Consolidating Procurements Of Medical Equipment Could Save Money

During fiscal years 1982 through 1984, the Department of Defense (DOD) and the Veterans Administration (VA) medical facilities purchased over $1 billion worth of medical and related equipment, mostly on a local, decentralized basis. GAO believes that DOD could procure many of these items on a centralized, consolidated basis and estimates savings averaging 11 percent to 15 percent, or $2.6 million to $3.6 million, on the DOD items sampled. GAO believes that VA might also be able to procure more items on a consolidated basis and realize price savings, but GAO could not conclusively demonstrate this because VA lacks specific, centralized data on its facilities' equipment procurements.

Consolidating equipment procurements might also (1) reduce the administrative costs associated with awarding and administering contracts and (2) establish a basis for DOD and VA to share procurements of commonly used equipment items as they now share procurements of drugs and medical supplies.

GAO recommends that the Secretary of Defense and the Administrator of Veterans Affairs take several actions to achieve these potential economies.
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We have completed a review to determine whether medical equipment purchased locally by the Department of Defense (DOD) and the Veterans Administration (VA) medical facilities could be obtained more economically and efficiently in large quantities through consolidated procurement. The results of our review are highlighted in this letter. More details on our findings, conclusions, and the scope and methodology of our review are contained in appendix I.

The Army, Navy, and Air Force operate 168 hospitals and medical centers and about 320 clinics worldwide. VA operates another 172 hospitals and medical centers and about 340 clinics, nursing homes, and domiciliaries. In fiscal years 1982 through 1984, the military medical facilities purchased a total of $532 million and VA medical facilities purchased another $544 million of nonexpendable medical and related equipment.¹

We estimate that the military and VA medical facilities buy about 75 percent and 51 percent, respectively, of the value of their equipment requirements on a local basis—either from federal supply schedule (FSS) suppliers² or on the open market. The balance of the facilities' needs are obtained mostly through contracts awarded centrally by the Defense Personnel Support Center (DPSC) and the VA Marketing Center.

¹The DOD total includes dental equipment and some nonmedical support equipment used at medical facilities, such as administrative and food service equipment. The VA total includes dental and scientific equipment.

²Under the FSS program, commercial vendors are contracted to provide government agencies with supplies and services. Government activities order items directly from the contractors. The schedules contain maximum order limitations and, therefore, are not intended to provide the benefits of large volume buying. Consequently, quantity discounts, to the extent they are available at all, are limited to the quantities offered on the schedules.
RESULTS OF OUR REVIEW

We found that DOD and VA have achieved some savings through consolidating medical equipment procurements and that DOD could have realized even greater savings if more local procurements were consolidated. We believe that VA might also have opportunities to achieve savings through consolidation of equipment purchases. However, we could not conclusively demonstrate such savings because of the lack of centralized, specific data on equipment procurements by local VA medical facilities.

We reviewed a sample of 17 medical equipment items procured locally by the military medical facilities in fiscal year 1983. The items had an acquisition value of $25.9 million, which we estimate represented about 20 percent of these medical facilities' local purchases. We eliminated procurements of $1.9 million because they appeared to have been made on a consolidated basis. This resulted in a net value of $24 million for the sample items. We estimate that DOD could have obtained price savings averaging 11 percent to 15 percent, or $2.6 million to $3.6 million, on the 17 sample items if they had been procured on a consolidated basis. (See app. II.)

We also found other evidence of price savings being achieved through consolidated procurement of medical equipment which we believe corroborates the reasonableness of the 11 percent to 15 percent savings estimate for DOD. For example, DPSC centrally procured many medical equipment items in large quantities at lower costs using competitively awarded indefinite delivery type contracts (IDTCs) to single suppliers of an item, IDTCs to multiple suppliers of an item, and definite quantity/definite delivery contracts. (Specific examples are discussed in app. I, on pp. 9 to 11.)

IDTCs, which may specify estimated minimum and maximum quantities as contractual commitments to be purchased during the term of the contract, are used to centrally award contracts when activities cannot precisely determine their requirements for an item in advance. As requirements materialize, users may either submit their requisitions to the procuring agency, which issues purchase orders against the contract, or place the orders locally if the contract so provides. The items are delivered directly to the users. The vendor prices under these contracts are based on the government getting prices equal to or better than those the vendor gives to its best commercial customers under similar terms and conditions.

DOD and VA generally cannot precisely forecast their facilities' equipment requirements in advance. When consolidation is warranted under these conditions, IDTCs centrally and competitively awarded to single suppliers should normally be the most economical and efficient method to procure the items.
because this approach more fully provides the combined benefits of competition and large volume buying. IDTCs awarded to multiple suppliers should only be used when this approach can be justified by the using activities, such as when using a single item of equipment is judged to be inappropriate because medical facilities have valid needs for different equipment. Further, IDTCs awarded either to single or multiple suppliers, and definite quantity/definite delivery contracts, if used, should be competitively awarded whenever possible. FSS contracts could continue to be used when appropriate for equipment that is purchased on a nonrepetitive basis or in relatively small quantities.

The Naval Audit Service and the Army Audit Agency recommended that their respective military services procure more equipment in large quantities. As a result, the Naval Medical Command began taking steps to establish a program to consolidate its medical equipment purchases. The Army's Health Services Command did not agree because of the Army's lack of uniform and consistent data on the items procured and the resources that would be needed to identify the items. However, the Health Services Command acknowledged that the potential does exist for more equipment to be procured by DPSC under IDTCs. We believe that rather than having individual military services consolidate their own procurements, DOD should centralize its purchases of equipment for which consolidation is warranted, such as in DPSC.

We believe that VA also might have opportunities to procure more items on a consolidated basis since its medical facilities purchased many of the same items from the same suppliers as the military facilities. But, due to the lack of VA centralized procurement data, we could not identify the extent to which specific items of medical equipment were procured locally by its medical facilities.

An Office of Technology Assessment report, entitled Federal Policies and the Medical Services Industry, issued in October 1984, concluded that opportunities exist for VA to achieve greater economies in its procurement of medical supplies and equipment through increased centralized volume procurement. This conclusion was supported by an Office of Technology Assessment consultant's analysis which found that one or more suppliers for five of the nine medical equipment categories reviewed indicated they would offer price reductions in exchange for volume commitments. Although estimated price reductions were generally not provided in either the report or the consultant's analysis, regarding one equipment category, the report states that price reductions of 5 percent to 10 percent could be realized "in exchange for a volume commitment." The Office of Technology Assessment procurement alternative suggested that the Congress:
"Encourage the VA to increase the proportion of its procurement of equipment and supplies by centralized contracts to realize lower costs from the VA's leverage in the marketplace.

"Combining quantity purchases of equipment and supplies on a national basis through centralized procurement could result in lower product costs through price discounts. Centralizing more device purchases could increase the VA's buying power and could lead to even greater price discounts."

Consolidating procurements through centrally awarded IDTCs and definite quantity/definite delivery contracts could also reduce the individual procuring activities' and medical facilities' administrative costs associated with the solicitation, award, and administration of contracts. In addition, it would establish a basis for DOD and VA to begin a program, similar to the program established by them to procure commonly used drugs and medical supplies, to identify and share procurement of commonly used equipment for which consolidation is warranted. This could result in further price reductions and streamlining the procurement process.

Centralizing the procurement of medical equipment should also help DOD and VA accomplish the purposes of Executive Order 12352 on Federal Procurement Reforms. The order requires heads of agencies to establish (1) criteria to improve the effectiveness of procurement systems and enhance competition and (2) programs to reduce the administrative costs and burdens which the procurement function imposes on the government and the private sector.

We discussed these matters with officials of the Office of the Assistant Secretary of Defense, Health Affairs; the Army and the Air Force Surgeons General Offices; the Naval Medical Command; other responsible DOD activities; and the VA Central Office. They generally concurred that more equipment could be procured on a centralized basis and that centralized procurement of equipment would result in lower prices, especially when awarded competitively. VA officials said VA was moving in this direction.

DOD and VA officials also mentioned the following factors that could limit the number of medical equipment items to be procured on a centralized basis: (1) physicians' preferences for certain brands of equipment, (2) the need for compatibility with existing equipment, (3) servicing of equipment by vendors, and (4) timeliness of procurements. However, the officials indicated that these factors would not preclude more centralized procurement.
We recognize that these concerns may limit the procurement of some equipment on a centralized basis. However, we believe that these concerns should not prevent DOD and VA from taking action to identify additional equipment that could be procured more efficiently on a centralized basis. In addition, even in cases where purchases of different equipment—based on physicians' preferences, compatibility, or equipment servicing considerations—are judged to be appropriate, consolidation of those requirements and award of IDTCs to multiple suppliers may still often result in lower prices. With respect to physicians' preferences, the Office of Technology Assessment's report suggested to the Congress that the use of consensus groups or giving more authority to hospital administrators to make procurement decisions may be ways to minimize this problem.

