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Medical Equipment Used to Support Operations in Southwest Asia

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Acronyms and Abbreviations

AOR Area of Responsibility

ASD(HA) Assistant Secretary of Defense (Health Affairs)

CJTH Combined Joint Theater Hospital

DLA Defense Logistics Agency

DMLSS Defense Medical Logistics Standard Support

MTF Military Treatment Facility

PBUSE Property Book Unit Supply Enhanced

SAMS–E Standard Army Maintenance System-Enhanced

TAMMIS Theater Army Medical Management Information System

USCENTCOM U.S. Central Command



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-4704

September 30, 2009

MEMORANDUM FOR CHAIRMAN, JOINT CHIEFS OF STAFF
COMMANDER, U.S. CENTRAL COMMAND
ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL
MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE LOGISTICS AGENCY
NAVAL INSPECTOR GENERAL
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Medical Equipment Used to Support Operations in Southwest Asia (Report No. D-2009-113)

We are providing this report for review and comment. We requested management comments on a draft report when preparing the final report. The Joint Chiefs of Staff and U.S. Air Forces Central Command did not respond to the draft report; however, we considered comments from the U.S. Central Command, Assistant Secretary of Defense (Health Affairs), Army, Navy, and Defense Logistics Agency.

DOD Directive 7650.3 requires that all recommendations be resolved promptly. Because of management comments, we revised Recommendation A.1. We request that the Joint Chiefs of Staff, U.S. Central Command, and Army and Air Force Central Commands provide comments on the revised recommendation by October 30, 2009. We also require comments on Recommendation A.2. from the Joint Chiefs of Staff, U.S. Central Command, and Army and Air Force Central Commands. We also request additional comments on Recommendation A.3. from the Surgeon General of the Army. We request comments by October 30, 2009.

Please provide comments that conform to the requirements of DOD Directive 7650.3. If possible, send your comments in electronic format (Adobe Acrobat file only) to audyorktown@dodig.mil. Copies of your comments must have the actual signature of the authorizing official for your organization. We cannot accept the / Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

Site visits in the U.S. Central Command area of responsibility presented numerous administrative and logistical challenges. We extend our appreciation to Military Department medical and logistics personnel for their assistance, cooperation, and support. Please direct questions to Michael A. Joseph at (757) 872-4698.

Paul J. Granetto

Principal Assistant Inspector General

for Auditing



Results in Brief: Medical Equipment Used to Support Operations in Southwest Asia

What We Did

The objective of the audit was to determine whether controls were in place for acquiring mission-essential medical equipment and whether the recording and reporting of medical equipment was accurate and complete.

We evaluated medical equipment accountability, inventory, maintenance, and procurement information at six military treatment facilities and five medical logistics activities in Afghanistan, Iraq, and Qatar. At those 11 locations, we analyzed and compared information to determine whether controls and records were in place to provide continuity and oversight of medical equipment and repair part accountability, maintenance, and procurement functions in theater.

What We Found

The theater lead agent for medical logistics supports military treatment facilities and medical logistics activities; however, the lead agent cannot effectively perform life-cycle management because it does not have visibility or oversight of all theater-wide medical equipment and repair part procurements.

The theater lead agent, Army, Marine Corps military treatment facilities, and logistics activities do not use a standard data system for tracking medical equipment procurements, inventory, and maintenance information. We identified an internal control weakness in the recording and reporting of medical equipment procurement, accountability, and maintenance transactions. Several management initiatives should improve the medical equipment accountability and procurement process.

What We Recommend

We revised our recommendation. The Commander, U.S. Central Command should coordinate and establish a working group to develop controls that will ensure the theater lead agent has oversight of all medical equipment and repair part procurements regardless of source of supply. The Commander should also ensure the installation and use of the Defense Medical Logistics Standard Support system equipment management and maintenance submodules at all military treatment facilities in the Command's area of responsibility.

The Assistant Secretary of Defense (Health Affairs) should coordinate with the U.S. Army Surgeon General on the implementation plan for Military Health System Defense Medical Logistics Standard Support system upgrades. Finally, the U.S. Army Central Command should provide a status update and implementation plan on the management initiatives that would improve the medical equipment and repair part procurement process.

Management Comments and Our Response

The Commander, U.S. Central Command did not agree with the original recommendation on the development of a joint theater procurement process. We revised the recommendation. Management generally agreed with the other recommendations to coordinate the installation and implementation of the Defense Medical Logistics Standard Support system in theater and to provide an update on management initiatives. See the recommendations table on page ii for additional comments required.

Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
	• 0	Required
Chairman, Joint Chiefs of Staff	A.1., A.2.	
Commander, U.S. Central Command	A.1., A.2.	
Assistant Secretary of Defense (Health Affairs)		A.1., A.2., A.3.
Surgeon General of the Army	A.3.	A.2.
Commander, U.S. Army Central Command	A.1., A.2.	
Commander, U.S. Naval Forces Central Command		A.1., A.2.
Commander, U.S. Marine Corps Forces Central Command		A.1., A.2.
Commander, U.S. Air Forces Central Command	A.1., A.2.	
Director, Defense Logistics Agency		A.1., A.2.

Please provide comments by October 30, 2009

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Introduction

This report addresses the accountability, maintenance, and procurement processes at six military treatment facilities (MTFs) and five medical logistics activities in Afghanistan, Iraq, and Qatar.

Objectives

Our overall objective was to evaluate the internal controls over medical equipment used to support operations in Southwest Asia. Specifically, we determined whether controls were in place for acquiring mission-essential medical equipment. We also determined whether the recording and reporting of medical equipment assets was accurate and complete. As part of the medical equipment and repair part procurement process, we reviewed the systems and processes used to provide medical equipment support in the U.S. Central Command (USCENTCOM) area of responsibility (AOR). We also reviewed the impact and relationship of medical equipment accountability to medical equipment maintenance support. See Appendix A for the scope and methodology and prior coverage related to this report. A map of the USCENTCOM AOR is at Appendix B.

We performed this audit pursuant to Public Law 110-181, "The National Defense Authorization Act for Fiscal Year 2008," section 842, "Investigation of Waste, Fraud, and Abuse in Wartime Contracts and Contracting Processes in Iraq and Afghanistan," January 28, 2008. Section 842 requires "thorough audits . . . to identify potential waste, fraud, and abuse in the performance of (1) Department of Defense contracts, subcontracts, and task and delivery orders for the logistical support of coalition forces in Iraq and Afghanistan; and (2) Federal agency contracts, subcontracts, and task and delivery orders for the performance of security and reconstruction functions in Iraq and Afghanistan."

Background

The mission of the Military Health System is to provide optimal health services in support of our nation's military mission. The Military Health System provides a comprehensive medical capability to military operations, natural disasters, and humanitarian crises around the world and ensures delivery of world-class health care to all DOD Service members and retirees, their families, and other eligible beneficiaries. When forces first deployed to the USCENTCOM AOR, the Military Health System was equipped to provide medical care for young and healthy U.S. and coalition forces. MTF operations have expanded to a sustainment mission, which includes delivery of health care to U.S. and coalition forces, U.S. Government civilians, contractors, local nationals, third-country nationals, and multinational government personnel.

In the USCENTCOM AOR, we visited six MTFs. The MTFs included three Army Combat Support Hospitals, one Air Force Theater Hospital, a Combined Joint Theater Hospital (CJTH), and a Marine Corps Expeditionary Medical Unit. We also visited five medical logistics activities that included the Army medical logistics theater lead agent;

one Army medical logistics brigade, battalion, and company; and a Marine Corps medical logistics company. We refer to those five as medical logistics activities.

The audit addresses the Military Health System mission of helping Service commanders create and sustain a healthy and medically prepared fighting force. This report will assist the Military Health System in meeting the goals of its strategic plans. The audit addresses the Military Health System Human Capital Strategic Plan goal of providing globally accessible health and business information to enhance mission effectiveness. The audit also supports the Military Health System Strategic Plan goal of enhancing the deployable medical capability and force medical readiness by reducing the time from "bench to battlefield" for more effective mission-focused products, processes, and services.

USCENTCOM Medical Logistics Management

In February 2006, the Chairman of the Joint Chiefs of Staff designated the U.S. Army Medical Materiel Center - Southwest Asia as the theater lead agent for medical materiel. The mission of the theater lead agent is to provide medical logistics support to the USCENTCOM AOR and includes medical logistics support to MTFs during hostility and sustainment operations. As the theater-level distribution node for medical logistics in the USCENTCOM AOR, the theater lead agent provides medical supply-chain planning, storage, and distribution of medical equipment and repair parts. The theater lead agent is also the lead procurement agent for acquiring medical equipment and associated repair parts and for performing medical equipment maintenance.

Joint Publication 4-02, "Health Service Support," October 31, 2006, states that the theater lead agent serves as the single point of contact between supported customers and numerous national-level industry partners. It also states that the theater lead agent is normally responsible for the provision of all core medical logistics functions required to support health services for the forces. Medical logistics functions include medical supply and medical equipment maintenance.

In June 2007, USCENTCOM outlined a life-cycle management strategy for medical equipment acquisitions to prepare and support MTFs for an extended or long-term operational presence. As part of that strategy, USCENTCOM requires the Military Departments to coordinate acquisition actions for new or replacement medical equipment with the theater lead agent. The strategy requires all Service components, in coordination with Medical Task Forces and their assigned medical facilities, to initiate a medical equipment life-cycle management program or to validate an existing program. One of the objectives of the program is to capture and maintain both equipment inventories and maintenance data for each medical equipment item. Additionally, the U.S. Army Central Command issued guidance outlining a four-phase, life-cycle management program for systematically replacing medical equipment while simultaneously ensuring that items procured are reliable, maintainable, and supportable.

Expanded Medical Capability in Theater

A deploying unit's organizational structure includes personnel and most of the equipment needed to accomplish their assigned mission. For example, in the Army, forces deploy with equipment listed in their Table of Organization and Equipment. When Army forces initially deployed to the USCENTCOM AOR, the Table of Organization and Equipment included medical equipment and personnel to support combat casualty care for young, healthy U.S. and coalition forces. The other Services have a similar process for initial deployments.

Most of the MTFs in USCENTCOM have been in the same location for 5 or more years, and their mission has transitioned from combat casualty care to a more complex combat casualty and sustainment mission. Over time, medical equipment has been replaced or updated, and the MTFs have received equipment that enables them to deliver care similar to or identical to care provided in MTFs in the United States. The Table shows equipment for a typical combat casualty medical mission and provides examples of additional medical capabilities at Army MTFs to meet new or expanded sustainment missions.

Table. Army MTF Medical Capabilities in the USCENTCOM AOR

Combat Casualty Mission ^a	Sustainment Mission ^b
Blood Bank*	Anesthesia Pain Management
Critical Care Medicine	Burn Surgery
Emergency Medicine	Definitive Fracture Care
Laboratory*	Dermatology
Pathology*	Microbiology
Psychiatry/Mental Health	Pediatrics
Radiology*	Prosthesis
Trauma Surgery (General, Orthopedic, Urologic, Obstetrics and Gynecology)*	Vascular Surgery

^a Asterisked services were expanded from original combat casualty medical mission because of increased level of care provided.

Review of Internal Controls

DOD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4, 2006, requires DOD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified an internal

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^b New medical capabilities as a result of health care delivery to U.S. and coalition forces, U.S. Government civilians, contractors, local nationals, third-country nationals, and multinational government personnel.

¹ A Table of Organization and Equipment sets the mission, organizational structure, personnel, and most of the equipment requirements for a military unit.

control weakness in the accountability and procurement processes for medical equipment. Specifically, internal controls were not in place to centrally report and record accountability, procurement, and maintenance actions for medical equipment and repair parts in the USCENTCOM AOR.

