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"PRIME VENDOR" - DOD'S FUTURE MEDICAL SUPPLY SYSTEM

BY

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The United States is reducing the size of its armed forces and is spending considerably less money on defense. This has provided a powerful stimulus to implement new "business practices" designed to modernize operations and dramatically reduce costs while maintaining essential combat capability. Expenditures for medical supplies and equipment within the Department of Defense (DOD) represent a significant portion of the total expense of health care. As a result, DOD is implementing a new concept of providing medical supply support to military hospitals. This program is known as "Prime Vendor." It relies on enhanced distribution means through commercial industry support and integrated logistics information technology. Preliminary analysis suggests that "Prime Vendor" adequately addresses peacetime concerns; economy, effectiveness, and responsiveness. It is more difficult to determine how well it will provide effective mission support and sustainment in wartime. DOD and the Services must examine the linkage between CONUS hospital operations, deployment planning, industrial base preparedness plans, and industrial stock rotation plans to insure readiness and wartime sustainability while implementing commercial practices.

USAWC MILITARY STUDIES PROGRAM PAPER

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"PRIME VENDOR" - DOD'S FUTURE MEDICAL SUPPLY SYSTEM

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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The United States is reducing the size of its armed forces and is spending considerably less money on defense. This has provided a powerful stimulus to implement new "business practices" designed to modernize operations and dramatically reduce costs while maintaining essential combat capability. Expenditures for medical supplies and equipment within the Department of Defense (DOD) represent a significant portion of the total expense of health care. As a result, DOD is implementing a new concept of providing medical supply support to military hospitals. This program is known as "Prime Vendor." It relies on enhanced distribution means through commercial industry support and integrated logistics information technology. Preliminary analysis suggests that "Prime Vendor" adequately addresses peacetime concerns; economy, effectiveness, and responsiveness. It is more difficult to determine how well it will provide effective mission support and sustainment in wartime. DOD and the Services must examine the linkage between CONUS hospital operations, deployment planning, industrial base preparedness plans, and industrial stock rotation plans to insure readiness and wartime sustainability while implementing commercial practices.

LIST OF ILLUSTRATIONS

LIST OF ABBREVIATIONS

ATH	Air Transportable Hospital
CONUS	Continental United States
CPD	Central Processing and Distribution
DFAS	Defense Finance and Accounting Service
DLA	Defense Logistics Agency
DMR	Defense Management Review
DMRD	Defense Management Review Decision
DPSC	Defense Personnel Support Center
DVA	Department of Veterans' Affairs
EC	Electronic Commerce
EDI	Electronic Data Interface
FAR	Federal Acquisition Regulation
FSS	Federal Supply Schedule
MEDLOG	Medical Logistics System
MILSTRIP	Military Standard Requisitioning and Issue Procedures
MICS	Medical Inventory Control System
TAMMIS	Theater Army Medical Management Information System
WRM	War Reserve Materiel

INTRODUCTION

The decade of the 90's promises profound changes for the military Services. The end of the Cold War, the dissolution of the Soviet Union, and a shift of the U.S. national focus to domestic problems have provided a powerful stimulus for change within the defense establishment. The most immediate change is in the size of the military. Both the active duty and civilian workforce will be smaller. A significant decline in defense spending is anticipated. By 1996, the defense budget will constitute about 3.8 percent of the Gross National Product (GNP), the smallest amount in over fifty years.[1] The Defense Department must increase efficiency while maintaining or improving service. It must reduce costs, yet maintain readiness. Reducing the inefficiency in defense management practices is not something new. In 1985, President Reagan established a Blue Ribbon Commission on Defense Management, known as the Packard Commission, to "study defense management policies and procedures... and report its findings and recommendations."[2] President Bush also requested a review of Defense Management Practices, which resulted in a number of Defense Management Review Decisions (DMRD). The objective of these decisions was to achieve cost savings by reducing overhead, eliminating redundant functions, and implementing modern business practices.

These challenges are particularly daunting for the military medical departments. Soaring civilian health care costs also affect the cost of military medicine. In 1992, total health care spending accounted for about 14 percent of the GNP.[3] Growth in the Department of Defense health care costs is programmed at 3.87

percent per year through FY97. This increase, small in comparison to national trends, is significant in a declining defense budget.[4] The medical portion of the President's FY93 amended budget is about $15.3 billion (5.7 percent).[5] Expenditures for military medical supplies and equipment represent a significant portion of the total expense for health care. The cost of medical materiel continues to rise between 8-14 percent per year.[6]

Faced with these increasing costs in a time of declining resources, it is essential to find ways to save money without compromising effective support.