Specifically regarding the fourth concern, some delay in procurement may occur initially due to the process involved in awarding contracts on a centralized basis. However, we believe that close coordination among the services and procuring activities in identifying equipment needs and delivery schedules and determining the conditions under which consolidation is and is not worthwhile would minimize the delays.

Officials of the Office of the Assistant Secretary of Defense, Health Affairs, and VA Central Office also noted that they do not have systems that provide adequate visibility over local procurements of supplies and equipment. They stated that computerized systems would be the most effective way of obtaining information covering all types of medical and nonmedical supplies and equipment. Although this may be a worthwhile long-term objective, in view of the potential savings and the fact that many equipment items could be identified for centralized procurement from existing records, we believe that DOD and VA should not defer action on equipment consolidation until comprehensive computerized systems covering all supplies and equipment are available.

CORRECTIVE ACTIONS UNDERWAY

We provided the Subcommittee on Defense, Senate Committee on Appropriations, with a statement of our findings on this review. The Committee, in its September 24, 1984, report (No. 98-636), referred to our savings estimate and directed DOD to provide the Senate and House Committees on Appropriations with a plan by March 15, 1985, to centralize the procurement of medical equipment to the maximum extent feasible.

In response, DOD's Office of the Assistant Secretary of Defense, Health Affairs, transmitted its report, entitled Centralized/Consolidated Medical Equipment Procurement, to the Chairman of the House and Senate Committees on Appropriations on March 5, 1985. The report identifies DOD's plan for
"consolidating requirements and centralizing the procurement of medical equipment." The plan is divided into three elements—test, evaluation, and implementation. The test element of the plan is intended to quantify the potential benefits and identify any problem areas associated with central procurement of medical equipment. During evaluation, DOD will ascertain which equipment lends itself to central procurement, what kind of response time central procurement is capable of, what savings are available, and the applicability of different contracting instruments. The implementation phase entails establishment of a consolidation point, appropriately staffing the central procurement activity, and continued monitoring of the process.

CONCLUSIONS AND RECOMMENDATIONS

We are encouraged by the actions outlined by DOD in its report, Centralized/Consolidated Medical Equipment Procurement. We believe these actions are consistent with the findings presented in this report. We also believe that such an effort by VA would be appropriate. Further, we believe the potential exists for DOD and VA to achieve additional savings by combining the procurement of those medical equipment items that are common to each agency.

We recommend that the Administrator of Veterans Affairs initiate the following actions for VA medical facilities:

--- Develop procedures for systematically aggregating and analyzing data on medical equipment procured repetitively on a local basis by VA medical facilities.

--- Take steps to consolidate purchases of those equipment items when there is a reasonable basis to conclude they would be more efficiently procured centrally using either (1) definite quantity/definite delivery contracts or (2) IDTCs, awarded competitively whenever possible and to single suppliers of an item whenever appropriate.

Although we had intended to also make this recommendation to DOD, we are not doing so because of DOD's plan in response to our statement of findings and the mandate of the Senate Committee on Appropriations. Instead, we recommend that the Secretary of Defense ensure that DOD's plan, as described in its report, Centralized/Consolidated Medical Equipment Procurement, is properly carried out.

In addition, because neither DOD nor VA have procedures in place to identify items for which consolidated procurement is warranted and because comprehensive systems could be costly, maximum consideration should be given to identifying items for consolidation from available records. Implementing a more comprehensive system should be based on the needs of the agencies and the medical facilities and the costs versus the benefits attainable through centralized procurements.
We also recommend that the Secretary of Defense and the Administrator of Veterans Affairs consider beginning a program, similar to the program established for drugs and medical supplies, to share procurement of those common medical equipment items which can be procured more efficiently on this basis.

AGENCY COMMENTS

We requested comments on a draft of our report from the heads of DOD, VA, and the Office of Federal Procurement Policy, who are responsible for providing overall direction of government procurement policy. DOD and the Office of Federal Procurement Policy provided written comments. (See apps. III and IV, respectively.) VA did not provide comments.

DOD concurred with all of our findings and recommendations and specified its corrective actions underway. In addition, DOD noted that, although it anticipates that savings will accrue on future central procurements:

--The savings we estimated were based on a small sample of items, informally obtained vendor price quotations, and review and analysis of prior central procurement actions and cannot be projected to future procurements.

--Its on-going test will likely provide more accurate information than our savings estimates.

--Our estimates should not be used as a basis for budgetary actions.

The Office of Federal Procurement Policy stated that it (1) agreed with the thrust of our recommendations, (2) will followup with DOD and VA to ensure that our recommendations are considered, and (3) sees no reason why medical equipment should not be subjected to the same shared procurement program as drugs and medical devices.

... ... ...

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.
We are sending copies of this report to the Secretaries of the Army, Navy, and Air Force; the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, and House and Senate Committees on Appropriations; and the Director, Office of Management and Budget.

Frank C. Conahan
Director
CONSOLIDATING PROCUREMENTS OF MEDICAL
EQUIPMENT COULD SAVE MONEY

BACKGROUND

The Army, Navy, and Air Force operate 168 hospitals and medical centers and about 320 clinics worldwide. VA operates another 172 hospitals and medical centers and about 340 clinics, nursing homes, and domiciliaries. In fiscal years 1982 through 1984, these military and VA medical facilities purchased the following amounts of medical and related equipment.1

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<td>Total</td>
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The equipment consists of nonexpendable replacement items and new or additional items, including equipment in new construction projects. Military facilities classify nonexpendable equipment as either (1) capital investment equipment (unit cost over $3,000) or (2) capital expense equipment (unit cost of $200 to $3,000). About 70 percent of the value of the equipment procured was investment equipment and 30 percent was expense equipment. VA classifies all nonexpendable equipment costing $100 or more as personal property.

Most purchases of medical equipment made on a local basis

Both the military and VA medical facilities purchase the majority of their medical equipment on a local basis. DPSC, an activity of the Defense Logistics Agency, and the VA's Marketing Center also award contracts for medical equipment on a centralized basis for use by the facilities.

1The DOD amounts include dental equipment and some nonmedical support equipment, such as administrative and food service equipment. The VA amounts include dental and scientific equipment.
Military medical facilities

We estimate that in fiscal year 1983 military medical facilities locally acquired about 75 percent of the $177 million worth of medical equipment from FSS2 suppliers or on the open market. The remainder was obtained primarily under centralized contracts either awarded by DPSC for direct delivery to the facilities or, in a few instances, awarded by the military services for their facilities.

In fiscal year 1983, DPSC centrally awarded contracts amounting to about $42 million for medical equipment to support military medical facilities. This was in addition to the $426 million of contracts it awarded for drugs and medical supplies for stockage and $11 million for requirements purchased for war reserve programs.

Of the $42 million of equipment DPSC procured for the medical facilities, $5.3 million was for computerized axial tomography systems for the Army under a single competitive solicitation; $9.5 million was for the Army's year-end consolidated capital expense equipment program; and $1.5 million was for the Navy's new construction projects. DPSC also procured about $2.6 million of equipment on individual procurement actions in support of overseas Army and Air Force medical facilities. In addition, DPSC ordered $22.8 million of X-ray systems and other equipment under IDTCs that it awarded.

IDTCs may be used to centrally procure items that are requisitioned repetitively by medical facilities, although the specific quantities and delivery dates are unknown. An IDTC can be awarded to many suppliers of an item or to a single supplier. Estimated minimum and maximum quantities to be purchased during the term of the contract--usually 1 year--may be specified in the contract. As requirements materialize, users may either submit their requisitions to the procuring agency, which issues purchase orders against the contract, or place the orders locally if the contract so provides. The items are delivered directly to the users. The vendor prices under these contracts

2Under the FSS program, commercial vendors are contracted to provide government agencies with supplies and services. Government activities order the items directly from the contractors at preestablished prices. The VA Marketing Center awards FSS contracts for drugs and medical items; the General Services Administration awards FSS contracts for all other items. The schedules contain maximum order limitations and, therefore, are not intended to provide the benefits of large volume buying. Consequently, quantity discounts, to the extent they are available at all, are limited to the quantities offered on the schedules.
are based on the government getting the most favored customer prices. That is, they must be equal to or better than the prices given by the vendor to its best commercial customers under similar terms and conditions.

DPSC has awarded seven IDTCs to multiple suppliers of X-ray systems and equipment. Users submit requisitions for the equipment to DPSC which issues the orders to the suppliers.

