation applies to all individuals who have had or who are suspected to have had experienced a concussive event. The individual may present as being dazed, is confused, saw stars, lost consciousness (even momentarily), or has memory loss as a result of an explosion/blast, fall, motor vehicle crash, or other event involving abrupt head movement, a direct blow to the head, or other head injury.

C-52. In addition to the algorithm, the card contains information on the red flags to watch for, symptoms (Table C-1), and appropriate exertional testing which can be conducted in this setting. It also provides information on when the patient should be referred to a credentialed provider.

INITIAL PROVIDER MANAGEMENT OF CONCUSSION IN DEPLOYED SETTING

C-53. The intent of this algorithm is to provide a definitive assessment and care given by initial providers to include a more detailed assessment, management recommendations, and consideration for evacuation to a higher role of care. Providers include physicians, physician assistants, and other providers as designated by the command surgeon. Patients seen in this setting may or may not have been evaluated by a combat medic/corpsman prior to seeking treatment at the Role 1 or Role 2 MTF.

C-54. The algorithm card for the initial provider contains information on the mandatory events reporting, red flags, a more detailed symptoms listing, and the exertional testing protocol appropriate for forward deployed MTFs.

PRIMARY CARE MANAGEMENT

C-55. The initial provider algorithm card provides the physician/physician assistant with recommended primary care principles and actions. This information includes rest requirements, any sleep issues, duty restrictions, possible medications, pain management, and medical evacuation to a higher role of care, as determined appropriate by the initial provider for the specific patient being evaluated.

COMPREHENSIVE CONCUSSION ALGORITHM REFERRAL FROM ROLE 1 OR ROLE 2 OR POLYTRUAMA

C-56. Additional resources available at Role 3 hospitals allow further evaluation and more comprehensive management for those patients who present acutely with concussion and/or have persistent symptoms. More comprehensive neurological and psychological examinations can be conducted at these facilities. Additional examinations, as indicated, include ears, nose, and throat; eye; and balance examinations. Further, computed tomography is available to provide an advanced diagnostic capability.

INTERNATIONAL CLASSIFICATION OF DISEASE CODES

C-57. International Classification of Disease codes pertaining to concussive injuries are defined by the Department of Defense International Classification of Disease Coding Guidance for Traumatic Brain Injury. A fact sheet and pocket card explaining the codes and coding process can be obtained from DVBIC.

RECURRENT CONCUSSION (THREE DOCUMENTED OCCURRENCES IN A 12-MONTH SPAN)

C-58. The recurrent concussion (three documented occurrences in a 12-month span) card contains the algorithm and information on the key clinical practice guidelines, mandatory events, MACE documentation, and discussion of return-to-duty considerations.

MILITARY ACUTE CONCUSSION EVALUATION

C-59. When evaluating recurrent concussions, all three parts of the MACE must be documented. Document the MACE using the mnemonic cognitive score, neurological examination, and symptoms (CNS): C—cognitive score (reported with 30 point score); N—neurological examination reported as green (normal) or red (abnormal/positive examination findings); and S—symptoms reported as A (no current symptoms) or B (one or more current symptoms).

C-60. If during the symptom section of the MACE, alteration of consciousness/loss of consciousness is not reported, then a concussion has not occurred. The MACE is stopped because the cognitive portion is not valid in nonconcussed patients. Document symptoms in the medical record and continue the evaluation to determine other causes of these symptoms. In this situation the MACE score would be reported as not applicable. If alteration/loss of consciousness is reported, continue with cognitive and neurological screening portion of the MACE.



★ Source Note

This publication cites this source as a historical example. It is listed by page number.

v FM 3-0, *Operations*, (Washington, DC: Department of Defense, 27 February 2008)

14 August 2020 ATP 4-02.5, C1 Source Note-1



★ Glossary

This glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. Terms for which ATP 4-02.5 is the proponent are marked with an asterisk (*). The proponent publication for other terms is listed in parentheses after the definition.