This paper describes the current DOD medical logistics system, examines a revolutionary initiative to improve supply system efficiency, and evaluates its impact on readiness and wartime sustainability.

HEALTH CARE MISSION

The mission of the Service Medical Departments is "to conserve the fighting strength."[7] This mission includes: (1) maintaining the health of service members and authorized beneficiaries during peacetime and (2) caring for the sick and wounded during wartime.[8] Medical materiel is vital to the delivery of medical care in both peacetime and wartime. Without essential medical supplies and equipment, the Service Medical Departments could not accomplish their missions. It is for this reason the medical logistics system exists. Its mission is to provide timely, quality supplies, equipment, facilities, and support services in both peace and war.

The type of medical supplies and equipment varies depending on the time and place they are used. For example, in wartime there is a much greater need for medical items needed to treat casualties. Items such as combat dressing, intravenous solutions (IVs), and litters, to name a few, are in much greater demand.

PEACETIME HEALTH CARE SYSTEM

Permanent hospitals and clinics provide the majority of peacetime military health care. Services range from outpatient treatment of minor illnesses to major surgery. They furnish the same standard of care as civilian health care facilities. The Army operates some of the largest hospitals in the Military Health Services System (MHSS).

Logistics support to peacetime health care is an enormous enterprise. The Services acquire and distribute over $2 billion annually in medical supplies and equipment.[9] Another $1 billion is spent on professional and non-professional services contracts. The medical logistics system manages property accounting, installation, maintenance, and replacement accounting for an in-use medical inventory valued at $2.2 billion.[10] Medical logisticians manage war reserve materiel (WRM) assets, contingency hospitals and medical units around the world with a value of over $2 billion.[11]

WARTIME HEALTH CARE SYSTEM

Health service support in wartime is based on the concept of forward treatment and can be characterized as a continuum of care from the point of injury in a combat zone to the hospitals and medical centers in the United States.[12]

The wartime health care system includes the fixed facilities that provide peacetime care and field medical units in the theater combat and communications zones.

Medical support at the tactical and operational levels differ among the Services. The Army uses a system of field medical units ranging from small aid stations at the battalion level to large field hospitals. Most of the Navy's wartime medical support is aboard ships. The Air Force uses Air Transportable Hospitals (ATH) to provide support. The Marine Corps provides support through a combination of land-based field medical units and ship-based medical facilities of the Navy.

CURRENT PROCEDURES

The DOD medical logistics system consists of wholesale and retail operations. The Defense Logistics Agency manages the wholesale function for all the military Services. This mission is accomplished by the Medical Directorate of the Defense Personnel Support Center (DPSC) and the DLA Depot System. DPSC acts as the group buyer of standard consumable items for the Services. It is also responsible for providing local purchase support for overseas medical facilities, storing of medical War Reserve Materiel (WRM),

cataloging, and building of medical assemblages--also called sets, kits, and outfits.

The retail medical logistics system is the responsibility of each Service. Each acquires, manages, and maintains medical supplies and services for their medical treatment facilities (MTF). The Services conduct the retail operations of the medical logistics systems in over 200 MTFs worldwide. Peacetime medical logistics support procedures are similar to those civilian hospitals use to purchase, distribute, and store the commercially available supplies and equipment they need.

In the MHSS, this is accomplished either by ordering from the Defense Personnel Support Center using Military Standard Requisitioning and Issue Procedures (MILSTRIP) or by local purchase from commercial vendors. Figure 1 illustrates the current DOD medical logistics system.