During the audit, we learned of several initiatives that should improve the accountability and procurement processes for medical equipment. Additionally, implementation of the recommendations will improve the recording and reporting of medical equipment and repair part transactions. See the Finding for an explanation of the internal control weakness, the management initiatives identified during the audit, and the recommendations. A copy of the report will be provided to senior officials responsible for internal controls in the Office of the Assistant Secretary of Defense (Health Affairs) (ASD[HA]), USCENTCOM, and the Military Departments.

Finding. Life-Cycle Management of Medical Equipment in Southwest Asia

The theater lead agent supports MTFs and medical logistics operations in the USCENTCOM AOR. Although we did not identify any instances where a lack of medical equipment or medical equipment maintenance had impacted the delivery of health care in theater, we believe opportunities exist to improve the life-cycle management of medical equipment and repair parts.

Currently in the USCENTCOM AOR:

- The theater lead agent does not have the capability to manage all theater-wide medical equipment and repair part procurements.
- The theater lead agent, MTFs, and medical logistics activities do not have an interoperable and integrated system for tracking medical equipment procurements, inventory, and medical maintenance information.

During visits to MTFs and medical logistics activities in the USCENTCOM AOR, we observed dedicated personnel working hard to accomplish the health care mission in spite of time-consuming workarounds involving nonstandard systems. Coordination of all medical equipment and repair part procurement actions and use of a theater-wide integrated system would allow the theater lead agent and MTFs to establish and maintain a viable life-cycle management program. An effective program would improve procurement efficiency, reduce or eliminate redundant workloads, improve medical equipment accountability, and provide for efficient tracking of medical equipment maintenance.

Sources of Supply for Medical Equipment and Repair Parts in the USCENTCOM Area of Responsibility

As part of the life-cycle management strategy issued by the USCENTCOM Command Surgeon, MTFs and Army and Marine Corps medical logistics activities should be coordinating and requesting medical equipment and repair part items through the theater lead agent. However, each of the Military Departments uses procurement processes that bypass the theater lead agent.

Army

The Army MTFs and medical logistics activities use the theater lead agent to procure medical equipment on the unit's current equipment authorization. An operational needs statement is used to justify requests for medical equipment that exceed the unit's current equipment authorization. Operational needs statements are also used for new equipment requests or an increase to authorized on-hand quantities. The Army process requires numerous levels of review and approval, up to and including the Headquarters, Department of the Army. (A discussion of the medical equipment justification process is

at Appendix C.) As stated by Army personnel, most of these requirements are not fulfilled or coordinated through the theater lead agent and are procured using the same methods used to procure medical equipment for nondeployed units.

Air Force

In addition to using the theater lead agent, the Air Force MTF and CJTH use local installation contracting support for services, supplies, or equipment that is not available through the theater lead agent. They also use a reachback process to obtain medical equipment and medical repair parts in a timely manner. The Air Force reachback process is a stateside point of resupply that is to be used until mature DOD logistical supply chains are established. Air Force guidance states that its reachback program, located in San Antonio, is not to be used to purchase routine, nonurgent equipment items.

Local contracting and the reachback process are currently used to improve the timeliness of medical equipment and repair part deliveries. The Air Force Central Command Surgeon's office approves all medical equipment requirements and identifies the best sourcing solution for the procurement. Additionally, the Air Force Central Command Surgeon may coordinate procurements using the same stateside procurement method used by nondeployed units.

Marine Corps

The Marine Corps medical logistics activity in Iraq supports all Marine Corps medical activities in country and obtains medical equipment and repair parts through the theater lead agent, the Marine Corps Systems Command, or the reachback process at its stateside command location. Requirements can be satisfied through the theater lead agent or by using the same methods used to procure medical equipment for nondeployed units.

Theater Lead Agent

Bypassing the theater lead agent is a short-term solution to obtaining medical equipment in the USCENTCOM AOR. All medical equipment procurement actions should be coordinated through the theater lead agent to facilitate life-cycle management, to ensure sustainability, and to enable supply-chain planning.

The theater lead agent is not able to manage or track local contracting or reachback procurements. As a result, current and future medical equipment requirements cannot be accurately determined, and supply-chain planning and life-cycle management efforts may be less effective. Implementation of a joint theater medical equipment and repair part procurement process would help to ensure that the theater lead agent has oversight over all transactions.

As the medical mission has endured and evolved, so has the requirement to replace and procure additional and more sophisticated medical equipment. Many of these requests are new item requests that are nonstandard items and not cataloged in the supply system. Personnel at MTFs and medical logistics activities stated that they experience delays in the receipt of medical equipment and repair parts. See Appendix D for a discussion on

information we obtained from personnel on the timeliness of medical equipment procurements.

The theater lead agent is aware of these delays, and there are several management initiatives to make the medical equipment and repair part procurement process more efficient and timely. These initiatives are discussed in the section titled "Management Initiatives." Implementation of the management initiatives, such as the Government purchase card or other methods of procurement, would improve the timeliness of procuring critical medical equipment or repair parts and allow the theater lead agent to better manage all procurements.

Need for an Interoperable Information System in Theater

The systems used by the theater lead agent, Army, Marine Corps, Air Force MTFs, and medical logistics activities are not interoperable for recording and reporting all medical equipment and repair part procurements, maintaining medical equipment inventory, or recording medical equipment maintenance actions.

Theater Army Medical Management and Information System

The USCENTCOM "Healthcare Information System Use Policy," July 14, 2008, states that the Theater Army Medical Management and Information System (TAMMIS) is to be used by the theater lead agent and its major forward distribution operation activities in Iraq, Kuwait, and Afghanistan. TAMMIS is to be used until a new information management solution or capability is developed and deployed to support these medical supply support activities. TAMMIS supports distribution and materiel management functions and provides the capability for the theater lead agent to order, manage, and track medical equipment orders.

TAMMIS provides the theater lead agent the ability to print DOD standard shipping documents, aggregate materiel shipments by customer, and pass data to external DOD systems for movement planning and in-transit tracking. Army personnel stated that the theater lead agent needs these capabilities to fulfill its operational responsibilities. The theater lead agent only has oversight of medical equipment and repair part procurements made in TAMMIS. TAMMIS is an Army system, and not a joint or fully integrated information system. All of the MTFs and medical logistics activities have access to TAMMIS through a customer assistance module; however, the Marine Corps MTF could not access the module because of information security restrictions.

Defense Medical Logistics Standard Support System

The Defense Medical Logistics Standard Support (DMLSS) system uses a Tri-Service suite of software modules that are intended to standardize medical logistics among the Services, reduce the time personnel spend on logistics activities, and improve the effectiveness and efficiency of health care delivery. DMLSS is deployed to stateside and home-base MTFs throughout the world and is used by medical logistics activities for tracking, recording, and reporting medical equipment and repair part procurements. The

USCENTCOM "Healthcare Information System Use Policy" states that the DMLSS is to be used in all theater hospitalization medical units within the USCENTCOM AOR.

The DMLSS equipment and technology management module provides customers and equipment managers with life-cycle management capabilities to support medical equipment accountability, maintenance, and procurement. Both the equipment management and maintenance management submodules are part of the equipment and technology management module.

The equipment management submodule provides users with the automated capability to manage equipment assets from the time a customer starts the research for an equipment item to the point at which the equipment is processed for redistribution or disposal. The maintenance management submodule provides users with a systematic approach to medical equipment maintenance.

Recording and Reporting Procurement Information

Army MTFs and medical logistics activities did not use the equipment management submodule of DMLSS and did not have a complete life-cycle management approach to recording and reporting medical equipment procurements. Personnel at Army MTFs and medical logistics activities used ad hoc Microsoft Excel spreadsheets to record and monitor medical equipment and repair part procurements. Army personnel stated that historical ordering and receipt information was not available because it was stored in predecessor medical units' computers, which were removed when the unit rotated out. The missing ad hoc information at some of the sites visited caused additional workload because medical logistics personnel had to manually re-create ad hoc procurement histories from hardcopy documentation. Army personnel agreed that the ad hoc reports could contain errors and that creation and maintenance of separate ad hoc records was redundant and took time from other responsibilities. The additional workload required to develop ad hoc spreadsheets could have been avoided if DMLSS had been used by Army MTFs and medical logistics activities throughout the theater of operation. Army MTFs and medical logistics activities need the DMLSS system to process and manage medical equipment and repair part procurements.

The Marine Corps MTF did not manage or maintain procurement information on-site because that information was maintained at the nearby Marine Corps medical logistics activity. The Marine Corps medical logistics activity did not use the equipment management submodule of DMLSS and also used ad hoc Microsoft Excel spreadsheets to record and monitor medical equipment and repair part procurements. Marine Corps personnel also agreed that the ad hoc reports could contain errors and that maintaining a separate system of records took time from other responsibilities. The use of DMLSS would provide Army and Marine Corps MTFs and medical logistics activities with a medical equipment life-cycle management capability and would improve the ability to provide oversight of medical equipment in the USCENTCOM AOR.

The Air Force MTF and CJTH used DMLSS to manage medical equipment and repair part procurements. Air Force MTF and CJTH personnel process medical equipment

procurement due-ins and receipts in the DMLSS equipment and technology management module whether items were procured through the theater lead agent, local contracting, or the reachback process. As a result, personnel at the MTF and CJTH were able to identify medical equipment and repair part procurements made from other sources. Because the theater lead agent uses TAMMIS, it is not able to track procurements made by local contracting or the reachback process and does not have full life-cycle oversight of all Air Force MTF and CJTH procurements.

In Iraq, a Joint Medical Task Force provides medical command and control in support of coalition and Iraqi security force combat operations. A similar medical task force is in Afghanistan. At the Iraq Joint Medical Task Force, other medical logistics activities, and MTFs visited, we obtained information on medical equipment and repair part procurements that was inconsistent or incomplete. For example, personnel at the Iraq Joint Medical Task Force reported purchases totaling \$9.2 million for Army MTFs and logistical units in Iraq for the 18-month period ended March 31, 2008. For the same period, the Air Force MTF reported about \$3.7 million in medical equipment procurements from the theater lead agent, local contracting, stateside logistics offices, and the reachback process. In contrast, the theater lead agent reported about \$2.8 million in medical equipment procurements for the same 18-month period.

A complete medical equipment procurement history is not available in the USCENTCOM AOR because TAMMIS only includes medical equipment orders placed through the theater lead agent. MTF orders made through local contracting, the reachback process, or by stateside commands are not in TAMMIS and not tracked by the theater lead agent. At this time, TAMMIS partially supports the needs of the theater lead agent. DMLSS provides a medical equipment life-cycle management capability to the Air Force MTF and CJTH. An integrated capability would provide the theater lead agent with the ability to track all medical equipment procurements in the USCENTCOM AOR. Efforts are underway to replace the TAMMIS functionality with an interim information system. The ASD(HA) should coordinate with the Army on the implementation plan for integrating the TAMMIS and DMLSS capabilities into a Military Health System-wide logistics system.

Medical Equipment Accountability and Maintenance

Army and Marine Corps MTFs and medical logistics activities in the USCENTCOM AOR maintained medical equipment inventories and maintenance records. However, personnel and biomedical equipment technicians are required to spend considerable time re-creating medical equipment inventories and maintenance records each time a unit rotates into theater. This occurs because Army and Marine Corps MTFs and medical logistics activities use separate information systems to maintain property accountability and maintenance records instead of a joint and integrated medical logistics system, such as DMLSS. Using DMLSS provided the Air Force MTF and CJTH the tools to manage the life-cycle of medical equipment and maintenance-significant medical equipment from the time of acquisition through disposal. A description of the data systems used by the Army, Marine Corps, and Air Force to monitor medical equipment is in Appendix E.

