DOD MEDICAL INVENTORY

Reductions Are Possible Through the Use of Commercial Practices

Statement of Donna M. Heivilin, Director, Logistics Issues, National Security and International Affairs Division
Mr. Chairmen and Members of the Subcommittee:

We appreciate the opportunity to be here today to discuss the Defense Department's inventory practices for medical supplies. We will point out practices used by very progressive civilian hospitals and the Department of Veterans Affairs (VA) that the Department of Defense (DOD) could adopt to reduce its medical logistics costs. Today, we have also issued a report which provides more detail on this subject.

RESULTS IN BRIEF

Military medical facilities and warehouses currently hold large quantities of supplies to satisfy peacetime requirements and provide initial supplies for wartime. Some of the facilities we visited held approximately 30 to 45 days of inventory inside the hospitals. The warehouses we visited held additional inventory that would last for 36 to 95 days. Finally, the Defense Logistics Agency stores additional supplies that would last approximately 250 days.

In contrast, very progressive civilian hospitals we looked at have greatly reduced supply inventories and costs through improved ordering and delivery systems, standardization of supplies, and better communication with vendors.

DOD is working to improve its medical logistics with such efforts as limited use of electronic ordering of supplies and a corporate information management initiative studying ways to improve medical logistics. However, DOD's health care system can save millions of dollars by increased use of inventory management practices pioneered by leading civilian hospitals.

BACKGROUND

DOD operates approximately 164 medical centers and hospitals worldwide, including 125 medical centers and hospitals located in the continental United States (CONUS). In fiscal year 1990, these CONUS facilities purchased medical supplies worth almost $1 billion. To support the hospital network and satellite activities such as clinics and reserve and national guard units, DOD maintains 443 warehouses and a depot system with 17 warehouses to hold medical supplies valued at approximately $824 million. Attachment 1 shows the value of medical supplies held by the three military services and the Defense Logistics Agency (DLA) in CONUS. As you can see, the majority of the medical supplies are held in DLA depot warehouses. This system supports the worldwide needs for DOD medical supplies.

VA also operates a large health care system in the United States, with 172 medical centers, 165 warehouses, and its own depot system.
NEW INITIATIVES IN CIVILIAN HOSPITALS

In response to growing inventory costs, some civilian hospitals have dramatically changed their management of medical supplies. One example of a major change some hospitals have adopted is the establishment of stockless systems that eliminate most of their warehouse inventory by contracting with vendors to buy, store, and distribute supplies to the hospital within hours of a request.

Manufacturers and distributors of medical supplies have also changed their operations in response to rising health care costs. They are working with civilian hospitals on new distribution practices that lower inventory costs. One civilian hospital official characterized these practices as establishing a "partnership" between the hospital and supplier to provide better patient care at lower costs.

Representatives of the civilian hospitals that have used these practices successfully are enthusiastic about the savings they have already achieved and predict even greater savings in the future. They cautioned us, however, that the practices they have adopted may not be feasible for all DOD facilities. We agree. Each DOD facility should examine the alternative inventory management practices and select those that will be the most effective for its particular institution.

COMPARISON OF DOD AND CIVILIAN MANAGEMENT PRACTICES

We compared the inventory management practices of six DOD medical centers and hospitals and the supporting DLA depot system with those of Vanderbilt Medical Center, Nashville, Tennessee; Baylor University Medical Center, Dallas, Texas; and Humana Corporation, Louisville, Kentucky. Vanderbilt and Baylor are among the most progressive institutions for material management in the country, and Humana is one of the larger hospital organizations, with a total of 82 hospitals. The following video highlights the differences between Vanderbilt and Walter Reed Army Medical Center--one of DOD's largest medical centers--located in the Washington, D.C., metropolitan area.

As the video highlights, civilian and military inventory management practices are significantly different in some areas. These differences fall into two categories. First, DOD holds large quantities of inventory to ensure that supplies are available when needed. Civilian hospitals are eliminating as many of these layers as possible. Second, DOD's depot system provides approximately 50 percent of the medical supplies used in the continental United States, while the civilian hospitals we visited do not use depots. The DOD depot system currently holds inventory that dates as far back as 1945 and may never be used.
Attachment 2 compares Vanderbilt’s inventory levels with those of Walter Reed and DLA’s depot warehouses in terms of days of supply on hand.

**DOD CAN REDUCE DUPLICATIVE INVENTORY**

DOD often stores duplicative medical supplies on hospital wards, in hospital storerooms, and in separate warehouses.