SECTION I - ACRONYMS AND ABBREVIATIONS

TION I – AC	CRONYMS AND ABBREVIATIONS		
ABCA	American, British, Canadian, Australian, and New Zealand		
AHS	Army Health system		
AO	area of operations		
ATP	Army techniques publication		
AR	Army regulation		
BICEPS	brevity, immediacy, contact, expectancy, promimity, and simplicity		
CBRN	chemical, biological, radiological, and nuclear		
CONUS	continental United States		
COSC	combat and operatinal stress control		
DA	Department of the Army		
DCoE	Defense Center Excellence		
DEPMEDS	Deployable Medical System		
DOD	Department of Defense		
DODD	Department of defense directive		
DODI	Department of Defense instruction		
DVBIC	Defense and Veterans Brain injury Center		
EXORD	execution order		
FM	field manual		
G-3	assistant chief of staff, operations		
JTAPIC	Joint Trauma Analysis and Prevention of Injury in Combat		
MACE	military acute concussion evaluation		
mg	milligram		
mTBI	mild traumatic brain injury		
MTF	medical treatment facility		
NATO	North Atlantic Teaty Organziation		
S-1	personnel staff officer		
S-2	intelligence staff officer		
S-3	operations staff officer		
S-4	logistics staff officer		
S-6	signal staff officer		
STANAG	standardization agreement		

TEMPER tent, expandable, modular, personneld

TM technical manual

TOE table of organization and equipment

U.S. United States

VA Department of Veterans Affairs

SECTION II - TERMS

*amnesia

A lack of memory. Amnesia related to trauma, such as concussion, can be either antegrade or retrograde. Antegrade amnesia is the inability to form new memories following the traumatic event (typically not permanent). Retrograde amnesia is the loss of memory for events that occurred prior to the traumatic event.

★ Army Health System

A component of the Military Health System that is responsible for operational management of the health service support and force health protection missions for training, predeployment, deployment, and postdeployment operations. Army Health System includes all mission-support services performed, provided, or arranged by the Army Medicine to support health service support and force health protection mission requirements for the Army and as directed, for joint, intergovernmental agencies, coalition, and multinational forces. (FM 4-02)

★ combat and operational stress control

A coordinated program of actions taken by military leadership to prevent, identify, and manage reactions to traumatic events that may affect exposed organizations and individuals during unified land operations. Also called COSC. (FM 4-02)

★combat and operational stress reaction

Describes the wide range of anticipated, maladaptive psychological and physical symptoms, generally transient, of any severity and nature which occur in individuals without any apparent mental disorder in response to combat and operational stress exposure, and which usually subside within hours or days. (ATP 4-02.51)

★definitive care

Care or treatment which returns an ill or injured Soldier achieving maximum medical improvement. (FM 4-02)

★definitive treatment

The final role of comprehensive care provided to return the patient to the highest degree of mental and physical health possible. It is not associated with a specific role or location in the continuum of care; it may occur in different roles depending upon the nature of the injury or illness. (FM 4-02)

★dental care

The preventive and restorative treatments of the hard and soft oral structures, which is comprised of operational dental care and comprehensive dental care. (ATP 4-02.19)

emergency medical treatment

The immediate application of medical procedures to the wounded, injured, or sick by specially trained medical personnel. (FM 4-02)

★essential care

The absolutely necessary initial, en route, resuscitative, and surgical care provided to save, stabilize, and return as many Soldiers to duty as quickly as possible. (FM 4-02)

*5 R's

Actions used for combat and operational stress reaction control that include—Reassure of normality; Rest (respite from combat or break from the work); Replenish bodily needs (such as thermal comfort, water, food, hygiene, and sleep); Restore confidence with purposeful activities and contact with his unit; Return to duty and reunite Soldier with his unit.

★force health protection

- (1) 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. (JP 4-02)
- (2) Measures that promote, improve, or conserve the behavioral and physical well-being of Soldiers comprised of preventive and treatment aspects of medical functions that include: combat and operational stress control, dental services, veterinary services, preventive medicine, and laboratory services. Enabling a healthy and fit force, prevent injury and illness, and protect the force from health hazards. (FM 4-02)

health service support

- (1) All services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel. Also called HSS. (JP 4-02)
- (2) Support and services performed, provided, and arranged by the Army Medicine to promote, improve, conserve, or restore the behavioral and physical well-being of personnel by providing direct patient care that include medical treatment (organic and area support) and hospitalization, medical evacuation to include medical regulating, and medical logistics to include blood management. (FM 4-02)

*medical evaluation or assessment

A meeting between a Soldier and a person with medical training (combat medic, physician assistant, physician, or other health care provider) to ensure the health and well-being of the Soldier. Components of this evaluation include reviewing a history (events surrounding injury, review of symptoms, and the like), a physical examination, and a review of the treatment plan with the Soldier.

*mild traumatic brain injury/concussion

The diagnosis of concussion is made when two conditions are met. In the absence of documentation, both conditions are based on self-report information. An injury event must have occurred.