Additionally, Army and Marine Corps MTFs use property accountability guidance issued outside the medical command structure to account for medical equipment. As a result, Army MTFs did not place some medical equipment on the property books because the items were below the accountability threshold. We did not determine whether the Marine Corps MTFs' medical equipment was on the property books because of time constraints and the classified nature of the Marine Corps property accountability system.

Army Inventory and Maintenance

Army MTFs in theater used two automated systems and one software application for tracking medical equipment and medical equipment maintenance. The two systems, Property Book Unit Supply Enhanced (PBUSE) and the Standard Army Maintenance System-Enhanced (SAMS-E), and the Microsoft Excel software application were not integrated and required time-consuming and redundant data input and monitoring. PBUSE is the Army's Web-based combat service support property accountability system that is used throughout the Army. Repair part orders made through the theater lead agent require manual input into the SAMS-E and subsequent manual updating as the order proceeds through the supply system. Personnel stated that the SAMS-E does not recognize the data fields that MTFs need to keep track of medical maintenance actions. Neither PBUSE nor SAMS-E is medical logistics systems that provide a complete lifecycle management picture to Army MTF personnel.

At the three Army MTFs visited, current units or previous units had not maintained or updated medical equipment PBUSE records in a timely manner. At one location, unit personnel performed a comprehensive physical inventory using Microsoft Excel spreadsheets upon their arrival in theater. They found more than 350 items valued at about \$1.9 million that required disposal or transfer to other locations. Additionally, 240 items, valued at \$3.6 million, were at the MTF but not entered into PBUSE.

At another MTF, we noted significant differences between the medical maintenance records and the PBUSE records. MTF personnel indicated that they had not processed changes to the PBUSE records in more than 6 months. Because the accountability records were officially maintained by the Army Materiel Command and not within the medical command structure, MTF personnel were reluctant to request placement of some maintenance-significant medical equipment items on the property accountability records. Lack of a consistent and accurate inventory hampers effective life-cycle management efforts and often results in increased workloads and redundant data entry and analysis.

Army personnel in theater also created a separate up-to-date database to track the maintenance actions for maintenance-significant equipment. At three Army MTFs, medical maintenance personnel were required to list all medical maintenance-significant equipment to ensure completion of preventive maintenance and calibration tasks. This occurred because predecessor units did not leave behind the maintenance records and because of inconsistencies in SAMS-E. An integrated inventory and medical maintenance system, such as DMLSS, would provide the information necessary for comprehensive oversight and life-cycle management of medical equipment and prevent

unnecessary and redundant work to manage the accountability and maintenance of medical equipment through the receipt, sustainment, and disposal process.

Marine Corps Inventory and Maintenance

The Marine Corps MTF used the classified Asset Tracking Logistics and Supply System to maintain its property accountability of medical equipment. For day-to-day medical equipment management, personnel used Microsoft Excel spreadsheets to monitor and maintain the medical equipment inventory.

The Marine Corps MTF did not perform medical equipment maintenance on-site because it was colocated with a Marine Corps medical logistics activity, which was responsible for tracking and maintaining medical equipment inventories at the MTF as well as medical units at remote forward-operating bases. The medical logistics activity also maintained its medical inventory and equipment maintenance records using Microsoft Excel spreadsheets.

At the time of our visit, medical logistics activity personnel were reconstructing the medical equipment inventory and maintenance status for each location. MTF personnel were unable to plan the level of effort necessary to perform preventive maintenance at these locations because records from the predecessor unit were incomplete or not available. If predecessor units had maintained the records in DMLSS, the additional workload would not have been required.

Air Force Inventory and Maintenance

Similar to its nondeployed counterparts stateside, the Air Force directed deployed Expeditionary Medical Support Squadrons and Groups to use DMLSS to manage supply and equipment inventories and equipment maintenance actions where applicable. The Air Force MTF and CJTH we visited used DMLSS for monitoring and maintaining their medical equipment. The medical logistics personnel used the system's equipment management submodule to account for medical equipment inventory; and the biomedical engineering technicians used it to record, report, and manage maintenance actions. The submodules are integrated within DMLSS; thus, additions and deletions as a result of equipment management actions flowed directly through the system to the equipment maintenance submodule. As a result, DMLSS provided the Air Force MTF and CJTH full life-cycle oversight of its medical equipment and maintenance-significant medical equipment from acquisition to disposal.

Environmental Considerations

Frequent medical equipment usage and the harsh operational environment in the USCENTCOM AOR place a significant burden on medical equipment, MTF personnel, biomedical equipment technicians, and medical logistics personnel. They commented on the conditions that could affect the reliability and functionality of medical equipment. Dust infiltration and high winds in theater permeate soft- and hard-side MTFs and lead to breakdowns in equipment. Also, the use of medical equipment (frequency and duration) beyond the manufacturer's recommendations leads to unscheduled maintenance. For example, one Army MTF reported that there were 1,176 instances of unscheduled

medical equipment maintenance in the first 6 months of the unit's deployment. Another Army MTF reported 1,367 instances of unscheduled maintenance in 12 months.

MTFs also experience power supply variations from generator-produced power and in-country power sources. Personnel stated that electrical power conditioners are required because of variations in voltage. Finally, some of the sophisticated medical equipment is sensitive to heat, which degrades its performance over time. Environmental conditions further support the need for an integrated information system that maintains accurate and complete medical maintenance records and repair histories. Those histories are important to maintaining an effective life-cycle management program and a high state of medical equipment readiness. An integrated system would also help lessen the workload on medical logistics and biomedical maintenance personnel.



Figure. Inside a Marine Corps Medical Equipment Repair Tent

Management Initiatives

During our visits to MTFs and medical logistics activities in the USCENTCOM AOR, we learned of several initiatives to strengthen controls, facilitate life-cycle management of medical equipment, and make the medical equipment and repair part procurement process more efficient and timely.

• In June 2007, USCENTCOM established a Joint Medical Technology Assessment Review Team to conduct a series of surveys across the AOR to determine medical equipment functionality and to ensure proper technology matches for an extended or long-term operational presence. The joint review team issued a report in September 2008 that stated a logistical supply analysis was needed and that use of DMLSS would provide a robust capability to properly manage medical equipment. USCENTCOM, however, did not agree with the Joint Medical Technology Assessment Review Team recommendation to perform a logistical supply-chain analysis.

- Personnel from the Army Medical Command stated that efforts are underway to interface DMLSS with other Army systems and that the Command plans to introduce DMLSS at Army Combat Support Hospitals in theater by late 2010. Actions are also underway to replace the TAMMIS functionality with an interim information system until the Military Health System's DMLSS suite of applications is implemented in approximately 2012. When implemented, the Military Health System will have a completely integrated, supply-chain management system from institutional MTFs to theater support.
- The use of the Government purchase card has proven effective in reducing repair part procurement delays, and the Army Surgeon General has extended the use of Government purchase cards in theater. The Medical Task Force in Iraq is evaluating a proposal to provide each MTF its own Government purchase card.
- The U.S. Army Medical Research and Materiel Command and the 6th Medical Logistics Management Center have initiated a Lean Six Sigma project² to examine medical acquisition processes and procedures. Initially the study is to concentrate on improving order ship times from the time the procurement is entered into TAMMIS to the time the theater lead agent receives the item.
- The Defense Logistics Agency (DLA) and the Defense Supply Center, Philadelphia were considering employing a troop support planner at the USCENTCOM headquarters location. The planner would be tasked to perform medical logistics planning with the combatant commands and theater lead agents, with the goal of providing better support to the combatant commander customer base, including the theater lead agent.

Conclusion

1

An integrated and comprehensive life-cycle management process and coordination of medical equipment and repair part procurements with the theater lead agent would provide health care managers and planners with information they need to efficiently sustain the critical health care mission in theater and forecast future requirements.

Multiple systems, incomplete information, and lack of historical information increase the possibility for error and increase the workload of MTF and medical logistics personnel.

² Lean Six Sigma is a project established by the U.S. Army Medical Research and Material Command to mathematically examine medical acquisition processes and procedures and to identify potential efficiencies in the delivery of medical material.

Timely implementation of DMLSS in theater should provide Army and Marine Corps personnel with an integrated system for life-cycle management and facilitate the sharing of medical equipment information. Such oversight and control is essential to ensuring that the resources of the Military Departments are efficiently used and effectively managed.

Implementation of management initiatives, such as the Government purchase card or other procurement methods, would enable the theater lead agent to provide timely service when critical medical equipment or repair part needs arise. Implementation of the initiatives would also enable the theater lead agent to capture complete procurement information for the USCENTCOM AOR.

Management Comments on the Introduction and Finding and Our Response

In addition to commenting on the recommendations, USCENTCOM, U.S. Army Medical Command, and Defense Logistics Agency commented on the Introduction and Finding. Comments related to the Introduction and Finding and our response are in Appendix F.

Recommendations, Management Comments, and Our Response

Revised Recommendation

As a result of USCENTCOM management comments on the original recommendation, we revised Recommendation A.1. to clarify our intention that controls should be in place to ensure medical equipment and repair part procurements are coordinated and centrally managed. Such oversight should assist USCENTCOM in managing a unified life-cycle management process for procuring medical equipment and repair parts.

A.1. We recommend that the Commander, U.S. Central Command coordinate and establish a working group with the Chairman, Joint Chiefs of Staff; Director, Defense Logistics Agency; Assistant Secretary of Defense (Health Affairs); and Military Department Central Commands to develop controls to ensure the theater lead agent has oversight of all medical equipment and repair part procurement transactions from all sources of supply. The controls should include consistent recording and reporting of all medical equipment and repair parts procured for use in the U.S. Central Command area of responsibility.

U.S. Central Command Comments

The Chief of Staff, USCENTCOM disagreed with the original report recommendation to develop a joint theater procurement process, stating that it was a Service Title X responsibility and beyond the purview of a Combatant Command. While acknowledging the Service procurement processes we discussed in Appendix C, the Chief of Staff stated that those processes were a Service responsibility.

Our Response

Although USCENTCOM did not agree with the original recommendation, we consider the comments partially responsive. The intent of the original recommendation was for the Commander, USCENTCOM to establish a joint theater procurement process that would result in consistent recording and reporting of all procurement transactions and would provide the theater lead agent with the capability to facilitate the life-cycle management of medical equipment and repair part procurements.

The mission of the theater lead agent is to provide medical supply-chain planning, act as the lead procurement agent for the theater, and facilitate a medical equipment life-cycle management program. In order for the theater lead agent to perform its mission more efficiently and effectively, coordination of all medical equipment procurements and consistent recording and reporting of procurements are necessary. As stated in the finding, there are currently multiple and fragmented processes for acquiring, recording, and reporting medical equipment in the USCENTCOM AOR.

During multiple discussions with USCENTCOM, we agreed that a joint procurement process is feasible and recognize the difficulty in developing such a process for equipment and repair part procurements. At this time, we believe it is more expedient to improve controls to ensure coordination, recording, and reporting of medical equipment and repair part procurements and for maintaining oversight, facilitating supply-chain planning and ensuring successful life-cycle management. As a result, we revised Recommendation A.1. We request that the Commander, USCENTCOM, provide comments on the revised Recommendation A.1. in response to the final report.

Assistant Secretary of Defense (Health Affairs) Comments

The Deputy ASD (Force Health Protection and Readiness), performing the duties of the ASD(HA), agreed with the original recommendation.

Assistant Secretary of the Navy (Manpower and Reserve Affairs) Comments

The Deputy Assistant Secretary of the Navy (Civilian Human Resources) provided comments for the Commander, U.S. Naval Forces Central Command the Health Service Support, U.S. Naval Forces Europe; and the Health Services Department, Headquarters, U.S. Marine Corps, who responded on behalf of the Marine Corps Forces Central Command.

