

**Physical Therapy
and
Occupational Therapy
Section**

Duties and Responsibilities

(References: AR 611-101, AR 40-48, FM 8-10-14, FM 8-10-15, STP 8-2-MQS)

General

Physical and occupational therapy refers to the services provided by physical therapists (PT) or occupational therapists (OT) and supporting enlisted specialists. PTs and OTs have complementary backgrounds and training, but are not substitutable for each other. When providing unit level care (physician extender mission) for neuromusculoskeletal problems, PTs provide primary care for complaints involving the head/neck, spine/trunk, and extremities; OTs provide care of the elbow/wrist/hand. If both services are present, they are ideally located together.

During a mass casualty situation, PT personnel may assist in managing “delayed” or “minimal” category patients, or supplement the Orthopedic section. OT personnel have skills and training to provide combat stress support to casualties and staff. In emergency situations, PT and OT personnel may be called upon to assist with triage, as occurred in the Vietnam War.

Both PT and OT services include outpatient and inpatient care. Both services are involved in injury prevention, health promotion, and fitness consultation.

OT Guidelines

OT can impact positively on a broad variety of medical, surgical, and psychiatric conditions and greatly ease the workload of the theater hospital staff, since human performance is its focus. OT treatment requires simple equipment and few supplies, relying instead upon educational methods and materials at hand. Through OT intervention, casualties can retain their identities as soldiers, achieve self-care independence, become productive and mission effective, obtain useful employment, and regain confidence in their ability to return to duty at the earliest opportunity.

OTs evaluate thoroughly aspects of performance involving sensorimotor, motor, neuromuscular, cognitive, and psychosocial skills. OTs also evaluate skills related to daily functioning, such as maintaining hygiene, dressing, eating, communicating, and moving about. At greater functional levels, performance areas include the capacity to perform the basic soldiering skills, to survive, to work, to manage emotions, and to rest or sleep appropriately. OT treatment develops these capacities and designs intervention programs to prevent their deterioration.

PT Guidelines

The goal of PT in a deployed environment is to provide accurate and timely evaluation, restore function, and alleviate pain and suffering with minimal use of consumable supplies and durable medical equipment. PTs evaluate, plan, supervise, and implement treatment programs to correct, prevent, or retard physical impairments resulting from injury, disease, or pre-existing biomechanical problems. PT enlisted personnel perform treatments as directed by the therapist, monitor response to treatment, and assist in collecting measurement data to assess the effectiveness of treatment procedures.

Immediate PT evaluation and treatment of patients with neuromusculoskeletal conditions (e.g. sprains, and strains of spinal and peripheral joints and muscle groups) allows rapid return to duty for a majority of patients and thus becomes a force multiplier. For some patients with injuries requiring evacuation from the theater, early PT evaluation and treatment is essential to facilitate a more rapid rehabilitation and subsequent return to functional status. Early intervention in the intensive care and recovery areas for enhanced mobility (transfers, breathing exercises, etc.) prevents morbidity due to deep vein thrombosis and pneumonia complications.

PTs serve as independent practitioners and physician extenders in accordance with the established guidelines and regulations of each military service. The PT performs primary assessment of patients with neuromusculoskeletal conditions and may order appropriate radiological or lab tests. Prescription of non-narcotic medications is included in the scope of practice for credentialed providers.

PTs perform baseline and interim assessments of each referred patients. The evaluation may include functional status, gait analysis, specific manual muscle testing, and assessment of mobility, structure/posture, neurological, and circulatory status. These documented objective findings are referenced by physicians as indicators of stabilization, improvement, or deterioration of a patient's condition and used for determination of return to duty status or evacuation.

Treatment may include individual and group exercise, manual therapy/mobilization procedures, ambulation, transfer training, balance facilitation, initial and subsequent non-surgical debridement of burns and open wounds, hydrotherapy, dressing application, positioning programs, general reconditioning, and application of various modalities (ice, heat, electricity, traction, ultrasound, etc.).