The individual must have experienced one of the following:

- Alteration of consciousness lasting less than 24 hours.
- Loss of consciousness, if any, lasting for less than 30 minutes.
- Memory loss after the event, called posttraumatic amnesia, that lasts for less than 24 hours.
- Normal structural neuroimaging.

*military acute concussion evaluation

A three-part medical screening tool developed by the Defense and Veterans Brain Injury Center to assist clinical providers with the evaluation of concussion. This tool is available to medical personnel by e-mailing: info@DVBIC.org. Also referred to as MACE.

*neuroimaging

A radiographic imaging study to evaluate the brain, to include computerized tomography scan or a magnetic resonance imaging.

*Posttraumatic amnesia

Period of amnesia following a traumatic brain injury.

*reconditioning program

An intensive 4- to 7-day program (may be extended by exception to theater evacuation policy) of replenishment, physical activity, therapy, and military retraining for combat and operational stress control casualties and neuropsychiatric cases (including alcohol and drug abuse) who require successful completion for return to duty or is evacuated for further neuropsychiatric evaluation.

*Soldier restoration

A 24- to 72-hour (1- to 3-day) program in which Soldiers with combat and operational stress reactions receive treatment.

★theater evacuation policy

A command decision indicating the length in days of the maximum period of noneffectiveness that patients may be held within the command for treatment. Patients who, in the opinion of a responsible medical officer, cannot be returned to duty status within the period prescribed are evacuated by the first available means, provided the travel involved will not aggravate their disabilities. (ATP 4-02.2)

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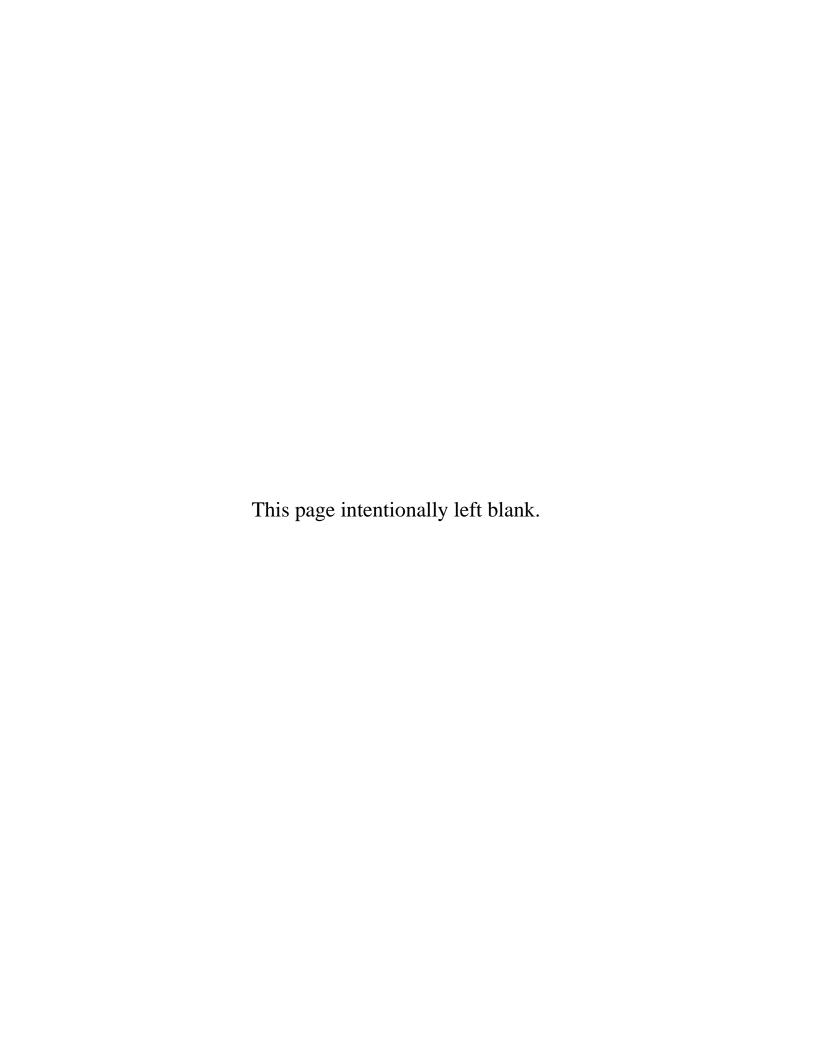
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