U.S. Naval Forces Central Command Comments

The Chief of Staff, U.S. Naval Forces Central Command stated that procurement system interoperability was necessary and that a joint solution should mitigate costly delays affecting readiness and operational capabilities.

Marine Corps Forces Central Command Comments

Headquarters, Marine Corps on behalf of the Marine Corps Forces Central Command agreed with the recommendation.

Defense Logistics Agency Comments

The Defense Logistics Agency (DLA) Acting Senior Procurement Executive agreed with the original recommendation, supporting a joint theater procurement process within Southwest Asia and stating that DLA currently supports the theater lead agent and attends medical logistics summits. He also stated that DLA would continue to provide personnel, data, and other support to develop the process in the best interest of USCENTCOM and others.

Our Response

The ASD (HA), U.S. Naval Forces Central Command, Marine Forces Central Command, and DLA comments are responsive to the original recommendation.

Unsolicited Comments

Health Service Support, U.S. Naval Forces Europe Comments

Although not required to comment, the Deputy Assistant Secretary of the Navy (Civilian Human Resources) provided comments for Health Service Support, U.S. Naval Forces Europe. Health Service Support agreed with the report recommendations and stated that its limited experience in dealing with the current procurement process has been extremely complicated and frustrating. Health Service Support also stated that there is an obvious need for the Services to have a unified process for procurement of medical equipment.

Comments Not Received

The Joint Chiefs of Staff, U.S. Army Central Command, and U.S. Air Forces Central Command did not comment on this recommendation. We request comments on the final report.

Revised Recommendation

We revised Recommendation A.2. to include the installation and use of the DMLSS equipment management and maintenance submodules at U.S. Marine Corps medical logistics companies and detachments in the USCENTCOM AOR.

A.2. We recommend that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff, Assistant Secretary of Defense (Health Affairs), and Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance submodules at all military treatment facilities and U.S. Marine Corps medical logistics companies and detachments in the USCENTCOM area of responsibility. Defense Medical Logistics Standard Support system functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records.

U.S. Central Command Comments

The Chief of Staff, USCENTCOM partially agreed, stating that the USCENTCOM "Healthcare Information System Use Policy," July 14, 2008, requires the Services to

deploy medical units with DMLSS. The Chief of Staff also stated that the policy was developed by the parties identified in the recommendation. Further, he stated that our report did not mention the July 2008 policy. The Chief of Staff discussed an Army management initiative to deploy DMLSS by 2012 and noted that other Services were already deploying DMLSS. He stated that because of the "Healthcare Information System Use Policy" and the Army's management initiative, USCENTCOM did not see a need for further coordination as stated in the recommendation.

Our Response

We consider USCENTCOM's partial agreement to be partially responsive to the recommendation, which was intended to ensure a joint integrated, interoperable, and consistent capability to track medical equipment procurements, maintenance, and medical equipment inventory across the USCENTCOM AOR. At the time of our visit, four of the six MTFs did not use the equipment and technology management submodule of the DMLSS system to maintain medical equipment inventory and maintenance records as required by the USCENTCOM policy. The USCENTCOM policy, if fully implemented in theater, should result in consistent use of DMLSS in the AOR. However, we request that USCENTCOM provide updated milestones on the Army's plan to implement DMLSS equipment management and maintenance submodules at the MTFs and the Marine Corps implementation plan for the same DMLSS submodules in the USCENTCOM AOR. With regard to the USCENTCOM statement that our report did not mention the "Healthcare Information System Use Policy," it was discussed twice in the Finding.

Assistant Secretary of Defense (Health Affairs) Comments

The Deputy ASD (Force Health Protection and Readiness) agreed with the recommendation and stated that the deployed U.S. Marine Corps medical logistics companies and detachments use the DMLSS equipment management and maintenance submodules in support of the medical units and treatment facilities. The Deputy ASD also stated that the recommendation should be revised to include U.S. Marine Corps logistics companies and detachments in the USCENTCOM AOR.

Our Response

The Deputy ASD comments are fully responsive. At the time of our visit, the Marine Corps medical logistics company maintained medical equipment inventory and maintenance records using Microsoft Excel spreadsheets and did not use the DMLSS equipment management and maintenance submodule. We agree with the Deputy ASD desire to include the requirement for Marine Corps medical logistics companies and detachments in theater to use the DMLSS equipment management and maintenance submodules. The intent of our recommendation was to ensure consistency in reporting and recording medical equipment procurements, inventory, and maintenance as well as make sure the USCENTCOM "Healthcare Information Use Policy" was followed. We encourage the implementation of the DMLSS equipment management and maintenance submodules at Marine Corps medical logistics companies and detachments.

U.S. Naval Forces Central Command Comments

The Chief of Staff agreed and stated the recommendation, if implemented, would provide interoperability to all DOD forces within a specific theater of operation. The Chief of Staff also stated that the focus for integrating, implementing, and executing an interoperable system should occur with the supporting technical commands; systems commands; and commands that train, equip, and resource Navy operational units.

Our Response

The U.S. Naval Forces Central Command comments are responsive to the recommendation.

Marine Corps Forces Central Command Comments

Headquarters, Marine Corps on behalf of the Marine Corps Forces Central Command stated that the U.S. Marine Corps medical units and treatment facilities do not use DMLSS but that deployed Marine Corps medical logistics companies and detachments use the DMLSS equipment management and maintenance submodules in support of the medical units and treatment facilities.

Our Response

The Headquarters, Marine Corps comments are responsive. As we stated in our response to the Deputy ASD comments on Recommendation A.2., at the time of our visit to the Marine Corps logistics activity, medical personnel were maintaining records using ad hoc Microsoft Excel spreadsheets and did not use the DMLSS equipment management and maintenance submodule. We revised the recommendation to include Marine Corps logistics companies and detachments in the recommendation. We also support the Marine Corps desire to further facilitate joint and interoperable information systems in theater.

Unsolicited Comments

Defense Logistics Agency Comments

Although not required to comment, the DLA Acting Senior Procurement Executive stated that the recommendation should identify functionality and interoperability requirements instead of recommending use of DMLSS for tracking medical equipment procurements, inventory, and maintenance information. However, he further stated that DLA and the Services were executing agreements to ensure system interoperability and functionality that would support the recommendations in the report.

Our Response

In response to the DLA comments, we recommended installation and use of DMLSS because it was developed and deployed to enhance health care delivery in peacetime and to promote wartime readiness and sustainability. Additionally, DMLSS was designed to standardize medical logistics among the Services and reduce the time health care professionals spend on logistics activities. DLA stated it was executing agreements that would ensure interoperability and support the recommendation. If DMLSS is not the best

medical logistics system in theater, we welcome suggestions from DLA regarding an alternative solution that would allow oversight of all medical equipment and repair part procurement and maintenance actions in theater.

Army Medical Command Comments

The Chief of Staff provided unsolicited comments, stating that maintenance systems in theater were inadequate because they lacked Class VIII supply systems integration. (The Class VIII medical commodity group includes pharmaceutical, medical-surgical, dental, medical laboratory, radiology, and optometry supplies as well as preventive medicine items and medical equipment.) He stated that integrating the Class VIII supply and maintenance systems would greatly enhance the Army's ability to track, monitor, and reconcile repair part orders. Further, he stated that a single system to manage Class VIII supply transactions and track maintenance and property would reduce inconsistencies among property and maintenance systems.

The Chief of Staff also stated that the DMLSS Class VIII functionality should be tested for use at a U.S. Army Combat Support Hospital before moving theater medical logistics assets to the DMLSS platform. He noted that many Army programs rely on equipment being loaded into the Army's PBUSE and SAMS-E systems and that this, as well as the ability to feed data directly to other Army logistics systems, should be considered when testing any system that might replace SAMS-E for medical equipment management.

Our Response

We recognize the Army's current effort to interface DMLSS with other Army systems and note the Army's plans to introduce DMLSS at Army Combat Support Hospitals, in theater, by late 2010. ASD(HA) personnel also provided documentation during the audit that showed testing of DMLSS at the Army Combat Support Hospital was to begin in 2009. We acknowledge that actions are underway to replace the TAMMIS functionality with an interim information system until the Military Health System's DMLSS suite of applications is implemented in approximately 2012. We also recognize the Army's concern for adequate testing of the DMLSS platform and the enhancements necessary to support the Army mission.

Comments Not Received

The Joint Chiefs of Staff, U.S. Army Central Command, and U.S. Air Forces Central Command did not comment on this recommendation. We request comments on the final report.

A.3. We recommend that the Assistant Secretary of Defense (Health Affairs) coordinate with the Surgeon General of the Army to ensure timely implementation and an updated milestone and implementation plan for the transition from the Theater Army Medical Management Information System to the Military Health System's Defense Medical Logistics Standard Support suite of applications.

Assistant Secretary of Defense (Health Affairs) Comments

The Deputy ASD (Force Health Protection and Readiness) agreed with the recommendation. However, she requested that the information system referenced in the recommendation be changed to Military Health System DMLSS instead of Military Health System enterprise solution, Defense Medical Logistics Standard Support Joint Enterprise-wide Logistics System as stated in the draft report recommendation.

Our Response

The comments from Deputy ASD are responsive. After additional discussions with the ASD (HA), we have revised the recommendation to read Military Health System's DMLSS suite of applications.

U.S. Army Medical Command Comments

The Chief of Staff agreed with the recommendation and provided additional comments. The Chief of Staff stated that medical logistics functions rely heavily on technology to support a variety of medical supplies, equipment management, sustainment, maintenance, and quality assurance processes, including initial response supplies, sustainment materiel, and medical equipment. He also stated that the Army has a dramatically larger mission in theater than the other Services, which requires additional functionality currently unsupported by a single automated system.

The Chief of Staff also stated that a

logistical end-to-end (factory to foxhole) business practice analysis is required to ascertain what functionality is needed with a [Combat Support Hospital] and what system(s) best delivers the capabilities determined to be essential to support the mission of a fully operational [Combat Support Hospital] in a deployed environment.

Our Response

We consider the comments from the Chief of Staff to be partially responsive. We have seen the Army "Theater Medical Logistics Automation Information Systems Concept in Support of the Medical Communications Capstone Concept," August 22, 2006, which discusses major initiatives for the Army's transition from TAMMIS to a commercially-based enterprise architecture. During the audit, personnel from the Army Medical Command stated that efforts were underway to interface DMLSS with other Army systems and that the Command plans to introduce DMLSS at Army combat support hospitals in theater by late 2010. Actions were also underway to replace the TAMMIS functionality with an interim information system until the Military Health System's DMLSS suite of applications are implemented in approximately 2012. In response to the final report, we request that the Chief of Staff provide additional and updated information regarding progress and timelines associated with the development of its transition from TAMMIS to its commercially-based enterprise architecture.

A.4. We recommend that the Commander, U.S. Army Central Command provide a status update on the management initiatives and, if appropriate, implementation

plans on any management initiatives that would improve the medical equipment and repair part procurement process.

U.S. Army Central Command Comments

The Chief of Staff agreed with the recommendation and stated that the theater requires a responsive reachback program for urgent medical equipment procurement and repair parts procurement. He stated that the theater lead agent has a reachback program in place for both equipment procurement and repair parts, but neither process is as efficient as it could be.

The Chief of Staff stated that the theater lead agent is "working closely with the 6th Medical Logistics Management Center and is employing Lean Six Sigma techniques to develop alternative courses of action to optimize reach back capabilities for both urgent medical equipment and repair parts procurement."

The comments also addressed an interim solution of using a Government purchase card, with a \$25,000 limit, to procure repair parts for theater medical units. The 6th Medical Logistics Management Center also secured the use of blanket purchase agreements with vendors for medical equipment repair parts.