Staffing

PT and OT sections in field or combat support hospitals will be small. There may be only one therapist and one technician assigned to the section. Administrative support is generally absent. Sometimes staffing can be augmented by soldiers with medical or administrative military occupational specialties. Soldiers in a temporary medical hold status may be able to assist with some administrative and other duties. Sometimes local civilians are available to do odd jobs and act as interpreters. However, do not count on this. You might be disappointed.

Patient Population

Therapists in deployed environments may treat a variety of patients other than American military personnel. Patients may include:

- Host country and allied military personnel
- Third country nationals
- Host country civilians
- American DOD/DA civilians
- State Department personnel
- Host country VIPs
- Refugees
- Enemy prisoners of war
- American contractors
- American civilians

Because the American medical system may be perceived as superior to local (foreign) medical care, our services may be in high demand.

Enemy prisoners of war (EPWs) are to be treated as any other wounded patient. Be aware that they may be terrified, angry, or relieved. Your access to EPWs may be determined by their guards, usually host country military.

Logistical Support

Do not expect an abundance of logistical support. Supplies should be more readily available at a permanent facility. If serving in a medical facility of the host country, as occurred for some PTs and OTs in Desert Storm, the religious customs, outdated protocols and equipment, and different philosophies of treatment by the host country's medical personnel may provide additional challenges. For example, the Saudis, because of their beliefs, were very penurious in administering pain medications. As a result, many of their burn patients were under-medicated during treatment. Regardless of the standards of medical care in other countries, US military medical personnel should strive to maintain high standards of care within environmental and logistical constraints.

Anticipated Injuries

In a non-combat environment, or prior to the participation of troops in military operations, musculoskeletal problems and sports related injuries are among the most common types of injuries treated by PTs and OTs. Therapists will serve as physician extenders. It may be possible to develop fitness programs, participate in injury prevention and screening, and present informational programs on a variety of health topics.

In a war zone or environments in which troops are engaged in combat, management of patients with multiple orthopedic trauma, brain and spinal cord injuries, burns, blast and mine injuries, traumatic amputations, and open wounds becomes the priority. Professional competence in management of the above conditions is imperative.

“Other Duties as Assigned”

AR 40-1, paragraph 2-22, clarifies that the senior physical therapist and senior occupational therapist will be chiefs of their respective sections. Paragraph 2-3 governs the utilization of AMSC officers. As an exception to policy, AMSC officers may be detailed as members of courts-martial boards or nonprofessional boards or committees when AMSC officers or other food service, physical therapy, or occupational therapy personnel are involved in the proceedings. (Ref. AR 40-1 Paras. 2-3& 2-22)

AMSC officers who work regularly established clinic hours may perform AOD or SDO functions. The regulation requires that scheduling be fair and equitable.

AMSC officers will not be assigned special administrative duties, such as linen inventory, drug inventory, hospital inspection, and cash verification unless they are serving in an administrative headquarters or as administrative residents.

PTs and OTs should be very visible and active participants in unit activities such as assembling and disassembling field hospitals and all training activities.

Special Opportunities

When deployed, AMSC personnel may have the opportunity to accompany Preventive Medicine or Special Forces units on outreach programs. Such participation can improve access to soldiers in remote locations, improve safety during travel, and expand the provision of needed services to troops and other populations.

Deployment with DEPMEDS

The Deployable Medical Systems (DEPMEDS) were developed in the 1980's in response to a recognized need to provide medical support that was austere but adequate, affordable, relocatable, maintainable, modular, capable of airlift, and of most importance, quadservice.

DEPMEDS are commonly used by active duty and reserve Army medical units in field environments and when deployed. DEPMEDS consists of two components: 1) prefabricated, containerized modules that house the pharmacy, X-ray, laboratory, and operating rooms, and 2) double-lined tents that house patient-care areas and ancillary services. These tents are called TEMPER (tents, extendible, modular, personnel). It is the responsibility of the medical personnel assigned to the Army medical units to erect and dismantle the containerized modules and TEMPER system during field training exercises (FTX) and during deployment. This process can take several days and is physically demanding. The various components of DEPMEDS can be configured according to the medical needs of the unit. This flexibility is essential in a combat environment.