DOD does not keep centralized information on the value of the inventory on hospital floors, but the amount may be significant. We saw large quantities of inventory in the wards and storerooms of each military hospital or medical center we visited. For example, at Walter Reed Army Medical Center, the hospital staff estimated that inventory stored adjacent to the operating rooms would last more than 30 days.

DOD holds another layer of inventory in warehouses adjacent to its medical facilities. In general, each DOD hospital or medical center has at least one outside warehouse to store bulk medical supplies. Employing 1990 usage rates, we calculated six DOD medical facilities’ days of supply on hand stored in their warehouses. As shown on attachment 3, the days of supply on hand in outside warehouses ranged from 36 days for Wright-Patterson Air Force Medical Center to 95 days for the Army hospital at Ft. Belvoir.

Civilian hospitals we visited reduced inventory costs and achieved large savings by taking aggressive measures. These measures include

-- reducing inventory stored in unofficial locations,
-- standardizing supplies,
-- eliminating bulk storage locations,
-- removing exchange cart systems,
-- improving information systems to better manage inventory and electronically order supplies from suppliers, and
-- relying on vendors to deliver smaller quantities of supplies when and where they are needed.

In addition, to Vanderbilt’s program which we highlighted in the video, Baylor Medical Center has taken aggressive measures to reduce its inventory costs. Baylor officials began by focusing on operating room supplies and unofficial inventories which represent a significant portion of hospital inventory costs. This effort, in addition to reducing levels of stock and delivering inventory closer to the time it is needed, included a
plan to reduce the number and types of sutures in its operating room. To do this, Baylor identified all the suture inventory on hand in all locations of the medical center and identified the types of sutures that were rarely or never used and returned obviously overstocked items to the manufacturer. After Baylor evaluated its suture usage, it removed backup stock locations; reduced the inventory kept on hand; and standardized, that is, reduced the variety of, sutures stocked in the operating room. In the first year, the savings from this program was over $600,000.

In another example, Humana officials claim standardization of their inventories has resulted in a 17-percent reduction of inventory costs in its facilities.

DEFENSE LOGISTICS AGENCY'S ROLE
RESULTS IN ADDED INVENTORY

DLA has purchased and currently holds approximately $490 million of inventory to support peacetime requirements and an additional $50 million of war reserve material. In fiscal years 1988 through 1990, the depots held an average of about 250 days of inventory. DLA's depots deliver the supplies to medical facility warehouses for use within DOD hospitals.

Attachment 4 shows inventory held at DLA's depot in Mechanicsburg, Pennsylvania. An example of a large amount of stock of a specific type of supply at this depot is nasal spray. Attachment 5 shows one location for nasal spray at the depot. Depots officials told us that nasal spray was stored in two more locations like this and that the depot had a total of about 1.2 million bottles of nasal spray. According to depot officials, their stock of nasal spray was intended for use during Operation Desert Storm.

Some of the inventory in the depots is held for long periods of time. In fact, the depot warehouses hold inventory that dates from the mid-1940s. In some cases, inventory items are held indefinitely because they do not have a specified shelf life or depot officials have not been directed to dispose of them. For example, the depots hold about 50,000 packages of 4"x4" radiopaque sponges dated from 1973 to 1980. These sponges can be detected by X-ray and were used extensively before surgeons began using suctioning techniques and laser surgery. DLA reports forecast an average of 11 packages of these sponges will be requested daily. At this usage rate, DLA has approximately a 13-year supply of the sponges. The services requisitioned only 580 packages for Operation Desert Storm because they preferred another type of sponge, which was not radiopaque.

We also saw patient jackets that were dated 1945, 1969, 1982, and 1983. The depots have about 29,000 of these jackets on hand; the
Army owns about half of those. DLA offered a 90-percent price reduction on the jackets in 1988, but only about 170 jackets have been issued since then, and none were requested for Operation Desert Storm. Attachment 6 shows boxes of the jackets at the Mechanicsburg depot.

A final example of old inventory we saw is glass needle-protecting tubes stored in depot warehouses since 1951. (See attachment 7.) According to DLA records, over the past year, the services have not requested any of the 40,000 tubes stored in the depots. They now use disposable needles. Since our visit to the depot, DLA has requested disposal of the tubes through the Defense Reutilization and Marketing Service.

