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Business Case Analysis of the Walter Reed Army Medical Center Medical/Surgical Prime Vendor Generation III Service Level Election Program

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By

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14. ABSTRACT

The purpose of the business case analysis was to determine what combination of Full-Time Equivalent (FTE) staffing and medical/surgical services offered under the Prime Vendor (PV) Generation III contract would provide the best supply chain management solution for Walter Reed Army Medical Center (WRAMC). In support, three scenarios were developed with various combinations of FTE staffing and PV service options in order to determine a best value solution. Results of the analysis indicated that the addition of five floater FTEs fully cross-trained in all areas should be added to the current staffing model and no changes or additions to PV contract services should be made. This scenario improves the division's ability to respond to patient surges, National Security matters, and operational requirements. The additional FTEs can also provide logistics support branches the ability to respond to turnover, retirement, leave, and illness. Ultimately, failure to hire additional FTEs could place a greater burden on the logistics staff and force the command to assume greater risk based on the inability to respond to additional requirements.

15. SUBJECT TERMS

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Executive Summary

The purpose of this Business Case Analysis was to determine what combination of FTE staffing and medical/surgical services offered under the Prime Vendor (PV) Generation III contract would provide the best supply chain management solution to support healthcare operations for Walter Reed Army Medical Center (WRAMC) and its customers in the future. The OMB A-76 Circular requiring agencies to streamline the performance of commercial activities coupled with the BRAC Legislation of 2005 directing the realignment of WRAMC and the National Naval Medical Center (NNMC) have presented significant staffing challenges. As a result, the logistics division was forced to improve the efficiency of the business process and conserve dollars in light of manning shortfalls. In support, a total of three scenarios were developed with various combinations of FTE staffing and PV service options in an effort to determine a best value solution for the hospital. Results of the analysis indicated that five floater FTEs fully cross-trained in all areas should be added to the current staffing model and no changes or additions to PV services should be made. This scenario assumes some degree of risk as it incurs $1.4 million for FTE costs over a five-year period. However, the scenario improves the division's ability to respond to patient surges, National Security matters, and operational requirements that displace military personnel. The current business process is not staffed appropriately to support this. Further, the additional FTEs can provide coverage for the Logistics Support Branches in response to personnel turnover, retirement, absenteeism, illness, and leave. Lastly, the scenario provides the ability to grow and develop a number of underutilized order and delivery sites that the current staff is unable to address. Ultimately, failure to hire additional FTEs as proposed could place a greater burden on the logistics staff and force the command to assume greater risk based on the inability to respond to additional requirements.

Introduction

Walter Reed Army Medical Center

Walter Reed Army Medical Center (WRAMC) is the Army's largest healthcare facility and one of the largest in the Department of Defense (DoD) (Walter Reed Army Medical Center Online, 2006). The current facility operates approximately 260 beds, although the building was originally designed with a capacity of 1,280. During the Persian Gulf War, WRAMC had about 1,000 beds in operation. Overall, WRAMC accommodates more than 600,000 visits per year with the main hospital and its satellite clinics. The hospital itself has about 5,000 employees and nearly half of the staff is Department of the Army (DA) civilians and contractors. In addition, another 2,000 employees are assigned to the 16 tenant units on the installation.

The vision of WRAMC is to foster a culture of excellence in quality care, research, training, readiness, safety, service, partnership and Tri-service collaboration founded on the example of Major Walter Reed (Walter Reed Army Medical Center Online, 2006). The mission of WRAMC is to provide Warrior Care. In order to accomplish this, the hospital focuses on patient care, medical education and training, medical research for soldiers and patients, and combat medical readiness. The hospital and its supporting clinics provide advanced and sub-specialty healthcare and services to soldiers, family members, and a large community of military retirees. Extensive support is also given to members of other military services, members of Congress, Presidents, Vice Presidents, the Public Health Service, and to foreign dignitaries designated by the State Department. Ultimately, WRAMC serves a potential patient population of more than eight million.

WRAMC's immediate health service area in metropolitan Washington, District of Columbia (DC) covers a radius of approximately 40 miles and includes the DiLorenzo

TRICARE health clinic (DTHC) at the Pentagon and at Ft. McNair. The service area also includes DeWitt Army Community Hospital at Ft. Belvoir, Virginia, Kimbrough Ambulatory Care Center at Ft. Meade, Maryland and seven satellite clinics. Further, WRAMC supports the Power Projection Platform (PPP) at Ft. Dix, New Jersey, supporting over 15,000 soldiers annually during unit Soldier Readiness Processing (SRP), mobilization, and coordination. Collectively, these organizations form what is known as the Walter Reed Healthcare System (WRHCS). WRAMC is also the home of the North Atlantic Regional Medical Command (NARMC) that has responsibility for 21 states and Washington, DC and extends from Maine to North Carolina to Minnesota. The command coordinates medical affairs for more than 200 reserve component units and provides leadership, planning, and support for over 40 Army hospitals and clinics (Walter Reed Army Medical Center Online, 2006). Overall, NARMC is responsible for approximately 25 percent of the Army's patient load in the United States.

WRAMC admits about 35 patients per day, and nearly 25 percent of these are referrals from other hospitals. Since the mid-1990s, the hospital's average number of in-patients has dropped from about 700 to 200, as WRAMC follows the managed care model in civilian medicine that emphasizes more pre-admission tests and procedures, same-day surgery, and ambulatory diagnostic care (Walter Reed Army Medical Center Online, 2006). WRAMC is a gateway to the world for medical care. It is a referral center for the northeastern United States and Europe and receives some of its patients through the Armed Forces aero-medical evacuation network. Aside from burn patients who travel to Brooke Army Medical Center in San Antonio, Texas, the majority of Army soldiers injured in Iraq and Afghanistan come to WRAMC for tertiary care. Healthcare professionals at the hospital work tirelessly to provide quality care to these soldiers.

Directorate of Logistics

In order for the clinical staff to provide the highest level of quality to its patients, it requires critical support from a number of administrative directorates and departments. One such agency is the Directorate of Logistics (DOL). The vision of DOL is to lead the DoD as the premier logistics organization for materiels management, clinical engineering, property management, facility management, and environmental services. In doing so, DOL provides logistics readiness for the deployment and redeployment of Army units and the United States Army Medical Command (USAMEDCOM) and serves as an education and training base for military and civilian personnel. DOL is staffed with approximately 475 employees (140 of which operate the Materiel Management Division or MMD). Primary tasks include the request, issue, storage, receipt, and pinpoint distribution of supplies and services.

The mission of the Materiel Management Division is to provide world class medical logistics product procurement, delivery, and Installation Medical Supply Account (IMSA) management for the WRHCS, National Capital Area (NCA) customers, and 1st Army units. USAMEDCOM is a partner with its sister services, the Veterans Administration (VA), and other federal agencies. As a subordinate command, WRAMC DOL MMD utilizes the Defense Logistic Agency's (DLA) Prime Vendor (PV) program for medical support.

Prime Vendor

A medical PV is a single distributor of brand-specific medical supplies, equipment, and other materiel. Under the PV concept, DoD relies on a distributor of a commercial product line, who in turn provides the product line and incidental services to customers in an assigned region or area of responsibility. Since 1991, DoD has identified the use of PV as a best business practice for inventory management. In Fiscal Year (FY) 2005, PV sales accounted for

approximately $9 billion of DLA's total sales and service of $32 billion (US Government Accountability Office Online, 2006).

On August 23, 2004, the Secretary of Defense designated DLA as the DoD Executive Agent (EA) for Medical Materiel (DoD Directive 5101.9 Online, 2004). A DoD EA is the Head of a DoD Component to whom the Secretary or Deputy Secretary of Defense has assigned specific responsibilities, functions, and authorities to provide defined levels of support for operational missions or administrative and other designated activities that involve two or more of the DoD Components (DoD Directive 5101.1 Online, 2002). DoD Directive 5101.9 directs DLA to act as the single point of contact to establish the relationships, capabilities, and system integration necessary for Class VIII (medical) supply chain support within the DoD. On December 13, 2004, DLA delegated EA Execution Authority for medical materiel to the Defense Supply Center Philadelphia (DSCP), a field activity of DLA. DSCP manages clothing and textiles, subsistence, and construction and equipment in addition to medical and surgical materiel.

The Medical/surgical PV Program provides most of a Medical Treatment Facility's (MTF) non-pharmaceutical, non-major equipment item needs to include sutures, bandages, surgical devices, gas tanks, and minor equipment. Prices are some of the lowest an MTF can find and delivery is next-day in most cases. The newer Generation III PV contracts only improve state-of-the-art logistical support that DSCP has provided for the last fifteen years through traditional PV contracts (Directorate of Medical Materiel Online, 2006). PV contracts began in 1996 as Generation I, with each program consisting of three 20-month customer commitment periods comprising full five year ordering coverage. Generation II PV contracts began in 2001 and Generation III began in 2006.

The Medical/surgical PV Program Generation III has established three TRICARE Global regions (i.e., North, South, and West) that combine to provide routine ordering capability throughout the world (DMM Online, 2006). WRAMC and its supported customers fall under Global Region North. Each TRICARE Global region must have two contracts for Primary PV support, with each PV required to hold backorders. Each Global region will also have up to two contracts for back-up PV support. Each Routine Ordering Facility (ROF) such as WRAMC must have a minimum of $10,000 in annual purchases to participate in the contract unless the PV grants an exception. The PV is required to meet the same standard of service for all participating facilities, regardless of ordering volume. WRAMC's annual purchase commitment for FY 2005 exceeded $19 million and was projected to surpass $21 million for FY 2006 based on a growth factor of 10 percent (Medical/surgical PV Generation III Service Level Election Form, 2006).

A Primary PV is required to offer routine day-to-day ordering and Prime Vendor War Readiness Materiel support (PVWRM) (Global Region North – Statement of Work – Medical/surgical PV Generation III, 2006). PVWRM is designed to provide contractual coverage of PV materiel in support of all Services' identified shortfalls while simultaneously utilizing the nationwide inventory maintained by the PVs (Directorate of Medical Materiel Online, 2006). Under Generation III of PVWRM, there are no surge provisions in the Medical/surgical PV contracts. Conversely, all support for contingency operations is contained in the Readiness Support Initiatives (RSI) Provisions of the contract. The objective is to buy access and not physical inventory. DSCP is the gatekeeper of the RSI Provisions on behalf of the Services and has chosen Primary PVWRM and occasionally Secondary PVWRM support or procurement for each of the Global regions. Materiel requirements and geographic regions are

determined by the Services in accordance with their logistics support scenario and are coordinated with DSCP and the affiliated PV.

Additionally, there are a variety of PV offered services included in the Statement of Work (SOW) and solicitation pricing sheet. A Primary PV is required to offer some services and has the option to offer others. A Primary PV is also required to offer a variety of service levels, with each changing the Basic Service Distribution Fee, even if the change is zero percent, with exceptions identified in the solicitation pricing sheet. The Basic Service Distribution Fee covers usage data and non-usage data items for ROFs within the specific global region. For medical/surgical PV services, Basic Service Distribution Fees range from 3.5 to 6.75 percent depending on the region (Directorate of Medical Materiel Online, 2006). Based on a combination of required and optionally selected services with appropriate service levels, WRAMC's Total Service Distribution Fee for FY 2006 was 6.3 percent.

The WRAMC Logistics division chose multiple PV services under the Generation III contract (FY 2006) in an effort to best provide logistical support to itself and its supported customers. Some decisions were made from a technical perspective that included a comparative assessment of vendor-provided services versus skill level, knowledge, and ability of staffed Full Time Equivalents (FTE), be they General Schedule (GS) or contracted employees. Others were based on the introduction by the Program Executive Office of the Military Healthcare System (PEO-MHS) of the Defense Medical Logistics Standard Support (DMLSS) Automated Information System (AIS) that is used to comply with changing DLA business practices requiring integration with the DMLSS AIS.

Defense Medical Logistics Standard Support

DMLSS is the AIS used to enhance healthcare delivery in peacetime and to promote wartime readiness and sustainability. DMLSS is inherently designed to interact with DLA PV contracts. It provides automation support of reengineered medical logistics business practices and delivers a comprehensive range of materiel, equipment, and facilities management information systems (Defense Medical Logistics Standard Support Online, 2006). DMLSS implements a variety of Tri-Service modules that standardizes medical logistics among the Services, reduces the time providers and healthcare professionals spend on logistics activities, and improves the effectiveness and efficiency of healthcare delivery. DMLSS has achieved significant savings by implementing just-in-time practices and PV support concepts, thereby eliminating the need to maintain large inventories of medical/surgical items at the wholesale level and at MTFs. By providing price comparison tools and electronic commerce capabilities, DMLSS has enabled MTFs to select and order the best value item that meets their requirements.

In support of its mission, WRAMC DOL utilizes the Inventory Management (IM), Customer Area Inventory Management (CAIM), and Electronic Catalog (ECAT) modules within DMLSS for procurement, delivery, and management of medical/surgical items. The first module, IM, provides customers and materiel managers with a seamless, automated capability to track requirements from submission to receipt, provide formal accountability through interface with financial systems, facilitate medical materiel management, and maximize efficient utilization of resources by incorporating best business practices (DMLSS Online, 2006). IM provides a requisitioning capability that includes interfaces with DLA, General Services Administration (GSA), internet ordering, and the ability to sustain a customer organization identification number with a ship to/bill to capability.

The second module, CAIM, provides a standardized methodology to automatically replenish customer areas and enhance the processing of materiel receipts using wireless technology and bar-code scanning (DMLSS Online, 2006). CAIM aids the customer in the identification of materiel items needed in patient care, and provides automated requisitioning support, inventory, ordering, storage, receipt, and tracking of materiel to the point of use. Further, a CAIM site has the ability to place orders directly with PV, stock rooms and the Medical ECAT. CAIM reduces the administrative time required to locate items and get them to patients. Ultimately, CAIM increases the number of customer areas managed by logistics personnel, reduces both inventory and time dedicated to the upload of inventory data, and establishes a just-in-time delivery process.

The third module, ECAT, is a web-based ordering system for lab, dental, optical, medical/surgical, and equipment products. It provides an easy-to-use interface, fast delivery, and convenient service. Additionally, ECAT supports committed volume pricing that gives individual customers access to tiered pricing and deep unit price discounts that are based on volume or standardization of one brand of products (DMLSS Online, 2006). ECAT is a robust search engine that allows users to find items quickly, conduct side-by-side product comparisons to contrast features, and schedule recurrent orders to save time and overhead. The module's electronic invoicing feature minimizes paperwork, while destination pricing eliminates surprises at the point of delivery. Most importantly, a one click download is all that is required to add the ECAT product order to the DMLSS database to enable the automated reorder process.

In order to ensure competitive pricing for medical/surgical products, the DoD establishes Distribution and Pricing Agreements (DAPA) for each of the Tri-Service Regional Business Offices (TRBO). TRBOs are geographically separated offices organized by DSCP and

the Services to facilitate medical/surgical product standardization in support of the TRBO regions. DAPAs identify the DSCP contracting officer's fair and reasonable price of an item to be distributed by the PV.

Classification of Medical Items

The WRAMC DOL Materiel division procures usage data items, non-usage data items, drop ship items, and manufacturer-direct items under the medical/surgical PV program. The first type, usage data items, are available through DAPA or any other designated contracting instrument and must be requisitioned by the ordering facility a minimum of once per month for a minimum quantity of one (Global Region North – Statement of Work – Medical/surgical PV Generation III, 2006). Routine delivery for usage items is the next business day. The PV required monthly usage quantity for an item will be calculated by multiplying the customer's usage quantity for that item by 110 percent. The PV stocks the item and must honor the Contractual Required Equal/Exceed Ship Total (CREST), or the whole number quantity the PV is required to ship each month for a given usage data item based on the requirement to provide 110 percent of the monthly usage data item quantity provided to the PV. For example, if a customer's usage data for an item is 25 boxes, then 110 percent of the usage data equals 28 boxes and the PV's required monthly usage quantity is 28. If a subsequent order is received for 30 boxes, the PV is expected to fill 28 boxes, (i.e., up to the required monthly usage quantity). Under the contract, the customer has an obligation to purchase usage data items he has requested the PV to stock.

The second type, non-usage data items, are also available through DAPA or other designated contracting instrument, but are optional and are provided solely as a customer service feature. The customer is not required to order these items through the PV, and the PV is not

required to supply these items through the Medical/surgical PV program (Global Region North – Statement of Work – Medical/surgical PV Generation III, 2006). Therefore, ordering facility personnel make a best value decision in the purchase of non-usage data items. Routine delivery for non-usage non-emergency items is not to exceed ten calendar days. Owens and Minor, WRAMC's primary PV, normally delivers non-usage items to its customers within eight days. Fill rates are not calculated for non-usage items, as they ordered sporadically by customers.

The third type, drop-ship items, are those items that on occasion an ordering facility may desire to purchase that a manufacturer makes available for order and delivery, but does not normally distribute through the PV. In this case, the ordering facility places an order through the PV and the manufacturer ships the item directly to the customer. The PV is only involved in the billing process. Delivery of usage data items is by the close of the next business day. If the PV chooses to drop-ship usage data items, the PV is then responsible for all drop shipment fees. Certain items have DAPA prices that already include drop shipment fees; therefore, the PV will not be charged a fee for these items. For non-usage data items, the manufacturer and the PV must negotiate responsibility for payment of drop shipment fees prior to order placement for drop shipment (Global Region North – Statement of Work – Medical/surgical PV Generation III, 2006). Once negotiated, the customer must pay the agreed upon drop shipment fee, which may include a PV distribution fee and a DSCP Cost Recovery Rate (CRR), or a medical administrative fee for orders.

The fourth type, manufacturer-direct items, is procured under the Alternate Commercial Product Ordering Program (ACPOP). Manufacturer-direct items are items or materiel that a vendor or manufacturer does not want a PV or middleman to touch due to business practices or Food and Drug Administration (FDA) concerns. This program is designed to provide the

opportunity for customers to have access to manufacturer-direct items available to commercial customers, but not available through a DAPA (Global Region North – Statement of Work – Medical/surgical PV Generation III, 2006). Any customer may choose to order supplies under ACPOP, but the customer is required to review the DoD/VA Master Catalog to ensure that the same or substitutable item is not available through DAPA. DAPA is the preferred source for an item. The customer should compare the PV ACPOP price to other available pricing to ensure that a purchase through ACPOP is in the Government's best interest. The Government may require that a customer make a fair and reasonable price determination. Prices offered for items under the ACPOP program will be a total delivered price, inclusive of the product price and CRR; however, a distribution fee is not allowed. In any event, the fact remains that customers are not required to order ACPOP items through the PV contract. The advantage of ACPOP is that it allows customers to utilize a DLA contractually-approved acquisition system in lieu of DoD service contracting offices. As a result, ACPOP eliminates the use of multiple logistics systems and streamlines the acquisition process as it reduces multiple touches of paperwork and physical touches of products, and allows for utilization of the electronic military billing process.

Methods of Procurement

WRAMC DOL and its supported customers procure medical/surgical items and generate sales through the use of DMLSS modules, Blanket Purchase Agreements (BPA), government credit cards, and depot-level stock centrally managed by DLA and supplied by DSCP. The first and most predominant method of procurement generating the majority of sales is through DMLSS. Division-level materiel managers utilize the IM and ECAT modules to procure items through PV. At the customer level, logistics and clinical personnel utilize the CAIM and ECAT modules to purchase the same items through PV.

The second method of procurement involves the use of BPAs. BPAs are a simplified method of filling anticipated repetitive needs for products (US GSA Online, 2006a). BPAs eliminate contracting and open market costs such as the search for sources, the need for solicitation preparation, and the requirement to summarize acquisitions. WRAMC DOL has established a number of BPAs for the 4th floor Logistics Support Branch (LSB) in order to support the hospital's sixteen Operating Room (OR) suites and supporting clinics. Due to both the complexity and costliness associated with these specialized medical/surgical items, BPAs are necessary to save time, reduce costs, obtain better value, and provide for quicker turnaround on orders.