Our Response

The Chief of Staff comments are responsive to the recommendation.

Unsolicited Comments

Assistant Secretary of Defense (Health Affairs) Comments

Although not required to comment, the Deputy ASD (Force Health Protection and Readiness) agreed with the recommendation.

Appendix A. Scope and Methodology

We conducted this performance audit from November 2007 through February 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. This final report was delayed because of coordination with USCENTCOM and the Chairman, Joint Chiefs of Staff, on the revision of Recommendation A.1. and the audit team being assigned to a statutorily required assessment; however, as of September 2009, the conditions and causes identified in this report remain relevant. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The audit focused on the accountability, maintenance, and procurement of medical equipment and repair parts used to support operations in the USCENTCOM AOR. We defined medical equipment as equipment that is directly related to the care of the patient and requires calibration, normally scheduled preventive maintenance, and inspection. See Appendix G for the categories of medical equipment we selected for review.

We reviewed laws, policies, and guidance from 1980 through 2008 relating to medical equipment and repair part procurement and accountability. We reviewed whether procedures and controls were in place for acquiring mission-essential medical equipment and whether the recording and reporting of that equipment was accurate and complete.

In addition, we contacted or met with representatives from the Assistant Secretary of Defense (Health Affairs), Joint Chiefs of Staff, TRICARE Management Activity, Defense Logistics Agency, USCENTCOM, Offices of the Military Department Surgeons General, U.S. Army Central Command, U.S. Army Medical Materiel Agency, U.S. Army Medical Command, U.S. Marine Corps Forces Central Command, Marine Corps Systems Command, U.S. Air Forces Central Command, and other DOD organizations.

We also visited six MTFs and five medical logistics activities in Afghanistan, Iraq, and Qatar. The six MTFs visited included three Army Combat Support Hospitals, one Air Force Theater Hospital, a Combined Joint Theater Hospital, and one Role 2 Marine Corps Expeditionary Medical Unit. The five medical logistics activities included the theater lead agent; an Army medical logistics brigade, battalion, and company; and a Marine Corps medical logistics company. During those visits, we obtained background and summary information on the medical equipment and repair parts accountability, maintenance, and procurement process in the USCENTCOM AOR. The facilities selected represented the Army, Marine Corps, and Air Force, and their selection was based on their mission, capabilities, and locations.

For each site visited, we obtained the criteria used for the inventory, procurement, and maintenance of medical equipment. When available, we also obtained inventory, procurement, transaction, and maintenance information. At each location, we compared data systems that were used to track that information, and verified some equipment

inventories. We judgmentally selected a limited number of medical equipment items and verified the existence of each item. For each, we cross-walked the item between the property accountability records and the inventory of maintenance-significant equipment. We also physically located the items in the MTF and verified the existence of plant property tags. Our limited inventory of medical equipment showed that locally maintained records of maintenance-significant equipment were generally more accurate than the property accountability records.

Roles of Care

In multinational operations, such as Operations Enduring and Iraqi Freedom, medical resources are typically distributed into four progressive roles or levels of capability (to conduct treatment, evacuation, resupply, and other functions) essential to the health of the force. Medical resources are categorized according to their capabilities, but are not directly interchangeable. The minimum capabilities of each role are imbedded in each higher role. For example, a Role 3 MTF has the ability to carry out Role 1 and Role 2 functions. Joint Publication 4-02, "Health Service Support," October 31, 2006, defines the various roles of health care as follows.

- The Role 1 MTF provides primary health care, specialized first aid, triage, resuscitation, and stabilization. Role 1 capabilities include casualty stabilization from the point of injury to preparation of casualties for evacuation.
- The Role 2 MTF is a structure that is able to receive casualties and perform triage and resuscitation and treatment of shock to a higher level than role 1. It usually includes damage control surgery and a limited capability for the short-term holding of casualties until they can be returned to duty or evacuated.
- The Role 3 MTF is designed to provide secondary health care within the restrictions of the theater holding policy. It supports deployed hospitalization and includes a variety of mission-tailored clinical specialties, including primary surgery and appropriate diagnostic support.
- The Role 4 MTF provides the full spectrum of definitive medical care that cannot be deployed to theater or is too time-consuming to be conducted in theater. It typically includes definitive care specialists, surgical and medical procedures, reconstructive surgery, and rehabilitation.

Limitations to Audit Scope

As part of our announcement objective, we intended to obtain complete medical equipment inventories and medical equipment procurements from October 1, 2006, through March 31, 2008, at each of the locations visited and all of the USCENTCOM AOR. We were unable to determine all of the medical equipment procured because there was no integrated information system and no one central source that captured all procurements.

At some locations, records were not always available because predecessor units did not leave behind inventory, maintenance, or procurement information during unit rotations. Additionally, units were unable to provide historical information on local ordering that reflected transaction initiation dates and completion dates. This prevented us from calculating and making comparisons of order ship times by source of supply across all MTFs visited. Additionally, our limited time in theater prevented us from completing an in-depth analysis to determine the reasons for delays in individual procurement transactions.

Use of Computer-Processed Data

We obtained computer-processed data from various inventory and procurement information systems and unit-prepared spreadsheets. During the audit, we performed limited reliability tests on the accuracy of the medical equipment inventory reported in PBUSE and DMLSS. We judgmentally selected medical equipment items and cross-checked them to the property accountability records and physically located the items in the MTF. Additionally we obtained listings of medical equipment and parts procured for each Service and the medical equipment inventory from plant property officers.

We could not verify the accuracy of the inventories for medical equipment because records were incomplete or had not been updated in PBUSE. Additionally, because of coding errors in DMLSS and the lack of complete procurement transactions in TAMMIS, we were unable to calculate the order ship times for procurements by source of supply.

We were unable to assess the overall accuracy or reliability of the systems used for medical equipment accountability, maintenance, and procurement. Our conclusions were not dependent on the accuracy of information from those systems. Our recommendations should help correct the data reliability issues addressed in this audit.

Prior Coverage

During the last 5 years, the Army and the Air Force have issued seven reports discussing medical equipment used to support operations in Southwest Asia. Unrestricted Army reports can be accessed from .mil and gao.gov domains over the Internet at https://www.aaa.army.mil/.

Air Force Audit Agency reports can be accessed from .mil domains over the Internet at https://wwwd.my.af.mil/afknprod/ASPs/cop/Entry.asp?Filter=OO by individuals with a common access card and established user account.

Army

A-2008-0121-FFH, "Readiness Reporting for Active Component Medical Units," April 30, 2008

A-2008-0041-ALL, "Asset Visibility in Support of Operation Iraqi Freedom and Operation Enduring Freedom – Summary Report, Active Army and Army Reserve Returning and Left-Behind Equipment," January 30, 2008

Army (Cont'd)

A-2008-0040-FFH, "Reserve Component Medical Readiness Reporting, U.S. Army National Guard," January $16,\,2008$

A-2007-0075-ALL, "Asset Visibility in Support of Operation Iraqi Freedom and Operation Enduring Freedom," February 15, 2007

A-2006-0249-FFM, "Defense Property Accountability System Material Weakness Closeout," September 28, 2006

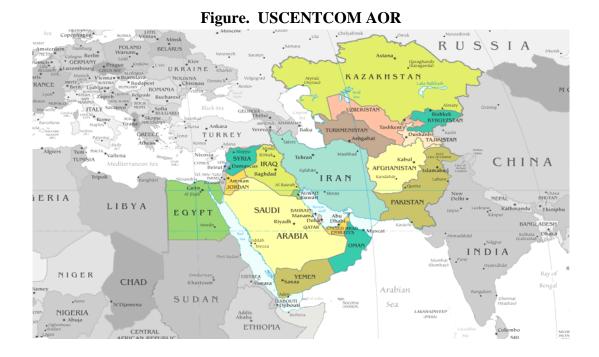
Air Force

F2008-0001-FD2000, "Patient Movement Items," October 12, 2007

F2004-0005-FD3000, "Medical Readiness Report," May 10, 2004

Appendix B. USCENTCOM Area of Responsibility

The USCENTCOM mission is to promote development and cooperation among nations, respond to crises, and deter or defeat state and transnational aggression in order to establish regional security and stability. The figure shows the countries (in color) in the USCENTCOM area of responsibility.



The countries in the USCENTCOM AOR are:

Kazakhstan

Afghanistan Oman
Bahrain Pakistan
Egypt Qatar
Iran Saudi Arabia

Iraq Syria Syria Jordan Tajikistan

Kuwait United Arab Emirates

Turkmenistan

Kyrgyzstan Uzbekistan Lebanon Yemen

Appendix C. Medical Equipment and Repair Part Approval Process

When new, nonstandard medical equipment or repair parts are needed, the Army uses operational needs statements, letters of justification, or new item requests. The Army processes are explained below.

- The Army operational needs statement is used to justify a request for equipment that exceeds the unit's current equipment authorization and provides either a new capability or an increase to authorized on-hand quantities.
- The Army letter of justification is used to justify an item of equipment that is needed to replace shortages that result from equipment that is unserviceable, uneconomical to repair, lost, or needed to replace an existing shortage.
- A new item request is part of the letter of justification and is used to justify a piece of medical equipment or repair part that is not cataloged in the TAMMIS system. Items that have not been ordered for 6 months or more drop out of the catalog and are no longer stocked and, thus, require a new item request.

The Air Force uses an equipment action request for justifying medical equipment that is not on an MTF's authorized allowance list. The Marine Corps uses the Army's operational needs statement process. Ultimately, the Command Surgeon at the Air Forces Central Command and the Marine Corps Systems Command approves Air Force and Marine Corps medical equipment and repair part procurements.

Nonstandard medical equipment and repair parts are not in the theater lead agent's catalog of items or in MTFs' authorized allowance lists. Because of the Army's multiple approval levels, it is our opinion that its cumbersome process can add considerable time to the procurement process. The Air Force equipment action request is more streamlined because it requires fewer levels of review and approval for new medical equipment procurements. The table on the next page shows the Army's operational needs statement approval process that Army MTFs must complete when requesting new medical equipment or increased quantities.

Table. Army Approval Process for Medical Equipment

Step	Description
1.	Unit identifies new medical equipment requirement
2.	MTF Commander reviews/approves requirement
3.	Task Force Medical (clinical operations and medical maintenance) approves requirement
4.	Medical equipment validation and standardization board approves requirement
5.	Brigade Commander approves requirement
6.	Operational Needs Statement entered into Equipment Common Operation Picture system
7.	Multi National Corps – Iraq approves requirement
8.	Multi National Force – Iraq approves requirement
9.	Military Department Central Command approves requirement
10.	Headquarters, Department of the Army – Operations approves requirement
11.	Headquarters, Department of the Army approves funding

As shown in the table, the Army's process requires numerous levels of approval, including Headquarters Department of the Army review for medical equipment items. In contrast, the highest level of approval for the Air Force is the U.S. Air Forces Central Command. Additionally, the highest level of approval for the Marine Corps is the Marine Corps Systems Command. When the requirements are approved, the U.S. Army and U.S. Air Forces Central Surgeon's office and the Marine Corps Systems Command identify the best sourcing solution for the requirement. Having numerous levels of approval in the Army has the potential to slow down the process for obtaining urgently needed medical equipment and repair parts. Because of the audit's scope limitations discussed previously, we were unable to validate the medical equipment procurements the Services made through the operational needs statement process, and therefore, we are not making recommendations in this area.