DEPMEDS Layout, 67th Combat Support Hospital, Hungary, 1996

The DEPMEDES contain medical material sets (MMS). For PT and OT, these are metal chests that contain equipment and supplies. As part of a Deployable Medical System (DEPMEDS), the Physical/Occupational Therapy Medical Material Set (MMS) contains the types and quantities of supplies and equipment needed to conduct an expedient PT/OT operation. The service is further augmented by wound management, burn, and splint packages. The PT/OT service should be located as close as possible to the intermediate and minimal care wards. It should also be adjoining Orthopedics. This MMS operates in a 64' x 20' Tent, Extendible, Modular, Personnel (TEMPER) and is stored and transported in a MILVAN (military-owned demountable container).

The PT/OT service provides the following:

- Neuromusculoskeletal evaluation and treatment
- Fabrication and application of orthotic devices
- Exercise programs to improve function
- Debridement and wound management

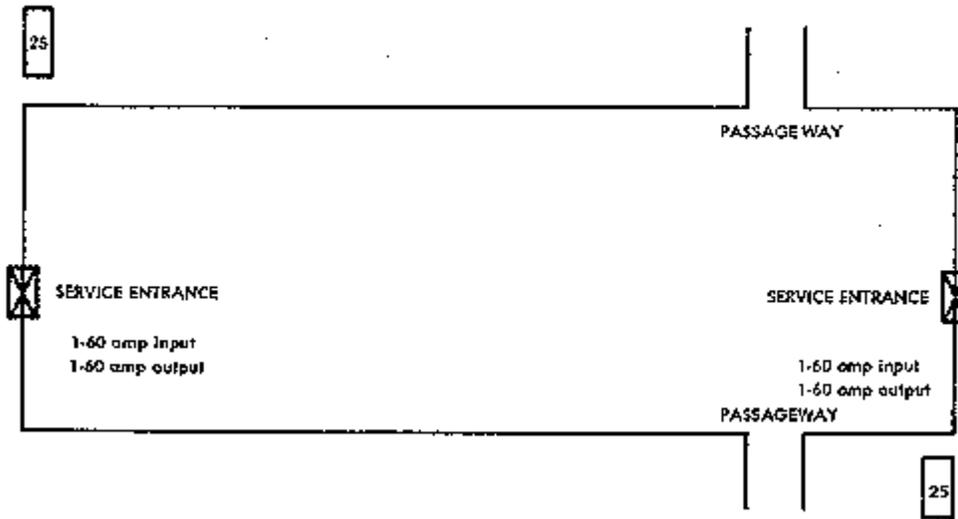
- Activity programs designed to improve fitness, reduce stress, and increase work tolerance
- Wellness and injury prevention programs

Examples of the equipment in the PT/OT MMS are:

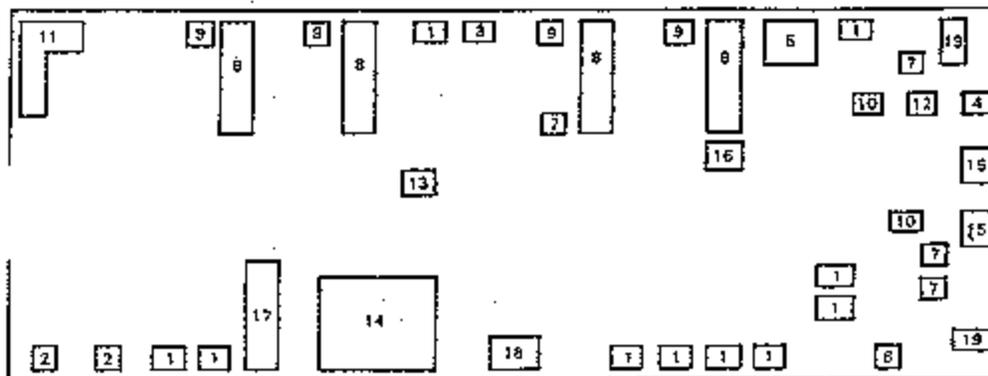
- Tool kit, carpenters, with chest
- Cabinet, electrocardiograph, mobile (augmentation)
- Sink unit, surgical, scrub
- Heater, heat treatment pad
- Cryotherapy unit
- Folding treatment table
- Ultrasound/high galvanic stimulator
- Portable traction apparatus
- Portable whirlpool and whirlpool chair
- Adjustable surgical instrument stand
- Laptop computer