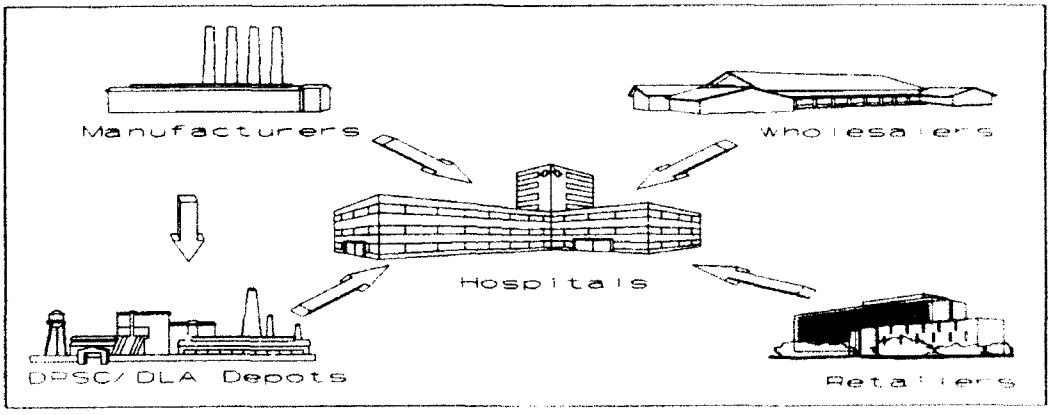

Figure 1. Current DOD Medical Logistics System

Wholesale level sales account for only about half of the total retail requirement because of either lack of item availability or timeliness or both. As a result, the retail level also depends on a very large volume of local purchasing. The resulting large local contract/payment function is costly and inefficient. Declining wholesale level sales have increased the DLA surcharge--a charge added to the cost of an item to cover DLA overhead. All of this serves to increase retail medical supply costs.

The current DOD medical logistics system is based on large inventories at both the wholesale and retail levels. At the retail level, for example, the number of days of inventory on hand in MTFs is between 60-120 days, compared to around twenty days in the civilian sector.[13]

There is no standard information system approach to logistics management among the Services. Full logistics integration within the MTF from the retail level to the end user is not possible; this increases the reliance on large inventories both at the retail and the using activity.

Characteristics of the system are:

- Reliance on large inventories;
- Large wholesale/retail warehouse/facility operations;
- long depot-retail delivery times;
- long lead times to stock new items;
- system financial disincentives (surcharge);
- frequent individual local purchase transactions;

- large volume of individual contract payments for local purchase activities; and

- diverse and non-interoperable information technology systems.

Current DOD medical logistics practices reduce efficiency, increase costs and do not improve customer satisfaction. Other implications are analyzed and discussed below.

Large inventories require large warehouses. The repair and upkeep of these buildings is expensive. These costs are even higher because most of DLA's depot facilities are old. Large inventories require either a large workforce or extensive materiels handling equipment (MHE). Efficiencies gained by modern MHE is offset by the nature of the medical commodity. Quality control, control of regulated drugs, and hazardous materials increase personnel requirements. Because there is usually not enough room to store large inventories within the MTF, additional facilities must be used. This usually requires an internal distribution system which requires additional personnel. Since most supplies are requested and received in bulk, there is an additional requirement for personnel to break down bulk supplies into units of issue or in some instances units of use.

The greatest impact of large inventories is the cost of holding them. Inventory holding costs are directly related to the size of the inventory. As material costs continue to rise 8-16 percent per year, the cost of holding large inventories also rises. Larger inventories have a greater potential for inventory losses

due to deterioration, obsolescence, and destruction. There is also a greater potential for large amounts of excess. The duplication of inventories at each level and by each Service is costly and inefficient.

Despite large inventories at the wholesale level, depot-retail delivery times are frequently two weeks or longer for routine items. Longer order-to-ship times mean increased investment in inventories and less responsive support to customers. As a result, many MTFs "go direct" to commercial vendors for a substantial part of their total medical supplies because of speed and timeliness.

The health care industry is very dynamic. Manufacturers are constantly introducing new drugs and medical equipment items to the commercial marketplace. Once new items are available in the civilian sector, they are soon incorporated into a "standard of medical care" and requested by military health providers. The process to standardize and stock these items within the DOD medical logistics system is often a lengthy process taking several months. Again, MTFs must purchase these non-standard items directly from commercial vendors usually at an increased cost.

The enormous amount of purchase activity outside the normal DLA requisitioning process results in costly contract/payment functions. There were an estimated 600,000 local purchase transactions in FY91. It is estimated that each of these transactions, on the average cost $200. This is a conservative estimate as the Federal Acquisition Regulation (FAR) states a cost of $500 per transaction for contracting and payment. A DLA study

found the cost of performing the contracting function to be $150 per transaction exclusive of the payment function. Army data collaborates a cost of $200 per transaction. The heavy volume of local purchase activity and associated contract/payment cost can be viewed as a result of the current operating system. The total contract/payment cost for local purchase transactions is estimated at $120 million for FY 91 calculated as: 600,000 transactions x $ 200/transaction = $120 million.[14]

There is no standard medical logistics management information system among the Services. The information technology costs in FY91 represented less than 1 percent of the total medical logistics costs.[15] According to the U.S. Chamber of Commerce estimates the health care industry spends about 2-3 percent of its operating costs on information technology.