Appendix D. Timeliness of Medical Equipment Procurements

At each MTF and medical logistics activity visited, we intended to obtain information on medical equipment and repair part procurements that were made from October 1, 2006, through March 31, 2008. With that information, we planned to calculate the amount of time it took to obtain medical equipment or repair parts from the time the order was placed by the MTF or medical logistics activity to the time the item was received. Because information was inconsistent, incomplete, or unavailable at some of the MTFs and medical logistics activities we visited, we were unable to consistently determine the time required to order and ship medical equipment or repair parts in the USCENTCOM AOR. Personnel at MTFs and medical logistics activities stated that they experienced delays in the receipt of medical equipment and repair parts and that customer wait times were an area of concern.

We obtained anecdotal information from several of the MTFs visited that showed concerns with the timeliness of equipment and repair part delivery. At one Army MTF, personnel stated that it took an average of 41 days to obtain repair parts. Customer wait times for medical equipment ranged from 7 to 109 days. At another Army MTF, personnel stated that it was common to have customer wait times of 120 to 250 days for medical equipment and repair parts.

Personnel at the theater lead agent were aware of these issues, and also provided us with an analysis of customer wait times for medical equipment for the three Army MTFs and two Army medical logistics activities that we visited. They calculated customer wait times from the time the theater lead agent placed the order to the time the lead agent received it. This did not include the time required for the MTF to place the order or the time required to ship the item from the theater lead agent to the MTF. For 2007, average customer wait times for the five Army locations we visited ranged from 152 to 245 days.

The theater lead agent did not calculate Air Force MTF customer wait times because the Air Force does not consistently order medical equipment through the theater lead agent. The theater lead agent did not calculate Marine Corps customer wait times. Also, the theater lead agent did not have access to information supporting medical equipment and repair part procurements made outside of TAMMIS. Because the Air Force used DMLSS, we were able to calculate the order ship times for medical equipment and repair parts. For calendar year 2007, average customer wait times for completed transactions for the Air Force MTF and the CJTH ranged from 41 to 61 days.

Reasons for Delays

Our limited time in theater and inconsistent information precluded us from analyzing each individual transaction to determine specific reasons for delays. To do so would have required in-depth research and analysis of transactions from the MTF, medical logistics activity, or theater lead agent. Discussions with personnel at those locations revealed that there was not any single reason for the lengthy order ship times, but that

many factors could impact the timeliness of medical equipment or repair part shipments. Delays could be caused by:

- items not available at the theater lead agent or the vendor location;
- manufacturing lead times or special accommodations; for example, remanufacturing medical equipment to run on 220-volt power instead of 110-volt power;
- delays in-transit;
- delays in processing medical equipment shipments through Customs in Qatar, where the theater lead agent is located;
- requisitions for nonstandard medical equipment that are not part of an MTF authorized allowance list or items requiring other justifications; or
- the levels of approval required by the Army operational needs statement process.

Appendix E. USCENTCOM Medical Inventory and Maintenance Data Systems

USCENTCOM uses various data systems to inventory medical equipment and record equipment maintenance. Summarized below are brief descriptions of the data systems that Army, Air Force, and Marine Corps personnel use for inventory and maintenance actions.

Defense Medical Logistics Standard Support System (Inventory and Maintenance)

The DMLSS system replaces the many, aging legacy logistics systems with one, standard DOD medical logistics system, enabling health care providers to spend less time on logistics and more time on primary health care delivery. Basic functionality includes some of the following capabilities: property accounting, biomedical maintenance operations, property management, and inventory. However, DMLSS does not include some of the functionality currently provided by TAMMIS.

Property Book Unit Supply Enhanced System (Inventory)

The PBUSE system is the Army's Web-based, combat service support property accountability system. It provides real-time management of total assets and automated catalog changes throughout the Army. Further, it includes Chief Financial Officer's compliance for Modified Table of Organizational and Equipment and Table of Distribution and Allowances.

Standard Army Maintenance System-Enhanced (Maintenance)

SAMS-E provides Army users and logistics personnel with easy access to day-to-day weapon systems, subcomponent readiness status, and maintenance and repair parts information and facilitates their associated management functions. SAMS-E applications are part of the Army's portfolio of automated logistics and integrated systems.

Asset Tracking Logistics and Supply System (Inventory)

ATLASS provides life-cycle support services for Marine Corps strategic, operational, and tactical logistics systems to meet the needs of the Marine Operating Forces and the Marine Corps Logistics community. It is a deployable, microcomputer-based supply system that allows for control, distribution, and replenishment of equipment and supplies.

Appendix F. Discussion of Management Comments on the Introduction and Finding

USCENTCOM, Army Medical Command, and the Defense Logistics Agency provided comments on the Introduction and Finding sections of the report. The additional comments and our responses that were not addressed at the end of the Finding are shown below. The full text of USCENTCOM, Army Medical Command, and Defense Logistics Agency comments are in the Management Comments section following the Appendices.

U.S. Central Command Comments

The Chief of Staff, USCENTCOM provided comments on the Finding and stated that USCENTCOM did not agree with the Joint Medical Technology Assessment Review Team finding that a medical logistics analysis was needed to provide better support. The Chief of Staff also stated that the audit did not uncover any substantive research to validate the assessment review team finding.

Army Medical Command Comments

The U.S. Army Medical Command Chief of Staff commented on the Finding and suggested that our comment on the Joint Medical Technology Assessment Review be modified. The Chief of Staff also stated that the joint review provided a comprehensive report that forms the basis for the life-cycle management program currently being used to reset theater-provided equipment.

Our Response

In the Management Initiatives section of the Finding, we stated that USCENTCOM established the assessment review team to conduct a series of surveys across the USCENTCOM AOR. We also stated that the assessment review team issued a finding that a logistical supply analysis was needed and that use of DMLSS would provide a robust capability to properly manage medical equipment. USCENTCOM did not agree that a medical logistics analysis was required to provide better support. The intent of the section was to include a brief synopsis of the USCENTCOM's management initiative involving the life-cycle management of medical equipment in the USCENTCOM AOR. We presented a portion of the assessment review team results and did not validate the assessment review team finding. We revised the management initiative to acknowledge USCENTCOM did not agree with the review team conclusion that a medical logistics analysis was needed.

Defense Logistics Agency Comments

The DLA Acting Senior Procurement Executive provided comments from the Directorate of Medical Materiel, Defense Supply Center Philadelphia on the Introduction and Finding sections, stating that the report did not adequately describe assumptions and conclusions to support the description of MTF sustainment operations. He also stated that the

requirement for a troop support planner at the theater lead agent has not been validated and that the planner might be located at USCENTCOM.

Our Response

The information in the Introduction section of the report provides a brief description of how the spectrum of care in theater has evolved from initially supporting young, healthy U.S. and coalition forces to providing more complex medical services to U.S. and coalition forces and other health care recipients. The enhanced level of care requires medical equipment replacement or updating with equipment that is more permanent or durable than what originally deployed to the USCENTCOM AOR. The equipment is being upgraded and replaced with more complex equipment similar to that found in MTFs in the United States. The complex combat casualty and sustainment mission information was provided by each of the Army and Air Force MTFs we visited in the USCENTCOM AOR. As a result of management comments, we revised the background section of the introduction.

We contacted DLA regarding the troop support planner initiative. At the time of our audit, DLA was pursuing a validated need for a troop support planner at the theater lead agent. After the issuance of the draft report, we learned that a new requirement was being considered to establish a troop support planner at the USCENTCOM headquarters location. As a result of the discussion, we made the appropriate revision to the Management Initiatives section of the Finding.

Appendix G. Categories of Medical Equipment Reviewed

To ensure continuity during the audit and to ensure coverage of medical equipment that has a significant impact on the health care mission, we limited the scope of the audit to certain categories of medical equipment. We selected medical equipment from the following categories that was maintenance-significant, could be tracked in inventory and procurement records, and was critical to the successful delivery of the health care mission.

Infusion Pumps Vital Signs Monitors Suction Units Portable X-Ray Units

Sterilizers

Digital Film Processors and Laptops

High Capacity X-ray Units

CT Scanners C-Arms

Fluid Warmers

Operating Room Lights Dental Compressors

Oxygen Generators Oxygen Concentrators

Ventilators **Defibrillators** Anesthesia Units **Electrosurgical Units Ultrasound Units Chemistry Analyzers** Hematology Analyzers

Lab Analyzers

Dental Operating Units

U.S. Central Command Comments

Final Report Reference



UNITED STATES CENTRAL COMMAND

OFFICE OF THE CHIEF OF STAFF 7115 SOUTH BOUNDARY BOULEVARD MACDILL AIR FORCE BASE, FLORIDA 33621-5101

29 April 2009

FOR: DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: United States Central Command Response to DODIG Draft Report "Medical Equipment Used to Support Operations in Southwest Asia", dated March 20, 2009

- 1. Thank you for the opportunity to respond to the recommendations presented in the DoDIG draft report.
- 2. CENTCOM response to the report and recommendations is attached and a summary of the response follows:
- a. CENTCOM does not concur with Recommendation 1 regarding the development of a procurement process since that is a Service Title X responsibility and beyond the purview of a COCOM to alter.
- b. CENTCOM partially concurs with Recommendation 2 regarding the requirement to use the Defense Medical Logistics Standard Support system. CENTCOM has already published the USCENTCOM Healthcare System Use Policy, dated 30 June 08, which requires this action and therefore believes further coordination/collaboration is not needed.

3.	The	Point	of	Contact	is
G	neral			AUGUST AND	

USCENTCOM Inspector

Attachments

Tab A: CENTCOM Response

Tab B: USCENTCOM Healthcare System Use Policy

Tab C: DODIG Report

Not included

Major General, U.S. Army

DODIG DRAFT REPORT - DATED 20 March 2009 DODIG CODE D2008-D000LF-0093,000

"Medical Equipment Used to Support Operations in Southwest Asia"

CENTCOM COMMENTS TO THE FINAL REPORT

RECOMMENDATION 1. (A.1., DODIG report page 13) DODIG recommends that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Director, Defense Logistics Agency, the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to develop a joint theater procurement process that requires consistent recording and reporting of all medical equipment and repair part procurement transactions from all sources of supply. The process should include coordination of all medical equipment procurements with the theater lead agent.

<u>CENTCOM RESPONSE</u>: Although CENTCOM partially concurs with information provided in this DODIG Report, we non-concur with the recommendation to develop a procurement process. In Appendix C, the report acknowledges Service processes, driven by funding linkages, on how equipment is purchased. It also describes who and where requisitions are actually made, dependent on the funding source driving the purchase. Each service has its own procedures by which these Title X requests are processed. These processes are beyond the purview of the COCOM to alter or coordinate; COCOMs do not direct Service HQs in execution of Title X responsibilities.

RECOMMENDATION 2. (A.2., DODIG report page 14) DODIG recommends that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance module at all military treatment facilities in the USCENTCOM area of responsibility. Defense Medical Logistics Standard Support functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records.

CENTCOM RESPONSE: CENTCOM partially concurs with information provided in this DODIG Report. The report did not include submission of USCENTCOM Healthcare System Use Policy, dated 30 Jun 08. This document identifies and requires Services to deploy medical units with DMLSS, to fulfill this exact DODIG recommendation. Development and staffing of this document included all parties identified as needing to collaborate in response to this recommendation. In Management Initiatives (page 12), the report also recognizes Army intent to deploy units with DMLSS by 2012 and that other Services are already doing so. Therefore, CENTCOM does not identify a need for further coordination/collaboration, as stated in this DODIG recommendation. The fixes and resources to resolve are either present in theater to some limited extent now, or where shortfalls exist, the Army solution is identified, with a suspense date.

Revised

1

GENERAL COMMENTS ON THE REPORT

- 1. Adding A1 as requirement to USCENTCOM is new from draft review.
- 2. USCENTCOM did not agree with the JMTART findings that a medical logistics analysis was required to provide better support. The DODIG team report did not uncover any substantive research to validate that finding in its report.