The layout of the PT/OT service is depicted in the below figures (ref: TC 8-13). The items identified in 1 through 10 in the matrix make up the basic PT/OT MMS. The items identified in 11 through 19 are components of the COMMZ augmentation set. Try to position your clinic close to orthopedics and as close to a potable water supply, and bunker, if possible.

MMS, PHYSICAL THERAPY, DEPMEDS



PT/OT MMS Floor Plan



TEMPLATE	NOMENCLATURE	TEMPLATE	NOMENCLATURE
1	CHEST, MEDICAL INSTRUMENT AND SUPPLY	11	CHAIR, FOLDING
2	DESK, FIELD WITH FOLDING CHAIRS	12	CHAIR, WHIRLPOOL
3	HEATER, HEAT TREATMENT	13	BIKCYCLE, STATIONARY, ERGOMETER
4	HOSE, GARDEN WITH NOZZLE	14	MAT, EXERCISE
5	REFRIGERATOR, COLD PACK THERAPY	15	PANELS, SHOWER, DISINFECTING ALKO
6	SINK UNIT, SURGICAL SCRUB	16	UNIT, TRACTION
7	STOOL, REVOLVING	17	TABLE, TILT
8	TABLE, TREATMENT, FOLDING	18	SET, WEIGHT
9	STIMULATOR, ULTRASOUND/HIGH GALVANIC	19	BATH, WHIRLPOOL, PORTABLE
10	STAND, SURGICAL		

Physical therapy/occupational therapy MMS.

Collocation of PT and OT makes for better teamwork. Be aware of drainage and other topography in locating your clinic. Ensure that the number of electric outlets are adequate, and that potable water is nearby. Although DEPMEDS allocated 64' x 20' for the PT/OT section, space may be limited. Acquire as much space as the unit allows. If necessary, the space may be expanded by use of a tarp or extra tent.

Supplies & Equipment:

If mobilized with a combat support hospital, the MMS will be included in DEPMEDS. It is strongly advisable to become familiar with the contents of the equipment box if you are PROFIS and assigned to a combat support hospital (CSH). Ensure that hand tools such as hammers, saws, and measuring tape are part of the kit. Consumable supplies will be obtained from a general supply area and though burn/wound care instruments will be part of the set, they will be prepared, sterilized, and handed out by Central Material Supply (CMS).

It is best to anticipate an austere environment. “Scrounging,” improvisation, ingenuity, and resourcefulness are valuable skills. Order expendable supplies, such as gloves, dressings, tape, and sterile packs, well in advance. It is essential to keep a running inventory of expendable items. A daily or weekly count will allow you to successfully anticipate supply needs. Limited supplies can severely impact your effectiveness in the field. Expect delays and “glitches” in the system. Do not become frustrated over the perceived lack of support. Your logistic/supply personnel are some of your hardest working and most under appreciated persons. Below are listed some the possible sources of equipment and/or supplies you might need.

- Logistics
- The local economy.
- Other units: Non medical items such as chairs, tables, cots, beds, paper, etc.
- Other sources: Discarded packing boxes, pallets, wood from construction areas etc.

The following page lists recommendations for the physical therapy inventory.