As of May 1984, DPSC had awarded five IDTCs to single suppliers for investment equipment. The contracts, which were awarded under competitive conditions, are for electro-surgical units, surgical instrument sterilizers, electrocardiographs with mobile carts, radiant infant warmers, and a portable isolation infant incubator. Estimated orders of $655,000 were expected to be placed under these contracts, which extended over fiscal years 1983 and 1984. DPSC places the orders for the equipment as requisitions are received from the users.

VA medical facilities

We estimate that in fiscal year 1983, VA medical facilities obtained 51 percent of their equipment on a local basis, principally from FSS suppliers or on the open market. VA does not have information on, nor were we in a position to estimate, the extent to which these equipment procurements were made from FSS suppliers versus the open market.

The VA Marketing Center has awarded IDTCs for five groups of equipment: X-ray, physiological monitoring, nuclear, medical data systems, and ultrasound. These amounted to $45 million in fiscal year 1983, or 28 percent of VA medical facility equipment purchases, according to VA procurement data. VA did not establish minimum or maximum quantities in the contracts.

In fiscal year 1983, the VA Marketing Center also procured on a single competitive procurement action, $20.7 million of computerized tomography systems. This represented about 13 percent of the total VA medical facility equipment expenditures. The VA Marketing Center also centrally purchased other equipment totaling $13 million, which represented 8 percent of the facilities' total requirements. In addition, the VA Marketing Center purchased $184 million in drugs and medical supplies for stockage.

Approval of equipment procurements

The Assistant Secretary of Defense, Health Affairs, is the principal advisor to and coordinator for the Secretary of Defense on health matters. The logistics divisions within the Surgeons General Offices of the Army and the Air Force and within the Naval Medical Command are responsible for (1) providing
material support to the military medical facilities and (2) developing the medical equipment budgets for their respective services. In the Army and the Air Force, the hospitals' major commands (such as the Army's Health Services Command and the individual Air Force Commands) also play a role in authorizing procurements of medical equipment.

Medical facilities must justify the need for and obtain advance approval to buy each piece of medical investment equipment, including those to be purchased locally. Depending on the dollar value and nature of the equipment, review and approval is made by the major commands and/or by military medical specialists located at various medical facilities who are assigned service-wide responsibility for equipment falling within their specialties.

The DOD Health Council, which includes the Assistant Secretary of Defense, Health Affairs, the Surgeon General of each of the military services, and other personnel, reviews items costing over $400,000. The purpose of the Council's and specialists' reviews is to ensure that the equipment is essential for the medical facility to perform its functions and that triservice and other joint or shared use opportunities have been considered. However, they do not question the need for equipment replacement or the brand of equipment requested.

Medical facilities also determine their expense equipment requirements, but only submit dollar value estimates of these requirements to higher commands for approval and funding purposes. The facilities periodically place priorities on their investment and expense equipment requirements. They initiate procurements as the items are needed in accordance with established priorities.

Although DOD investment equipment requirements are approved at higher levels, they are generally not consolidated for procurement purposes. As discussed on page 16, the information submitted to higher offices for approval could be accumulated and used as a starting point for identifying equipment items for consolidated procurement.

The VA Central Office, through the annual budgeting process, approves funding for the individual medical facilities' equipment requirements. In addition, the facilities must obtain advance approval from the Department of Medicine and Surgery, VA Central Office, to procure high-dollar value items which are included on VA's controlled items list. This review is made for the same purpose as the reviews made by the military specialists and DOD Health Council—to ensure that the equipment is essential for the facility to perform its functions.
OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of our review were to determine whether medical equipment acquired by military and VA medical facilities on a local basis could be procured in volume on a centralized basis at lower cost and in a more efficient manner.

We performed our review within DOD primarily at the U.S. Army Medical Materiel Agency (USAMMA), a field activity of the Surgeon General's Office, and DPSC, a supply center of the Defense Logistics Agency which procures medical material for the military services. Information was also obtained from the logistics divisions and other field activities of the Army and Air Force Surgeons General Offices and the Naval Medical Command. We reviewed Army Audit Agency and Naval Audit Service reports which dealt, in part, with procurements of medical equipment by Army and Navy medical facilities.

USAMMA is responsible for managing the investment equipment requirements and procurements of Army medical facilities worldwide. All requests to buy equipment and copies of procurement actions are forwarded to USAMMA. Neither the Air Force nor the Navy have centralized systems such as USAMMA's for managing or controlling medical equipment.

At USAMMA, we selected for review a sample of 17 investment equipment items out of the hundreds of different items of medical equipment repetitively procured by Army medical facilities in fiscal year 1983. We selected these 17 items judgmentally to obtain a variety of items with high potential for volume procurement based on the number of buys, the total quantity procured, and the dollar value of those Army procurements. However, we cannot estimate, even within the Army, the total number of items that have potential for volume procurement.

For the same fiscal year, we also obtained information at the Naval Medical Command from equipment budget reports on the quantities and prices paid for these same 17 sample items procured by Naval medical facilities. The Air Force Surgeon General's Office provided us with lists of equipment, which included these same 17 sample items, covering quantities and prices purchased by the Air Force's Military Airlift Command, Tactical Air Command, and Strategic Air Command. These procurements comprised about 35 percent of the total value of investment equipment purchased by Air Force medical facilities.

Based on the data gathered from the three services, we found that the medical facilities made 1,436 procurements of the 17 sample items in fiscal year 1983. The items had an acquisition value of $25.9 million, which we estimated represented about 20 percent of the medical facilities' local purchases. Of the 1,436 actions, 905 were Army medical equipment procurements.
which had an acquisition value of $16.8 million. At USAMMA and DPSC, we reviewed copies of 533 (or 59 percent) of the Army's contracts and purchase orders, representing 67 percent of the value of the Army acquisitions, to more specifically identify the items and quantities ordered, suppliers, and prices paid.

To estimate price reductions obtainable through volume procurements of the sample items, we used verbal quotes obtained for us by DPSC from the suppliers of the items.

To corroborate the reasonableness of the estimated savings attainable through centralized procurement of medical investment equipment, we ascertained the extent of price reductions obtained by DPSC on

--7 IDTCs with multiple suppliers for X-ray equipment,
--5 IDTCs with single suppliers for various medical equipment, and
--13 contracts for investment equipment awarded by DPSC in fiscal year 1983 for the Air Force war reserve hospital assembly program.3

We did not review any capital expense equipment purchases made by the military medical facilities because of the lack of centralized procurement data. However, we did review and determine whether price reductions were obtained on expense equipment procurements made by DPSC in fiscal year 1983 for

--13 high-dollar value contracts for expense equipment for the Air Force hospital assembly program and
--7 procurements (based on a minimum value of $50,000) for the Army's year end consolidated capital expense equipment procurement program.

VA does not maintain centralized procurement information on the specific equipment procured by its medical facilities. Consequently, we were not able to identify the extent to which specific items purchased locally by VA medical facilities could have been consolidated and procured on a volume basis.

3Under the hospital assembly program, DPSC procures supplies and equipment for the military services' wartime requirements for 500/1,000 bed hospitals. The supplies and equipment are assembled into various hospital components and stored as prepositioned war reserve material.
At the VA Central Office, we discussed VA medical equipment procurement policies and procedures and reviewed the fiscal year 1983 report on equipment items replaced by VA medical facilities. The report indicated that VA medical facilities used many of the same items of equipment used by military facilities. The report did not contain procurement information such as when the equipment was actually procured, source of supply, and so forth; and it did not include equipment purchased for the first time.

We contacted the VA Marketing Center, Hines, Illinois, and obtained data on FSS and other contracts awarded by the Center on a centralized basis for equipment to be used by various VA medical facilities. We also discussed procurement methods with Center officials.

We visited the Office of Technology Assessment, Washington, D.C., to discuss its report entitled Federal Policies and the Medical Devices Industry, and related studies.

Our review was performed in accordance with generally accepted government auditing standards between October 1983 and July 1984.

We discussed the results of our review with officials of the Office of the Assistant Secretary of Defense, Health Affairs; Army and Air Force Surgeons General Offices; Naval Medical Command; DOD Medical Standardization Board; Defense Logistics Agency; DPSC; and the VA Central Office.

OPPORTUNITIES TO REDUCE THE COSTS OF PROCURING MEDICAL EQUIPMENT

We believe that many medical equipment items which DOD medical facilities purchase locally on an individual basis could be procured on a consolidated basis at cost savings averaging from 11 percent to 15 percent. We believe that VA might also have opportunities to achieve savings through consolidation of its medical facilities' equipment purchases.

Even though a large percentage of the equipment was obtained from FSS suppliers, the decentralized procurement of the equipment precluded the facilities from obtaining the

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4The DOD Medical Standardization Board is comprised of representatives from the medical departments of each of the military services. It acts principally as a single point of contact for all professional-technical matters regarding medical material. This includes establishing essential characteristics for medical items and making standardization decisions on new items.
limited discounts offered by many FSS suppliers in return for buying in quantities up to the maximum order limitations. Further, because orders for like items are not aggregated for procurement purposes, the facilities could not obtain additional price reductions available through negotiation when the value of the orders exceed maximum order limitations in the FSS contracts.