The third method of procurement for medical/surgical items is through the use of the government credit card under the GSA SmartPay program. This program provides the government with an efficient and effective tool for conducting purchase, travel, and vehicle fleet operations. The use of the government credit card provides streamlined, best practices that are consistent with private industry standards (US GSA Online, 2006b). The administrative cost savings associated with processing charge card transactions versus those assigned to paper-based transactions encourages both card use and vendor acceptance.

Specific to medical/surgical items, the government purchase credit card gives customers the ability to purchase usage, non-usage or ACPOP items without using the DMLSS system. The use of the card rather than traditional on-line ordering through DMLSS allows customers to fulfill their mission by avoiding red tape when time is of the essence. Credit cards are utilized by materiel managers, but are more frequently used by customers at various CAIM sites. The card can be used as a procurement or payment tool for micro-purchases in accordance with the Federal Acquisition Regulation (FAR) 13.2 (US GSA Online, 2006b). A micro-purchase is an

acquisition of supplies in which the aggregate amount does not exceed $3,000 and is therefore limited due to the increased costs of medical/surgical products. A contract must be drafted for any item or combination of items requiring purchase that exceed the $3,000 threshold. In comparison to credit card use, the purchase of products through PV is preferred. PV procurement does not count against obligation authority, does not limit procurement authorization, and reduces administrative FTE costs associated with credit cards because WRAMC is already paying for these costs under the PV contract.

The fourth method of procurement for medical/surgical items is through depot-level stock centrally managed by DLA and supplied by DSCP. DSCP provides customers with a variety of acquisition methods through the Director of Medical Materiel (DMM) Online. Along with PV and ECAT, DMM's medical/surgical Commodity Business Unit (CBU) also maintains a group of items in DLA depots. Military Specific (MILSPEC) items are managed as Acquisition Advice Code (AAC) "D", and are maintained in depot stock inventory (DMM Online, 2006). Examples include the Mark I Nerve Agent Antidote Kit (NAAK), Chemical Biological Radiological, Nuclear and Explosive (CBRNE) materiel, and combat lifesaver bags. Depot-level management of these items allows for responsive logistics support for medical/surgical items that are critical to the warfighter and have traditionally long production lead-times. In an effort to support the PV contract, WRAMC has elected to limit DSCP purchases to MILSPEC items only. WRAMC is currently paying a service distribution fee of 6.3 percent under the medical/surgical PV contract for Generation III Option I and is therefore trying to mitigate additional costs external to the contract.

Aside from a comparative assessment of services and FTEs and the introduction of the DMLSS AIS, WRAMC DOL also chose multiple PV services under the Generation III contract

from a strictly business perspective. The Office of Management and Budget (OMB) issued Circular No. A-76 in 2003 which states that the federal government's policy is to rely on the private sector for commercial services (Executive Office of the President Online, 2003). The American people are entitled to receive the maximum value for their tax dollars, therefore commercial activities should be subject to the forces of competition. This policy requires that agencies identify all activities performed by government personnel as either commercial or inherently governmental, perform inherently governmental activities with government personnel, and use a streamlined or standard competition to determine if government personnel should perform a commercial activity. The result of this legislation is that agencies are required to streamline their workforces and AISs accordingly and subsequently delete or remove an appropriate number of employee positions.

Additionally, the DoD Base Realignment and Closure (BRAC) initiative and supporting legislation of 2005 have directed the realignment of WRAMC with the National Naval Medical Center (NNMC) in Bethesda, MD. The DoD states that this realignment does not include a reduction in force resulting from workload adjustments, reduced personnel or funding levels, or skill imbalances. However, this action will undoubtedly result in a reduction of functions and civilian personnel positions (DoD Base Realignment and Closure Online, 2006).

Statement of Purpose

The OMB A-76 Circular requiring agencies to streamline the performance of commercial activities coupled with the BRAC legislation of 2005 directing the realignment of WRAMC and NNMC have presented a significant staffing challenge. Further, the WRAMC logistics division's efforts to conserve dollars in light of manning shortfalls has forced it to acknowledge the need to identify the best combination of PV services and civilian staffing in order to provide

high quality logistical support in a fiscally responsible manner. Therefore, the purpose of the analysis is to determine what combination of medical/surgical PV services and FTE civilian staffing will provide the best supply chain management solution to support healthcare operations for WRAMC and its customers in the future as Global Region North transitions to Generation III Option II in July 2007. In support, the efficiency of the existing combination of PV services and FTE civilian staffing under Generation III Option I (October 2005 through September 2006) will be examined. The intent is to review and analyze current PV services and FTE staffing in an effort to determine the best value and practice for the future.

Background/Literature Review

The PV model, a cooperative effort between industry and the medical logistics system, is not a new concept. Civilian medical facilities began experimenting with PV in the early 1980s as a means to reduce inventory, simplify purchasing, ordering, and receiving, appreciate lower fixed-prices, and enjoy extended price protection based on assured sales. A PV agreement is one in which a single vendor becomes the primary source of a defined group of products for a defined period of time (Rourke, 1984). The hospital expects to gain a dependable source who offers exceptional value and operating efficiency. In return, the vendor expects to gain guaranteed sales, a strong opportunity for sales growth, and operating efficiency. The scope of the agreement may range from a narrowly defined class of items such as printed forms to a much broader category such as medical and surgical items for a hospital. The length of the agreement typically ranges from one to three years, but some extend over several years.

Hospitals use supply items that are often complex, varied, and normally disposable (Pitts, 1984). Technological changes in a dynamic health care industry have encouraged hospitals to look to manufacturers for supplies instead of producing them in-house. In addition, hospitals are

requesting warehousing from PVs so that they only order proper amounts of needed items. If a PV cannot provide items specified by contract, it is required to pay the difference in price when an item has to be purchased from a different vendor, along with a five percent penalty fee. This contract provision has significantly reduced the amount of required inventory space.

By the late 1980s, hospitals demonstrated an even greater interest in the use of PVs for medical and surgical supplies (Litsikas, 1990). Approximately 25 percent more hospitals used medical/surgical PV contracts than they did 10 years earlier. By the early 1990s, materiel managers began to severely limit the use of medical/surgical distributors because using PVs produced logistical savings and fostered relationships between the hospital and the distributor, thereby resulting in improved efficiency and reduced costs. Hospitals also demanded more services from their chosen medical/surgical distributors and manufacturers and were no longer willing to purchase products through the manufacturer's chosen channel of distribution. As a result, manufacturers became more responsive to these demands.

Unfortunately, not all hospitals were able to take advantage of the benefits offered by the PV relationship because some states experienced greater Medicare and Medicaid reimbursement cuts than others and simply could not afford to begin and maintain such a program. As a result, hospitals were forced to work on a competitive-price basis with big business for individual products to ensure fair and open competition. Additionally, hospitals began to rely more on informed distributor representatives who understood hospital needs because healthcare manufacturers were downsizing their sales force (Litsikas, 1990). In turn, this downsizing created an opportunity for Group Purchasing Organizations (GPO) to get involved and assist manufacturers in promoting their products. GPOs have the ability to leverage the purchasing

power of a group of businesses to obtain discounts from vendors based on their collective buying power.

In the military arena, the DoD acknowledged similar logistical challenges with its MTFs. Until 1992, the typical MTF spent approximately 43 percent of its operating budget doing business, attributing 19 percent to product costs and 24 percent to overhead (Cardella, 1999). Average procurement and delivery times were 30 to 60 days. Multiple sources of supply, duplication, and increased ordering costs were commonplace. In addition, escalating costs and inefficiencies in the distribution channels were undoubtedly troublesome, but they became unbearable as the Government was desperately searching for ways in which to reduce costs. These issues coupled with media stories regarding warehouses full of waste demanded swift action. In response, DSCP established a task force in 1992 to analyze and dramatically change the business processes for wholesale management of medical supplies in the DoD. Results of the analysis yielded a key solution to the problem called the Medical Prime Vendor Program.

The PV program was a relevant answer to the manner in which DSCP historically executed its business processes. Prior to PV, DSCP ultimately controlled what products the customer received, when they received them and how much they cost (Cardella, 1999). The agency handled specification preparations, purchasing, and the supply depot. As a result, the customer was trapped in a closed system and could not sidestep bureaucracy because internal government regulations dictated that all military customers come through DSCP for medical supplies. Conversely, Medical PV puts the customer in control. The customer selects the brand-specific item desired and DSCP does not have to procure the item, place it in a depot, and ship it to the customer. Rather, the PV pulls the item from its inventory and ships it to the customer within 24 hours of receiving the order.

Methods and Assumptions

Scenario and data

A Business Case Analysis (BCA) methodology will be utilized in the examination of medical/surgical PV services and FTE staffing. Three scenarios will be considered during the analysis. Scenario 1 is a representation of the PV Generation II contract with a total service distribution fee of 4.5 percent that includes five deliveries per week, unlimited ordering sites, usage data item delivery by close of next business day, delivery to the ordering facility dock, access to the PV data warehouse, and one weekly customer service visit. It also assumes 100 percent fill of 145 FTE authorizations. Scenario 2 is the status quo or the current combination of FTE staffing and PV services paid for under the contract. Initially, it includes all aforementioned services that are paid for with the 4.5 percent distribution fee. Additional options paid for under the Generation III contract include delivery to two additional sites within the facility, outside delivery to two sites within 25 miles of the facility, outside delivery to one site greater than 25 miles away, a full-time on-site PV customer service representative, and custom palletization.

Scenario 3 accounts for the same PV services paid for under the Generation III contract in scenario 2, yet it considers the addition of five floater FTEs (GS grade 7 step 5) who are cross-trained in all areas and can provide flexibility to an aging workforce that has been affected by both the A-76 study and BRAC legislation of 2005. Each of these FTEs would be distributed to an LSB to provide coverage for personnel who retire, require leave, or are absent. Further, scenario 3 examines the feasibility of increasing or developing current services that are paid for but are underutilized. Scenario 3 seeks to stabilize routine ordering for these underutilized (CAIM) sites from month to month. If accomplished, these services could be grown successfully over time. Overall, the intent is to review and analyze current PV services and FTE staffing in

an effort to determine the best value and practice. A detailed analysis of the aforementioned scenarios may determine that best value is not consistent with best cost, yet it may be the most viable choice.

WRAMC Logistics division and Owens & Minor, their current PV distributor, will provide 12 months of data from October 2005 through September 2006 that include total sales from PV, ECAT, credit cards, depot stock, BPAs, and contracts. All financial data will be retrieved from DMLSS and the Manugistics AIS maintained by Owens and Minor. DMLSS and Manugistics have the ability to communicate with each other through Electronic Data Interchange (EDI). Relative to personnel, WRAMC gained approval by both NARMC and MEDCOM to use the FY05 approved Table of Distribution and Allowances (TDA) in order to develop the FY06 level of services (See Appendix A). No changes to personnel authorizations occurred from the FY05 to the FY06 TDA. The Automated Staffing Assessment Model (ASAM) consolidated all supply chain management functions into one organization for the FY06 TDA (USAMEDCOM Online, 2002). As a result, the FY06 TDA only provides aggregate personnel authorizations by section and does not drill down to the LSB level of detail with individual authorizations. Therefore, the FY05 approved TDA will be used to examine military and civilian FTE authorizations under the Generation III contract. Initial personnel costs assume that every position is filled.

The ideal option for WRAMC is to purchase 100 percent of their medical/surgical items through PV. Figure 1 shows FY06 sales of medical/surgical items totaling $32,437,519 broken down by method of procurement.

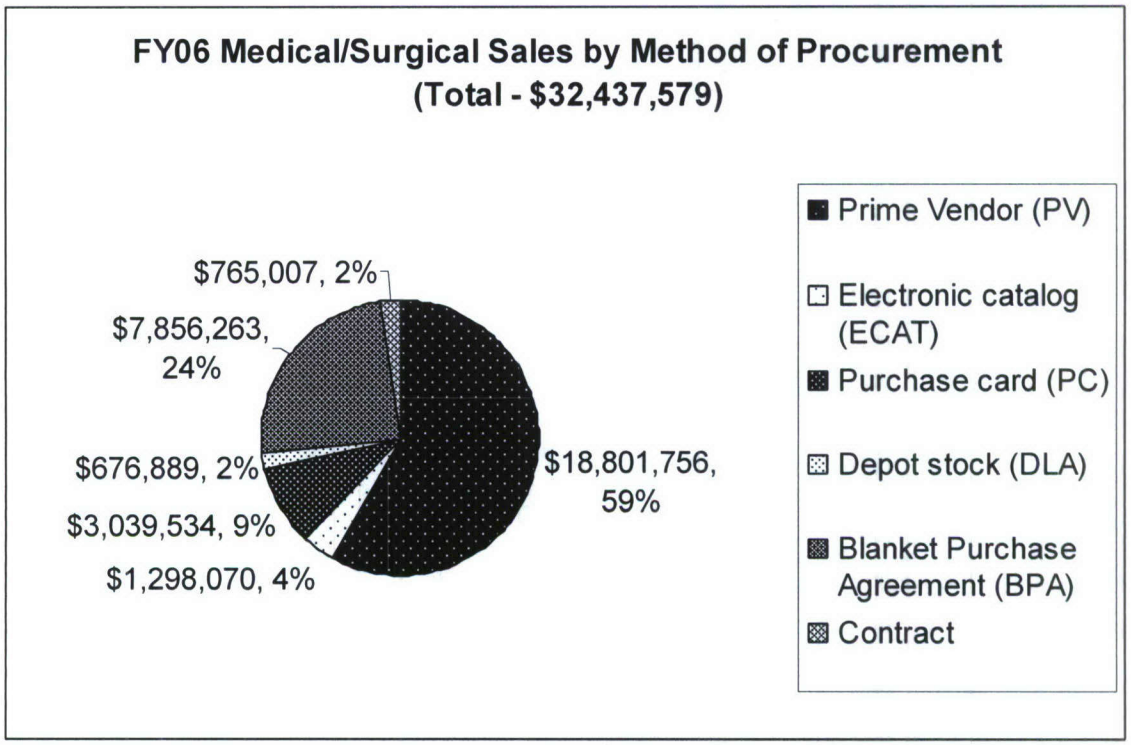

Figure 1. Total FY06 sales of medical/surgical items by method of procurement.

This option would reduce the number of vendors from several to one, would drastically reduce the administrative costs associated with purchasing items through alternative methods of procurement, and would allow systems analysts to track all expenditures through one financial and administrative AIS. In any event, this option is not feasible for a variety of reasons.

First, WRAMC's surgical floor utilizes a wide variety of complex and highly specialized medical/surgical items that are not available through PV and therefore requires the use of BPAs for procurement. BPA sales totaled in excess of $7.8 million for FY06. Currently, WRAMC maintains BPAs with twelve different vendors who support the hospital's OR suites and supporting clinics. These vendors are reluctant to sell their items to the PV based on FDA guidance and tracking of implantable devices and associated items. They seek to avoid potential litigation costs due to violations of the Safe Medical Devices Act of 1990 (Library of Congress

Online, 2007) and avert potential violations of previous regional and local sales and distribution agreements.

Second, government purchase credit cards are used to procure medical/surgical items that are also not available through PV for the previously stated reasons. Credit cards accounted for over $3 million in sales for FY06. Purchases can be made for items under $3,000 that do not require a contract and are often used when time is of the essence and direct delivery is paramount. Credit cards are frequently used in emergency situations that require rapid turnaround.

Third, WRAMC procures MILSPEC items through DLA in order to support the war fighter. These items are not available through PV, are manufactured by DoD or contracted out to industry to manufacture, and traditionally have long production lead-times. Examples include vaccines, NAAK kits, CBRNE protective materiel, insect repellent, and combat lifesaver bags. Sales for MILSPEC items in FY06 exceeded $675,000. The Power Projection Platform at Ft. Dix, NJ that supports the mobilization of thousands of soldiers and the Joint Task Force for the National Capital Region (JTF-NCR) under United States Army Northern Command (USANORTHCOM) that maintains the first-responder mission account for the majority of depot stock sales generated by the hospital. Fourth, contracts are utilized to procure medical/surgical items that are not available through PV and exceed the micro-purchase threshold of $3,000 which grants the use of the government credit card. Contract sales totaled $765,000 for FY06.

Although exclusive business with the PV would reduce the number of vendors to one, cut administrative costs, and allow for the management of the medical/surgical account with one AIS, WRAMC's mission cannot be supported efficiently with this methodology. The nature and extent of complex medical procedures required to treat the injuries of soldiers fighting the Global

War on Terror (GWOT) necessitate the use of highly specialized medical/surgical items that are not available for purchase through the PV. Aside from GWOT, WRAMC is the largest Medical Center (MEDCEN) in the Army that provides advanced and sub-specialty healthcare to a patient population of nearly eight million. It has some of the most robust medical education, training, and research programs in the DoD. As such, WRAMC receives a wide variety of complex cases that require the use of specialized medical/surgical items not currently stocked by the PV. Although the logistics division makes every effort to utilize the PV, these alternative methods of procurement must be used in concert to acquire non-stocked PV items and support fully WRAMC's mission.

Scope

The time period is five years ranging from FY 2007 through FY 2011. The unit of analysis is WRAMC. A number of geographical issues indicative of WRAMC and the NCA have been identified as having a critical impact on the case. According to the US Bureau of Labor and Statistics in 2005, Washington, DC ranks sixth highest in wages in the nation. Washington, DC, and Arlington and Fairfax, Virginia comprise three of the 10 counties with the highest wages in the US, thereby acknowledging a high cost of living. Although the GS salary table is supplemented with a locality payment of 18.59 percent, it is still difficult to attract personnel for hire. Competition is fierce for jobs in the federal marketplace because employees can go to other federal agencies outside of WRAMC and apply for the same job that is paying at a higher grade and step.

In addition, DC traffic is creeping toward the Nation's worst. According to Ginsberg and Dwyer (2005), the Washington area has the third-worst traffic congestion in the US and residents spend an average of 69 hours a year in traffic jams at a cost of $577 per commuter. This implies

that it is difficult for people to commute to and from work in the NCA and both PV and WRAMC delivery drivers face significant traffic challenges when transporting products to delivery sites. Most importantly, in comparison with other Army medical centers, WRAMC's geographical boundary is the largest, spanning from the PPP at Ft. Dix, New Jersey in the north to the DiLorenzo TRICARE Health Clinic at the Pentagon in the south.

Technological issues relevant to the case include the advancements of PV Generation III contracts. Under Generation II, logistics personnel had to consult with contracting more frequently because ACPOP was not available. PV Generation III gives customers ACPOP capability, allows for the selection of direct delivery locations, and provides the ability to add additional CAIM ordering sites to support these delivery locations. Further, the development of e-commerce in the last several years has witnessed the transition from a paper-based logistical process to a nearly paperless one, thereby streamlining administrative processes, reducing errors, and improving efficiency.

Financial metrics

In order to conduct a thorough analysis, three scenarios will be considered that include a variety of PV service options and staffing models that in turn, will yield one or more Returns on Investment (ROI). ROI assesses the expected profitability in the financial analysis, or in this case, the cost savings associated with the best combination of PV service options and FTE staffing. ROI is commonly expressed as Net Present Value (NPV) or Internal Rate of Return (IRR). NPV measures a project's time value adjusted dollar return, while IRR measures a project's rate (percentage) of return. The higher the dollar value or percentage rates of return, the more favorable the ROI (Gapenski, 2003). An analysis of the supply chain management process that includes FTE staffing and PV service elections is unlike traditional case analyses

such as make-or-buy decisions, joint ventures, or venture capital initiatives. There is no initial investment that incurs sizable debt such as buying a piece of equipment. Instead, costs such as FTE salaries and PV service fees are incorporated to fit the Business Case Analysis (BCA) tool. These items are sunk costs that must be incurred to support the supply chain business process. Further, total PV sales for medical/surgical items have been labeled as revenue. The Government is not considered a revenue-producing organization and instead is focused on the most efficient use of the taxpayer dollar. Cost avoidance of medical/surgical items resulting from the TRBO standardization process has also been included. Lastly, because the organization is not taking on debt in order to acquire a positive cash flow or generate sales of medical/surgical items in the future, the payback period is not a significant factor in the overall decision-making process.