Revised Page 12, 13

APPROVED BY:

YA-03 CCSG Exec Dir PREPARED BY:

7-6397

2

Assistant Secretary of Defense (Health Affairs) Comments

Final Report Reference

Revised

Revised



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE WASHINGTON, DC 2030 1-1 200

APR 3 0 2009

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL DIRECTOR READINESS, OPERATIONS AND SUPPORT

SUBJECT: Medical Equipment Used to Support Operations in Southwest Asia (Project No. D2008-D000LF-0093.000)

Thank you for the opportunity to review and provide comments on the Department of Defense Inspector General draft report, "Medical Equipment Used to Support Operations in Southwest Asia (D2008-D000LF-0093.000)".

Overall, we concur with the report's findings and conclusions. My specific responses to the recommendations are attached. My only comments regard two small changes to the wording of recommendations A.2. and A.3. A.2. should include deployed U.S. Marine Corps Medical Logistics Companies/Detachments for installation and use of the Defense Medical Logistics Standard Support. For A.3., we request "Military Health System enterprise solution, Defense Medical Logistics Standard Support Joint Enterprise-wide Logistics System" be changed to "Military Health System, Defense Medical Logistics Standard Support" as a proper reflection of name and function. These changes are highlighted in our technical comments (attached).

My points of contact on this issue are (Functional), who may be reached at (Audit Liaison), who may be reached at (Audit Liaison).

Sincerely,

Ellen P. Embrey

Deputy Assistant Secretary of Defense (Force Protection Health and Readiness) Performing the Duties of the

Assistant Secretary of Defense (Health Affairs)

Attachment: As stated

DoD IG DRAFT REPORT D2008-D000LF-0093.000

Medical Equipment Used to Support Operations in Southwest Asia

ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS) COMMENTS

RECOMMENDATION A.1.: We recommend that the Commander, U.S. Central Command (USCENTCOM) coordinate with the Chairman, Joint Chiefs of Staff; the Director, Defense Logistics Agency, the Assistant Secretary of Defense (Health Affairs) [ASD (HA)] and the Military Department Central Commands to develop a joint theater procurement process that requires consistent recording and reporting of all medical equipment and repair part procurement transactions from all sources of supply. The process should include coordination of all medical equipment procurements with the theater lead agent.

ASD (HA) RESPONSE: Concur

RECOMMENDATION A.2: We recommend that the Commander, USCENTCOM, coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support (DMLSS) equipment management and maintenance module at all military treatment facilities in the USCENTCOM area of responsibility. DMLSS functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records.

ASD (HA) RESPONSE: Deployed U.S. Marine Corps (USMC) Medical Logistics Companies/Detachments use DMLSS Equipment Management and Maintenance Module in support of the medical units/treatment facilities.

RECOMMENDATION A.3.: We recommend that the Assistant Secretary of Defense (Health Affairs) coordinate with the Surgeon General of the Army to ensure timely implementation and an updated milestone and implementation plan for the transition from the Theater Army Medical Management Information System to the Military Health System enterprise solution. DMLSSt Joint Enterprise-wide Logistic System.

ASD (HA) RESPONSE: This recommendation refers to DMLSS as the "Military Health System enterprise solution, Defense Medical Logistics Standard Support Joint Enterprise-wide Logistics System." Please adjust statement as follows, "Military Health System, Defense Medical Logistics Standard Support."

Revised

RECOMMENDATION A.4.: We recommend that the Commander, U.S. Army Central Command, provide us with a status update on the management initiatives and if appropriate, implementation plans on any management initiatives that would improve the medical equipment and repair part procurement process.

ASD (HA) RESPONSE: Concur

DoD IG DRAFT REPORT D2008-D000LF-0093.000

Medical Equipment Used to Support Operations in Southwest Asia

ASD (HEALTH AFFAIRS) TECHNICAL COMMENTS

Technical Comments:

- Page 14. Recommendation A.2. As currently written, the recommendation does not include reference U.S. Marine Corps (USMC) logistics responsibilities. Recommend that the first sentence of Recommendation A.2 be revised to read "We recommend that the Commander, U.S. Central Command (USCENTCOM) coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance module at all military treatment facilities and USMC Medical Logistics Companies/Detachments in the USCENTCOM area of responsibility."
- Page 14. Recommendation A.3. As currently written, the recommendation does not correctly reference the Defense Medical Logistics Standard Support (DMLSS) program. Recommend that Recommendation A.3 be revised to read "We recommend that the Assistant Secretary of Defense (Health Affairs) coordinate with the Surgeon General of the Army to ensure timely implementation and an updated milestone and implementation plan for the transition from the Theater Army Medical Management Information System to the Military Health System, Defense Medical Logistics Standard Support." Replace the reference to Military Health System enterprise solution, Defense Medical Logistics Standard Support Joint Enterprise-wide Logistics System.

Replaced

Assistant Secretary of the Navy (Manpower and Reserve Affairs) Comments



DEPARTMENT OF THE NAVY

OFFICE OF THE SECRETARY 1000 NAVY PENTAGON WASHINGTON, D.C. 20350-1000

MAY 1 2009

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: DoDIG Draft Report Titled: Medical Equipment Used to Support Operations in Southwest Asia

The Department of the Navy concurs with the DoD Draft Report Project No. D2008-D000LF-0093.00, "Medical Equipment Used to Support Operations in Southwest Asia," with comments. USMC concurs with comments, Commander, U.S. Naval Forces Central Command concurs, and Health Service Support, U.S. Naval Forces Europe concurs. Specific comments provided in attachment 1.

My point of contact in this matter is

USN, or

Patricia C. Adams Deputy Assistant Secretary of the Navy (Civilian Human Resources) Performing the Duties of the

ASN(M&RA)

Attachments: As stated



DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS 3000 MARINE CORPS PENTAGON WASHINGTON, DC 20350-3000

IN REPLY REFER TO: 7510 RFR-80 23 Apr 09

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY (MANPOWER AND RESERVE AFFAIRS)

Subj: Department of Defense Inspector General Draft Report D2008-D000LF-0093.000, "MEDICAL EQUIPMENT USED TO SUPPORT OPERATIONS IN SOUTHWEST ASIA," dtd March 20, 2009

Ref: (a) DODIG memo of March 20, 2009

Encl: (1) Marine Corps official comments

1. Reference (a) provided the subject draft report for review and comment.

2. The Marine Corps has reviewed the report and provides official comments at the enclosure.

3. Point of contact for this matter is Headquarters Marine Corps Senior Audit Liaison, email or phone

By direction of the Commandant of the Marine Corps Subj: Department of Defense Inspector General Draft Report
D2008-D000LF-0093.000, "MEDICAL EQUIPMENT USED TO SUPPORT
OPERATIONS IN SOUTHWEST ASIA," dtd March 20, 2009

1. The Marine Corps has reviewed the draft report and the following comments are provided:

Recommendation A.1. DODIG recommends that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Director, Defense Logistics Agency; the Assistant Secretary of Defense (Health Affairs); and the Military Department Central Commands to develop a joint theater procurement process that requires consistent recording and reporting of all medical equipment and repair part procurement transactions from all sources of supply. The process should include coordination of all medical equipment procurements with the theater lead agent.

Marine Corps Response: Concur.

Recommendation A.2. DODIG recommends that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance module at all military treatment facilities in the USCENTCOM area of responsibility. Defense Medical Logistics Standard Support functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records.

Marine Corps Response: Concur with comments. Recommend changing Recommendation A.2. to read as follows: DODIG recommends that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance module at all military treatment facilities and USMC Medical Logistics Companies/Detachments in the USCENTCOM area of responsibility. Defense Medical Logistics Standard Support functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records. Justification: USMC Medical units/treatment facilities do not use DMLSS. Deployed USMC Medical Logistics Companies/Detachments use DMLSS Equipment Management and Maintenance Module in support of the medical units/treatment facilities.

Encl (1)

Marine Corps comments were prepared for the Marine Corps Forces Central Command by Headquarters, Marine Corps Health Services Department

Revised



DEPARTMENT OF THE NAVY COMMANDER, U.S. NAVAL FORCES CENTRAL COMMAND FPO AE 09501-6008

NREPLYTO: 7650 Ser N00/141 30 Apr 09

From: Commander, U.S. Naval Forces Central Command

To: Inspector General, Department of Defense, Program

Director, Readiness, Operations, and Support

Subj: MEDICAL EQUIPMENT USED TO SUPPORT OPERATIONS IN SOUTHWEST

ASIA (PROJECT NO. D2008-D000LF-0093.000)

Ref: (a) DoD IG Memo of 20 Mar 09

(b) DoD Directive 7650.3 of 18 Oct 06

Encl: (1) Response to Draft Report Recommendations

- 1. This is the Commander, U.S. Naval Forces Central Command (COMUSNAVCENT) response to reference (a), in accordance with reference (b). Detailed comments on recommendations A.1 and A.2 are at enclosure (1).
- 2. COMUSNAVCENT appreciates the opportunity to comment on the draft report and concurs with recommendations A.1 and A.2 and with the internal control weakness. Although COMUSNAVCENT provides an oversight role and is not a direct user of the different systems across the services, agree that system interoperability is necessary and that a joint solution should mitigate costly delays affecting readiness and operational capabilities.

3. Subject matter Force Medical,	expe	ert point of contact	is		ema	ail,
is		Inspector General	(IG)	point	of	contact . email
		J. Y. LOE Chief of	BEEIN			

RESPONSE TO DRAFT REPORT RECOMMENDATIONS

RECOMMENDATION A.1. "We recommend that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Director, Defense Logistics Agency, the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to develop a joint theater procurement process that requires consistent recording and reporting of all medical equipment and repair part procurement transactions from all sources of supply. The process should include coordination of all medical equipment procurements with the theater lead agent."

CONCUR. Commander, U.S. Naval Forces Central Command (COMUSNAVCENT) has different supply tracking mechanisms for medical supplies, particularly for shipboard use that are service specific. Currently, medical facilities use Defense Medical Logistics Standard Support (DMLSS) in the continental United States (CONUS). Implementation of DMLSS as part of the Theater Medical Information Program (TMIP) effort is currently pending.

RECOMMENDATION A.2. "We recommend that the Commander, U.S. Central Command coordinate with the Chairman, Joint Chiefs of Staff; the Assistant Secretary of Defense (Health Affairs) and the Military Department Central Commands to ensure the installation and use of the Defense Medical Logistics Standard Support equipment management and maintenance module of all military treatment facilities in the USCENTCOM area or responsibility. Defense Medical Logistics Standard Support functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records."

CONCUR. If implemented, this would provide interoperability to all Department of Defense forces within a specific theater of operations. The focus for integrating, implementing and executing should occur with the supporting technical commands, system commands, and type commands that train, equip, and resource our operational units for tasking.

Enclosure (1)

Health Service Support (HSS) input: After reviewing the Draft Report assigned, it was noted the report does not address specific equipment, but appears to focus on how to keep track of the life cycle and procurement process of the medical equipment used in Southwest Asia by Army, Air Force, and Marine Corps MTFs. One major concern addressed in the report was the need for a "joint theater procurement process" due to the in-theater military forces using different data systems for tracking medical equipment procurements, inventory, and maintenance information.