NEW BUSINESS PRACTICES

In July of 1989, the Department of Defense completed a review of its management practices requested by President Bush. This Defense Management Report (DMR) recommended initiatives to modernize operations, while dramatically reducing costs and maintaining essential combat capability. These actions included reducing overhead, eliminating redundant functions and improving business practices. The management efficiencies were categorized into five functional areas: Logistics; Administration; Base Operations and Facility Management; Automated Support and

Information Systems; and Finance, Procurement and Contract Management.

DOD estimated that the combined DMR initiatives will save approximately $71.1 billion from FY 1991 through FY 1997.[16] About one third of the total savings ($24.3 billion) are produced by supply system efficiencies. The key to success in this process is the adaptation of new business practices.

The following new business practices are essential to achieving the objectives of the DMR and providing the basis for follow-on cost savings.

- Totally integrated logistics function of Tri-Service and Defense Logistics Agency (DLA) during wartime and peacetime;
- Use of Electronic Commerce (EC) technologies including Electronic Data Interface (EDI);
- Reduced number of centrally maintained/stocked lined items;
- Increased reliance on private sector direct delivery through EC;
- Paperless transaction/workplace;
- Consolidation/reduction in contract/payment transaction volume; and
- Reduced transportation/pipeline time.[17]

Integrated logistics management includes the functions of transportation, warehousing, inventory management, and customer service. Implementation of integrated logistics management by private industry resulted in increased customer satisfaction, while

reducing logistics costs. Cost savings were realized through inventory reductions, increased inventory turnover rates, and fewer warehouses and distribution centers.[18]

Electronic commerce uses automation and communication technologies to speed the creation, flow, and management of business information between business participants. It includes applications of electronic mail, voice mail, computers and software, and electronic data storage and retrieval. Electronic Data Interface (EDI) is an essential component of EC. EDI is a system of standardized computer-to-computer transactions regardless of an individual computer's software or file formats.

In an attempt to reduce inventory operating costs, DOD is pursuing commercial alternatives to DOD stockage such as direct vendor deliveries to DOD customers. In 1992, the DLA satisfied 22 percent of customer demands through direct vendor deliveries. The goal for 1993 is to attain 28 percent. The Army guidance is to effect a goal of 10 percent annual improvement on commercial vendor usage.[19]

Proponents of the medical logistics system have also developed a concept to implement many of the DOD initiatives in a medical supply system of the future. The following elements are include in this concept:

- DLA-EDI hub for 90 percent of orders;
- Reduced order-ship time from suppliers by five to seven days;
- High fill rate by suppliers;

- Fewer number of suppliers;
- Highly efficient distributors providing 12 hour resupply;
- Significant inventory reduction by DLA and Medical Treatment Facilities (MTF);
- Less reliance on NSNs;
- Total asset and demand visibility;
- Full functional integration within MTF via Central Processing and Distribution (CPD);
- Standard information system architecture-retail; and
- Improved information architecture support-wholesale.[20]

DOD INITIATIVE TO REDUCE MEDICAL INVENTORIES

A different concept of providing medical logistics support to hospitals is evolving. Figure 2 illustrates the future DOD medical logistics process. This program is known as "Prime Vendor." It