Executive Order 12352 on Federal Procurement Reforms, dated March 17, 1982, requires heads of executive agencies to establish

--criteria for improving the effectiveness of procurement systems,

--criteria for enhancing effective competition and limiting noncompetitive actions, and

--programs to reduce administrative costs and burdens imposed by the procurement function on the federal government and the private sector.

Centralizing procurements of medical equipment should help accomplish these objectives. Centralization should eliminate duplication of effort and result in administrative savings by the individual medical facilities and procuring activities. However, neither DOD nor VA have procedures in place to identify all of the items that should be procured in larger volume or precisely forecast their total requirements for equipment. Therefore, some administrative costs would be incurred to implement procedures to identify the items, coordinate the facilities' requirements, and award the contracts. We could not determine the net effect on administrative costs and savings. Nonetheless, we believe that the potential savings due to lower prices on consolidated high volume procurements are significant enough to justify greater efforts to procure more equipment in large quantities on a centralized basis.

Further procurement savings and streamlining of the procurement process may be obtained through DOD/VA shared procurement of common equipment, just as these agencies now share procurement of common drugs and medical supplies.

Procurements of medical equipment by military medical facilities

Our sample of 17 capital investment equipment items repetitively procured by individual military medical facilities in fiscal year 1983 had a procurement value of $25.9 million. We eliminated procurements of about $1.9 million because they appeared to have been made on a consolidated basis. This resulted in a net value of $24 million.
Based on the 533 Army contracts we reviewed, we estimate that about one-half of the local purchases for medical equipment by Army hospitals were made from FSS suppliers and one-half on the open market. In a few instances these medical facilities obtained a quantity discount offered by an FSS supplier, but most orders were not large enough to qualify for any quantity discounts.

Based on the verbal quotes DPSC obtained from suppliers of the 17 sample items, we estimate that average savings of 11 percent to 15 percent, or $2.6 million to $3.6 million, above those currently obtained could have been realized if the items were procured on a consolidated basis. (See app. II.) We identified the following additional evidence of savings obtained at DPSC through consolidation which we believe supports the reasonableness of the savings estimates shown above.

1. Our review of five IDTCs with single suppliers awarded by DPSC under competitive conditions disclosed price reductions averaging 24 percent more than FSS or open market purchases made in small quantities. The estimated dollar value of the items procured under these contracts was $655,000.

2. Our review of seven active IDTCs awarded by DPSC to multiple X-ray equipment suppliers disclosed that the average prices were 9 percent to 13 percent below commercial list prices.

3. Our review of 13 definite quantity/definite delivery contracts awarded by DPSC in fiscal year 1983 for investment equipment for the Air Force war reserve program disclosed that on the 8 contracts for which information was available, price reductions averaged 17 percent more than FSS discounts or commercial prices for the items. The total savings on these eight contracts, which had a procurement value of $3.9 million, were $802,000. All of these contracts were awarded on a competitive basis.

Efforts by the military services to centrally procure medical equipment

The military services have centrally procured medical equipment in large quantities on a limited basis, principally for their own medical facilities, and have realized significant savings in doing so. In addition, the Naval Audit Service and Army Audit Agency have recommended that their respective military services procure more equipment in large quantities.
The Navy has East and West Coast consolidated dental equipment procurement centers. The centers consolidate equipment requirements for clinics in their geographical area and award contracts, mainly to FSS suppliers. We obtained information on the consolidated procurements by the West Coast center in fiscal year 1983. About $547,000 of equipment was purchased on 41 purchase orders. Quantity discounts were obtained on some of the purchases. For example, on one order for 26 dental chairs and units costing $57,133, the center realized an additional quantity discount of $1,842 by consolidating requirements from 2 dental clinics.

The Air Force provided us with three examples of their requirements that were consolidated and centrally procured on a competitive basis. The contracts, which were awarded during fiscal years 1976 to 1984, were for anesthesia machines, hemotology counters, and chemistry analyzers. The savings amounted to over $2.4 million, or 41 percent of the equipment list prices, according to the Air Force. (Part of the savings for the analyzers, which accounted for $1.5 million of the total, may be due to the trade-in of old units for the new models.)

The Naval Audit Service reviewed procurements of medical equipment by Navy hospitals and concluded, in its report dated July 2, 1984, that $234,000, or 12 percent, could have been saved in the procurement of six items if the items had been procured in volume. (These six items were also included in our sample.) Based on this report, the Naval Medical Command delegated authority to its subordinate command, the Naval Medical Materiel Support Command, to centrally procure the remaining fiscal year 1984 requirements for the above six items and (2) began taking steps to establish a program to consolidate further medical equipment purchases.

An Army Audit Agency report issued in November 1981 concluded that savings could be realized on many items if they were consolidated and procured in volume. The report recommended that the Army Surgeon General procure more equipment on a centralized basis. Although the Army Surgeon General initially agreed with this recommendation, a subsequent study by the Army's Health Services Command, which operates the facilities, did not agree because of the lack of uniform and consistent data on the items procured and the resources that would be needed to identify the items. However, the Health Services Command acknowledged that the potential for more equipment to be procured by DPSC under IDTCs did exist. We agree that, rather than having the individual military services consolidate their own procurements, DOD should centralize in one place, such as DPSC, its purchases of equipment for which consolidation is warranted.
Expense equipment

We did not review any procurements of expense equipment by military medical facilities in detail because of the lack of centralized procurement data. Nevertheless, we believe that opportunities exist to centrally procure expense equipment at savings comparable to those on investment equipment. For example, DPSC saved an average of 23 percent, or $146,397, from the FSS or commercial list prices on four of seven procurements made in fiscal year 1983 for expense equipment under the Army's fiscal year 1982 year end capital expense equipment program.\(^5\) (Two of the procurements were made under competitive contracts and two were FSS awards.) In addition, DPSC saved an average of 24 percent, or $315,293, from commercial list prices on 8 of 13 competitively awarded contracts for expense equipment procured for the Air Force's hospital assembly program in fiscal year 1983.\(^6\)

Procurement of medical equipment by VA medical facilities

We believe that VA also might have opportunities to realize savings by procuring more medical equipment in volume on a centralized basis. We found that VA medical facilities purchased many of the same items from the same suppliers as the military. In addition, a recent Office of Technology Assessment report concludes that VA's decentralized purchasing of medical equipment prevents it from taking advantage of the lower prices available. Because VA does not have centralized information on the specific items of equipment procured by its medical facilities, we could not (1) identify the total quantities of specific items procured on a local basis or (2) analyze their potential for consolidated procurement.

In fiscal year 1983, VA medical facilities ordered $162 million of medical equipment. Based on the information which was available relating to equipment purchases in general, we estimate that the VA facilities ordered 51 percent, or $83 million, of their equipment requirements either from FSS suppliers or on the open market.

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\(^5\)The information in DPSC files did not enable us to determine whether there were price savings on the other three contracts for Army equipment.

\(^6\)The information in DPSC files did not enable us to determine whether there were price savings on the other five contracts for Air Force equipment.
As with the military facilities, the decentralized process used to make these purchases does not allow VA to take advantage of economies available through larger volume procurements, including the limited discounts available for increased quantity buying offered by FSS suppliers. VA medical facilities obtain their equipment from at least some of the same suppliers that the military medical facilities used. For example, our review of the limited VA data available centrally on purchases of specific equipment items—the fiscal year 1983 report on equipment items replaced by VA medical facilities—and related contracts disclosed that at least 5 of our 17 sample items that the military facilities purchased on a local basis were also purchased by VA hospitals on a local basis. However, because of the lack of data, we could not identify the total quantities VA procured for these or other items.

An Office of Technology Assessment report issued to the Congress in October 1984, entitled Federal Policies and the Medical Devices Industry, concluded that opportunities exist for VA to achieve greater economies in its procurements of supplies and equipment through increased use of centralized volume procurements. The report states that (1) VA, which is the largest health care delivery system in the Nation, has the potential for influencing the medical devices industry and has obtained favorable prices on medical supplies through centralized procurements but (2) because many VA procurement decisions are made at the hospital level, the advantages available to it as a large market power are reduced. The report notes that VA medical facilities purchase about 39 percent of their supplies and equipment on the open market compared with only 10 percent in the early 1960s.

According to the report, VA could obtain better prices for equipment if it made specific volume commitments to suppliers. This conclusion was based on an analysis of nine categories of VA medical equipment procurements performed by an Office of Technology Assessment consultant, who contacted several suppliers of equipment. The Office of Technology Assessment also found that:

--For seven of the nine equipment categories examined, volume is a major influence on price.