The reports recommends that one system be developed and used in order for the theater lead agent to be afforded the capability to oversee all theater-wide medical equipment and repair part procurements; HSS strongly supports this recommendation. Our limited experience in dealing with the current procurement process has shown it can be extremely complicated and frustrating. Clearly, there is an obvious need for the military services to have a unified process for procurement of medical equipment, as well as the necessary repair parts needed to service existing equipment, in order to assist in successful mission accomplishment. if you have further questions.) Please contact

U.S. Army Medical Command Comments



DEPARTMENT OF THE ARMY HEADQUARTERS, U.S. ARMY MEDICAL COMMAND 2050 WORTH ROAD FORT SAM HOUSTON, TX 78234-6000

REPLY TO ATTENTION OF	2.0 ADD 2000
MCIR	3 O APR 2009
MEMORANDUM FOR Department of De Operations Support, Military Health Syste	
SUBJECT: Reply to Draft Report on Med Southwest Asia (Project No. D2008-D000	dical Equipment Used to Support Operations in DLF-0093.000)
Thank you for the opportunity to review consideration.	w this report. Our comments are enclosed for your
2. Our point of contact is Office, or email:	, Internal Review and Audit Compliance
FOR THE COMMANDER:	
Encl	Herbut A. Colly- HERBERT A. COLEY Chief of Staff

US Army Medical Command (MEDCOM) and Office of the Surgeon General (OTSG)

Comments on DODIG Draft Report: Medical Equipment Used to Support Operations in Southwest Asia (Project No. D2008-D000LF-0093.000)

MANAGEMENT INITIATIVES: Page 12, first bullet states, "In June 2007, USCENTCOM established a Joint Medical Technology Assessment Review Team to conduct a series of surveys across the AOR [area of responsibility] to determine medical equipment functionality and to ensure proper technology matches. The joint review team issued a report in September 2008 that stated a logistical supply analysis was needed and that use of DMLSS would provide a robust capability to properly manage medical equipment."

TECHNICAL COMMENT: We suggest the bullet be modified to read as follows: In June 2007, USCENTCOM requested assistance from U.S. Army Medical Research and Materiel Command (MRMC) and U.S. Army Medical Materiel Agency (USAMMA) to help identify a medical equipment formulary to support standardization and establish a theater lifecycle management program. In response to USCENTCOM's request, U.S. Army Medical Command (MEDCOM) directed MRMC/USAMMA to establish a Joint Medical Technology Assessment Review Team (JMTART). From 11 June to 7 August 2008, JMTART assessed the clinical workload and medical equipment technology at nine level three military treatment facilities (MTF) in Iraq, Kuwait, and Afghanistan to identify proper lifecycle management and technology matches. JMTART provided a comprehensive report in September 2008 that forms the basis for the lifecycle management program currently being used to reset theater-provided equipment. The report recommended a logistical supply analysis and commented that use of Defense Medical Logistics Standard Support System (DMLSS) at some locations would provide a more robust capability to properly manage medical equipment. MEDCOM further proposed the JMTART methodology as the solution for lifecycle management of theater equipment.

RECOMMENDATION A.2.: We recommend the Commander, USCENTCOM coordinate with the Chairman, Joint Chiefs of Staff; ASD (HA); and Military Department Central Commands to ensure the installation and use of the DMLSS equipment management and maintenance module at all MTFs in the USCENTCOM area of responsibility. DMLSS functionality should include the ordering and receipt of medical equipment and repair parts and maintaining medical equipment inventory and maintenance records.

RESPONSE: We agree that current maintenance systems in theater are inadequate, in large part due to a lack of Class VIII supply system integration. Integrating the Class VIII supply and maintenance systems will greatly enhance our ability to track, monitor, and reconcile repair part orders. A single system to manage Class VIII supply transactions, track maintenance, as well as property, will also reduce inconsistencies among property and maintenance systems. The entire integrated suite of DMLSS Class VIII functionality should be tested for use in a U.S. Army Table of Organization and Equipment Combat Support Hospital (CSH) mission, including

Encl

interoperability with the Single Army Logistics Enterprise, before moving theater medical logistics assets to the DMLSS platform.

This DODIG report discusses inconsistencies between SAMS-E and Property Book Unit Supply Enhanced (PBUSE) records and recommends that DMLSS be used as an integrated inventory and medical maintenance record. However, many Army programs (such as reset funding) are predicated on equipment being loaded in PBUSE. In addition, U.S. Army Sustainment Command relies on equipment being loaded in SAMS-E before a unit is deployed so the equipment can be pulled into the Left Behind Equipment module of SAMS-E. These challenges, as well as the ability to feed data to Logistics Support Agency (LOGSA) and Logistics Information Warehouse (LIW), should be considered when testing any system that might replace SAMS-E for medical equipment management.

<u>RECOMMENDATION A.3.</u>: We recommend that ASD(HA) coordinate with the Surgeon General of the Army to ensure timely implementation and an updated milestone and implementation plan for the transition from TAMMIS [Theater Army Medical Management and Information System] to DMLSS.

RESPONSE: Concur with comment. Medical logistics functions rely heavily on technology to support a variety of medical supplies, equipment management, sustainment, maintenance, and quality assurance processes, including initial response supplies, sustainment materiel, and medical equipment. As Theater Lead Agent for Medical Materiel, the Army has a dramatically larger mission in theater than other Services. This mission requires additional functionality currently unsupported by a single automated system.

Current CSH medical logistics automation functionality is delivered through multiple systems. Supply chain management is supported through TAMMIS. PBUSE is used for equipment management and SAMS-1/2E for equipment maintenance and reporting. Global Combat Support System – Army/Field Tactical (GCSS-A/FT) will begin to subsume Army legacy systems by FY 10. Army mandates these systems for accountability, reporting, asset visibility, and operational readiness.

A logistical end-to-end (factory to foxhole) business practice analysis is required to ascertain what functionality is needed within a CSH and what system(s) best delivers the capabilities determined to be essential to support the mission of a fully operational CSH in a deployed environment. The following current gaps in DMLSS capability must be addressed before deploying automation to support theater operations:

- Ability to remove work orders to a separate maintenance support organization regardless
 of what automated system the support organization is using and pass status from one
 level of support to another. This process is unique to the Army.
- Ability to send and receive customer work orders among systems and report critical workload, man-hour, and cost data to the LIW. This capability provides web-based equipment lifecycle management tools to war fighters and materiel managers.

U.S. Army Central Command Comments



DEPARTMENT OF THE ARMY UNITED STATES ARMY CENTRAL 1881 HARDEE AVE SW FORT MCPHERSON, GA 30330-1064

ACEN-RMZ-M

20 April 2009

MEMORANDUM FOR U.S. Department of Defense Office of the Inspector General; ATTN:

SUBJECT: Draft Audit Report, Department of Defense Office of the Inspector General (DoDIG) Audit of Medical Equipment Used to Support Operations of Southwest Asia

Reference: Draft Audit Report, Department of Defense Office of the Inspector General (DoDIG) Audit of Medical Equipment Used to Support Operations of Southwest Asia (Project No. D2008-D000LF-0093.000).

1. USARCENT provides the following response to the DoDIG recommendation.

Recommendation A.4: We recommend that the Commander, U.S. Army Central Command provide us with a status update on the management initiatives and if appropriate, implementation plans on any management initiatives that would improve the medical equipment and repair part procurement process.

USARCENT Response: Concur. The theater requires a responsive reach back program for urgent medical equipment procurement and for repair part procurement. Currently, the Theater Lead Agent for Medical Materiel (TLAMM), U.S. Army Medical Materiel Center-Southwest Asia (USAMMC-SWA), has a reach back program in place for both equipment procurement and repair parts but neither process is as efficient as it could be. USAMMCSWA is currently working closely with the 6th Medical Logistics Management Center (MLMC) and employing Lean Six Sigma techniques to develop alternative courses of action to optimize reach back capabilities for both urgent medical equipment and repair parts procurement.

Medical equipment procurement. USAMMC-SWA has the capability to support medical equipment procurements less than the simplified acquisition threshold of \$2,500. Requirements above \$2,500 are passed to the U.S. Army Medical Materiel Center, Europe (USAMMCE) as a reach back mechanism. Because USAMMCE's infrastructure has allowed it to secure several blanket purchase agreements (BPAs), it is able to procure certain medical equipment items much faster than the Defense Logistics Agency (DLA)/Defense Supply Center Philadelphia (DSCP). However, if a piece of medical equipment is coded as an Other Procurement Army (OPA) funded item, USAMMCE cannot procure it with their BPA process and the request must be forwarded to DSCP back in CONUS. In an effort to improve this process, the 6th MLMC, who supports USAMMC-SWA from Fort Detrick, Maryland, began a Lean Six Sigma (LSS) charter

ACEN-RMZ-M

SUBJECT: Draft Audit Report, Department of Defense Office of the Inspector General (DoDIG) Audit of Medical Equipment Used to Support Operations of Southwest Asia

to identify methods to reduce the shipping times of Supply Category 84 (medical equipment) items from CONUS to the CENTCOM Theater. The estimated completion date for this LSS project is June 2009.

Medical equipment repair parts procurement. USAMMC-SWA, as an interim solution, utilizes a \$25,000 Government Purchase Card (GPC) to procure required repair parts for theater medical units. This process has assisted in reducing the customer wait time for repair parts. However, this is a manual process and all demand computations are managed manually. As a way ahead, the 6th MLMC has identified avenues in which they can assist in improving repair parts acquisition for the theater. First, the 6th MLMC secured the use of BPAs with vendors for medical equipment repair parts in an effort to procure items for theater. Secondly, 6th MLMC began a LSS study charter to improve the process of providing repair parts to the theater. The LSS study will focus on two primary areas: New Item Request (NIR) process and cataloging of repair parts. USAMMCE currently supports the NIR process. The LSS team will identify avenues to improve this process. The 6th MLMC will coordinate with the U.S. Army Medical Materiel Agency (USAMMA) to develop a mechanism to catalog repair parts into FEDLOG and/or TAMMIS, based on the medical equipment Integrated Logistics Support (ILS) process. This portion of the study will take longer to complete, but will assist the supply chain in developing a way ahead for repair parts ordering.

2. The point of contact for issues related to this memorandum is USARCENT Audit Liaison at

Colonel, GS Chief of Staff

FOR THE COMMANDER:

2

Defense Logistics Agency Comments

Final Report Reference



DEFENSE LOGISTICS AGENCY HEADQUARTERS

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IN REPLY REFER TO J-72

MAY - 8 2009

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL PROGRAM MANAGER, READINESS, OPERATIONS, AND SUPPORT

SUBJECT: Medical Equipment Used in Support Operations in Southwest Asia (Project No. D2008-D000LF-00093.000)

Thank you for the opportunity to review and provide comments on the subject report. Overall we fully concur and support your recommendation of a joint theater procurement process within Southwest Asia. The Defense Logistics Agency (DLA) currently supports the United States Army Medical Material Center Southwest Asia (USAMMC-SWA) and attends the USAMMC-SWA hosted Medical Logistics Summits that include discussion of the material procurement process. We will continue to provide personnel, data from Defense Medical Logistics Standard Support (DMLSS) and Enterprise Business System, and other required support to develop the process in the best interest of the United States Central Command (USCENTCOM) Commander, DLA, and others.

In addition, the Directorate of Medical Materiel, of the Defense Supply Center Philadelphia (DSCP), field agency of DLA, provided comments to the subject Draft, which remains in the current version of the report. The comments include the following:

- The DODIG discussion of "Expanded Medical Capability in Theater" states the length of operations is resultant in sustainment operations but does not adequately describe assumptions and conclusions to support this determination and subsequent recommendations.
- The DODIG information systems recommendation should identify functionality and interoperability requirements vice recommending the DMLSS. The DLA and Services are executing current agreements to ensure system interoperability and functionality that will support the recommendations within this report.
- The section discussing provision of the troop support planner to USAMMC-SWA requires update. The requirement for the planner in the forward location is not validated; the DSCP and USCENTCOM are considering placing a planner at HQ USCENTCOM, in Tampa, Florida.

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