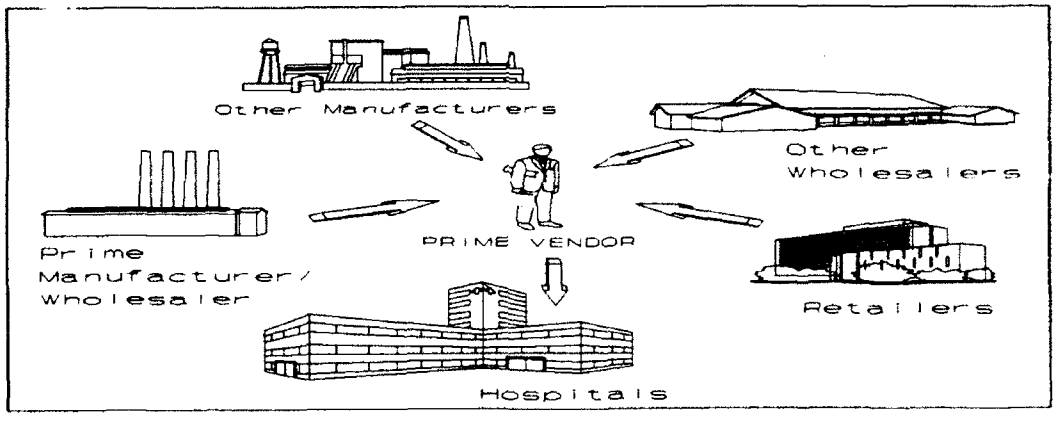

Figure 2. Future DOD Medical Logistics System

relies essentially on enhanced distribution means through commercial industry support and integrated logistics information technology. Under "Prime Vendor", DOD will award contracts to commercial distributors on a regional or area basis to provide the bulk of a hospital's buying needs. Distributors are classified as pharmaceutical and non-pharmaceutical medical/surgical. Under the terms of the contract, a vendor is responsible to stock, deliver, and if necessary accept return of, all items specified in the contract. Implementation of the plan varies among the Services, but the basic concept is for interactive automated communications directly between the vendor and the hospital. In some cases, individual customers within the hospital--the pharmacy, for example--may directly communicate with the vendor. The goal of this program is to reduce inventories, achieve greater availability and reliability, faster delivery, and reduced supply costs. Some of the improvements noted by the Department of Veterans' Affairs (DVA) in a test of a prime vendor were:

- Confirmation of availability within 20 minutes after order was placed.

- Delivery of better than 95 percent of the items requested within 24 hours after an order was placed.

- Optional clause to provide delivery of the remaining items within 5-7 days after an order was placed.

- Inventory reductions of up to 50 percent per hospital.

- Potential cost savings of up to 10 percent of supply budgets per year per hospital.

- Payment of government supply bills within 14 days after delivery.

- Virtual paperless ordering, receiving, and invoicing processes.

- Greatly reduced paper records for audit and accountability processes.[21]

DOD and the military Services will test "Prime Vendor" distribution concepts for medical supplies and pharmaceuticals through two acquisition agencies, the Department of Veterans' Affairs National Acquisition Center and the Defense Personnel Support Center. Figure 3 provides DOD selected test sites and the supporting acquisition authority.

DVA CONCEPT FOR "PRIME VENDOR"

The DVA "Prime Vendor" contracts will support hospitals on a regional basis for pharmaceutical items currently on the Federal Supply Schedule and not stocked within the DVA supply system. The DVA gives selected vendors exclusive contracts for the geographical region supported. Vendors will provide supported hospitals proprietary information systems--hardware and software--at vendor expense. Initially these systems will have only limited interface with existing government management information systems. Vendors are also responsible for training and user support for this system.

Defense Personnel Support Center	Department of Veterans' Affairs
Walter Reed Army Medical Center	USAF Medical Center, Wright Patterson AFB
Malcolm Grow USAF Medical Center	Camp LeJeune Naval Hospital
Bethesda Naval Medical Center	Jacksonville Naval Hospital
Kimbrough Army Community Hospital	Orlando Naval Hospital
Dewitt Army Community Hospital	Darnall Army Community Hospital
Oakland Naval Hospital	Brooke Army Medical Center
David Grant USAF Medical Center	Eisenhower Army Medical Center
	Moncrief Army Hospital

Figure 3. DOD Selected Test Sites for "Prime Vendor"

Hospital materiels managers and pharmacists tailor "Prime Vendor" supply schedules to meet local needs at the beginning of the contract period. Customers can transmit supplemental orders daily or as needed. Vendors usually will provide confirmation of item availability within twenty minutes after requests are received and will ship all confirmed orders by noon the following day, six days a week, for orders received by a pre-determined "cut off" time, usually early evening. There are provisions for emergency supply support, but experience in the civilian sector has indicated it is rarely required. The receiving hospital reconciles all orders at the time of receipt. If there are any shipment discrepancies, they are handled informally with the vendor by telephone. A single receiving report serves as the receipt documentation and the vendor invoice. Once the hospital confirms

receipt of the invoice--managed under a single invoice number--it forwards it to the DVA's centralized finance and accounting activity for payment by electronic funds transfer. DOD hospitals participating in the DVA program will provide the DVA advanced funding based on anticipated purchases. These funds will be decremented as invoices are received at the finance and accounting activity. This summary receiving and billing process eliminates discrepancies between receiving documentation and vendor invoicing, speeds receipt processing and payment of bills. A number of management reports in either hard copy or floppy disk format are available from the vendor.