7Further details are included in another report, an Office of Technology Assessment "technical memorandum," entitled, Medical Devices and the Veterans Administration, which was issued in February 1985. Technical memorandums are issued, when requested by Members of the Congress, on specific subjects analyzed in recent Office of Technology Assessment reports or on projects in process.
--When equipment is purchased from stock, and is fairly standardized, a volume commitment can reduce manufacturing costs that can be passed on to the buyer.

--The effects of volume commitments seem to depend on whether equipment is expensive or inexpensive. When equipment is inexpensive, the costs of preparing contracts and marketing are higher relative to the purchase price of the equipment, and the savings that come with volume commitment are more significant.

The Office of Technology Assessment cited specific evidence of price reductions available through consolidation. For example, the Office noted that the VA Marketing Center realized a volume discount of 40 percent on a consolidation procurement of 24 computed tomography scanners made in fiscal year 1983. In addition, based on the consultant's analysis, which supported Office of Technology Assessment findings and conclusions, for four other equipment categories not being procured on a consolidated basis—hemodialysis equipment, ultrasound diagnostic equipment, electromedical equipment, and X-ray equipment—the consultant found that one or more suppliers indicated they would offer price reductions in exchange for contractual volume commitments:

--Two suppliers of hemodialysis equipment said that discounts of 5 percent to 10 percent could be offered on volume procurements. One vendor said that its administrative costs for each order are about $100 and, at the very least, a group purchase of 20 machines could produce a cost savings of $2,000 that would be passed on to the purchaser.

--Three of four suppliers of ultrasound equipment indicated that they would offer a significantly better price if there was a volume commitment. One vendor of the equipment said that a group purchase of 15 units to 20 units would suffice for a larger price discount than currently offered.

--Three suppliers of electromedical equipment indicated that volume commitments would result in greater discounts and one supplier of X-ray equipment also stated that a volume commitment might result in a lower price.

The Office of Technology Assessment procurement alternative suggested to the Congress is:

"Encourage the VA to increase the proportion of its procurement of equipment and supplies by centralized contracts to realize lower costs from the VA's leverage in the marketplace."
"Combining quantity purchases of equipment and supplies on a national basis through centralized procurement could result in lower product costs through price discounts. Centralizing more device purchases could increase the VA's buying power and could lead to even greater price discounts.

"There are problems, however, in getting physicians to support more centralized procurement. As part of the effort to retain physicians on staff, it has been the practice of the VA since the 1960s to allow physicians to choose their own brands of medical equipment and supplies. The difficulty of achieving physician/user acceptance of one specific type of medical equipment is a substantial obstacle to increasing centralized procurement.

"Use of consensus groups might be one mechanism to help physicians reach agreement, or perhaps hospital administrators could be given greater authority. The extent of disagreement among physicians regarding the desirability of particular brands or models of medical equipment varies depending on the type of equipment, the number of manufacturers, and other less tangible factors."

We noted that VA uses centrally awarded IDTCs for five categories of medical equipment. The contracts were awarded by the Marketing Center to more than one supplier of each item. Medical facilities' orders under these contracts amounted to about $45 million, which was 28 percent of the total expenditures for medical equipment in fiscal year 1983. The contract prices are based on VA getting the most favored customer prices. Our analysis of VA data indicated that, in fiscal year 1983, the price reductions for the IDTC contracts for two of the five categories--medical and X-ray equipment and supplies--averaged about 8 percent more than discounts obtained on FSS contracts.8

VA medical facilities are required to order medical equipment from the least cost supplier; however, if they can justify another brand or supplier, they can purchase the item desired from another supplier. Although IDTCs awarded to multiple suppliers offer lower prices than FSS suppliers, we believe that greater economies can normally be achieved if equipment is procured centrally and competitively on IDTCs to single suppliers. That is, this approach more fully provides the combined benefits of competition and large volume buying

8The VA data used to calculate the 8-percent price advantage included some definite quantity contracts.
when (1) consolidation is warranted and (2) definite quantity/definite delivery contracts are not appropriate because agency officials cannot precisely forecast their facilities' equipment requirements in advance. We also believe that this approach is consistent with the results of the Office of Technology Assessment's study. Awards to more than one supplier of an item should be made only when this approach is warranted, such as when using a single item of equipment is judged to be inappropriate because medical facilities have valid needs for different equipment.

DOD and VA need to identify local procurements of medical equipment that should be consolidated

Neither DOD nor VA have procedures to identify the specific medical equipment being procured by their medical facilities or to project future agency-wide requirements. Such procedures would be necessary to identify the full extent to which equipment can be procured in volume on a centralized basis. As part of these procedures, DOD and VA need to coordinate the requirements of the medical facilities and to identify essential characteristics of equipment for procurement purposes.

In December 1980, our Office issued a report entitled, VA Needs Better Visibility and Control Over Medical Center Purchases (GAO/PSAD-81-16). The report stated that individual VA medical centers independently bought $373 million of their supplies and equipment on the open market, which resulted in high costs. The report (1) recommended that VA develop an information system that provides greater visibility over all medical center purchases, including supplies as well as equipment and (2) added that this would enable both the VA Marketing Center and the individual medical centers to identify and manage commonly used items. VA Central Office officials told us that although they agree with this recommendation, VA has not had sufficient resources to put in place the computerized systems they believe are necessary to achieve the visibility and control over all medical center purchases which the 1980 report recommended.

Officials of the Office of the Assistant Secretary of Defense, Health Affairs, told us that the military services have a system under development which may be able to provide data on the local procurements of supplies and equipment made by military medical facilities. It is called the Tri-Service Medical Logistics system. This automated system is intended to integrate retail inventory management, intrahospital material distribution, financial accounting interface, property accounting equipment planning, asset visibility, procurement, and medical maintenance management. The system is not scheduled to be fully implemented until fiscal year 1994.
We believe centralized procurement of medical equipment should not be deferred until DOD and VA develop and implement comprehensive computerized systems covering all or most items of supply as well as equipment. Equipment items have a much higher average unit cost than supplies. Also, many equipment items could be identified for central procurement from existing records. For example, medical facilities in both DOD and VA are required to identify and document their need for each item of investment equipment to be replaced or added and obtain approval from higher offices before procurement. (See pp. 3 and 4 of this app.) Therefore, both agencies should consider accumulating and systematically analyzing this data to identify items for consolidated procurement. Other data sources, such as equipment replacement reports and the priority lists maintained by medical facilities of medical items proposed for procurement should also be considered. In addition, in DOD it may be possible to enhance the system maintained by USAMMA to provide more useful data for consolidating procurements.

Administrative costs and savings

The current military service and VA practice of buying many medical equipment items on a decentralized basis results in the duplication of procurement effort. For example, the number of contracts solicited, awarded, and administered by individual medical facilities and procuring activities would be reduced by consolidating procurements of medical equipment. However, we could not determine the amount of administrative cost savings that would result if equipment requirements were consolidated for procurement purposes because the military and VA activities do not maintain the costs of awarding or administering medical contracts or purchase orders.

The costs of establishing and operating a consolidated system would have to be considered in determining any net administrative cost savings. Some costs would be incurred by the military and VA to establish procedures to identify the items, coordinate requirements, prepare specifications or purchase descriptions when necessary, and to award the contracts. However, even if no administrative cost savings result, we believe that the potential price savings from consolidation are significant enough to justify increased efforts by the military services and VA to identify additional medical equipment which could be obtained more economically and efficiently on a volume basis.

Potential for DOD and VA to share procurements of common medical equipment

We believe that DOD and VA should consider establishing a program, similar to the program they have established for drugs and medical supplies, identifying and sharing procurement of commonly used medical equipment items for which consolidation is
warranted. Shared procurement of drugs and medical supplies, which has been underway since 1980, has resulted in streamlining the procurement process and in procurement savings, according to the agencies.

Our review indicated that the potential exists for many equipment items used by the military and VA medical facilities to be procured in volume on a centralized basis at lower prices. Also, both DPSC and the VA Marketing Center now centrally procure the same or similar equipment under separate contracts with the same suppliers. For example, DPSC and the VA Marketing Center awarded separate IDTCs to the same seven suppliers of X-ray equipment. In fiscal year 1983, the military hospitals ordered about $23 million of X-ray equipment under the DPSC awarded contracts and VA hospitals ordered $30.6 million of the equipment under the VA Marketing Center contracts.

Under the DOD/VA Shared Procurement Program for drugs and medical supplies, items common to both agencies have been assigned to DPSC and the VA Marketing Center for procurement on an equal dollar value basis, and IDTCs awarded to single suppliers are used extensively to procure the items. As of May 1984, 1,661 line items were included in the program and a total of 331 contracts, valued at $337.7 million, had been awarded by both agencies for the items.