Benefits

The three aforementioned scenarios will yield four tangible benefits that will serve as critical decision criteria in the overall case analysis of the supply chain business process. Tangible benefits include ROI (expressed as NPV), cumulative discounted cash flows, cost savings, and a benefit-to-cost ratio for five years. Total PV sales from FY06, TRBO cost avoidance for medical/surgical items, FTE salaries, and PV service fees for additional options under the contract will be entered as variables in the BCA tool. Inflationary factors and cost-of-living considerations also will be incorporated into each scenario in order to provide a relatively accurate representation of costs and benefits over a five-year period.

Aside from ROI (expressed as NPV), cumulative discounted cash flows, cost savings, and benefit-to-cost ratios, a variety of intangible benefits inherent to the case must be acknowledged and incorporated in the overall analysis. It is fundamentally challenging to

measure and assign an appropriate value to these types of benefits, but the process is critically important. Failure to consider the value of intangible benefits by making decisions based solely on an examination of financial metrics may prompt stakeholders to choose the best cost alternative that may not be consistent with best value in the long run.

In an effort to measure the value of intangible benefits applicable to the analysis, a survey was created and utilized in order to collect valuable information regarding direct delivery service level support as paid for under the Generation III PV contract (see Appendix B). Direct delivery service level support includes delivery to two additional sites within the facility (ORs and 4th floor wards & clinics), outside delivery to DTHC, Arlington, and Ft. Dix, a full-time on-site customer service representative, and custom palletization. The short survey consisted of rating multiple lists of items and answering open-ended questions. Survey development was accomplished with the assistance of the MMD Chief as a subject matter expert in the medical/surgical PV arena, but the internal validity of the instrument may be subject to central tendency or social desirability biases. Central tendency bias is the inclination of respondents to avoid using extreme response categories, while social desirability bias is the tendency to present oneself or the organization in a manner viewed favorably by others in order to achieve social acceptance by providing higher scores to questions (Cooper & Schindler, 2003). Further, the external validity of the instrument (generalizability of the results) may be somewhat limited given the unique mission and requirements of comparative medical centers. A search was conducted for existing surveys that could provide supporting data for the analysis, yet none could be found.

In order to gather data regarding direct delivery service level support, the survey was administered to personnel assigned to the WRAMC logistics division. Participants' answers

were transcribed, whereby numerical scores for intangible benefits were totaled and an average for each benefit was calculated. Responses to open-ended questions were examined in an effort to search for common themes. The representative sample of ten participants have worked in the division an average of five years and have worked in the medical logistics community from ten to thirty years, serving in a variety of positions to include supply technician, logistics systems information management, and senior logistics management. More importantly, the majority of surveyed participants has worked in medical logistics since the inception of PV and possesses institutional knowledge of both depot-stock level ordering and DMLSS on-line ordering from Generation I through Generation III of the PV contract.

Results of the survey indicated that there are three highly valuable intangible benefits regarding direct delivery service level support that are indicative of both scenarios 2 and 3. The three intangible benefits are increased quality of care, streamlined logistical operations, and the presence of a full-time on-site PV customer service representative. First, overall quality of care has increased because direct delivery service level support has given the division the ability to respond timely to clinical requirements. Second, logistical operations have become more streamlined, as direct delivery has reduced customer wait time by decreasing the number of personnel who are involved in transactions from request to receipt. Further, direct delivery has eliminated the requirement for large warehouses and multiple layers of staff in light of constant turnover, personnel shortages, and retraining. Third, the presence of a full-time on-site customer service representative reduces the number of times an item can be mishandled. The PV representative can intensely manage PV drop-ship items and add new item requests to the Owens & Minor database, thereby reducing procurement delays and workload for the logistics staff.

Results of the survey also provided a number of recommendations to modify current services in order to better support the supply chain management process. First, off-site locations are currently limited to non-usage items for direct delivery, which means that the PV has eight days to deliver these items. A recommendation was made to have these locations maintain their own use accounts for recurring requirements in specific customer areas (i.e., materiel distribution branch & warehouse 178) that do not have adequate demand to be stocked. A second recommendation suggested that drop-ship items be renegotiated into the contract in order to provide more automation and set pricing that is quoted at the time of the order. A third recommendation requested the establishment of two more direct delivery areas, the development of underutilized ordering (CAIM) sites, and the addition of flex staff to ensure coverage for training, leave, sick days, absenteeism, and retirement. The first two recommendations will be submitted to the command for further review. The third recommendation has been incorporated into scenario 3 as a possible solution in the overall improvement of the supply chain management process.

Aside from the survey results, there are three additional intangible benefits that are not related to direct delivery service level support, yet are unique to scenario 3. The three additional benefits are the ability to respond to contingencies, provide flexibility to the LSBs, and provide staffing necessary to grow underutilized CAIM ordering sites. First, the addition of five floater FTEs in scenario 3 allows the division to respond effectively to patient surges, matters of homeland defense, and military personnel taskings required to support GWOT. Second, the presence of five floater FTEs provides flexibility to the LSBs by allowing personnel to take leave, sick days, and retirement and addresses both absenteeism and turnover resulting from an aging workforce. Third, scenario 3 provides the staffing necessary to stimulate the growth of

underutilized CAIM ordering sites within the LSBs. The logistics division as it is currently staffed simply cannot support efforts to grow the LSB CAIM sites because priority was given to the 4th floor CAIM sites and personnel are already focused on several other duties.

Costs

As previously mentioned, the Secretary of Defense designated DLA as the Executive Agent for medical materiel, who in turn delegated its authority to DSCP. The DSCP contracting officer is the individual who drafts and approves the SLEF as a contract between the hospital and the PV, Owens & Minor. DSCP determines the fee schedules for the SLEF in an effort to standardize costs for all medical facilities in the geographical area. WRAMC is a Routine Ordering Facility (ROF) that falls under TRBO Region 1 (North). The Basic Service Distribution Fee covers usage and non-usage data items for ROFs within its global region (See Appendix C) (Defense Supply Center Philadelphia, 2005). The fee for TRBO Region 1 is 4.5 percent. This fee for ROFs with a total annual sales commitment of $10,000 - $100,000 includes five deliveries per week (business days only), unlimited ordering sites within an ROF, usage data item delivery by close of next business day, delivery to the ordering facility dock, access to the PV web-based data warehouse, and one weekly customer service visit.

Due to the complexity of advanced and sub-specialty care and sheer volume of patients, WRAMC has elected to purchase additional options under the PV contract in order to best support healthcare operations. First, WRAMC chose to enhance its customer service election by requiring the use of a full-time, on-site customer representative that, in turn, incurs an additional fee of .75 percent. Second, the hospital chose to amend its delivery location election by paying for up to two additional delivery sites within the facility. Current patient volume and an increase attributed to GWOT have necessitated direct delivery to both ORs and supporting wards and

clinics on the 4th floor. This option incurs an additional fee of .35 percent. Third, WRAMC increased the basic service distribution fee by an additional .35 percent in order to provide outside delivery to three sites within 25 miles of the hospital. These include DTHC (DoD site) at the Pentagon, the Arlington Annex (USN site), and the WRAMC medical logistics warehouse. The DoD directed that WRAMC provide medical logistics support to DTHC and the Arlington Annex, therefore this fee was unavoidable. The hospital incurred an additional fee of .40 percent by providing delivery to Ft. Dix, NJ, one additional site greater than 25 miles away. Fourth, the hospital opted for custom palletization so that logistics personnel could simply receive pre-configured orders and deliver them to the appropriate location without having to break down pallets and assemble individual orders. The additional fee for this option is 1 percent. Based on an annual purchase commitment from FY05 of approximately $19 million and a 10 percent growth factor (that brings the total to more than $21 million), WRAMC enjoys a discount of 1.05 percent against the total distribution fee of 7.35 percent, bringing the final total to 6.3 percent for the medical/surgical PV contract. Actual cost to the hospital for FY06 was $1,184,511 (or $18,801,756 in total sales x 6.3 percent).

When examining FTE staffing, the WRAMC logistic division is comprised of both military and civilian personnel. In an effort to standardize FTE salaries for analysis, military personnel in the grade of E6 and above were rated as a GS grade 9 step 5, while those in the grade of E5 and below were rated as a GS grade 5 step 5. Only one officer in the grade of 04 was included, whose rating was determined to be a GS grade 12 step 5. GS grade and step levels for military personnel are commensurate with their civilian counterparts as supply technicians and managers, based on duties, responsibilities, and level of experience. Given the number of personnel on staff and their various levels of skill and ability, an assumption was made to assign

every FTE a step 5 rating. FTE salaries were retrieved from the 2007 GS salary table for the locality pay area of Washington, DC, Baltimore, and northern Virginia that includes a 1.7 percent GS increase and a locality payment of 18.59 percent (See Appendix D) (Office of Personnel Management Online, 2007). An additional 25 percent was added to each salary rate to account for an FTE benefit package that includes life and health insurance, awards, and the Thrift Savings Plan (TSP). For example an FTE rated as a GS grade 5 step 5 would be paid a total of $43,046 annually (or $34,437 x 1.25). Additionally, the WRAMC FY05 TDA was scrubbed in order to retrieve total FTE authorizations by section or department. The MMD Chief provided a personnel lay-down for the division that identified those positions that are currently filled.

Aside from PV service fees and FTE salaries, there a number of administrative costs that impact the supply chain management business process at WRAMC. First, there are costs associated with WRAMC systems personnel who provide training and customer support to logistics personnel at DTHC, Arlington Annex , and the Power Projection Platform at Ft. Dix, NJ. Training and customer support include New Equipment Training (NET), DMLSS system support, facilitation of troublesome payment and contracting issues, and both on-site and telephonic customer service. Based on discussions with the WRAMC MMD chief and the DMLSS system manager, it costs the WRAMC logistics division approximately one FTE salary at a GS grade 11 step 7 or $83,561 ($66,849 x 1.25) to provide this training and support. Current authorization for system staffing is four personnel, all of whom are rated GS grade 11 step 7. It takes two FTEs approximately 50 percent of their time to sustain, retrain, and grow new employees. Additional training is provided by the full-time PV customer service representative, which is funded under the SLEF as a one percent surcharge to the contract.

In addition, there are costs associated with the establishment of a contract for medical/surgical items from initial request through the North Atlantic Regional Contracting Office (NARCO) to delivery and payment of items. The cost of any one contracting action varies based on size, complexity, scope, and time involved. However, based on conversations with both NARCO and logistics personnel, a figure of $750 per contracting action is sufficient to cover the entire acquisition life cycle process.

Further, there are administrative costs associated with credit card purchasing of medical/surgical items. Administrative tasks include product research, vendor selection, placement of the order, processing of required paperwork, and reconciliation of the monthly billing statement with the approving official. MMD currently has three credit card holders who predominantly order for the division, and LSBs 1-3 and 5-7. There are three additional contract specialists who order exclusively for the surgical (4th) floor using credit cards and BPAs and there is one part-time wide area workflow manager (WAWM) who manages the receipt of all types of contracting actions including but not limited to medical/surgical items under the WRHCS. According to the MMD Chief, it cost the WRAMC logistics division six and one quarter FTEs salary at a GS grade 9 step 7 (one quarter represents the WAWM) or $431,633 ($55,249 x 1.25 x 6.25) in FY06 to provide these two methods of procurement that generated over $11 million in sales.

Major assumptions

The current BCA is supported by a number of predictive assumptions that are financial or administrative in nature and will change over time. These assumptions and their potential impacts must be considered in the overall analysis of WRAMC's medical/surgical supply chain management solution. First, the OMB A-76 Study and BRAC legislation will lead to a reduction

in functions and civilian personnel positions. WRAMC is required to streamline its performance of commercial activities and make every effort to delete or remove an appropriate number of employee positions as it prepares to realign with NNMC prior to 2011. Second, based on a total GS salary increase of 3.44 percent in 2006 and an increase of 2.64 percent in 2007 for the Washington-Baltimore-Northern Virginia locality pay area as outlined by the Office of Personnel Management (OPM), an assumption was made to increase GS salary for FTEs by 3 percent over the next five years to account for inflation. Third, given the number of personnel on staff and their various levels of skill and ability, an assumption was made to assign every FTE a step 5 rating. Fourth, the BCA assumes that FTE staffing will not change and no changes to GS step and grade will occur over the five-year period for any of the three scenarios.

Fifth, a 2.6 percent discount rate (or project cost of capital) that is currently used as a baseline for the MEDCOM BCA tool was considered reasonable and was therefore applied to all scenarios when calculating NPVs. Sixth, PV sales volume will increase by approximately 3.5 percent each year over the next five years. Total PV sales for FY05 totaled $19.9 million, while sales for FY06 totaled $18.8 million, thereby producing a 6.3 percent decrease in sales of medical/surgical items. However, this decrease was due to both an efficient supply chain business process and cost avoidance from TRBO standardization of medical/surgical items. The goal of the division is not to generate sales, but instead to make the most efficient use of the business process at the lowest cost to the Government. Additionally, MEDCOM directed that medical facilities channel 15 percent of their purchase card sales into PV (i.e., FY06 PC sales of $3,039,534 x .15 = $455,930). These purchase cards used monies from the Defense Working Capital Fund (DWCF) and DA needed to reallocate these funds to support the war fighter for GWOT. Based on a total PV sales forecast for FY07 of more than $19 million coupled with 15

percent of current purchase card sales from FY06, an assumption was made to increase total PV sales by approximately 3.5 per year for the next five. Although DSCP defines the annual purchase commitment level as based on the last twelve months of sales and a growth factor of ten percent (DSCP, 2005), sales volume increase is based on obligations and not commitments, and therefore 3.5 percent is more realistic.

Seventh, based on discussions with the MMD chief and the DMLSS system manager, PV sales for underutilized CAIM sites as outlined in scenario 3 (i.e., LSBs 1-3, 5, 6, 7 and the cardiac catherization lab) should increase by approximately three percent in both FY07 and FY08. PV sales will then stabilize in FY09 through FY11 with a modest increase of one percent each year. These percentages are based on the amount of time required to build a direct delivery catalog for CAIM sites and then maintain it. Since LSBs 5 and 6 generated no PV sales for the first six months of FY07, dedicated efforts to grow them should generate PV sales commensurate with LSBs 1-3 and 7, thereby witnessing a modest surge in the first two years and stabilization in years three through five. Total sales for the above CAIM sites from October 2006 through March 2007 totaled $17,213. An assumption was made to double this number (i.e., $17,213 x 2 or $34,426) in order to calculate PV sales growth for the five-year period as previously stated. Further, total PV sales for all CAIM sites are expected to total $1.88 million for FY07 (i.e., $942,280 for October 2006 through March 2007 x 2 or $1,884,560) and comprise only ten percent of total PV sales of $18,801,756. Given that PV sales for the underutilized CAIM sites (i.e., $34,426) represents approximately two percent of total PV sales by CAIM sites (i.e., $1,884,560) and less than two-tenths percent of total PV sales (i.e., $18,801,756), PV sales growth will be extremely conservative. Because the priority of effort was initially focused on the

4th floor CAIM sites and the PPP at Ft. Dix, NJ, workload would have to be diverted from these sites to the underutilized CAIM sites to some extent in order to promote growth.

Eighth, discussions with both TRBO Region 1 and the MMD Chief have identified that current projections of TRBO Clinical Process Teams (CPT) for standardization efforts and initiatives in the pipeline have been analyzed and forecasted to increase TRBO cost avoidance for medical/surgical items by approximately 10 percent each year over the next five years. Ninth, prices for medical/surgical items will increase by approximately 6.25 percent over the next year based on inflation. Individual product category lines range from a 2 percent decrease in IVs to a 10 to 15 percent increase in latex exam gloves (Healthcare Purchasing News, 2007).

Tenth, according to the US Department of Labor's Bureau of Labor Statistics Consumer Price Index (2007), the cost of living is expected to rise at a rate of approximately 2.8 percent over the next year based on inflation. This figure is indicative of the prices paid by urban consumers for a representative basket of goods and services and is a US city average. Eleventh, traffic will worsen progressively as more and more individuals move into the NCA. Ginsberg and Dwyer (2005) provide statistics from a 2003 study conducted by the Texas Transportation Institute that found that poor highway management and land-use planning are also contributing to the deteriorating state of travel. Congestion is worsening in metropolitan areas where too few roads and rail lines are built. Moreover, the current pace of transportation improvement is not sufficient to keep pace with even a slow growth in travel demands in most urban areas.

Twelfth, fuel prices are expected to remain at or above current levels for the next few years. OPEC recently announced a resolution to cut production by 1.2 million barrels per day (Fuel Price Outlook Online, 2007). In addition, worldwide demand for oil that has been spurred by growth in China, India, and the US is projected to increase by 1.5 million barrels per day.

Further, surplus capacity that exists almost entirely in Saudi Arabia is the lowest it has been in 30 years. As of April 2007, fuel prices were currently rising at a pace similar to the spike during Hurricanes Katrina and Rita in 2005 (Carroll, 2007). Gasoline consumption is climbing twice as fast as 2006, rising almost 5 percent above the five-year average and pump prices may increase to $4 a gallon due to the threat of a potentially active hurricane season forecasted to strike the Gulf Coast and threaten its refineries. Increased fuel prices will undoubtedly impact the efficiency of product delivery to supported sites in the catchment area.

Business Impacts

Overall Results

An examination of each of the three proposed scenarios has revealed that no initial investment is required in the traditional sense. Instead, FTE salaries and service distribution fees for the PV contract have been labeled as costs incurred from the outset. All three scenarios produce both a positive ROI (expressed as NPV) and discounted cash flows from day one and a benefit-to-cost ratio of greater than two to one in five years. Additionally, scenarios 2 and 3 realize a cost savings substantially greater than scenario 1. Admittedly, some variance of tangible benefits exists among the three scenarios. However, true differences rest with levels of FTE staffing, PV service option packages, and the value of intangible benefits associated with the different scenarios.

Scenario 1 is indicative of the PV Generation II contract in that it requires 100 percent fill of all FTE authorizations in order to provide all of the direct delivery service level support that is currently realized. This scenario requires the full complement of FTEs to provide these additional service options that have not been paid for and are not provided by the PV under Generation II. Additionally, FTE staffing outlined in scenario 1 is not consistent with the

reduction of personnel positions and functions as dictated by the A-76 Study and BRAC Legislation of 2005. Scenarios 2 and 3 both require the same additional service options under the Generation III PV contract. However, scenario 3 differs from scenario 2 based on the addition of five cross-trained floater FTEs, the development of underutilized ordering sites at no additional cost, and the intangible benefits associated with each. Scenario 3 incurs a greater initial cost than scenario 2, but scenario 3 may provide better value and better mitigation of risk for the organization over the five-year period.

Benefits

Tangible Benefits

The expected earnings from scenario 1 that require 100 percent fill of all FTE authorizations and a total distribution fee of 4.5 percent for PV services that do not include direct delivery service level support are summarized below in Table 1.

Table 1. *Scenario 1 – Benefits, Costs, and Expected Earnings FY07-FY11 (Dollars in 000s)*

Annual Benefits	**FY07**	**FY08**	**FY09**	**FY10**	**FY11**
Total PV Sales*	$18,801.8	$19,459.8	$20,140.9	$20,845.8	$21,575.4
Cost Avoidance**	$906.4	$997.0	$1,096.8	$1,206.4	$1,327.1
Total Benefits	$19,708.2	$20,456.9	$21,237.7	$22,052.3	$22,902.5
Costs					
Operating Expenses					
FTE salaries***	($7,618.9)	($7,847.5)	($8,076.0)	($8,304.6)	($8,533.2)
PV Service Fees	($846.1)	($875.7)	($906.3)	($933.5)	($966.2)
Total Costs	($8,465.0)	($8,723.2)	($8,982.4)	($9,238.1)	($9,499.4)
Yearly Cash Flow	$11,243.2	$11,733.7	$12,255.3	$12,814.1	$13,403.2
Cum. Cash Flow	$12,243.2	$22,976.9	$35,232.2	$48,046.4	$61,449.5

*Total PV sales increases 3.5% per year for inflation.
**Cost avoidance increases by 10% per year.
***FTE salaries increase by 3% per year for inflation.