Pricing is based on FSS (Federal Supply Schedule) prices plus a small vendor distribution surcharge of .75 to 1.5 percent and a one percent *DVA contract administration charge*.

DPSC "PRIME VENDOR" CONCEPT

DPSC intends to add considerable enhancements to its "Prime Vendor" contracts to support unique DOD requirements such as overseas support and support for wartime significant items. Coverage of supported hospitals will be on a regional or area basis for pharmaceutical and medical-surgical items. Medical items--including Federal Supply Schedule, "local purchase"/"open purchase" items--will be covered through separate negotiated price schedules. Depot-stocked or electronic commerce supported items managed by DPSC will be available for emergency resupply or where "Prime Vendor" resupply is economically more favorable. DPSC expects more

competitive pricing than provided by FSS, and lower "Prime Vendor" distribution charges than those negotiated by the DVA. When pricing issues are resolved, DPSC will add "Prime Vendor" support to the DLA depot at Mechanicsburg to support European customers. By mid 1993, "Prime Vendor" coverage will be expanded to the DLA depot at Tracy, California, to provide support to Pacific customers.

Daily operation of DPSC "Prime Vendor" contracts will be very similar to DVA contracts. DPSC will use the results of an analysis of local purchase requirements at DOD MTFs to negotiate price schedules with an estimated 400 manufacturers on all or major parts of their product lines. This price negotiation will most likely focus on high volume items. Low volume items will most likely be priced with FSS prices as the ceiling. DPSC is acquiring an automated vendor database for the development and maintenance of vendor price schedules. The vendor's proprietary information system will identify depot stocked items, EDI items, and wartime significant items. Supported hospitals will initially make use of the vendor's information system for ordering. As an interim solution, DPSC will integrate "Prime Vendor" systems with the Theater Army Medical Management Information System (TAMMIS), the Navy's Medical Inventory Control System (MICS), and the Air Force's Medical Logistics System (MEDLOG) for auditing and accountability purposes. The Defense standard medical logistics system, now in the planning stages will completely integrate hospital support operations with "Prime Vendor" capabilities. DPSC will assist

hospitals to transition to "Prime Vendor" and will insure that contracted vendors are adequately resourced and organized to provide backup supply sources and systems redundancy. "Prime Vendor" contracts will also provide for the rotation of expired or recalled materials at vendor expense.

DPSC and the Defense Finance and Accounting Service (DFAS) will use "Fast Pay" to pay prime vendors. "Prime Vendor" contracts will guarantee payment within 14 days after the receipt of the hospital receiving report. The Military Billing System's electronic interfund billing procedures will be used to adjust accounts between DPSC, DFAS, and the using hospital. DPSC will add a surcharge of less than one percent to support contract administration, price schedule administration, and financial management functions. No other surcharge will be applied to "Prime Vendor" transactions, to include the cost recovery surcharges for depot supplied items and the electronic commerce surcharge. Fees for vendor distribution are expected to be equal to or less than those on the DVA contracts for pharmaceuticals, while fees for medical/surgical supplies will most likely be higher due to increased handling, storage, space requirements, and item diversity.

ANTICIPATED COST SAVINGS

"Prime Vendor" is essential to DOD's plan to significantly reduce the cost of peacetime medical logistics. Presently, military hospitals purchase about 60 percent of their consumable

medical supplies and pharmaceuticals using "local purchase", "open purchase", or other decentralized acquisition method. DOD anticipates "Prime Vendor" will reduce these purchases by half. Centralized "hospital buying group" will also reduce the purchase price by 10 percent.

Figure 4 provides cost savings by Service based on these savings and projected hospital purchases. Total estimated savings (then-year dollars) are $271.58 million.

	FY93	FY94	FY95*	FY96*	FY97*	FY98*
ARMY	1.21[1]	7.5	14.8	25.6	28.8	31.6
NAVY	0.75	4.5	9.0	15.5	17.4	19.1
AIR FORCE	1.08	6.5	12.9	22.4	25.2	27.7
TOTAL	3.08	18.5	36.7	63.5	71.4	78.4

[1] Millions $

Figure 4. Projected Cost Savings

* Maximum savings anticipated through implementation of an integrated logistics information system which optimizes hospital performance under the "Prime Vendor" concepts.[22]

In addition to the savings resulting from lower materiel costs, fewer "local purchases" will also reduce contract/payment costs. Under the "Prime Vendor" concept, the materiel manager at the MTF will need less support from both the installation Contracting Office and the Finance and Accounting Office. These

functions will be centralized under either the DVA or the DPSC, thereby reducing the large volume of local purchase activity and associated contract/payment costs.