According to the DOD/VA reports on savings obtained under the Shared Procurement Program for drugs and medical supplies, cost avoidances of $7 million, $21.8 million, and $19.3 million were achieved for fiscal years 1981, 1982, and 1983, respectively. The benefits were attributed to product cost savings, inflation cost avoidance, and administrative savings. We believe savings may also be possible through shared procurements of medical equipment.

Views of responsible DOD and VA medical equipment support and procurement officials

We discussed these matters with officials of the Office of the Assistant Secretary of Defense, Health Affairs; the Army and the Air Force Surgeons General Offices; the Naval Medical Command; and other responsible military activities. They generally concurred that more equipment could be procured on a centralized basis and that centralized procurement of equipment would result in lower prices, especially when awarded competitively. They also mentioned the following factors that could limit the number of medical equipment items to be procured on a centralized basis: (1) physicians' preferences for certain brands of equipment, (2) the need for compatibility with existing equipment, (3) servicing of equipment by vendors, and (4) timeliness of procurements. However, the officials indicated that these factors would not preclude more centralized procurement.
Officials of the Office of the Assistant Secretary of Defense, Health Affairs, also noted that the military services do not have systems that provide visibility over local procurements of medical equipment. They stated that a system would have to be devised to capture this information. One option that they mentioned to accomplish this was to incorporate this requirement into the Tri-Service Medical Logistics system currently being developed for use by military medical facilities.

VA Central Office officials also agreed with our findings and stated that VA was moving toward more centralized procurements. However, they also stated that physicians' preferences could limit somewhat the number of medical equipment items to be procured on a consolidated basis.

VA officials noted that VA does not have visibility over the supplies and equipment that its medical facilities purchase. In this regard, the VA officials referred to our previously mentioned report, VA Needs Better Visibility and Control Over Medical Center Purchases, which pointed the need for visibility over all VA medical center purchases, including supplies as well as equipment. These officials stated that although they agree with the recommendation, VA has not had sufficient resources to put in place the computerized systems which they believe are necessary to achieve adequate visibility and control over all medical center purchases.

We recognize that DOD and VA officials' concerns may preclude procuring some equipment on a centralized basis. However, we believe that these concerns should not prevent DOD and VA from taking action to identify additional equipment that could be procured more efficiently on a centralized basis. In addition, even in cases where purchases of different equipment—based on physicians' preferences, compatibility, or equipment servicing considerations—are judged to be appropriate, consolidation of those requirements and award of IDTCs to multiple suppliers may still result in lower prices.

With respect to physicians' preferences, the Office of Technology Assessment report suggested that the use of consensus groups or giving more authority to hospital administrators to make procurement decisions may be ways to minimize this problem at VA.

Although some delay in procurement may occur initially due to the process involved in awarding contracts on a centralized basis, we believe that close coordination among the services and procuring activities in identifying equipment needs and delivery schedules and determining the conditions under which consolidation is and is not worthwhile would minimize the delays.
We also recognize that procedures would have to be developed to provide information on local facility equipment purchases. Although use of computerized systems may eventually be an efficient way of providing such data on all types of medical and nonmedical supplies and equipment, we believe that in the absence of such systems, many equipment items could be identified for consolidated procurement from existing records. (See p. 16.)

CORRECTIVE ACTIONS UNDERWAY

We provided the Subcommittee on Defense, Senate Committee on Appropriations, with a statement of our findings on this review. The Committee, in its September 24, 1984, report (No. 98-636), referred to our savings estimate and directed DOD to provide the Senate and House Committees on Appropriations with a plan by March 15, 1985, for centralizing the procurement of medical equipment to the maximum extent feasible.

In response, DOD's Office of the Assistant Secretary of Defense, Health Affairs, transmitted its report entitled, Centralized/Consolidated Medical Equipment Procurement, to the Chairmen of the House and Senate Committees on Appropriations on March 5, 1985. The report identifies DOD's plan for "consolidating requirements and centralizing the procurement of medical equipment." The plan is divided into three elements--test, evaluation, and implementation. The test element of the plan is intended to quantify the potential benefits and identify any problem areas associated with central procurement of medical equipment. During evaluation, DOD will ascertain which equipment lends itself to central procurement, what kind of response time central procurement is capable of, what savings are available, and the applicability of different contracting instruments. The implementation phase entails establishment of a consolidation point, appropriately staffing the central procurement activity, and continued monitoring of the process.

CONCLUSIONS

The acquisition of medical equipment on a decentralized basis is not the most economical or efficient method of procuring many items. Our review demonstrated that equipment which DOD medical facilities ordered repetitively on a local basis could have been procured centrally at significantly lower prices based on consolidated requirements using IDTCs awarded to single suppliers of an item, IDTCs awarded to more than one supplier of an item, or definite quantity/definite delivery type contracts. With IDTCs, users do not need to precisely forecast their requirements in advance.
VA might also have opportunities to achieve savings through consolidation of equipment purchases. However, we were unable to conclusively demonstrate such savings because of the lack of centralized, specific data on equipment procurements by local VA medical facilities.

Both DOD and VA need to develop procedures for systematically aggregating and analyzing data on the medical equipment being procured repetitively by their medical facilities on a local basis to determine which items would be more efficiently procured on a centralized basis. Consideration needs to be given to using existing records as a basis for this effort.

DOD and VA generally cannot precisely forecast their facilities' equipment requirements. Under these conditions, IDTCs centrally and competitively awarded to single suppliers should normally be the most economical and efficient method of procuring items on a consolidated basis because this approach more fully provides the combined benefits of competition and large volume buying. IDTCs to multiple instead of single suppliers should only be used when this approach can be justified by the using activities. Further, we believe that IDTCs, as well as definite quantity/definite delivery contracts, which may be used when requirements can be precisely forecast, should be competitively awarded whenever possible. FSS contracts could continue to be used if appropriate for the quantities being procured, or for equipment that is purchased on a nonrepetitive basis.

Centralized procurements of medical equipment would reduce the number of contracts solicited, awarded, and administered by the individual medical facilities and procuring activities. However, we were unable to determine the amount of administrative cost savings because of the lack of cost data maintained by the medical facilities procuring activities. Also, some additional costs would be involved in implementing procedures to identify items for which centralized procurement is warranted and to award the contracts. Nevertheless, we believe the potential price savings available through consolidation are significant enough to justify increased efforts by DOD and VA to procure more items on a centralized basis.

In addition, we believe that DOD and VA medical facilities have a sufficient number of items commonly used by both to justify considering DOD and VA shared procurement of medical equipment. This could result in further price and administrative cost savings, as evidenced by the millions of dollars in savings that DOD and VA reported during the first 3 years of their Shared Procurement Program for drugs and medical supplies.
### Estimated Fiscal Year 1963 Savings Attainable on Sample Items

**Of DoD Medical Equipment If Procurements Had Been Consolidated**

<table>
<thead>
<tr>
<th>Item</th>
<th>Procurements</th>
<th>Savings or range of savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Dollar Value</td>
</tr>
<tr>
<td><strong>Defibrillators</strong></td>
<td>135</td>
<td>$1,973,310</td>
</tr>
<tr>
<td><strong>Electrocardiograms</strong></td>
<td>58</td>
<td>701,358</td>
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<tr>
<td><strong>Ophthalmic equipment:</strong></td>
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<td></td>
</tr>
<tr>
<td>Tonometers slit lamps</td>
<td>95</td>
<td>671,442</td>
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<tr>
<td>Phoropters</td>
<td>101</td>
<td>929,611</td>
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<tr>
<td>Dental chairs &amp; units</td>
<td>111</td>
<td>2,146,796</td>
</tr>
<tr>
<td>Dental X-ray equipment</td>
<td>53</td>
<td>543,845</td>
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<tr>
<td>X-ray processing machines</td>
<td>85</td>
<td>734,172</td>
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<tr>
<td>Examination/treatment tables/chairs</td>
<td>142</td>
<td>1,689,453</td>
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<tr>
<td>Sterilizers (steam, electric, etc.)</td>
<td>78</td>
<td>2,443,213</td>
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<tr>
<td>Endoscopic instruments (Colonoscopes, bronchosopes, etc.)</td>
<td>196</td>
<td>1,524,656</td>
</tr>
<tr>
<td><strong>Pathologic equipment:</strong></td>
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<tr>
<td>Blood cell counters</td>
<td>46</td>
<td>$1,242,796</td>
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<tr>
<td>Spectrophotometers</td>
<td>18</td>
<td>332,346</td>
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<tr>
<td>Centrifuges</td>
<td>68</td>
<td>765,066</td>
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<tr>
<td>Analyzers</td>
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<tr>
<td>Clinical/chemical electrolyte</td>
<td>68</td>
<td>2,963,932</td>
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<td>Blood gas</td>
<td>53</td>
<td>1,121,048</td>
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<tr>
<td><strong>Physiological monitors:</strong></td>
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<td></td>
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<tr>
<td>Patient, cardiac, blood pressure, etc.</td>
<td>118</td>
<td>2,258,515</td>
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<tr>
<td></td>
<td>46</td>
<td>883,826</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,430</td>
<td>$23,975,385</td>
</tr>
<tr>
<td><strong>Percentage saved</strong></td>
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<td></td>
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</tbody>
</table>

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Note: Savings are expressed as a range, with the lower end of the range indicating the minimum potential saving and the higher end indicating the maximum potential saving. The percentage saved is calculated based on the total cost of individual items when procured separately and consolidated when purchased together.
Mr. Frank Conahan  
Director, National Security And  
International Affairs Division  
United States General Accounting Office  
Washington, DC 20548

Dear Mr. Conahan:


The DoD concurs in the findings and recommendations contained in the draft report. The attached enclosure provides detailed comments on the draft and specifies the corrective action currently underway.