Figure 2 shows the annual sustainment financial profile with total costs and benefits by year for five years.

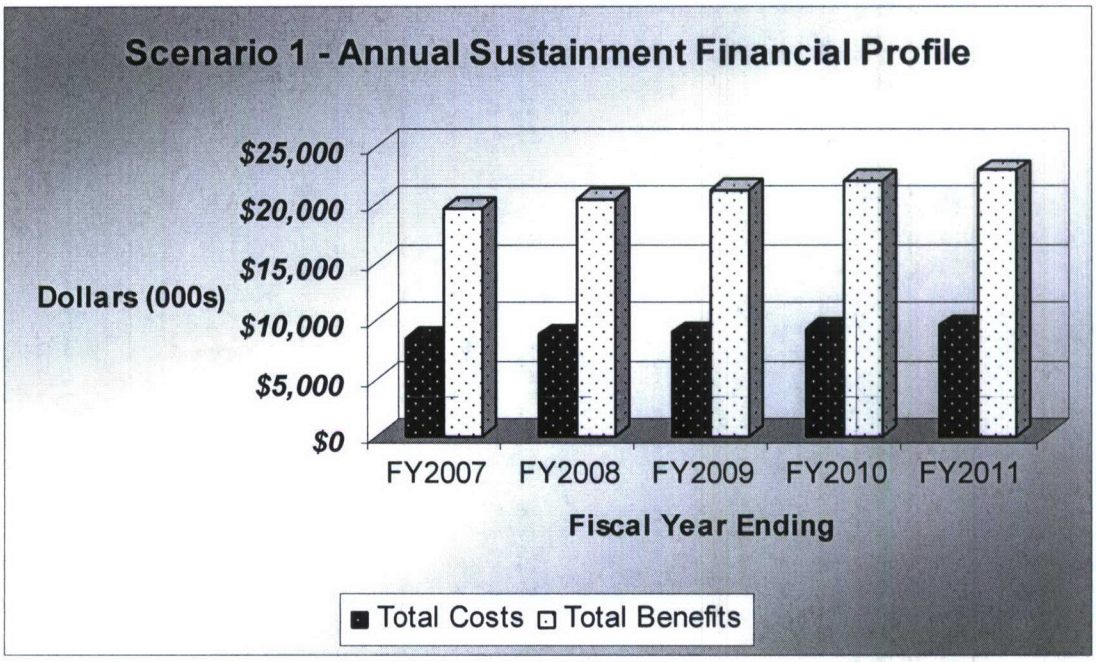

Figure 2. Scenario 1 – Annual Sustainment Financial Profile.

The analysis predicts a positive cumulative cash flow discounted at 2.6 percent of $58,281,400 over a five-year period.

Table 2. *Scenario 1 – Cash Flow Summary.*

Cash Flow Summary	Year1 Sep 2007	Year2 Sep 2008	Year3 Sep 2009	Year4 Sep 2010	Year5 Sep 2011
Annual Benefit Impacts	$19,708.2	$20,456.9	$21,237.7	$22,052.3	$22,902.5
Annual Expense Item Impacts	(8,465.0)	(8,723.2)	(8,982.4)	(9,238.1)	(9,499.4)
Net Operating Inflow (Outflow)	$11,243.2	$11,733.7	$12,255.3	$12,814.1	$13,403.2
Net Cash Flow	$11,243.2	$11,733.7	$12,255.3	$12,814.1	$13,403.2
Cumulative Net Cash Flow	$11,243.2	$22,976.9	$35,232.2	$48,046.4	$61,449.5
Cash Flow Discounted at 2.6%	$11,243.2	$11,436.4	$11,642.0	$11,864.5	$12,095.3
Cumulative Discounted Cash Flow	$11,243.2	$22,679.6	$34,321.6	$46,186.1	$58,281.4

The ROI is calculated at 142 percent for the five-year period. Figure 3 displays the ROI financial profile with cumulative costs and benefits. Given the costs required at inception for FTE salaries and PV service fees, the payback period is approximately five months. The benefit-to-cost ratio for the scenario is 2.37.

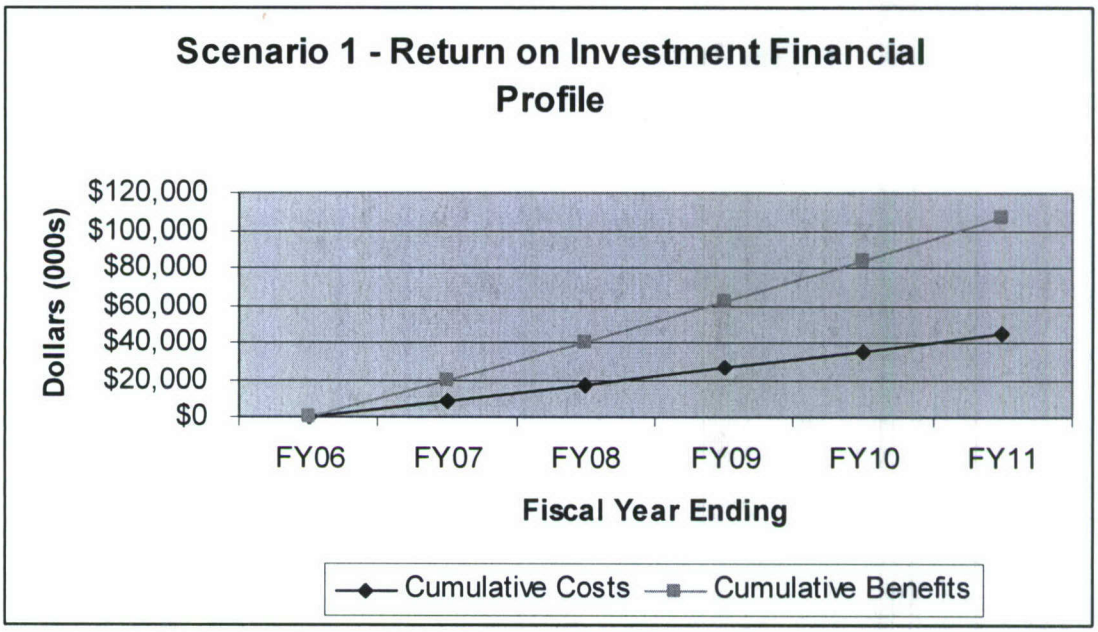

Figure 3. Scenario 1 – Return on Investment Financial Profile.

Expected earnings from scenario 2 that requires current FTE staffing and a total service distribution fee of 6.3 percent for PV services that includes additional options under direct delivery service level support are captured in Table 3. Figure 4 shows the annual sustainment financial profile with total costs and benefits by year for five years. The analysis predicts a positive cumulative cash flow discounted at 2.6 percent of $69,446,500 over a five-year period (see Table 4). The ROI is calculated at 235 percent for five years. Figure 5 displays the ROI financial profile with cumulative costs and benefits. Given the cost required at inception for FTE salaries and PV service fees relative to total PV sales and TRBO cost avoidance, the payback period is approximately three-and-a-half months. The benefit-to-cost ratio for scenario 2 is 3.21.

Table 3. *Scenario 2 – Benefits, Costs, and Expected Earnings FY07-FY11 (Dollars in 000s)*

Annual Benefits	**FY07**	**FY08**	**FY09**	**FY10**	**FY11**
Total PV Sales*	$18,801.8	$19,459.8	$20,140.9	$20,845.8	$21,575.4
Cost Avoidance**	$906.4	$997.0	$1,096.8	$1,206.4	$1,327.1
Total Benefits	$19,708.2	$20,456.9	$21,237.7	$22,052.3	$22,902.5
Costs					
Operating Expenses					
FTE salaries***	($5,055.5)	($5,207.2)	($5,358.9)	($5,510.5)	($5,662.2)
PV Service Fees	($1,184.5)	($1,226.0)	($1,268.9)	($1,313.3)	($1,359.3)
Total Costs	($6,240.1)	($6,433.2)	($6,627.8)	($6,823.8)	($7,021.5)
Yearly Cash Flow	$13,468.1	$14,023.7	$14,609.9	$15,228.4	$15,881.1
Cum. Cash Flow	$13,468.1	$27,491.8	$42,101.7	$57,330.1	$73,211.2

*Total PV sales increases 3.5% per year for inflation.
**Cost avoidance increases by 10% per year.
***FTE salaries increase by 3% per year for inflation.

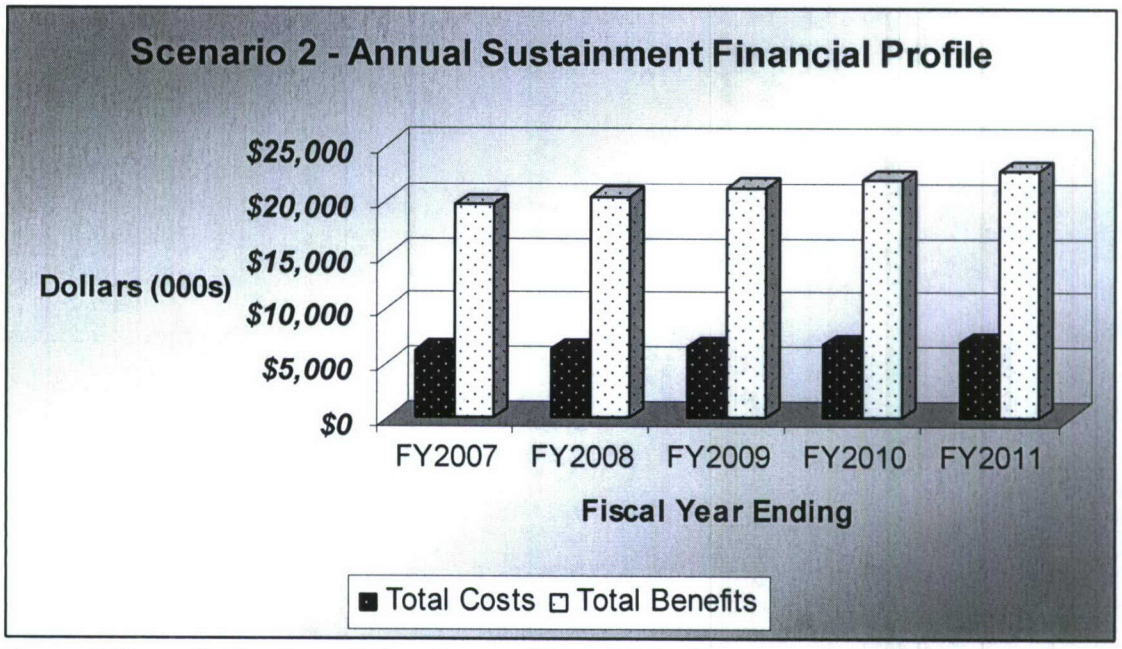

Figure 4. Scenario 2 – Annual Sustainment Financial Profile.

Table 4. *Scenario 2 – Cash Flow Summary.*

Cash Flow Summary	Year1 Sep 2007	Year2 Sep 2008	Year3 Sep 2009	Year4 Sep 2010	Year5 Sep 2011
Annual Benefit Impacts	$19,708.2	$20,456.9	$21,237.7	$22,052.3	$22,902.5
Annual Expense Item Impacts	(6,240.1)	(6,433.2)	(6,627.8)	(6,823.8)	(7,021.5)
Net Operating Inflow (Outflow)	$13,468.1	$14,023.7	$14,609.9	$15,228.4	$15,881.0
Net Cash Flow	$13,468.1	$14,023.7	$14,609.9	$15,228.4	$15,881.0
Cumulative Net Cash Flow	$13,468.1	$27,491.8	$42,101.7	$57,330.1	$73,211.2
Cash Flow discounted at 2.6%	$13,468.1	$13,668.3	$13,878.8	$14,099.8	$14,331.4
Cumulative Discounted Cash Flow	$13,468.1	$27,136.4	$41,015.2	$55,115.0	$69,446.5

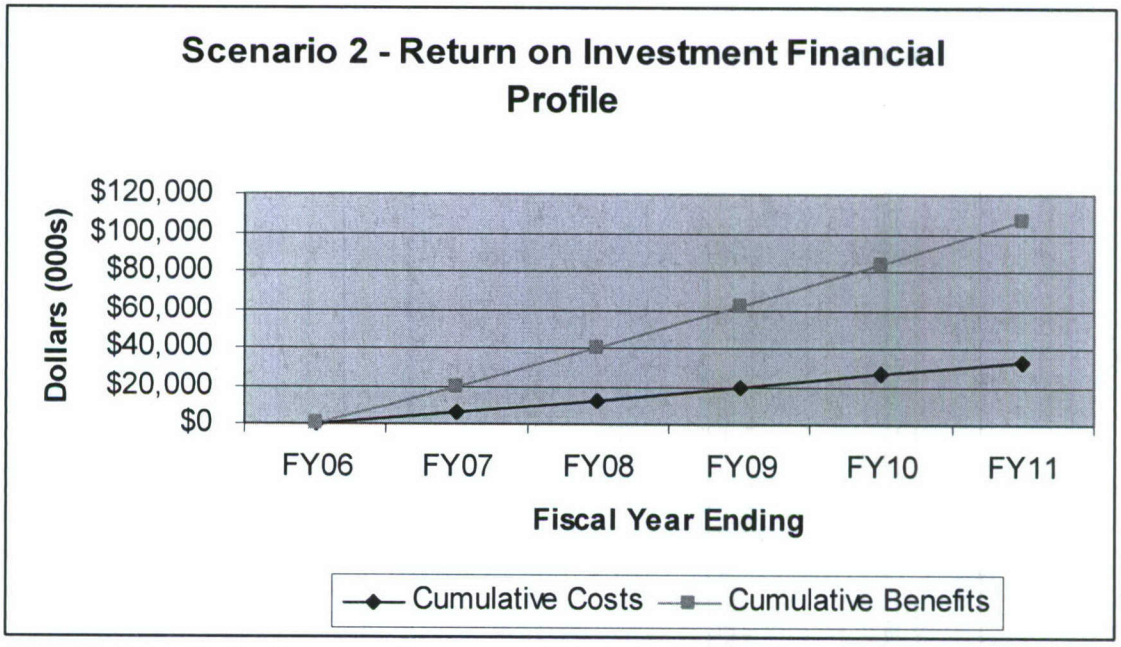

Figure 5. Scenario 2 – Return on Investment Financial Profile.

Expected earnings from scenario 3 that require the addition of five floater FTEs to the current staffing model and a total service distribution fee of 6.3 percent for PV services that includes additional options under direct delivery service level support are captured in Table 5.

Figure 6 shows the annual sustainment financial profile with total costs and benefits by year for five years. The analysis predicts a positive cumulative cash flow discounted at 2.6 percent of $68,125,300 over the five-year period (see Table 6). The ROI is calculated at 220 percent for the five-year period. Figure 7 displays the ROI financial profile with cumulative costs and benefits. A sizable benefit relative to a modest cost results in a payback period of approximately three-and-a-half months for scenario 3. The benefit-to-cost ratio for this scenario is 3.08.

Table 5. *Scenario 3 – Benefits, Costs, and Expected Earnings FY07-FY11 (Dollars in 000s)*

Annual Benefits	**FY07**	**FY08**	**FY09**	**FY10**	**FY11**
Total PV Sales*	$18,802.8	$19,461.9	$20,146.7	$20,852.0	$21,582.0
Cost Avoidance**	$906.4	$997.0	$1,096.8	$1,206.4	$1,327.1
Total Benefits	$19,709.2	$20,459.0	$21,243.4	$22,058.4	$22,909.1
Costs					
Operating Expenses					
FTE salaries***	($5,322.2)	($5,481.8)	($5,641.5)	($5,801.2)	($5,960.8)
PV Service Fees	($1,184.5)	($1,226.0)	($1,268.9)	($1,313.3)	($1,359.3)
Total Costs	($6,506.7)	($6,707.8)	($6,910.4)	($7,114.5)	($7,320.1)
Yearly Cash Flow	$13,202.5	$13,751.2	$14,333.0	$14,944.0	$15,589.0
Cum. Cash Flow	$13,202.5	$26,953.7	$41,286.7	$56,230.7	$71,819.7

*Total PV sales increases 3.5% per year for inflation.
**Cost avoidance increases by 10% per year.
***FTE salaries increase by 3% per year for inflation.

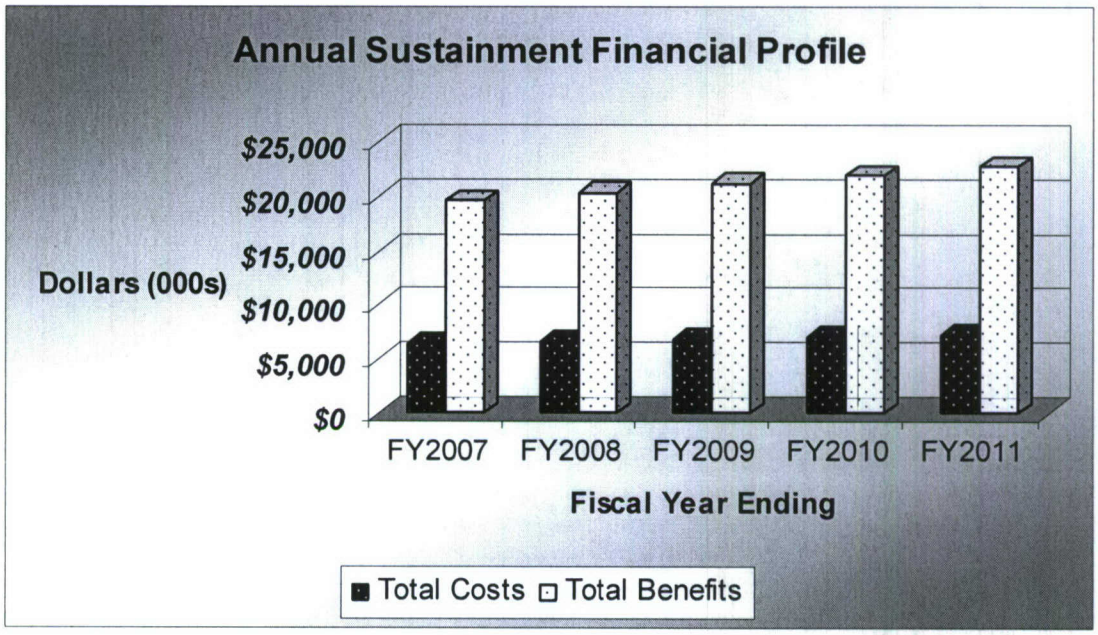

Figure 6. Scenario 3 – Annual Sustainment Financial Profile.