"Prime Vendor" will also reduce the size of inventory held by the local MTF. Smaller inventories mean less expense for warehousing, distribution, inventory holding cost, and personnel. Since less storage space is required, it may also be possible to gain more room for patient care, a constant challenge within the limited space of the hospital facility.

READINESS/WARTIME SUSTAINABILITY IMPLICATIONS

The "Prime Vendor" concept shows promise of greatly improving peacetime medical logistics while saving money. DOD is rapidly implementing the concept to realize these projected savings. But before it expands the program, DOD must assess the readiness and wartime sustainability implications of the increased reliance on civilian manufacturers and distributors. Maintaining essential combat capability must continue to be a goal of any new business practice. Peacetime concerns must be balanced with wartime considerations.

This is especially important for the medical logistics system, since it is an integral part of patient care. Medical supplies are literally a "life-or-death" commodity and are essential to combat operations.

DISADVANTAGES OF THE "PRIME VENDOR" CONCEPT

Reduced inventories mean less stock immediately available for emergency use. Vendors' inventory levels, based on a steady, peacetime demand may not be able to rapidly respond for a major deployment. This may be especially true if the types of items requested are not those normally used in peacetime health care, e.g. morphine, combat dressings, etc. A proposed solution is to identify readiness significant or military unique items for special management by military medical logisticians or the vendor. This should not be too difficult a task, since:

> Fewer than 500 medical items are listed as unique to the military, and of those, many are open to challenge. In any event, 500 military unique items represents less than 1 percent of the approximately 60,000 items listed in the medical portion of the *Federal Supply Catalog*.[23]

Smaller inventories and reduced warehousing requirements will reduce the number of personnel required for these functions. As these staffs become smaller, they will most likely be civilianized. The resulting elimination of most of the retail training base is a significant disadvantage of "Prime Vendor". Few other organizations offer the day-to-day medical materiel management experience of a functional medical treatment facility. Since there are no plans to extend "Prime Vendor" within a theater of operations, it is essential to have well trained medical supply personnel who can effectively receive, store, maintain, and issue medical supplies. Every effort should be made to provide medical logistics proficiency training through hands-on training at the

local MTF. This training should parallel the medical proficiency training given to other medical specialties. Medical supply specialists from field medical units should rotate through the local hospital to gain experience managing and handling medical supplies.

Until a new Defense Medical Logistics Standard System is adopted, vendor information systems and operations could decrease the military's ability to act as a self-sustaining entity.

ADVANTAGES OF THE "PRIME VENDOR" CONCEPT

"Much of the difficulty experienced by DOD in supporting deployed forces during the Persian Gulf conflict stemmed from a lack of integration with and understanding among civilian manufacturers and distributors and military logisticians."[24] The "Prime Vendor" concept directly addresses this problem.

According to DOD, the vendor's ability to rapidly resupply the DLA depot or other consolidation and transhipment point will eliminate seven to thirty days from the routine order ship time to units in a deployed theater of operations. However, the vendor's ability to continually replenish stock will ultimately depend on the industrial base to meet the increased demand over time.

Another benefit cited by DOD is the ability to maintain complete visibility of peacetime consumption patterns. This increased visibility will allow the dynamic management of wartime requirements listings to reflect changing clinical practice patterns, demographic trends, and the health status of the force.

CONCLUSIONS

The Department of Defense is committed to substantial downsizing during the decade of the 90's. The subsequent changes in the defense establishment will place greater demands on the Military Health Service System (MHSS) for improved efficiency. The medical logistics system throughout the range of its responsibilities plays a critical role in the ability of the MHSS to meet its role in a vastly different defense establishment.[25]

The implementation of new business practices is essential to achieve the goals set by the DOD. These new business practices can substantially improve the overall operation of the medical logistics system.

This paper has outlined and discussed one of these new practices--the increased reliance on civilian manufacturers and distributors to provide the bulk of hospital's buying needs--called "Prime Vendor."

This preliminary analysis suggests that "Prime Vendor" adequately addresses peacetime concerns; economy, effectiveness, and responsiveness. It is more difficult to determine how well it will provide effective mission support and sustainment in wartime.