In addition, the DoD would like to make note of the fact that the draft report identifies estimated and projected savings which were based on a small sample of items, informally obtained verbal vendor price quotations, and review and analysis of prior central procurement actions. The DoD anticipates that savings will accrue on future central procurements. However, the amount of estimated savings identified in the draft report cannot be projected to future procurements. Therefore, it should be emphasized that the reported savings are estimates only, that the on-going test will likely provide more accurate information, and that the draft report estimates should not be used for budgetary actions.

Sincerely,

[Signature]

William Mayer, M.D.

Enclosure
FINDING A. Opportunities to Reduce the Costs Of Procuring Medical Equipment. The GAO reported that during fiscal years 1982 through 1984, DoD and the Veterans Administration (VA) purchased over $1 billion worth of medical related equipment, mostly on a local, decentralized basis. The GAO found that even though a large percentage of the equipment was obtained from federal supply schedule (FSS) suppliers, (1) the decentralized procurement of the equipment precluded the facilities from obtaining the limited discounts offered by many FSS suppliers, and (2) because orders for like items were not aggregated for procurement purposes, the facilities could not obtain additional price reductions available through negotiation when the value of the orders exceeded maximum order limitations in the FSS contracts. The GAO further found that based on the verbal quotes the Defense Personnel Support Center (DPSC) obtained from suppliers of the 17 GAO sample items, it estimated that savings of 11 percent to 15 percent, or $2.6 million to $3.6 million, above those currently obtained could have been realized if the items were procured on a consolidated basis. The GAO identified additional evidence of savings obtained at DPSC through consolidation which it concluded supported the reasonableness of the savings estimates. For example, GAO's review of seven active indefinite delivery-type contracts (IDTCs) awarded by DPSC to multiple X-ray equipment suppliers disclosed that the average prices were 9 percent to 13 percent below commercial list prices. The GAO concluded that although DoD and VA have achieved some savings through consolidated medical equipment procurement, DoD could have realized even greater savings if more local procurements were consolidated. The GAO further concluded that centralizing the procurement of medical equipment should also help DoD and VA accomplish the purposes of Executive Order 12352 on Federal Procurement Reforms. (See pp. 1 and 2 of the letter and pp. 7 to 9 of app. I.)

DoD POSITION. CONCUR. The DoD agrees that opportunities exist to reduce the costs of procuring medical equipment by consolidating requirements and procuring them centrally. The DoD is committed to the current test, evaluation and implementation of a central equipment acquisition program consistent with maintaining maximum responsiveness to patient care needs and providing adequate safeguards to insure procurement of quality health care products as outlined in the Assistant Secretary of Defense (Health Affairs) report to Congress, "Centralized/Consolidated Medical Equipment Procurement", dated March 5, 1985 reported to the Congress.

GAO NOTE: Page references were changed to conform to page numbers in final report.
The DoD notes that the percentage of potential cost savings identified in this finding were informally obtained by verbal quotation. Furthermore, the estimated savings of 11-15 percent was based upon a sample of only 17 items. These items were highly suited for central procurement, as evidenced by the high correlation with the candidate items in the on-going test. Therefore, the 11-15 percent estimated savings may not be extendable over the whole spectrum of medical equipment purchased by the DoD, nor should these savings estimates be used as a basis for budgetary action. The test portion of the aforementioned plan, when completed, should furnish more accurate information for management and budgetary action.

FINDING B. Evidence Of Price Savings Being Achieved Through Consolidated Procurement. The GAO found other evidence of price savings being achieved through consolidated procurement of medical equipment, which it concluded corroborated the reasonableness of the 11 percent to 15 percent savings estimate for DoD. For example, DPSC centrally procured many medical equipment items in large quantities at lower costs using competitively awarded IDTCs to single suppliers of an item, and definite quantity/definite delivery contracts. The GAO noted that IDTCs are used to centrally awarded contracts when activities cannot precisely determine their requirements for an item in advance. The GAO further found that DoD and VA generally cannot precisely forecast their facilities' equipment requirements in advance; when consolidation is warranted under these conditions, IDTCs centrally and competitively awarded to single suppliers should normally be the most economical and efficient method to procure the items. IDTCs awarded the multiple suppliers should only be used when this approach can be justified. The GAO concluded that IDTCs, as well as definite quantity/definite delivery contracts, should be competitively awarded whenever possible. The GAO further concluded that FSS contracts should continue to be used if appropriate for the quantities being procured, or for equipment that is purchased on a nonrepetitive basis. (See pp. 2 and 3 of the letter and p. 20 of app. 1.)

DoD POSITION. CONCUR. The DoD agrees that previous consolidated procurement initiatives provide evidence of price savings. DoD also agrees that competitively awarded contracts should be used to the maximum possible extent, and that the circumstances of each individual procurement action should dictate the contract type (single or multiple award indefinite delivery, definite quantity or definite delivery). DoD will continue to use the Federal Supply Schedule contracts whenever appropriate.

FINDING C. Efforts By The Military Services to Centrally Procure Medical Equipment. The GAO found that the military Services have centrally procured medical equipment in large quantities on a limited basis, principally for their own medical facilities, and
have realized significant savings in doing so. The GAO noted that the Navy has East Coast and West Coast consolidated dental equipment procurement centers and on one order from the West Coast Center for 26 dental chairs and units costing $57,133, the center realized an additional quantity discount of $1,842 by consolidating requirements from 2 clinics. The GAO further noted that the Air Force provided three examples of their requirements that were consolidated and centrally procured with savings amounting to over $2.4 million, or 41 percent of the equipment list prices according to the Air Force. The GAO reported that the Naval Audit Service and the Army Audit Agency have recommended that their respective military Services procure more equipment in large quantities. The GAO further found that although the Army Surgeon General initially agreed with the 1981 recommendation by the Army Audit Agency to procure more equipment on a centralized basis, a subsequent study by the Army's Health Services Command did not agree because of the lack of uniform and consistent data on the items procured and the resources that would be needed to identify the items. The Health Services Command acknowledged, however, that the potential for more equipment to be procured by DPSC under IDTCS' did exist. The GAO concluded that rather than having the individual military Services consolidate their own procurements, DoD should centralize in one place, such as DPSC its purchases of equipment for which consolidation is warranted. (See pp. 9 and 10 of app. I.)

**DOD POSITION. CONCUR.** The DoD agrees that the mentioned Service conducted central procurement actions realized savings. DoD also agrees that the individual Service requirements could be consolidated into a total DoD requirement which could be centrally procured at a single contracting activity, such as the Defense Personnel Support Center (DPSC). The Services are now consolidating their requirement as part of the aforementioned plan.

**FINDING D. Procurements Of Expense Equipment.** GAO did not review any procurements of expense equipment by the military medical facilities in detail due to the lack of centralized procurement data. GAO found, however, that DPSC saved on an average 23 percent, or $146,397, from the FSS or commercial list prices on four of seven procurements made in fiscal year 1983 for expense equipment under the Army's fiscal year 1982 year-end capital expense equipment program. The GAO further found that DPSC saved an average of 24 percent, or $315,293, from commercial list prices on 8 of 13 competitively awarded contracts for expense equipment procured for the Air Force's hospital assembly program in fiscal year 1983. The GAO concluded that opportunities exist to centrally procure expense equipment at savings comparable to those on investment equipment. (See p. 11 of app. I.)