Table 6. *Scenario 3 – Cash Flow Summary.*

Cash Flow Summary	Year1 Sep 2007	Year2 Sep 2008	Year3 Sep 2009	Year4 Sep 2010	Year5 Sep 2011
Annual Benefit Impacts	$19,709.2	$20,459.0	$21,243.4	$22,058.4	$22,909.1
Annual Expense Item Impacts	(6,506.7)	(6,707.8)	(6,910.4)	(7,114.5)	(7,320.1)
Net Operating Inflow (Outflow)	$13,202.5	$13,751.2	$14,333.0	$14,944.0	$15,589.0
Net Cash Flow	$13,202.5	$13,751.2	$14,333.0	$14,944.0	$15,589.0
Cumulative Net Cash Flow	$13,202.5	$26,953.7	$41,286.7	$56,230.7	$71,819.7
Cash Flow discounted at 2.6%	$13,202.5	$13,402.7	$13,615.8	$13,836.4	$14,067.9
Cumulative Discounted Cash Flow	$13,202.5	$26,605.2	$40,221.0	$54,057.4	$68,125.3

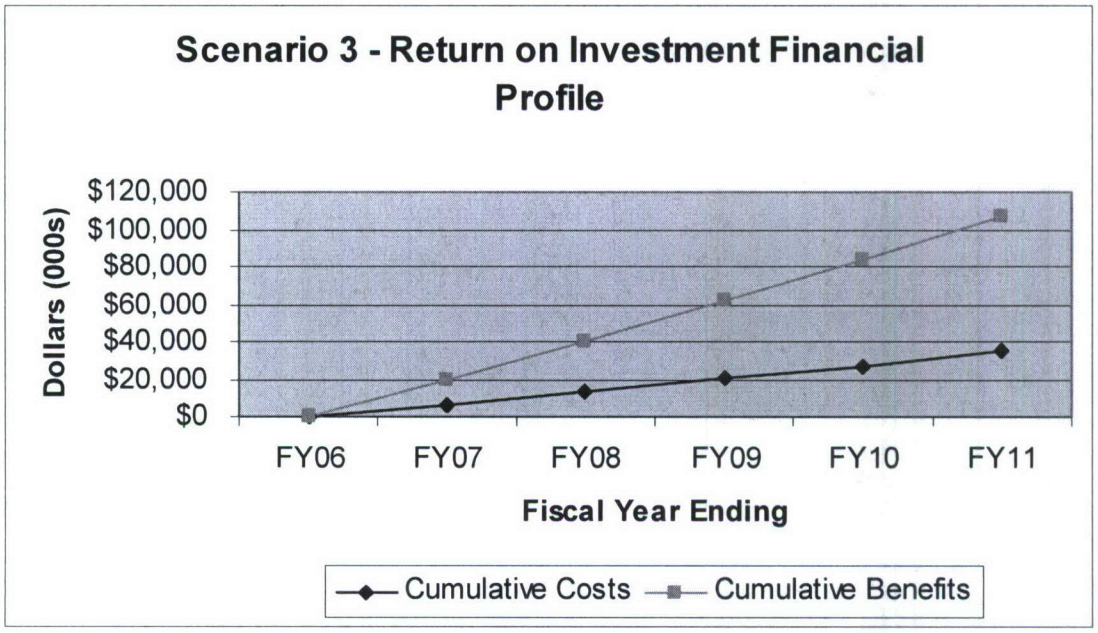

Figure 7. Scenario 3 – Return on Investment Financial Profile.

The current staffing model (scenario 2) and current staffing with the addition of five floater FTEs (scenario 3) both realize a greater ROI (expressed as NPV), cumulative discounted cash flows, and benefit-to-cost ratio than scenario 1. Initial costs are nearly $2.5 million and $2.3 million less per year for the five-year period respectfully. Scenario 2, or the status quo, is currently operating at a high level of efficiency. Rather than pay in excess of $13 million over five years for 51 vacant FTE authorizations, the hospital pays approximately $1.46 million for the same period for direct delivery service level support options under the Generation III PV contract (see Table 7). When compared to scenario 1, scenario 2 appreciates a cost savings of over $11 million for a process that is more efficient, thereby utilizing less FTEs and instead using additional PV services to provide a more streamlined supply chain operation. Further, the ability to fill 51 FTE authorizations under scenario 1 is unrealistic, given the nature of the A-76 study and BRAC. Scenario 3 appreciates a cost savings of $10.3 million, with a $1.4 million

salary for the five floater FTEs and a PV service fee of $1.46 million totaling approximately $2.87 million.

Table 7. *Cost Comparison of Scenarios 1, 2 & 3.*

Scenario 1	**FY07**	**FY08**	**FY09**	**FY10**	**FY11**	**Total**
Total salary for 51FTEs	$2,485,228	$2,559,785	$2,636,578	$2,715,676	$2,797,146	**$13,194,413**
Scenario 2						
Tot PV sales	$18,801,756	$19,459,817	$20,140,911	$20,845,843	$21,575,447	$100,823,775
PV service fee %	**0.0145**					
Fee for addt'l options	$272,625	$282,167	$292,043	$302,265	$312,844	**$1,461,945**
Scenario 3						
Total Salary	$266,620	$274,620	$282,860	$291,345	$300,085	$1,415,530
Tot PV sales	$18,801,756	$19,459,817	$20,140,911	$20,845,843	$21,575,447	$100,823,775
PV service fee %	**0.0145**					
Fee for addt'l options	$272,625	$282,167	$292,043	$302,265	$312,844	$1,461,945
Total salary & svc fee	$539,245	$556,787	$574,903	$593,610	$612,929	**$2,877,475**

The basic service distribution fee of 4.5 percent has been applied to all scenarios. An outside delivery service fee of .35 percent was removed from the 1.8 percent fee for additional direct delivery service level options because delivery support to DTHC and the Arlington annex has been DoD-directed. As a result, a service fee of 1.45 percent was used to calculate PV service costs against sales dollars.

Intangible Benefits

An analysis of the three scenarios has shown that no intangible benefits are inherent in scenario 1. Scenario 1 is consistent with the PV Generation II contract and requires the 100 percent fill of all FTE authorizations to perform additional services paid for under the existing contract. Therefore, it does not appreciate the intangible benefits associated with direct delivery service level support. Conversely, scenarios 2 and 3 both acknowledge the value of three

intangible benefits indicative of current services provided in the Generation III contract. Results of the direct delivery service level support survey revealed that the most valuable intangible benefits were increased quality of care, streamlined logistical operations, and the presence of a full-time on-site customer service representative. First, quality of care has improved because the division has been able to respond quickly to clinical requirements. Second, logistical operations have become more streamlined, as direct delivery has reduced customer wait time and has eliminated requirements for large warehouses and multiple layers of staff. Third, the presence of a full-time on-site customer service representative has reduced the number of times an item has been mishandled and has reduced procurement delays and workload for the logistics staff through intense management of PV drop-ship items and the adding of new items to the Owens & Minor database.

Further, scenario 3 yields three additional intangible benefits that are not a result of direct delivery service level support and are not indicative of scenarios 1 or 2. First, the addition of five floater FTEs provides the logistics division the ability to respond to contingencies that may include but are not limited to patient surges, matters of homeland defense or National Security, and taskings to support GWOT. Second, this augmentation provides the flexibility within the LSBs that is necessary to allow personnel to take leave, sick days, or retirement and addresses personnel shortfalls due to absenteeism and turnover. Third, scenario 3 provides the staffing necessary to foster growth and development of underutilized CAIM sites with the LSBs. Under its current staffing, the logistics division cannot effectively support the growth of the LSB CAIM sites because it is focused on a number of other priorities and responsibilities.

Costs

Scenario 1 requires FTE salary costs for 100 percent fill of 51 vacant FTE authorizations and a total service distribution fee of 4.5 percent that does not include direct delivery service level support (see Table 1). An assumption was made previously to adjust salaries by 3 percent per year over the five-year period to account for inflation, which was calculated using the BCA tool. The total service distribution fee is 4.5 of total PV sales for each year during the period, with the base year beginning at $846,079 ($18,801,756 x .045). Total PV sales are assumed to increase by approximately 3.5 percent annually. TRBO cost avoidance is assumed to increase by approximately ten percent per year. FY06 PV sales of $18.8 million and TRBO cost avoidance of approximately $906,000 exceed start-up costs for FTE salaries and PV service fees, so the scenario breaks even within five months.

Scenario 2 requires FTE salary costs coupled with a total service distribution fee of 6.3 percent that includes additional options under direct delivery service level support (see Table 3). A service fee of 6.3 percent incurs a larger initial cost for additional options under the contract at $1,184,511. The same assumptions apply to this scenario with respect to 3 percent for salary, 3.5 percent for PV sales inflation, and ten percent for TRBO cost avoidance. FY06 PV sales and TRBO cost avoidance dollars again exceed FTE salaries and services fees. However, because the total cost for FTEs in scenario 2 is approximately $13.5 million less than in scenario 1 over five years, the break even point is approximately three-and-a-half months.

Scenario 3 requires FTE salary costs and the addition of five floater FTEs rated GS grade 7 step 5 and a total distribution fee of 6.3 percent that also accounts for all of the direct delivery service level support options (see Table 5). The addition of the five floater FTEs in scenario 3 incurs an additional $1.4 million over five years that scenario 2 does not realize. Scenario 3

incurs that same 6.3 percent service fee for all of the PV service level options selected under the contract. Salary, PV sales inflation, and TRBO cost avoidance assumptions remain intact. FY06 PV sales and TRBO cost avoidance are substantially higher than initial costs for this scenario as well. Total FTE costs for scenario 3 are approximately $12 million less than scenario 1 over five years, so the break even point is also approximately three-and-a-half months.

Additionally, a review of scenario 3 that examines the potential development of underutilized CAIM sites at no additional cost is warranted. Aside from the $1.4 million impact of hiring five floater FTEs, the potential exists to further develop select CAIM sites in an effort to improve the efficiency of the supply chain business process. CAIM sites perform both ordering and delivery functions. Table 8 displays the WRAMC CAIM sites for the first six months of FY07, thereby showing PV sales for each location.

Table 8. *PV Sales by CAIM ordering site (October 2006 – March 2007).*

CAIM site	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Total
Central Materiel Service (CMS)	$38,991	$39,022	$39,052	$39,083	$39,114	$39,142	$234,404
LSB 1-3	$0	$768	$0	$817	$1,309	$672	$3,566
Operating Room (OR)	$33,989	$74,809	$51,193	$74,962	$90,097	$43,259	$368,310
4th Fl Wards & Clinics	$17,870	$13,651	$18,405	$19,284	$15,178	$36,015	$120,403
4th Fl Cardiac Cath Lab	$1,180	$4,104	$2,155	$42	$817	$37	$8,336
LSB 5	$0	$0	$0	$0	$0	$0	$0
LSB 6	$0	$0	$0	$0	$0	$0	$0
LSB 7	$0	$0	$612	$816	$1,927	$1,956	$5,311
Ft. Dix PPP	$24,446	$44,243	$0	$0	$26,243	$107,018	$201,950
							$942,280

The logistics division acknowledged the need to develop CAIM sites within the last twelve months in an effort to improve the efficiency of the business process. The priority of effort was initially focused on the 4th floor CAIM sites because the OR and its supporting wards and clinics are the greatest revenue drivers in the hospital. The Relative Weighted Products (RWP) and Relative Value Units (RVU) associated with surgical procedures drove the development of the

OR, wards and clinics, and the cardiac catherization laboratory. Further, the level of reimbursement for procedures on the 4th floor is much higher than other areas within the facility. The cardiac catherization laboratory has witnessed some growth in the first six months of FY07, but the potential for increased growth still exists.

Following the 4th floor CAIM sites, the logistics division turned its attention to Ft. Dix. Based on the number of soldiers who train and mobilize at the Power Projection Platform, an effort was made to develop the site to maximize capability while supporting GWOT. The Ft. Dix CAIM generated some fairly consistent sales for medical/surgical items through March 2007 and intends to maintain its ordering capacity. No units conducted mobilization in the months of December and January, which explains the lack or absence of PV sales for this period.

Aside from the 4th floor and Ft. Dix CAIM sites, the intent of scenario 3 is to examine the potential development of the LSB CAIM sites on floors 1-3 and 5-7. Undoubtedly, the ordering of medical/surgical items through the OR, 4th floor wards and clinics, and Ft. Dix is going well and must be maintained. The cardiac catherization laboratory is utilizing CAIM, but may require some additional effort to further develop the site. If the division is satisfied that the level of effort dedicated to the development of the 4th floor CAIM sites is commensurate with a level of efficiency that begins to yield a diminishing margin of return, then perhaps the focus should shift to LSBs 1-3 and 5-7.

Table 8 displays a modest degree of CAIM development for LSB 1-3 for the first half of FY07, yet the same is untrue of LSB 5-7. To date, no level of effort has been dedicated to the development of LSB 5-7 because the priority has focused on the 4th floor and Ft. Dix. The challenge of implementing a new initiative such as this is that it takes a significant amount of time to build a direct delivery catalog. Once built, if a customer does not require a given

product, then the CAIM will witness a drop in sales. Under the basic service distribution fee of the current contract, WRAMC pays 4.5 percent for unlimited ordering sites. Because the development of underutilized CAIM sites incurs no additional cost, it may be in the organization's best interest to invest the man-hours necessary to grow the business. Doing so could potentially improve the efficiency of the business process, as use of the CAIM sites ultimately reduces both the number of touches and the time associated with the delivery of an item to the user. The 4.5 percent fee is a sunk cost, therefore a decision to eliminate underutilized CAIM sites does not conserve dollars. As a result, this decision will not be considered as a viable option for the division.

Sensitivities, Risks, and Contingencies

Sensitivities

A sensitivity analysis was conducted in order to identify those variables that would have the greatest impact on cost savings associated with the best combination of FTE staffing and services offered under the PV contract. Sensitivity analysis demonstrates how changes in an input variable affect cost savings. Each input variable is held at its base case value except one. The relationship of the input variables assumes that changes in one variable are independent of changes in another (Gapenski, 2003). An assumption was made that FTE costs (salaries) and PV medical/surgical sales would be the most sensitive variables and were therefore analyzed independently to determine how changes in each affected the cost savings of all three scenarios. Given that the total service distribution fee is set at 4.5 percent for scenario 1 and 6.3 for scenarios 2 and 3 and is dependent on total PV sales, this variable was eliminated from consideration. Additionally, TRBO cost avoidance was excluded because the logistics division has no direct influence over it. Clinical Process Teams (CPT) are responsible for the

standardization of medical/surgical items and the logistics division appreciates cost avoidance for these items once they are placed on a Regional Incentive Agreement (RIA).

Total PV sales were held at their base case and then adjusted ± 20 percent for each of the three scenarios while FTE costs were held constant in order to examine changes in NPV. Separately, FTE costs were held at their base case and subsequently adjusted ± 20 percent for all three scenarios while PV sales remained constant to again observe changes in NPV. Given the high cost-of-living in the NCA and the competitive nature of employment, a metric of 20 percent was used to account for a potentially dramatic increase in GS salaries. The same 20 percent was applied to a potential increase in PV sales based on the development of underutilized CAIM sites. Conversely, the hospital could witness a decrease in sales based on improving the overall efficiency of the supply chain business process.

Results of the analysis indicated that PV sales had a greater influence on cost savings than FTE costs for all three scenarios. At its base case, PV sales in scenario 1 yielded an NPV of $58,281,400 (see Figure 8). NPV values ranged from a 20 percent reduction in PV sales of $13,323,000 to a 20 percent increase of $119,631,300. The large range of PV sales in scenario 1 is indicative of the greatest number of required FTEs and therefore the highest associated cost. However, even with a 20 percent reduction in PV sales and FTE costs held constant, scenario 1 yielded an ROI of 32.4 percent. Changes in FTE costs had less of an affect on cost savings. At its base case, scenario 1 yielded the same NPV of $58, 281,400 for FTE costs. NPV values then ranged from a 20 percent decrease in salary of $32,533,900 to a 20 percent increase of $76,914,100 (see Figure 9).

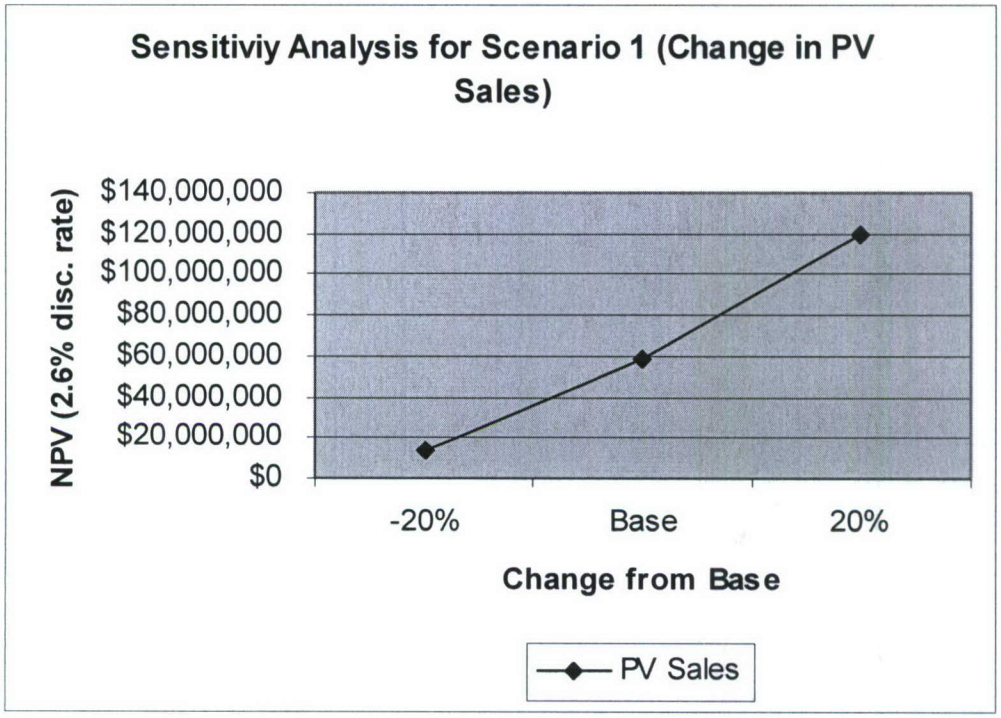

Figure 8. Sensitivity Analysis (Scenario 1) Change in PV Sales.

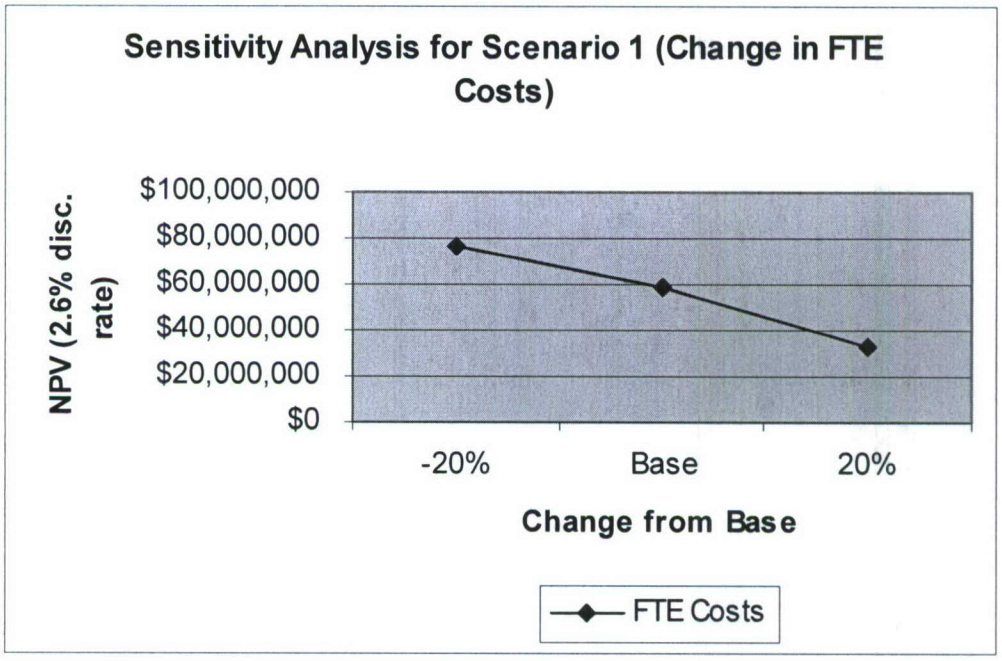

Figure 9. Sensitivity Analysis (Scenario 1) Changes in FTE Costs.