Civilian hospitals, on the other hand, do not have a depot system. Instead, they rely on the manufacturer or distributor to deliver supplies to the hospital when needed. Humana, for example, has a centralized contracting and paying system that allows it to obtain quantity discounts and at the same time reduce inventory holding costs without operating a depot system.

GOVERNMENT INITIATIVES TO IMPROVE MEDICAL LOGISTICS

Both DOD and VA are pursuing initiatives to improve medical logistics. Since 1988, vendors have been delivering certain intravenous solutions and related supplies directly to VA hospitals. VA expects this program to save approximately $75 million over a 5-year period. In 1990, DOD used this concept in three of its hospitals and plans to expand it to others.

VA is also testing a new distribution system for 32 of its hospitals. Using this system, VA will eliminate the need to store some pharmaceuticals in its warehouses by using a prime vendor to deliver them directly to the hospital.

Under a corporate information management initiative, DOD is evaluating its entire medical logistics systems. Preliminary documents call for greater use of commercial practices. Suggested changes include revising inventory management policies and procedures and modifying DLA's role so that DLA contracts and pays for medical supplies but does not store them.

RECOMMENDATIONS

In our report, we recommended that the Secretary of Defense direct the services and DLA to conduct pilot programs to demonstrate the applicability of commercial practices to military medical facilities. We recommended that these programs (1) include facilities from all three services, (2) test initiatives encompassing all aspects of inventory management, and (3) quantify the cost and benefits of the changes. These programs should comprehensively test the extensive changes needed
in the total logistics system to dramatically reduce inventory costs. Among the practices that should be included in the tests are:

-- significantly reducing duplicative inventory requirements in medical facilities,

-- establishing electronic ordering capabilities between private vendors and DOD medical facilities,

-- using prime vendors to deliver supplies from a variety of manufacturers directly to medical facilities,

-- eliminating the need to store medical supplies in separate warehouses adjacent to medical facilities and in the DLA depot system, and

-- contracting with private firms to maintain and rotate war reserve material.

Once these steps have been accomplished, the services should tailor the changes required in each of their facilities so the successful results of the pilot program can be applied. This approach would allow DOD the flexibility to accommodate special conditions such as remote facility locations, access to commercial distribution systems, and support for overseas operations. At the same time, DOD would improve its logistics systems and save money.

This concludes my prepared statement. I would be happy to answer questions at this time.
### DOD Medical Supply Storage at Continental United States Locations
(as of December 31, 1990)

<table>
<thead>
<tr>
<th></th>
<th>Total (including war reserves)</th>
<th>Peacetime operating stock (excluding war reserves)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force</td>
<td>$160,481,000</td>
<td>$46,375,000</td>
</tr>
<tr>
<td>Army(^a)</td>
<td>95,566,000</td>
<td>63,166,000</td>
</tr>
<tr>
<td>Navy</td>
<td>28,466,000</td>
<td>27,822,000</td>
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<tr>
<td>Defense Logistics Agency(^b)</td>
<td>540,000,000</td>
<td>488,000,000</td>
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<tr>
<td>Total</td>
<td>$824,513,000</td>
<td>$625,363,000</td>
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</tbody>
</table>

\(^a\)Includes inventory held at Alaska and Panama locations.

\(^b\)Inventory supports medical facilities in the continental United States and overseas.
<table>
<thead>
<tr>
<th>Location</th>
<th>Vanderbilt</th>
<th>Walter Reed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse</td>
<td>45&lt;sup&gt;a&lt;/sup&gt;</td>
<td>66</td>
</tr>
<tr>
<td>Central Supply</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Ward</td>
<td>2</td>
<td>6&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Defense Logistics Agency</td>
<td>0</td>
<td>250</td>
</tr>
</tbody>
</table>

<sup>a</sup>Maintained by prime vendor.

<sup>b</sup>Walter Reed officials stated that they store 30 to 45 days of supply for some operating room items.
INVENTORY LEVELS AT DOD MEDICAL TREATMENT FACILITY WAREHOUSES

Days on hand

Wright-Patterson  Leesley  Walker Road  Barksdale  Baltraa  Charleston

Medical treatment facility
MEDICAL SUPPLIES STORED
IN DLA WAREHOUSE
NASAL SPRAY STORED IN DLA WAREHOUSE
ATTACHMENT VI

PATIENT JACKETS FROM 1969 IN DLA WAREHOUSE
GLASS NEEDLE-PROTECTING TUBES FROM
THE 1950s IN DLA WAREHOUSE