References:

Handouts from Combat Development Division, AMEDD Ctr & School
Deployable Medical Systems, Doctrine and Tactics Training Outline, AMEDD Ctr & School
TC 8-13, Deployable Medical Systems: Tactics, Techniques, and Procedures, HQ, DA

LOGISTICS IN OT/PT OPERATIONS

A good understanding of logistics in deployment is necessary if the occupational and physical therapist are to ensure they'll have the supplies needed to meet the needs of the soldiers in the theater of operations. In addition, the therapist must be knowledgeable about logistics actions in the event they deploy as a "slice element" away from their parent unit or logistical base of support.

There are traditional and non-traditional methods of acquiring supplies to meet operational needs. The traditional methods are those common to the Army logistical system for ordering and receiving supplies that are in the standard stock system. Non-traditional logistics are those methods and supplies used to meet mission needs that utilize more unconventional methods which may assist the therapist in acquiring items that are either not in the standard stock system or may take an inordinate amount of time to receive through traditional supply channels.

The following are some general suggestions to consider in order to maximize logistical support of your clinical operations in the field.

A. Traditional Logistics

Perform layout of all equipment. Take all you are authorized! Check for any additional room in supply containers (MilVans) to take additional supplies if possible. Check with S4 on operational funds and acquiring excess equipment or supplies. Your S4 may be able to get a "Project Code" which is the accounting code for the operation. OTs check with Department of Housing (DEH) on post for packing and crating lumber.

Therapists should acquire Class II and Class VIII supplies for Deployment Phase of operation. If possible, find out which Main Support Battalion will be supporting you in your area of operation (AO). Check to see if your Unit Identification Code (UIC) has been identified on the theater of operations G4 (Operations) list for units in theater. Establish a rear detachment re-supply through prior coordination. Fill out in advance 2765's supply transaction cards for high use items. Use your deployment UIC, Project code and receiving MSB on cards.

Therapists should plan for no re-supply for the first 90 days of the operation. Consideration should be given to the electrical source in theater and the environmental conditions.

B. Non-Traditional Logistics

Use personnel movement of unit personnel in and out of theater as an alternate method of re-supply e.g. MEDEVAC or rest and relaxation (R&R). Therapists should make a list of all e-mail addresses / phone numbers of all traditional and non-traditional

supply sources and give a copy to rear detachment. Consider use of Army Post Office (APO) mail for small item and emergency re-supply. If possible have unit maintain International Merchant Purchasing Card (IMPAC) account for use by rear detachment and with prior coordination, the card may be used in theater and /or communication zone (COMMZ). Training of rear detachment card holder must be done in advance of deployment or current unit card holder may be able to maintain card with prior coordination with resource management and project code. In addition, authorizing agent must be in the area of operation (AO).

The following are some logistical actions therapists may want to consider. These actions are broken down according to deployment cycle.

DEPLOYMENT PHASE LOGISTICS

- * Check all equipment and inventory supplies during the load up
- * Pack immediate use supplies in deployment vehicles / trailers or near front of Mil Vans
- * Keep all supply sources information with you
- * Make contact with professional peers who might be able to support you logistically
- * Check in at Intermediate Staging Base (ISB) Logistics Center to confirm in-theater UIC. Get Mobile Subscriber Equipment (MSE) field telephone numbers and attempt to identify Medical Logistics Battalion that will support your AO.

IN-THEATER: EARLY DEPLOYMENT PHASE

- * Make contact via phone / e-mail with all supply sources as soon as possible
- * If possible visit Combat Support Hospital (CSH), Forward Support Medical Company (FSMC), MEDLOG BN and MSB get POC's and phone numbers
- * Visit base camp operations office (Mayor's) office. He or she controls base camp layout / space and construction materials.