Scenario 2 yielded similar results relative to PV sales. Base case for scenario 2 yielded an NPV of $69,446,500. NPV values ranged from a 20 percent reduction in sales of $22,378,500 to a 20 percent increase in sales of $127,970,700 (see Figure 10). Changes in FTE costs for scenario 2 also had less of an affect on cost savings. At its base case, scenario 2 yielded the same NPV. NPV values then ranged from a 20 percent decrease in salary of $52,354,900 to a 20 percent increase of $81,810,300 (see Figure 11). A 20 percent reduction in PV sales yielded an ROI of 76.5 percent, or a 158 percent drop from the base case at 234 percent. The same reduction in FTE costs yielded an ROI of 472 percent because PV sales did not change.

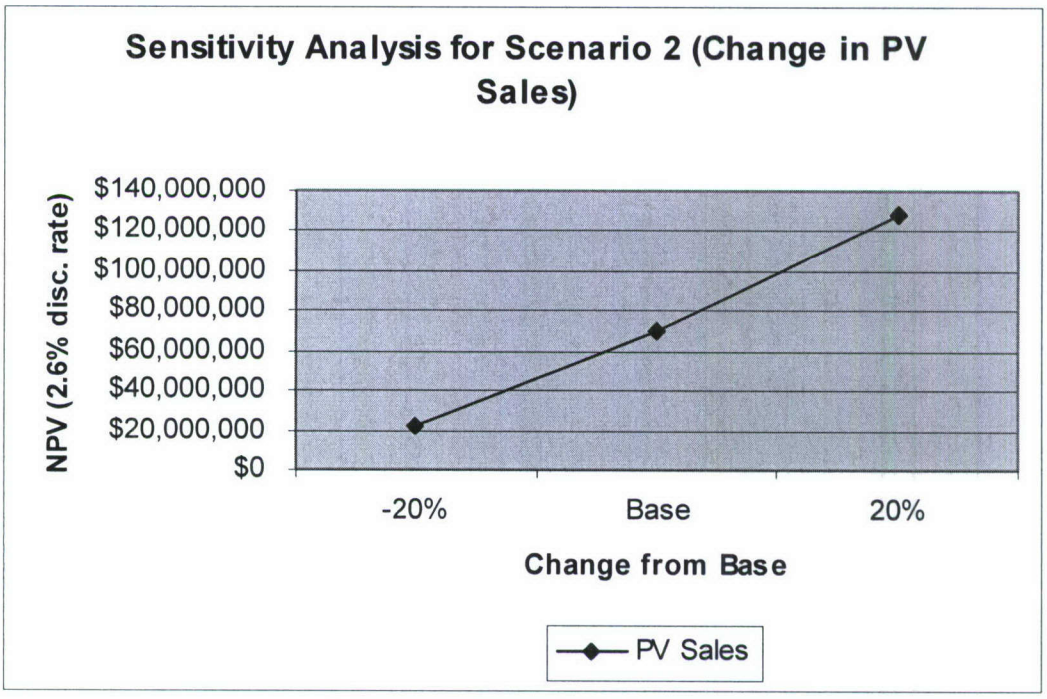

Figure 10. Sensitivity Analysis (Scenario 2) Change in PV Sales.

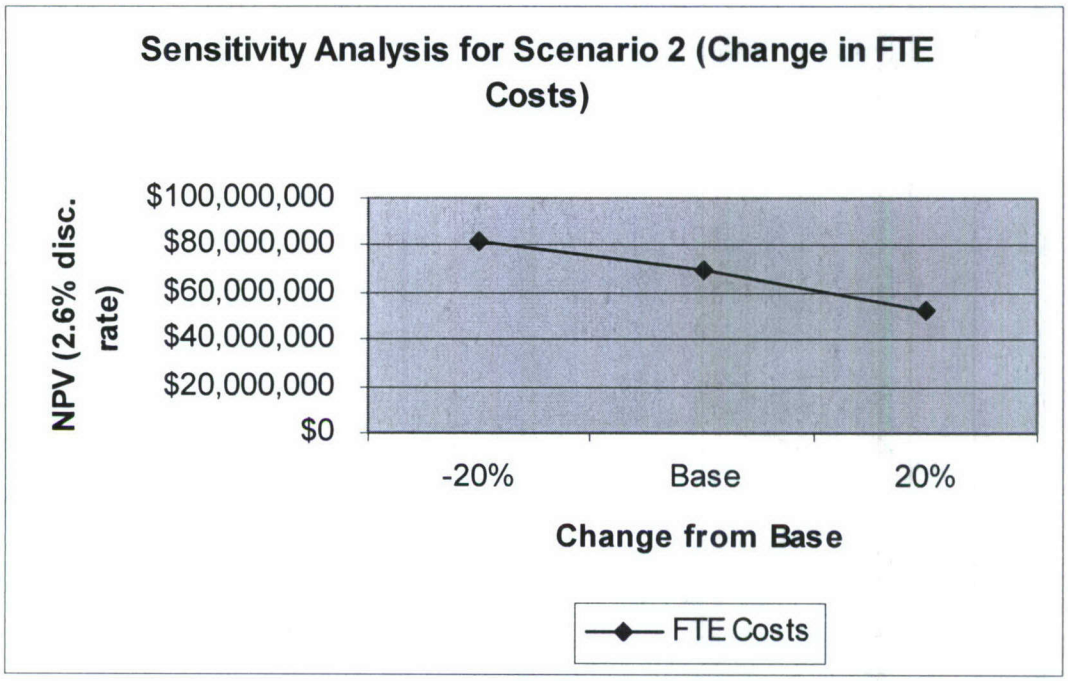

Figure 11. Sensitivity Analysis (Scenario 2) Change in FTE Costs.

Scenario 3 yielded results comparative to the first two scenarios. When examining PV sales, the base case yielded an NPV of $68,125,300. NPV values ranged from a 20 percent reduction in sales of $24,022,600 to a 20 percent increase in sales of $126,649,500 (see Figure 12). Changes in FTE costs for scenario 3 again had less of an affect on cost savings. At its base case, the same NPV was used for FTE costs. NPV values then ranged from a 20 percent decrease in salary of $50,132,700 to a 20 percent increase of $80,511,000 (see Figure 13). A 20 percent reduction in PV sales yielded an ROI of 81 percent. A 20 percent FTE cost increase yielded and an ROI of 103 percent while holding PV sales constant.

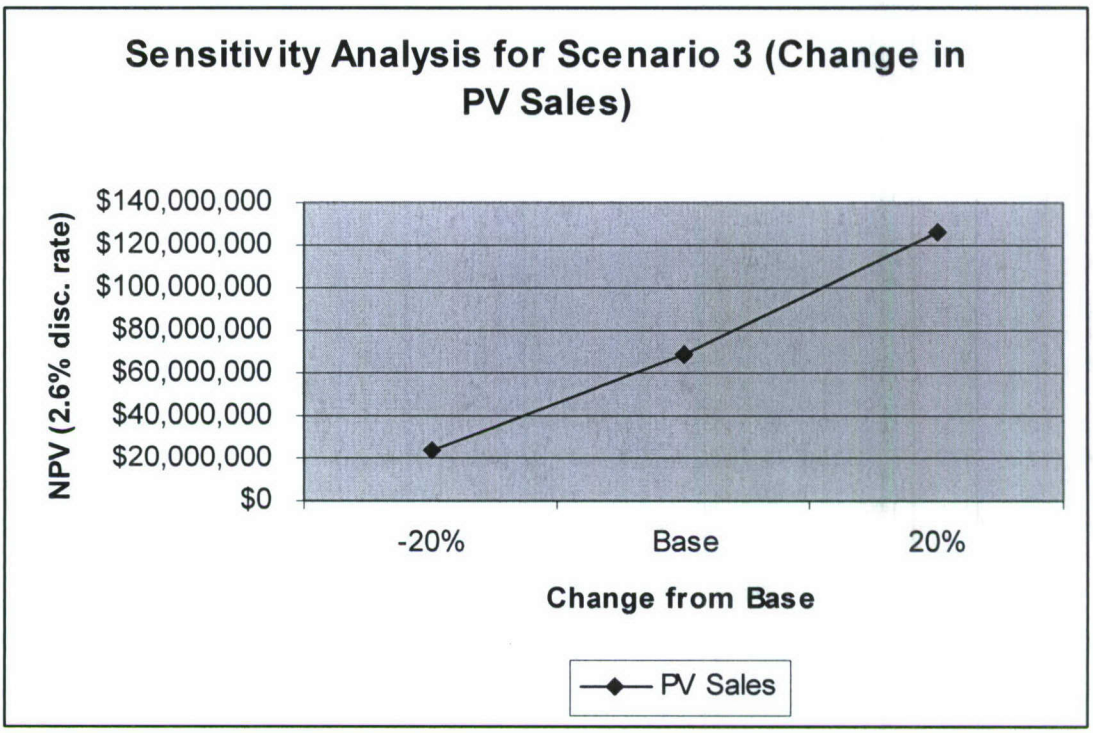

Figure 12. Sensitivity Analysis (Scenario 3) Changes in PV Sales.

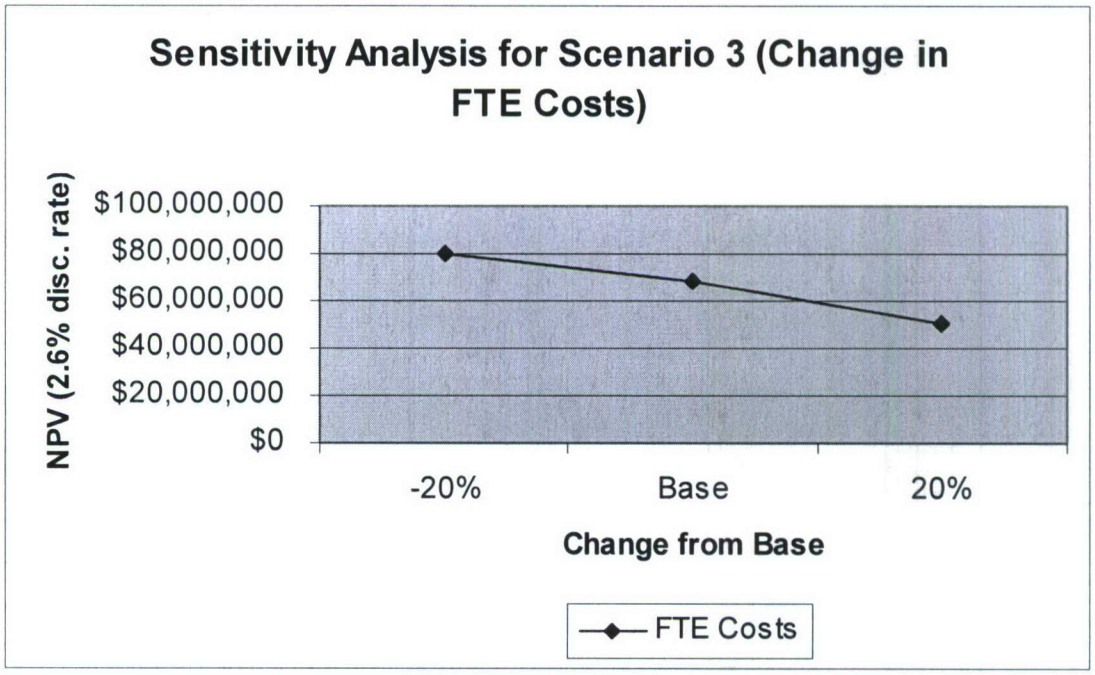

Figure 13. Sensitivity Analysis (Scenario 3) Change in FTE Costs.

Overall results of the sensitivity analysis indicated that PV sales was the more sensitive variable having a greater influence on cost savings for all three scenarios. The steeper lines for PV sales in each of the three scenarios show greater risk because small changes in sales ($\pm$20) from its expected value resulted in larger changes in NPV. Because PV sales display steeper lines than FTE costs, NPV is more sensitive to changes in PV sales than to changes in FTE costs. The limitations of the results are that sensitivity analysis does not consider the amount by which the input variable can actually change, so assumptions must be made. Further, sensitivity analysis does not account for any interaction among the input variables, as it assumes that changes in one variable have no affect on the changes of another.

Risks

Each of the three aforementioned scenarios assumes an inherent level of risk that must be addressed. Factors such as demand variability, sales price variability, input cost variability, and the ability to raise output prices all have an influence on the risks associated with the operation of the business process. Although all three scenarios yield positive cash flows, positive ROIs, and short payback periods, scenario 1 assumes the greatest level of risk. Scenario 1 requires the fill of 51 vacant FTE authorizations at a cost of more than $13 million over five years. In addition, scenario 1 does not offer direct delivery service level options under the PV contract. The scenario assumes that a fully-staffed logistics division will provide all of the direct delivery service level options currently provided by the PV and will do so in a manner that is equally efficient. Given that the current business process is operating at a high level of efficiency, placing direct delivery service level options back into the hands of the logistics staff presents a level of risk that is unacceptable to the command.

Scenario 2 (status quo) assumes minimal risk relative to FTE costs because it does not require additional personnel. Further, the $1.46 million paid for direct delivery service level options in scenario 2 is far less risky than paying the salaries of 51 additional FTEs in scenario 1 who are required to provide these additional options instead of the PV. However, without the addition of five floater FTEs as outlined in scenario 3, the division will not be able to respond to additional requirements within the command.

Scenario 3 assumes more risk than scenario 2 initially because it requires $1.4 million for the addition of five floater FTEs. However, scenario 3 acknowledges three additional tangible benefits that are not available under scenarios 1 and 2. First, scenario 3 provides the ability to respond to contingencies such as patient surges, matters of homeland defense and National Security, and taskings required to support GWOT. Second, scenario 3 also provides flexibility to the LSBs, thereby allowing personnel to take leave, sick days, and retirement and addresses personnel shortfalls due to absenteeism and turnover. Third, scenario 3 provides staffing that is necessary to promote the growth of underutilized LSB CAIM sites, as the current staff is unable to do so based on a myriad of other highly prioritized requirements.

Contingencies

It is also relevant to consider a number of contingencies if the scenarios could not be implemented or conditions of the environment changed to such an extent that military personnel were removed from the business process to support operational requirements. First, the logistics division could share personnel resources through BRAC with NNMC in an effort to supplement each other's workforce based on mission requirements. Both commands need to work together now to smooth the transition process as they prepare for the realignment scheduled for 2011. This option presents a challenge to command and control, however, as a reduction in personnel

authorizations and functions takes place and personnel from each organization compete for individual positions. Second, the organization could modify the current contract to increase the current service provider by calling in a Third Party Logistics (TPL) vendor such as Eagle Group to run the entire business process in lieu of military personnel who are reassigned to support other requirements. A variation of this solution could be to modify the existing base operations contract to expand hospital requirements for logistics services.

Third, the contract could be modified to bring in a PV such as Owens and Minor or Cardinal Health, who have experience in running hospital logistics. Initial discussions regarding this type of solution have been conducted by the command. However, a cost-benefit analysis has not been conducted for these types of contract modifications. Future studies could examine one or more of these contingencies for feasibility. A last option considers placing DTHC and the Arlington Annex on its own contract. Doing so would save the organization a .10 percent service fee of $18,800 or $94,000 over five years for outside delivery and it would eliminate the administrative costs associated with the training and customer support of logistics personnel at these sites. However, given that the cost savings associated with this option are minimal, it is both more realistic and cost-effective to retain these sites under the contract.

Recommendations/Conclusions

Supply chain management of medical/surgical items is an increasingly important part of healthcare delivery. The nature, volume, and complexity of medical care provided at WRAMC demands a supply chain management solution that provides the most efficient use of FTE staffing and PV service elections paid for under the contract. The A-76 Study and the BRAC Legislation of 2005 have forced the logistics division to make the most efficient use of the supply chain business process at the lowest cost to the Government in light of manning

shortfalls. Based on a thorough analysis of the three proposed scenarios, the author recommends scenario 3 as the best supply chain management solution for the hospital.

Scenario 1 assumes the greatest level of risk as a supply chain management. Although the scenario yields an ROI of 142 percent and a cumulative discounted cash flow of over $58 million, it requires 100 percent fill of FTE authorizations at a cost that exceeds $13 million over five years. The ability to fill these personnel authorizations in light of A-76 and BRAC is unrealistic. With a total service distribution fee of 4.5 percent, scenario 1 does not offer all of the direct delivery service level options under the current PV contract. Instead, the scenario assumes that a fully-staffed logistics division will provide all of these additional options at a level of efficiency commensurate with the PV. Assigning responsibility to the logistics division for direct delivery service level support that is operating efficiently is not consistent with best business practices. Further, scenario 1 does not produce intangible benefits realized in scenarios 2 and 3. The direct delivery service level support options provided by these scenarios have improved overall quality of care, have streamlined logistical operations, and have reduced customer wait times with the presence of a full-time on-site PV customer service representative. Therefore, scenario 1 is no longer considered a viable supply chain management solution for the hospital.

Scenario 2 (status quo) assumes less risk as a solution when compared to scenario 1. Scenario 2 yields a more favorable ROI of 235 percent and a cumulative discounted cash flow that exceeds $69 million. This scenario incurs the lowest FTE cost ($26 million over five years) of all three scenarios because it does not require additional personnel. Scenario 2 presents less of a risk than scenario 1 because the $1.46 million paid for direct delivery service level options is approximately $11 million less than the $13 million required in scenario 1 to fill 51 vacant FTEs

who in turn must provide these services. Further, the additional options paid for under the PV contract have provided intangible benefits that contribute greatly to the overall value of the solution. However, the current business process has attained a level of efficiency that does not allow the division to respond appropriately to contingencies. With the current level of staff, the division cannot effectively respond to patient surges, matters of National Security, or operational requirements. Scenario 2 does not address the ability to develop underutilized CAIM sites and cannot respond effectively to personnel turnover, retirement, absenteeism, illness, and leave. Based on these shortfalls, the status quo is no longer a viable solution for the hospital.

Scenario 3 is the best supply chain management solution for the hospital. This scenario also assumes less risk than scenario 1. The $2.8 million required in scenario 3 for FTEs and additional service options is significantly less than the $13 million required in scenario 1 for 100 percent fill of FTE authorizations. Scenario 3 yields an ROI of 220 percent and a cumulative discounted cash flow in excess of $68 million for five years, which is far better than scenario 1, yet not as good as scenario 2. Further, the addition of five floater FTEs incurs a salary cost of $1.4 million during the period, making the scenario riskier than scenario 2. Although slightly riskier than scenario 2 at the outset, scenario 3 provides three intangible benefits that are not available in scenarios 1 and 2 that prove more valuable than the salary costs for five floater FTEs over a five-year period.

First, the addition of five floater FTEs improves the division's ability to respond to contingencies such as patient surges, National Security matters, and operational requirements that displace military personnel. Second, scenario 3 provides flexibility to the LSBs, as it allows personnel to take leave, take sick days, retire, and relocate. Third, this personnel adjustment provides the staffing necessary to stimulate growth and development of underutilized CAIM

sites. As previously stated, WRAMC pays a basic service distribution fee of 4.5 percent for unlimited ordering sites, therefore the elimination of underutilized CAIM sites would not save money. Admittedly, no guarantee exists for the success of anticipated growth in these sites. PV sales projections for these sites are extremely conservative. However, the division believes that small growth could potentially protect its current investment, as the use of CAIM sites reduces the number of touches for medical/surgical items and improves efficiency. In any event, the value of scenario 3 rests primarily in the ability to respond to contingencies and the flexibility afforded to the LSBs. The current business process is operating at a level of efficiency whereby the current staff does not have the ability to respond to patient surges or National emergencies and cannot provide flex staff to accommodate retirement, illness, leave and turnover. In weighing all of the alternatives, the logistics division is willing to assume the risk of paying the $1.4 million floater FTE salary in exchange for the value of the intangible benefits in scenario 3. A decision to stay with the status quo is not sufficient to address the shortfalls as outlined. Ultimately, failure to hire additional FTEs as proposed could place a greater burden on the logistics staff and force the command to assume greater risk based on the inability to respond to additional requirements as they arise.