**DOD POSITION. CONCUR.** The DoD agrees with the information as stated and that all equipment, both investment and expense, is being procured on a consolidated and centralized basis for the Deployable Medical Systems program.
FINDING E. DoD and VA Need to Identify Local Procurements Of Medical Equipment That Should Be Consolidated. The GAO found that neither DoD nor VA have procedures to identify the specific medical equipment being procured by their medical facilities or to project future agency-wide requirements. The GAO reported that it was informed by officials of the Office of the Assistant Secretary of Defense, Health Affairs, that the military Services have a system under development which may be able to provide data on the local procurement of supplies and equipment made by military medical facilities. It is called the Tri-Service Medical Logistics System and is not scheduled to be fully implemented until fiscal year 1994. The GAO concluded that centralized procurement of medical equipment should not be deferred until DoD and VA develop and implement comprehensive computerized systems covering all or most items of supply as well as equipment. The GAO further concluded that both agencies should consider accumulating and systematically analyzing data from existing records to identify items for consolidating procurements. The GAO also concluded that in DoD it may be possible to enhance the system maintained by the United States Army Medical Materiel Agency to provide more useful data for consolidating procurements. (See pp. 15 and 16 of app. I.)

DoD POSITION. CONCUR. The DoD agrees that there is no comprehensive agency-wide medical equipment requirements information system. DoD also concurs that centralized procurement of medical equipment should not be deferred until 1994 when full implementation of the Tri-Service Medical Logistics System is projected. Under the aforementioned plan, the Services are collecting and analyzing data from existing records to identify items for consolidation and central procurement.

FINDING F. Administrative Costs And Savings. The GAO found that the current military Service and VA practice of buying many medical equipment items on a decentralized basis results in the duplication of procurement effort. The GAO further found that it would not determine the amount of administrative cost savings that would result if equipment requirements were consolidated for procurement purposes, as the military and VA activities do not maintain the costs of awarding or administering medical contracts or purchase orders. The GAO noted that the cost of establishing and operating a consolidated system would have to be considered in determining any net administrative costs savings. GAO concluded that even if no administrative cost savings resulted, the potential price savings from consolidation are significant enough to justify increased efforts by the military Services and VA to identify additional medical equipment which could be obtained more economically and efficiently on a volume basis. (See p. 16 of app. I.)
APPENDIX III

APPENDIX III

DOD POSITION. CONCUR. The aforementioned plan includes as an objective a comparison of costs of central versus decentralized procurement. This includes an evaluation of administrative costs along with contract award price. It is anticipated that analysis of the administrative cost data that is being collected will help clarify these costs and potential savings.

FINDING G. Potential For DOD And VA To Share Procurements Of Common Medical Equipment. The GAO found that the potential exists for many equipment items used by the military and VA medical facilities to be procured in volume on a centralized basis at lower prices. The GAO further found that both DFSC and the VA Marketing Center now centrally procure the same or similar equipment under separate contracts with the same suppliers. The GAO noted that according to the DoD/VA reports on savings obtained under the Shared Procurement Program for drugs and medical supplies, cost avoidances of $7 million, $21.8 million, and $19.3 million were achieved for fiscal years 1981, 1982, and 1983, respectively. The GAO concluded that DoD and VA medical facilities have a sufficient number of items commonly used by both to justify considering DoD and VA shared procurement of medical equipment. The GAO further concluded that this could result in further price and administrative cost savings, as evidenced by the millions of dollars in savings that DoD and VA reported during the first 3 years of their Shared Procurement Program for drugs and medical supplies. (See pp. 16, 17, and 20 of app. I.)

DOD POSITION. CONCUR. The DoD agrees that there is a potential for DoD and VA shared procurement of common medical equipment. To an extent shared procurement now exists via use of decentralized schedules and interagency support. However, these actions, with the exception of those orders placed against VA managed Federal Supply Schedules, are not occurring under the auspices of the formal Shared Procurement Program. The DoD has kept the VA Director, Office of Procurement and Supply apprised of DoD's on-going test. DoD plans to request that shared procurement of medical equipment be formally considered under the Shared Procurement Program. This will be addressed at the next meeting of the Interagency Medical Procurement Management Committee.

FINDING H. Views of Responsible DoD and VA Medical Equipment Support And Procurement Officials. The GAO found that DoD officials generally concurred that more equipment could be procured on a centralized basis and that centralized procurement of equipment would result in lower prices, especially when awarded competitively. However, they mentioned several factors that could limit the number of medical equipment items to be procured on a centralized basis: (1) physicians' preferences for certain brands of equipment, (2) the need for compatibility with existing equipment, (3) servicing of equipment by vendors, (4) timeliness of procurements, and (5) the military Services do not have systems that
provide visibility over local procurements of medical supplies. The GAO noted that VA Central Office Officials also agreed with its findings but also expressed some concerns. The GAO concluded that DoD and VA officials' concerns may preclude procuring some equipment on a centralized basis; however, these concerns should not prevent DoD and VA from taking action to identify additional equipment that could be procured more efficiently on a centralized basis. The GAO further concluded that even in cases where purchases of different equipment--based on physicians' preferences, compatibility, or equipment servicing considerations--are judged to be appropriate, consolidation of those requirements and award of IDTCs to multiple suppliers may still often result in lower prices. The GAO also concluded that although some delay in procurement may occur initially, close coordination among the Services and procuring activities in identifying equipment needs and delivery schedules and determining the conditions under which consolidation is and is not worthwhile would minimize the delays. (See pp. 4 and 5 of letter and pp. 17 to 19 of app. I.)

**DoD POSITION. CONCUR.** The DoD agrees in the statements of fact, however, DoD cautions that the complexities associated with coordination of requirements identification, specification development, and programming, planning and budgetary interface should not be underestimated.

**FINDING I. Corrective Actions Underway.** The GAO found that, in response to the Senate and House Committees on Appropriations direction for a plan for centralizing the procurement of medical equipment to the maximum extent feasible, DoD's Office of the Assistant Secretary of Defense, Health Affairs, transmitted its report, entitled, "Centralized/Consolidated Medical Equipment Procurement," on March 1985. The GAO further found that the report identifies DoD's plans for "consolidating requirements and centralizing the procurement of medical equipment" and is divided into the three elements of test, evaluation, and implementation. The GAO concluded that it is encouraged by the actions outlined by DoD in this report and that these actions are consistent with the findings presented in the subject report. (See p. 6 of letter and p. 19 of app. I.)

**DoD POSITION. CONCUR.**
RECOMMENDATIONS

Recommendation 1. The GAO recommended that the Secretary of Defense ensure that DoD's plans, as described in its report, Centralized/Consolidated Medical Equipment Procurement, are properly carried out. (See p. 6 of the letter.)

DoD POSITION. CONCUR. The Office of the Assistant Secretary of Defense (Health Affairs) is monitoring the progress of the test as described in the report to the Congress. This is being accomplished via required reports from the central contracting activity (DPSC), through the DPSC sponsored quarterly Customer Support Meetings, and by direct contact with the DPSC project manager.

Recommendation 2. The GAO recommended that because neither DoD nor VA have procedures in place to identify items for which consolidated procurement is warranted and because comprehensive systems could be costly, that maximum consideration should be given to identifying items for consolidation from available records. Implementing a more comprehensive system should be based on the needs of the agencies and the medical facilities and the costs versus the centralized procurements. (See p. 6 of the letter.)

DoD POSITION. CONCUR. The DoD agrees that consolidation of requirements for central procurement can be accomplished on an interim basis from available records until the Tri-Service Medical Logistics System is fully implemented. Should a more comprehensive interim system be considered, a cost benefit analysis would first be accomplished to assure that the system costs do not outweigh the anticipated savings from central procurement.

Recommendation 3. The GAO recommended that the Secretary of Defense and the Administrator of Veterans Affairs consider beginning a program, similar to the program established for drugs and medical supplies, to share procurement of those common medical equipment items which can be procured more efficiently on this basis. (See p. 7 of the letter.)

DoD POSITION. CONCUR. The DoD agrees that consolidation of DoD and VA medical equipment requirements and their subsequent central procurement should be considered for inclusion under the Shared Procurement Program. The DoD plans to introduce this topic as an agenda item at the next Interagency Medical Procurement Management Committee which is tentatively scheduled for early September 1985. This committee provides direction to the Shared Procurement Program.
Mr. Frank C. Conahan  
Director, National Security and  
   International Affairs Division  
U.S. General Accounting Office  
Washington, DC 20548  

Dear Mr. Conahan:

Thank you for sending me copies of your report entitled, "Consolidating Procurements of Medical Equipment Could Save Money."

Members of my staff have reviewed the report, and we agree with the thrust of your recommendations. We will follow up with the Department of Defense and the Veterans Administration to ensure that the recommendations are considered. On the surface, we see no reason why medical equipment should not be subjected to the same shared procurement program as drugs and medical devices.

Your cooperation in requesting our review is appreciated.

Sincerely,

William E. Mathis  
Acting Administrator

(396002)