IN-THEATER: LATE DEPLOYMENT PHASE

- * OT/PT contact G5, Civil Affairs to determine assistance (if any) to CA operations, e.g. work therapy assistance, soldier to children programs, or pediatric development programs, etc.
- * Contact Morale, Welfare and Recreation (MWR) personnel for their deployment timeline, services and programs as well as cooperative programs or logistical support

SUSTAINMENT PHASE: Approx. Day 90-120

- * Begin receiving sustainment phase operational supplies for soldiers and mission support
- * Coordinate programs through MWR, CA and base camps. Push supplies and equipment forward with therapy teams if possible.
- * Identify any additional sources of supplies available in theater
- * If possible use IMPAC Card in theater or CommZ through AAFES. Remember that monthly reconciliation of account must be continued through rear detachment.

RE-DEPLOYMENT PHASE: Beginning Determined by Operation

- * Turn in all excess equipment and supplies received in theater
- * Turn over all-important POCs and phone numbers to follow-on therapist in on-going operations
- * Write up logistical lessons learned and share with peers

Recommended Physical Therapy Inventory

Expendable Supplies	Durable Supplies	Non-Expendable Items
pre-wrap	1 trash can/lid	1 field desk/2 stools
athletic tape (1 ½")	4 linen bags	medical chest
elastic tape	72 hand towels	6 boxes (shipping)
rubber tubing/theraband	50 towels	1 refrigerator/freezer
theraputty	36 sheets	1 field sink
3", 4", 6" elastic bandages	7 pillows with covers	1 CHCS computer/printer (pt. Tracking)
canes	20 pillow cases	4 exercise mats
crutches with tips and pads	1 cervical traction unit	1 x-ray viewing box
ultrasound gel	2 spreader bars with tx cord	1 field stove
chemical hot and cold packs	10 ankle weights	2 portable US/ES units
stockinette, 4" and 6"	14 sand weights	4 TENS units
twine	1 bolster	3 exam tables
traction cord	4 timers	2 exam stools
sterile gauze	1 field fracture brace	1 hydrocollator
¼" or ½" orthopedic felt	5 gait belts	reference books (burns, trauma, ortho/neuro, neuromusculoskel. eval)
wound dressings	6 restraints	medical terminology, language)
ankle/knee braces	stethoscope	laptop computer with diskettes
knee immobilizer	sphygmomanometer	portable whirlpool
lumbosacral corsets	tape measures	
cervical collars	hydrocollator forceps	
exercise handouts	3 emesis basins	
rehab protocols	1 rocker or BAPS board	
thermoplastic material	leather punch	
(i.e. Aquaplast or Orthoplast)	4 6" curved Mayo scissors	
fishing line and rubber bands	4 Russian forceps	
Surgilube	goniometers	
Cups	2 reflex hammers	
Sterile brushes	2 bandage scissors	
	2 reflex hammers	
	tuning fork (128 c)	
	hot packs and covers	
	hand dynamometer	
	tin snips	
	Handtools (pliers, convertible screwdriver, vise grips, leatherman tool)	

Bring a complete listing of national stock numbers (NSN) of needed supplies. Consider ordering thru Orthopedics if their service has a higher acquisition priority.

Let no man's soul cry out: "Had I been properly trained..."

Monument at Fort Benning, GA

Professional Preparation

Clinical

In a field environment, everyone will be expected to perform at a higher intellectual and skill level with a decreased level of technology. It is essential to keep current with the standards of treatment of the military required for deployment. Take advantage of continuing education opportunities. When on two weeks of active duty, reserve officers should serve as patient care providers in Army clinics to become comfortable with military therapy procedures and responsibilities. Therapists must become adept with administrative procedures, to include personnel management and resource management, record keeping, and data collection.

Begin problem solving in advance. As you go through your daily patient care, observe and ask yourself what you would use if a particular item were not available. Ask the advice of others on acceptable substitutes.

Based on the suggestions of previously deployed therapists, the following continuing education courses should be pursued:

- Care of burns/wounds/acute trauma
- Early amputee rehabilitation
- Early spinal cord trauma management
- Combat care casualty course
- Upper extremity splinting
- Pediatric evaluation/rehabilitation
- Neurological evaluation/rehabilitation
- Manual therapy

ARTEP 8-955-MTP lists task standards and outlines task steps and performance measures in a "go" or "no-go" format. This is a valuable training tool and can be used to assess staff skills and as a guideline for training emphasis. These task standards are listed in Appendix M.