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Appendix A
FY05 Table of Distribution and Allowances – WRAMC

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SECTION II - PERSONNEL ALLOWANCE

PARA	LN	POSITION OR DUTY TITLE	GR	POSCO	SQI	A1	A2	A3	A4	LI	LPI	BR	ID	P1	P2	P3	AMSCO	SWC	MDEP	REQ	AUTH	NET CHANGE REQ	NET CHANGE AUTH	R1	R2	R3
645	07	PHARMACIST	13	00660								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	1					
645	08	PHARMACIST	11	00660								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	1					
645	09	INV MGT SP	09	02010								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	0					
645	10	LD PHARM TECH	07	00661								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	1					
645	11	PHARM TECH	06	00661								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	1					
645	12	PHARM TECH	06	00661								GS	C	Y	Y	Y	84770031	HRB	HSDH	1	1					
		PARAGRAPH 645 TOTALS																		13	12					
665	00	DEPT MINISTRY		W2DH01	HW	KW																				
665	01	CHIEF	05	56A00		7R						CH	K	F	E	Y	84770051	BZG	HSDH	1	1					
665	02	SR CH CLIN	04	56A00		5K	7R					CH	K	Y	Y	Y	84770051	BZG	HSDH	1	1					
665	03	CH CLIN	04	56A00		7F	7R					CH	K	Y	Y	Y	84770051	BZG	HSDH	1	1			96		
665	04	CH CLIN	04	56A00		7R						CH	K	Y	Y	Y	84770051	BZG	HSDH	1	1			96		
665	05	CH CLIN	04	56A00		7R						CH	K	Y	Y	Y	84770051	BZG	HSDH	1	1			96		
665	06	CH CLIN	03	56A00		7R						CH	K	Y	Y	Y	84770051	BZG	HSDH	2	2			96		
665	08	CH CLIN	03	56A00		7R						CH	K	Y	Y	Y	84770051	BZG	HSDH	1	1			96		
665	09	CH ASST NCO	E7	56M40								NC	I	Y	Y	Y	84770051	BZG	HSDH	1	1					
665	10	CH ASST	E4	56M10									I	Y	Y	Y	84770051	BZG	HSDH	1	1					
665	11	CH ASST	E3	56M10									I	Y	Y	Y	84770051	BZG	HSDH	2	2					
665		ADMIN SPT ASST	07	00303								GS	C	Y	Y	Y	84770051	BZG	HSDH	1	1					
		MAJOR PARAGRAPH 665 TOTALS																		13	13					
665A	00	CPE CENTER		W2DH01	HW	KW																				
665A	01	CLIN PAST ED	05	56D00								CH	K	Y	Y	Y	84770051	BZH	HSDH	1	1			96	ZE	
665A	02	CH ASST NCO	E6	56M30								NC	I	Y	Y	Y	84770051	BZH	HSDH	1	1			ZE		
665A	03	CH ASST	E3	56M10									I	Y	Y	Y	84770051	BZH	HSDH	1	1			ZE		
665A	04	SECY (OA)	05	00318								GS	C	Y	Y	Y	84770051	BZH	HSDH	1	1			ZE		
		SUB PARAGRAPH 665A TOTALS																		4	4					
		PARAGRAPH 665 TOTALS																		17	17					
700	00	DIR OF LOGISTICS		W2DH23	HW	KW																				
		MAJOR PARAGRAPH 700 TOTALS																		0	0					
700A	00	OFF OF DIRECTOR		W2DH23	HW	KW																				
700A	01	DIRECTOR	06	70K67								MS	K	D	A	B	84770051	NNA	HSDH	1	1			SA	YB	
700A	02	DEPUTY DIR	05	70K67								MS	K	D	A	B	84770051	NNA	HSDH	1	0					
700A	03	CH MED LOG NCO	E9	91Z50								NC	I	F	E	Y	84770051	NNA	HSDH	1	1			ZA	YB	
700A	04	ADMIN OFFICER	11	00341								GS	C	Y	Y	Y	84770051	NNA	HSDH	1	1			YB		

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SECTION II - PERSONNEL ALLOWANCE

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		SUB PARAGRAPH 700A TOTALS																		5	4				
700B	00	AUTOMATION BR		W2DH23	HW	KW																			
700B	01	SUP SYS ANAL	12	02003							GS	C	Y	Y	Y		84770061	NNA	HSDH	1	1			YB	
700B	02	SUP SYS ANAL	12	02003							GS	C	Y	Y	Y		84770061	NNA	HSDH	1	1			YB	
		SUB PARAGRAPH 700B TOTALS																		2	2				
		PARAGRAPH 700 TOTALS																		7	6				
701	00	HOSPITAL LOG DIV		W2DH23	HW	KW																			
		MAJOR PARAGRAPH 701 TOTALS																		0	0				
701A	00	OFFICE OF CHIEF		W2DH23	HW	KW																			
701A	01	HS MAT OFF	05	70K67							MS	K	Y	Y	Y		84770061	NNB	HSDH	1	1				
701A	02	HS MAT OFF	03	70K67							MS	K	Y	Y	Y		84770061	NNB	HSDH	1	1				
701A	03	MED LOG NCO	E8	91J50							NC	I	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
701A	04	ADMIN COORD (OA)	07	00303							GS	C	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
		SUB PARAGRAPH 701A TOTALS																		4	4				
701B	00	LOG SPT BR-FL 1-3		W2DH23	HW	KW																			
701B	01	SUPV LOG MGT SP	11	00346							GS	C	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
701B	02	MED LOG SGT	E5	91J20							NC	I	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
701B	03	MED LOG SP	E4	91J10								I	Y	Y	Y		84770061	NNB	HSDH	4	4			YB	
701B	04	MED LOG SP	E3	91J10								I	Y	Y	Y		84770061	NNB	HSDH	2	2			YB	
701B	05	MED LOG SP	E3	91J10								I	Y	Y	Y		84770061	NNB	HSDH	2	2			YB	
701B	06	SUPPLY TECH	06	02005							GS	C	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
		SUB PARAGRAPH 701B TOTALS																		11	11				
701C	00	LOG SPT BR - FL4		W2DH23	HW	KW																			
701C	01	HS MAT OFF	04	70K67							MS	K	Y	Y	Y		84770061	NNB	HSDH	1	1				
701C	02	MED LOG NCO	E6	91J30							NC	I	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	
701C	03	MED LOG SGT	E5	91J20							NC	I	Y	Y	Y		84770061	NNB	HSDH	2	2			YB	
701C	04	MED LOG SP	E4	91J10								I	Y	Y	Y		84770061	NNB	HSDH	3	3			YB	
701C	05	MED LOG SP	E4	91J10								I	Y	Y	Y		84770061	NNB	HSDH	4	4			YB	
701C	06	MED LOG SP	E3	91J10								I	Y	Y	Y		84770061	NNB	HSDH	3	3			YB	
701C	07	MED LOG SP	E3	91J10								I	Y	Y	Y		84770061	NNB	HSDH	5	5			YB	
701C	08	SUP MGT SP	11	02003							GS	C	Y	Y	Y		84770061	NNB	HSDH	1	1			YB	

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701C	09	LOG MGT SP	09	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701C	10	LOG MGT SP	09	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701C	11	SUPPLY TECH (OA)	06	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701C	12	SUPPLY TECH (OA)	05	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	8	4			YB		
		SUB PARAGRAPH 701C TOTALS																		31	27					
701D	00	LOG SPT BR - FL5		W2DH23	HW	KW																				
701D	01	SUPV LOG MGT SP	11	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701D	02	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701D	03	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701D	04	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
		SUB PARAGRAPH 701D TOTALS																		4	4					
701E	00	LOG SPT BR - FL6		W2DH23	HW	KW																				
701E	01	SUPV LOG MGT SP	12	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701E	02	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701E	03	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701E	04	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	2	2			YB		
701E	[illegible]	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701	[illegible]	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNB	HSDH	2	2			YB		
701E	[illegible]	SUPPLY MGT REP	11	02003								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701E	08	LD SUPPLY TECH	07	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701E	09	SUPPLY TECH (OA)	06	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
		SUB PARAGRAPH 701E TOTALS																		11	11					
701F	00	LOG SPT BR - FL7		W2DH23	HW	KW																				
701F	01	SUPV LOG MGT SP	11	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701F	02	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701F	03	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB		
701F	04	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	2	2			YB		
701F	05	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNB	HSDH	2	2			YB		
		SUB PARAGRAPH 701F TOTALS																		7	7					
701G	00	ENV SVC BR		W2DH23	HW	KW																				
701G	01	ENV SVC MGR	12	00301								GS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YB		
701G	02	HOSP HSK OFFICER	11	00673								GS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB	
701G	03	SECY (OA)	06	00318								GS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB	
701G	04	CUST GEN SUPV	04	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB	
701G	05	MAT HNDLR SUPV	04	06907								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB	
701G	06	CUST WK SUPV	03	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB	

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PARA	LN	POSITION OR DUTY TITLE	GR	POSCO	SQI	A1	A2	A3	A4	LI	LPI	BR	ID	P1	P2	P3	AMSCO	SWC	MDEP	REQ	AUTH	NET CHANGE REQ	NET CHANGE AUTH	R1	R2
701G	07	CUST WK SUPV	03	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	08	CUST WK SUPV	03	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	09	CUST WK SUPV	03	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	10	CUST WK SUPV	02	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	2	2			YZ	YB
701G	11	CUST WK SUPV	02	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	12	CUST WK SUPV	02	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	13	CUST WK SUPV	02	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	14	CUST WK SUPV	01	03566								WS	C	Y	Y	Y	84770062	KPA	HSDH	2	2			YZ	YB
701G	15	MAT HNDLR LDR	05	06907								WL	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	16	CUST WKR LDR	03	03566								WL	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	17	CUST WKR LDR	03	03566								WL	C	Y	Y	Y	84770062	KPA	HSDH	4	4			YZ	YB
701G	18	CUST WKR LDR	02	03566								WL	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	19	CUST WKR LDR	02	03566								WL	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	20	CUST WKR LDR	02	03566								WL	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	21	CUST WKR INSP	05	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	22	MAT HNDLR	05	06907								WG	C	Y	Y	Y	84770062	KPA	HSDH	3	3			YZ	YB
701G	23	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	5	5			YZ	YB
701G	24	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	4	4			YZ	YB
701G	25	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	1	1			YZ	YB
701G	26	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	13	13			YZ	YB
701G	27	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	31	31			YZ	YB
701G	28	CUST WKR	03	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	2	2			YZ	YB
701G	29	CUST WRK	02	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	27	27			YZ	YB
701G	30	CUST WKR	02	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	14	14			YZ	YB
701G	31	CUST WKR	02	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	20	20			YZ	YB
701G	32	CUST WKR	02	03566								WG	C	Y	Y	Y	84770062	KPA	HSDH	5	5			YZ	YB
		SUB PARAGRAPH 701G TOTALS																		161	161				
		PARAGRAPH 701 TOTALS																		229	225				
704A	00	FAC MGT OFC		W2DH23	HW	KW																			
704A	01	SUPV GEN ENGR	14	00801								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	1			YB	ZE
704A	02	MED LOG SP	E4	91J10									I	Y	Y	Y	846278U1	JCE	QRPA	1	1			YB	ZE
704A	03	MED LOG SP	E3	91J10									I	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
704A	04	SUPV GEN ENGR	12	00801								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	1			YB	ZE
704A	05	MECH ENGR	12	00830								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
704A	06	ELEC ENGR	12	00850								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
704A	07	FACILITY MGR	12	01640								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
704A	08	ARCHITECT	11	00802								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	1			YB	ZE
704A	09	ENGR TECH	11	00802								GS	C	Y	Y	Y	846278U1	JCE	QRPA	2	1			YB	ZE
704A	10	ENGR TECH	11	00802								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
704A	11	ADMIN COORD	07	00303								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	1			YB	ZE

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704A	12	SECY (OA)	05	00318								GS	C	Y	Y	Y	846278U1	JCE	QRPA	1	0			YB	ZE
		PARAGRAPH 704 TOTALS																		13	6				
705	00	MAT MGT DIV		W2DH23	HW	KW																			
705	01	MED LOG NCO	E7	91J40								NC	I	F	F	Y	84770061	NNB	HSDH	1	1			ZB	YE
705	02	SUPPLY MGT OFF	13	02003								GS	C	F	C	Y	84770061	NNB	HSDH	1	1			SB	
705	03	ADMIN COORD	07	00303								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
		MAJOR PARAGRAPH 705 TOTALS																		3	3				
705D	00	MAT MGT SEC		W2DH23	HW	KW																			
705D	01	HS MAT OFF	05	70K67								MS	K	F	E	Y	84770061	NNB	HSDH	1	1			SB	
705D	02	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	03	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	04	S INV MGT SP	12	02010								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	05	S INV MGT SP	10	02010								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	06	S INV MGT SP	10	02010								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	07	INV MGT SP	09	02010								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D	08	INV MGT SP	08	02010								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705[illegible]		SUPPLY TECH	07	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
70[illegible]		SUPPLY TECH	07	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705D [illegible]		SUPPLY TECH	07	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	3	3			YB	
705D	12	SUPPLY TECH	06	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	0			YB	
705D	13	SUPPLY TECH	05	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
		SUB PARAGRAPH 705D TOTALS																		15	14				
705E	00	MAT DIST BR		W2DH23	HW	KW																			
705E	01	SUPV LOG MGT SP	12	00346								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705E	02	SUPV SUP TECH	09	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	0			YB	
705E	03	MED LOG SGT	E5	91J20								NC	I	F	E	Y	84770061	NNB	HSDH	1	1			YB	
705E	04	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNB	HSDH	2	2			YB	
705E	05	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705E	06	LD SUPPLY TECH	06	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705E	07	SUPPLY TECH	05	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	1	1			YB	
705E	08	SUPPLY TECH	05	02005								GS	C	Y	Y	Y	84770061	NNB	HSDH	2	2			YB	
705E	09	MAT HNDLR SUPV	03	06907								WS	C	Y	Y	Y	84770061	NNB	HSDH	3	3			YB	
705E	10	MAT HNDLR	06	06907								WG	C	Y	Y	Y	84770061	NNB	HSDH	4	4			YB	
705E	11	MAT HNDLR	05	06907								WG	C	Y	Y	Y	84770061	NNB	HSDH	3	1			YB	
705E	12	MAT HNDLR	04	06907								WG	C	Y	Y	Y	84770061	NNB	HSDH	9	9			YB	

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		SUB PARAGRAPH 705E TOTALS																		29	26					
705F	00	STORE & DIST BR		W2DH23	HW	KW																				
705F	01	HS MAT OFF	03	70K67							MS	X	Y	Y	Y	84770061	NNB	HSDH		1	1					
705F	02	MED LOG SGT	E5	91J20							NC	I	Y	Y	Y	84770061	NNB	HSDH		1	1			YB		
705F	03	MED LOG SP	E4	91J10								I	Y	Y	Y	84770061	NNB	HSDH		1	1			YB		
705F	04	MAT HNDLR SUPV	08	06907							WS	C	Y	Y	Y	84770061	NNB	HSDH		1	1			YB		
705F	05	MAT HNDLR SUPV	07	06907							WS	C	Y	Y	Y	84770061	NNB	HSDH		1	1			YB		
705F	06	MAT HNDLR SUPV	04	06907							WS	C	Y	Y	Y	84770061	NNB	HSDH		2	2			YB		
705F	07	MAT HNDLR INSP	07	06907							WG	C	Y	Y	Y	84770061	NNB	HSDH		1	1			YB		
705F	08	MAT HNDLR	06	06907							WG	C	Y	Y	Y	84770061	NNB	HSDH		4	3			YB		
705F	09	MAT HNDLR	05	06907							WG	C	Y	Y	Y	84770061	NNB	HSDH		2	2			YB		
		SUB PARAGRAPH 705F TOTALS																		14	13					
705G	00	SUPPLY & SERVICES BR		W2DH23	HW	KW																				
705G	01	CHIEF	W3	670A0							SW	P	F	E	Y	84770063	NNA	HSDH		1	1			SB		
705G	02	MED LOG SGT	E5	91J20							NC	I	F	E	Y	84770063	NNA	HSDH		1	1					
705G	03	MED LOG SP	E3	91J10								I	Y	Y	Y	84770063	NNA	HSDH		1	1					
705G	04	S SUP MGT SP	11	02003							GS	C	Y	Y	Y	84770063	NNA	HSDH		1	1			YB		
705G	05	S PROD SVC CLK	07	00303							GS	C	Y	Y	Y	84770063	NNA	HSDH		1	1			YB		
705G	06	LD SUPPLY TECH	07	02005							GS	C	Y	Y	Y	84770063	NNA	HSDH		1	0			YB		
705G	07	PROD SVC CLK	06	00303							GS	C	Y	Y	Y	84770063	NNA	HSDH		1	1			YB		
705G	08	PROD SVC CLK	05	00303							GS	C	Y	Y	Y	84770063	NNA	HSDH		3	2			YB		
705G	09	SUPPLY TECH	05	02005							GS	C	Y	Y	Y	84770063	NNA	HSDH		2	1			YB		
705G	10	OFC AUTOM CLK	04	00326							GS	C	Y	Y	Y	84770063	NNA	HSDH		1	1			YB		
705G	11	TOOL&PTS ATTD	06	06904							WG	C	Y	Y	Y	84770063	NNA	HSDH		1	1			YB		
		SUB PARAGRAPH 705G TOTALS																		14	11					
		PARAGRAPH 705 TOTALS																		75	67					
708G	00	LINEN DISTR LAUNDRY		W2DH23	HW	KW																				
708G	01	SEWING MAC OPR	04	03111							CC	T	Y	Y	Y	84770064	KLC	HSDH		1	1			49	MP	MY
708G	02	LAUNDRY WKR	02	07304							CC	T	Y	Y	Y	84770064	KLC	HSDH		21	21			49	MP	MY
708G	03	PRESSER	02	07306							CC	T	Y	Y	Y	84770064	KLC	HSDH		3	3			49	MP	MY
		PARAGRAPH 708 TOTALS																		0	0					
		STD RMK CODE (NON-ADD) TOTALS																		25	25					
715	00	CLIN ENG DIV		W2DH23	HW	KW																				
715	01	MAINT MGR	14	01601							GS	C	F	C	Y	84770063	NQA	HSDH		1	1			SB		
715	02	ADMIN COORD (OA)	08	00303							GS	C	F	C	Y	84770063	NQA	HSDH		1	1			YB		