DOD and the Services must examine the linkage between CONUS hospital operations, deployment planning, industrial base preparedness plans, and industrial stock rotation plans to insure readiness and wartime sustainability while implementing commercial practices.

ENDNOTES

[1] U.S. Congress, Office of Technology Assessment, Redesigning Defense: Planning the Transition to the Future U.S. Defense Industrial Base, OTA-ISC-500 (Washington, DC: U.S. Government Printing Office, July 1991), 3.

[2] United States, President's Blue Ribbon Commission on Defens Management, A Quest for Excellence, Final Report to the President, June 1986, xi.

[3] Enrique Mendez Jr., "Restructuring the Military Medical System," Defense Issues 7, no. 13 (1992): 1.

[4] Ibid.

[5] Ibid.

[6] Department of Defense, Assistant Secretary of Defense for Health Affairs, Functional Economic Analysis of the Department of Defense Medical Logistics Function, II-9.

[7] "To Conserve the Fighting Strength" is the motto of the Army Medical Department, but it aptly describes the mission of all Service Medical Departments.

[8] Donald B. Rice, Defense Resource Management Study, February, 1979, U.S. Government Printing Office, Washington, D.C., 79-112.

[9] Department of Defense, Assistant Secretary of Defense for Health Affairs, I-9.

[10] Ibid.

[11] Ibid.

[12] John T. Robertson, CPT(P), and Calvin J. Glazier, CPT(P). "The Medical System Program Review, New Methods to Improve Medical Readiness", Army R,D&A Magazine, Vol 26, No 4, Jul-Aug 1985, US Government Printing Office, Washington, D.C., 17-24.

[13] Department of Defense, Assistant Secretary of Defense for Health Affairs, 2-11.

[14] Ibid. II-14.

[15] Ibid. II-12.

[16] Department of Defense, Department of Defense Update of Justification of Estimates for Defense Management Report Initiatives, III-6.

[17] Department of Defense, Assistant Secretary of Defense for Health Affairs, ES-4.

[18] United States General Accounting Office, Defense Logistics Observations on Private Sector Efforts to Improve Operations: Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, House of Representatives. 16.

[19] Department of Defense, 3.

[20] Department of Defense, Assistant Secretary of Defense for Health Affairs, III-4.

[21] Department of Defense, Assistant Secretary of Defense Health Affairs, "Prime Vendor" Demonstration Project, 3.

[22] Ibid.

[23]George L. Slyman and Gilbert L. Goldman, Streamlining the Medical Materiel Acquisition Process, Vol 2, Logistics Management Institute, II-1.

[24] Ibid., VI-7.

[25] Department of Defense, Assistant Secretary of Defense Health Affairs, III-4.

BIBLIOGRAPHY

Mendez, Enrique Jr. "Restructuring the Military Medical System." Defense Issues 7, no. 13 (1992): 1-5.

Robinson, John T., and Calvin J. Glazier. "The Medical System Program Review, New Methods to Improve Medical Readiness." Army R, D&A Magazine 26, no. 4 (July-August 1985): 79-112.

The President's Blue Ribbon Commission on Defense Management. A Quest for Excellence by David Packard. Washington: U.S. Government Printing Office, 1986.

U.S. Congress. General Accounting Office. Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, House of Representatives. Defense Logistics: Observations on Private Sector Efforts to Improve Operations. 1991.

U.S. Congress. Office of Technology Assessment. Redesigning Defense: Planning the Transition to the Future U.S. Defense Industrial Base. OTA-ISC-500. Washington: U.S. Government Printing Office, 1991.

U.S. Department of Defense. Assistant Secretary of Defense for Health Affairs. Functional Economic Analysis of the Department of Defense Medical Logistics Function. January 1992.

U.S. Department of Defense. Assistant Secretary of Defense for Health Affairs. Memorandum of "Prime Vendor" Demonstration Project. 20 May 1992.

U.S. Department of Defense. Defense Resource Management Study final report by Donald B. Rice. Washington: U.S. Government Printing Office, 1979.

U.S. Department of Defense. Department of Defense Update of Justification of Estimates for Defense Management Report Initiatives. Washington: U.S. Government Printing Office, 1992.

Slyman, George L., and Gilbert L. Goldman. Streamlining the Medical Acquisition Process. Vol. 2 prepared for the Department of Defense by Logistics Management Institute. Bethesda: LMI, MDA 903-85-C-0139, 1990.