Military

- Common task training
- Physical training and acclimatization
- Medical field training. Training with your unit in medical training exercises provides hands on experience in a field environment and familiarization with available equipment.
- Joint Field Exercises. Field exercises with combat units provide realistic training and educate the line as to the value of PTs and OTs in directly conserving the fighting strength. Participation also enables us to promote our skills and educate others on the important role of PT and OT in a field medical unit.
- Combat Care Casualty Course (C4)
- Triage
- Expert Field Medical Badge training
- Emergency Medical Technician (EMT) training
- Anti terrorist training (SAEDA briefing). See Appendix K.
- Biohazard training/NBC training
- Advanced cardiac life support/advanced trauma life support training

Data Collection and Record Keeping

Data collected during deployments provide valuable information regarding the types of patients receiving care, workload, utilization of services, effectiveness of interventions, etc. When deployed, most therapists remain very busy. An expedient way of collecting information is desired. Familiarity with spreadsheets and databases can be helpful if a computer is available.

Suggested items for data collection:

- Number of neuromusculoskeletal evaluations performed
- Percentage of patients that would have been evacuated from the theater if PT or OT care were not available
- Types of injuries and percentages
- Location of injury and percentages (i.e. shoulder/upper arm, knee)
- Numbers of visits per injury
- Percentages of patients with chronic or exacerbated chronic conditions
- Time to return to duty
- Categories of patients treated (e.g. active duty, reservist, civilian, native, allied)
- Any trends in injuries (e.g. truck drivers on bumpy roads, falls during icy conditions)
- Percentage of outpatients vs. inpatients
- Number of soldiers participating in fitness or injury prevention programs if offered.

The PT or OT should remain alert for research opportunities. These need not be detailed studies. A physical therapist who participated in Operation Joint Endeavor from December 1995 through July 1996, administered a brief questionnaire to MC, MSC and NC officers in his deployed unit to determine their perception of the need of a PT in a MASH unit before deployment compared with their perception once deployed with a PT. The results demonstrated a need for education regarding the role of the therapist in the field, and verified the value of a therapist as a member of a MASH.

An injury data collection form provides a means to consistently collect and report injuries and/or illnesses seen in the clinic. An example of a generic form for collection of research information is provided in Appendix Q.

After Action Reports

After action reports from those who have previously deployed, if available, can serve as an excellent reference prior to deployment. Such references offer insights into the peculiarities of the mission, the challenges, obstacles, strategies, suggestions, lessons learned, and direction for future endeavors. Collectively, they provide a compilation of lessons learned and valuable historical information.

Weekly summaries of accomplishments and challenges serve as excellent references for writing final after action reports or for later publication of the experience. Slides and videotapes offer excellent means of sharing the experience with others and for future presentations.

The following format has been standardized for use among deployed Army physical therapists, and may be useful for other specialties as well. It provides a reporting structure appropriate for a variety of missions.

After Action Report Format (AAR)

Your deployment experience is very important to us. Your input will be used: (1) to ensure that Physical Therapists deploying in the future are well prepared to contribute to the mission, and (2) to enhance the personal safety and professional satisfaction of those deploying. This is to be prepared with your peers and junior officers in mind.

Within 10 working days of the completion of a deployment an AAR should be submitted to the Chief, Physical Therapist Section who will review and distribute accordingly. Use appropriate letterhead, date the report, and prepare as follows:

Consolidate and summarize your important points specifically addressing all areas noted in the following format. Include attachments, photos, slides, and appendices as needed to portray an accurate description. Your thoughtful and thorough assessment of problems and issues, along with recommendations for resolution are required; personal opinions and comments are welcomed but should be so identified. See Appendix N.

If serving as a member of a Process Action Team (PAT), you may be requested to submit a trip report through channels to your AOC chief. A recommended format can be found in Appendix P.