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715	03	OFC AUTOM ASST (OA)	05	00326								GS	C	F	C	Y	847796CD	NQA	QLOG	1	0			YB		
		MAJOR PARAGRAPH 715 TOTALS																		3	2					
715A	00	BIOMED REP BR		W2DH23	HW	KW																				
715A	01	C MED MAINT BR	W4	670A0								SW	P	F	E	Y	84770063	MAA	HSDH	1	1			SB		
715A	02	SR MED MAINT NCO	E8	91A50								NC	I	F	E	Y	84770063	MAA	HSDH	1	1					
715A	03	MED EQ MN NCO	E7	91A40								NC	I	Y	Y	Y	84770063	MAA	HSDH	2	2					
715A	04	MED EQ REP SGT	E6	91A30								NC	I	F	E	Y	84770063	MAA	HSDH	1	1					
715A	05	MED EQ REP SGT	E6	91A30								NC	I	Y	Y	Y	84770063	MAA	HSDH	2	2					
715A	06	MED EQ REP SGT	E5	91A20								NC	I	Y	Y	Y	84770063	MAA	HSDH	5	5					
715A	07	MED EQ REP	E4	91A10									I	Y	Y	Y	84770063	MAA	HSDH	2	2			YB		
715A	08	MED EQ REP	E4	91A10									I	Y	Y	Y	84770063	MAA	HSDH	4	4					
715A	09	BIOMED ENGR	13	00858								GS	C	Y	Y	Y	84770063	MAA	HSDH	1	1			YB		
715A	10	S BIOMED TECH	12	00802								GS	C	Y	Y	Y	84770063	MAA	HSDH	2	2			YB		
715A	11	BIOMED ENG TECH	11	00802								GS	C	F	C	Y	84770063	MAA	HSDH	17	14			YB		
715A	12	ELECT TECH	11	00856								GS	C	Y	Y	Y	84770063	MAA	HSDH	1	1			YB		
715A	13	SECY (OA)	05	00318								GS	C	F	C	Y	84770063	MAA	HSDH	1	1			YB		
715A	14	MED EQ RPR	11	04805								WG	C	Y	Y	Y	84770063	MAA	HSDH	1	1			YB		
715A	15	MED EQ RPR	11	04805								WG	C	Y	Y	Y	84770063	MAA	HSDH	3	3			YB		
715A		MED EQ RPR	11	04805								WG	C	Y	Y	Y	84770063	MAA	HSDH	2	2			YB		
		SUB PARAGRAPH 715A TOTALS																		46	43					
715B	00	CAPITAL EQUIP BR		W2DH23	HW	KW																				
715B	01	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNC	HSDH	1	1			YB		
715B	02	GEN SUPPLY SP	11	02001								GS	C	Y	Y	Y	84770061	A26	HSDH	1	1			YB		
715B	03	SUP TECH	07	02005								GS	C	Y	Y	Y	84770061	A26	HSDH	1	1			YB		
		SUB PARAGRAPH 715B TOTALS																		3	3					
715C	00	EQUIP ACCOUNTING BR		W2DH23	HW	KW																				
715C	01	MED LOG NCO	E6	91J30								NC	I	F	E	Y	84770061	NNC	HSDH	1	1			YB		
715C	02	MED LOG SGT	E5	91J20								NC	I	Y	Y	Y	84770061	NNC	HSDH	1	1			YB		
715C	03	MED LOG SP	E4	91J10									I	Y	Y	Y	84770061	NNC	HSDH	2	2			YB		
715C	04	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNC	HSDH	3	3			YB		
715C	05	MED LOG SP	E3	91J10									I	Y	Y	Y	84770061	NNC	HSDH	1	1			YB		
715C	06	S SUP MGT SP	12	02003								GS	C	F	C	Y	84770061	NNC	HSDH	1	1			SB	YB	
715C	07	SUPV SUP TECH	07	02005								GS	C	Y	Y	Y	84770061	NNC	HSDH	1	1			YB		
715C	08	SUPV SUP TECH	07	02005								GS	C	Y	Y	Y	847796BG	NNC	QLOG	1	1			YB	ZE	
715C	09	SECY (OA)	05	00318								GS	C	F	C	Y	84770061	NNC	HSDH	1	0			YB		
715C	10	SUPPLY TECH	05	02005								GS	C	Y	Y	Y	84770061	NNC	HSDH	2	2			YB		
715C	11	SUPPLY TECH	05	02005								GS	C	Y	Y	Y	84770061	NNC	HSDH	1	1			YB		
715C	12	MAT HNDLR SUPV	06	06907								WS	C	F	C	Y	84770061	NNC	HSDH	1	1			YB		

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ON-LINE TDA SYSTEM - B PRINT
DA APPROVED
WALTER REED ARMY MEDICAL CENTER

DOCNO: MCW2DHAA
CCNUM: 0105
FILE: MASTER

SECTION II - PERSONNEL ALLOWANCE

PARA	LN	POSITION OR DUTY TITLE	GR	POSCO	SQI	A1	A2	A3	A4	L1	LPI	BR	ID	P1	P2	P3	AMSCO	SWC	MDEP	REQ	AUTH	NET CHANGE REQ	NET CHANGE AUTH	R1	R2	I
715C	13	MAT HNDLR LDR	06	06907							WL	C	F	C	Y		84770061	NNC	HSDH	1	1			YB		
715C	14	MTR VEH OPR	06	05703							WG	C	Y	Y	Y		84770061	NNC	HSDH	1	1			YB		
715C	15	MAT HNDLR	06	06907							WG	C	Y	Y	Y		84770061	NNC	HSDH	3	2			YB		
715C	16	MAT HNDLR (MVO)	06	06907							WG	C	Y	Y	Y		84770061	NNC	HSDH	1	1			YB		
715C	17	MAT HNDLR	06	06907							WG	C	Y	Y	Y		84770061	NNC	HSDH	2	1			YB		
		SUB PARAGRAPH 715C TOTALS																		24	21					
715D	00	QA BR		W2DH23	HW	KW																				
715D	01	SUPV EQ SP	12	01670							GS	C	F	C	Y		84770063	NNA	HSDH	1	1			SB	YB	
715D	02	EQ SP (PI&SE)	12	01670							GS	C	Y	Y	Y		84770063	NNA	HSDH	2	2			YB		
715D	03	EQ SP (PI&SE)	11	01670							GS	C	Y	Y	Y		84770063	NNA	HSDH	3	2			YB		
715D	04	EQ SP	11	01670							GS	C	Y	Y	Y		84770063	NNA	HSDH	1	1			YB		
		SUB PARAGRAPH 715D TOTALS																		7	6					
		PARAGRAPH 715 TOTALS																		83	75					
720	00	DIR PNT ADM		W2DH01	HW	KW																				
		MAJOR PARAGRAPH 720 TOTALS																		0	0					
720A	00	OFF OF DIRECTOR		W2DH01	HW	KW																				
720A	01	DIRECTOR	06	70E67							MS	K	F	E	Y		84770053	ARB	HSDH	1	1			SB		
720A	02	PAT ADMIN NCO	E8	91G50							NC	I	F	F	Y		84770053	ARB	HSDH	1	1			SB		
720A	03	PAT ADMIN NCO	E7	91G40							NC	I	Y	Y	Y		84770053	ARB	HSDH	1	1			SB		
720A	04	DATA QUALITY SP	12	00301							GS	C	Y	Y	Y		84770053	ARB	HSDH	1	1					
720A	05	ADMIN OFFICER	09	00341							GS	C	Y	Y	Y		84770053	ARB	HSDH	1	1					
720A	06	SECY (OA)	06	00318							GS	C	Y	Y	Y		84770053	ARB	HSDH	1	1					
		SUB PARAGRAPH 720A TOTALS																		6	6					
		PARAGRAPH 720 TOTALS																		6	6					
722	00	MED REC DIV		W2DH01	HW	KW																				
722	01	PNT ADM OFF	03	70E67							MS	K	F	E	Y		84770053	ARB	HSDH	1	1			SB		
722	02	PAT ADMIN NCO	E6	91G30							NC	I	Y	Y	Y		84770053	ARB	HSDH	1	1					
722	03	PAT ADMIN NCO	E5	91G20							NC	I	Y	Y	Y		84770053	ARB	HSDH	1	1					
722	04	PAT ADMIN SP	E4	91G10								I	Y	Y	Y		84770053	ARB	HSDH	1	1					
722	05	PAT ADMIN SP	E3	91G10								I	Y	Y	Y		84770053	ARB	HSDH	1	1					
722	06	MED RCDS ADMIN	13	00669							GS	C	Y	Y	Y		84770053	ARB	HSDH	1	1					
722	07	MED RCDS ADM SP	12	00669							GS	C	Y	Y	Y		84770053	ARB	HSDH	1	1					

Appendix B
WRAMC Supply Chain Management Survey

Background: The OMB A-76 Circular requiring agencies to streamline the performance of commercial activities coupled with the BRAC legislation of 2005 directing the realignment of Walter Reed Army Medical Center (WRAMC) and the National Naval Medical Center (NNMC) have presented significant staffing challenges. Further, the WRAMC Logistics Division's efforts to conserve dollars in light of manning shortfalls has mandated the need to identify the best combination of medical/surgical prime vendor services and civilian FTE staffing in order to provide the best supply chain management solution for the hospital. To do so, a number of scenarios will be identified that include a variety of prime vendor service options and FTE staffing models that will yield one or more returns on investment (ROI).

Purpose: The purpose of the survey is to analyze WRAMC's direct delivery service level support from Owens & Minor, the hospital's medical/surgical prime vendor. This survey is designed to measure your level of satisfaction with the prime vendor direct delivery selections made by WRAMC. When completing the survey, the following direct delivery areas should be considered: logistics support branch floors 1-3, logistics support branch floor 4, central materiel service, operating room, 4th floor wards and clinics, cardiac catherization laboratory, logistics support branch floors 5-7, and the power projection platform at Ft. Dix, NJ.

Instructions: Please answer all questions as truthfully as possible. Question format varies from rating multiple lists of items to answering open-ended questions. Survey participants will remain anonymous and responses to all questions will only be used by the author to provide valuable feedback in the overall analysis of WRAMC's supply chain management solution. There is no time limit associated with the completion of the survey. Thank you for your participation.

1. The direct delivery service level support provided by Owens & Minor provides a number of intangible benefits that do not yield financial metrics such as ROI. Please indicate how important or unimportant each benefit is as it relates to direct delivery support.

	Important						Unimportant
Increased customer satisfaction	7	6	5	4	3	2	1
Increased quality of care	7	6	5	4	3	2	1
Streamlined logistical operations	7	6	5	4	3	2	1
More efficient staff utilization	7	6	5	4	3	2	1
Management of the supply chain	7	6	5	4	3	2	1
Full-time PV service representative	7	6	5	4	3	2	1

2. Based on your responses to question # 1, please explain in the space provided why you believe that a particular benefit is the most important. If you ranked two or more benefits as equally important, please comment on each.

3. Based on your responses to question # 1, please explain in the space provided why you believe that a particular benefit is the least important. If you ranked two or more benefits as equally unimportant, please comment on each.

4. If you believe that a valuable benefit regarding direct delivery service level support has been overlooked or excluded, please list it in the space provided and evaluate its relative importance as it compares to the benefits listed in question # 1.

5. Whether you are satisfied or dissatisfied with the current services offered under the PV contract, what additions, deletions or modifications of current services would you recommend to better support the supply chain management process?

6. How long have you been an employee of WRAMC DOL? How long have you worked in medical logistics?

Appendix C
Routine Ordering Facility (ROF) Service Level Election Form (SLEF) V6 Global Region North

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
2					
3		Med/Surg PV Gen III			
4		**Routine Ordering Facility (ROF) Service Level Election Form (SLEF) V6**			
5	Select TRBO Region	Global North Region			
6	TRBO REGION I	ROFs in TRBO REGION I (First Commitment Period)			
7					
8	DSCP Contracting Officer:	Donna Kennedy, 215-737-7232, donna.kennedy@dla.mil			
9	Prime Vendor:	Owens & Minor			
10	DSCP Contract Award Number:	SP0200-05-D-7000			
11					
12	Facility Administrative Contract Number:	SP0200-05-D-6054			
13					
14	DoDAAC	Complete Name of ROF:			
15	W71PEC	Walter Reed Army Medical Center			
16	Customer Type	DMLSS Customer			
17					
18	*The ROF's Total Distribution Fee will be calculated by your DSCP contracting officer upon receipt of your completed SLEF. A copy will be emailed to you for your contract files.		EFFECTIVE DATE		
19		*ROF'S TOTAL DISTRIBUTION FEE:	6/1/06	6.30%	
20					
21	Department Level Distribution Fee (where applicable):				
22		ID or DoDAAC, Name of Department			
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
36		**ROF/Customer Information:**			
37		**Complete Mailing Address of ROF**			
38	Complete Street Address	6900 Georgia Ave., N.W.			
39	City	Washington			
40	State	DISTRICT OF COLUMBIA			
41	Zip Code	20307-5001			
42					
43		Person Responsible for SLEF Data			
44	Salutation	Military			
45	First Name	Mark			
46	Last Name	Dick			
47	Position Title	Chief, Medical Materiel Division			
48	Rank or Grade	MAJ			
49	email	mark.dick@na.amedd.army.mil			
50	PoC Phone Number	(202) 782-4005			
51	PoC Fax Number	(202) 782-0240			
52					
53		Person Entering Form Data (if other than above)			
54	Salutation	Mr			
55	First Name	Nathanial			
56	Last Name	Johnson			
57	Position Title	Chief, Materiel Management Branch			
58	Rank or Grade	GS-12			
59	email	nathaniel.johnson@na.amedd.army.mil			
60	PoC Phone Number	(202) 782-4013			
61	PoC Fax Number	(202) 782-0240			
62					
63					
64		**"DEPARTMENT" DEFINED:** For the purpose of completing the SLEF, the term "department" shall include; a department within the ROF, it shall be within the same general physical location (all must be on the same installation), such as the Operating Room Department; or, an outside delivery location (ODL), which is outside the general physical location of the ROF (must be outside the installation), such as an Army Clinic located in a city different from that of the ROF. The terms Department ID/CUSTID and DoDAAC shall be used interchangeably for their identification as applicable.			
65					
66		**ROF Basic Service Distribution Fee**			
67		The Basic Service Distribution Fee covers usage data and non-usage data items for ROFs within this global region. The fee for ROFs with Total Annual Sales Commitment of $10,000 -$100,000 includes five deliveries per week (business days only), unlimited ordering sites within an ROF, usage data item delivery by close of next business day, delivery to the ordering facility dock, access to the PV Web-based Proprietary Data Warehouse, Wisdom (a single sign-on per site), and one weekly customer service visit. The PV Customer Service Representative is only required to service a single customer point of contact at each ROF.			

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
68					
69	If O&M registers no activity through WISDOM in six months, O&M will notify DSCP that the user licenses will be cancelled; however, O&M agrees to reactivate licenses upon request from DSCP.				
70	O&M's fee also includes batch picked orders with the contents of each pallet noted on the packing list for easy identification.				
71					
72		ROF must choose ONE option			
73		Primary PV holding Backorders, excluding RFID costs			4.40%
74		Primary PV NOT holding Backorders, excluding RFID costs		X	4.50%
75		Primary PV NOT holding Backorders, excluding RFID costs		4.50%	
76					
77					
78					
79		Customer Service Election			
80	Customer Service Election: The change to the Basic Service Distribution Fee based on the level of PV-supplied customer service required by the ROF. Basic Service includes access to the PV's standard commercial telephonic customer service hours.				
81					
82		*ROF must elect ONE Option			
83		Weekly customer service rep visits: Included as Basic Service			
84		Monthly customer service rep visits:	Minus		0.05%
85		Quarterly customer service rep visits:	Minus		0.10%
86		Telephonic customer service rep visits:	Minus		0.15%
87		Full-time, on-site customer service rep: Annual Purchase Commitment $5 or greater:	Plus	X	0.75%
88		Full-time, on-site customer service rep: Annual Purchase Commitment $5 or greater:	Plus	0.75%	
89					
90					
91					
92		Delivery Frequency			
93		For entire ROF (must check ONE block):			
94		Delivery once per week	Minus		0.20%
95		Delivery twice per week	Minus		0.15%
96		Delivery three times per week	Minus		0.10%
97		Delivery four times per week	Minus		0.05%
98		Delivery five times per week Included in Basic Fee		X	
99		Delivery five times per week Included in Basic Fee			
100					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
101					
102		The ROF requires this many ordering sites, as listed below, including the ROF if applicable.		13	
103		Provide the name and address for each ordering site, both inside and outside the ROF. This includes orders placed by any departments including those listed under Low Unit of Measure, and Wound Closure Management.			
104					
105		Up to 15 sites	Department ID (CUSTID) DoDAAC		
106	Site #1 Name:	WRAMC Materiel Division	W71PEC		
107	Address 1:	Bldg 1, Room B326			
108	Address 2:	6900 Georgia Ave., N.W.			
109	Address 3:	Washington, DC 20307-5001			
110					
111	Site #2 Name:	WRAMC Logistics Support Branch 1-3 (for CMS)	YMENCM		
112	Address 1:	Bldg 2, Room 2E07A			
113	Address 2:	6900 Georgia Ave., N.W.			
114	Address 3:	Washington, DC 20307-5001			
115					
116	Site #3 Name:	WRAMC Logistics Support Branch 1-3 (Other than CMS)	YMENC1		
117	Address 1:	Bldg 2, Room 2E07A			
118	Address 2:	6900 Georgia Ave., N.W.			
119	Address 3:	Washington, DC 20307-5001			
120					
121		Please enter additional Ordering Sites on the Ordering Sites Tab!			
122					
123					
124		ROF Basic Stockless Service Option			
125	Stockless Delivery Service Election: Stockless is optional for the ROF to select, however you must indicate whether the ROF elects it or not. This service is a comprehensive acquisition and materiel management program available to each ROF. This service is also available at a department level.				
126					
127		*Stockless option for entire ROF (must check ONE block).			
128		ROF does not select Stockless service.		X	
129		ROF elects Stockless service			
130		ROF does not select Stockless service.			
131					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
132		For Entire ROF:			
133		$10,000-$100,000 Annual Purchase Commitment	Plus		8.00%
134		$100,001-$1,000,000 Annual Purchase Commitment	Plus		8.00%
135		$1,000,001-$2,000,000 Annual Purchase Commitment	Plus		8.00%
136		$2,000,001-$3,000,000 Annual Purchase Commitment	Plus		8.00%
137		$3,000,001-$4,000,000 Annual Purchase Commitment	Plus		8.00%
138		$4,000,001-$5,000,000 Annual Purchase Commitment	Plus		8.00%
139		Above $5,000,001 Annual Purchase Commitment	Plus		8.00%
140					
141					
142					
143					
144		***Stockless option for a Department within a ROF:**			
145	This applies when a department within a ROF chooses Stockless delivery but the rest of the ROF does not. When this occurs, the department would be assigned its own Basic Service Distribution Fee. This fee would be the ROF's Total Basic Service Distribution Fee (inclusive of all service level changes except Delivery Frequency Election for Entire ROF for Delivery once, twice, three, four or five times per week) PLUS the Stockless delivery fee.				
146					
147	Choose Yes or No	ROF chooses Stockless service for a Department(s)	No		
148					
149					
150					
151					
152		$10,000- $100,000 Dept. Annual Purchase Commitment	Plus		8.00%
153		$100,001- $1,000,000 Dept. Annual Purchase Commitment	Plus		8.00%
154		$1,000,001-$2,000,000 Dept. Annual Purchase Commitment	Plus		8.00%
155		$2,000,001-$3,000,000 Dept. Annual Purchase Commitment	Plus		8.00%
156		$3,000,001-$4,000,000 Dept. Annual Purchase Commitment	Plus		8.00%
157		$4,000,001-$5,000,000 Dept. Annual Purchase Commitment	Plus		8.00%
158		Above $5,000,001 Dept. Annual Purchase Commitment	Plus		8.00%
159					
160					
161					
162					
163					
164					
165					
166					
167					
168					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
169					
170					
171		**Low Unit of Measure Service Election**			
172		Low Unit of Measure (LUM) is optional for the ROF to elect, however you must indicate whether the ROF elects it or not. If this option is elected, the ROF may order DAPA products in a smaller unit of purchase. The PV breaks down the DAPA lowest saleable unit to a smaller unit of purchase for ROF use. LUM service includes delivery of the materiel in totes, segregated by department to whatever delivery location election is made. This service is available at a department level. NOTE: If your entire ROF has chosen Stockless Delivery Frequency Election, LUM IS provided and INCLUDED IN the Stockless fee.			
173					
174		For entire ROF (must check ONE block):			
175		ROF **does not** select LUM service		X	
176		ROF elects LUM service			
177		**ROF does not select LUM service**			
178					
179					
180		$10,000- $100,000 Annual Purchase Commitment	Plus		4.80%
181		$100,001- $1,000,000 Annual Purchase Commitment	Plus		4.70%
182		$1,000,001-$2,000,000 Annual Purchase Commitment	Plus		4.60%
183		$2,000,001-$3,000,000 Annual Purchase Commitment	Plus		4.50%
184		$3,000,001-$4,000,000 Annual Purchase Commitment	Plus		4.40%
185		$4,000,001-$5,000,000 Annual Purchase Commitment	Plus		4.30%
186		Above $5,000,001 Annual Purchase Commitment	Plus		4.20%
187					
188					
189					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
190		***LUM Option for a Department within a ROF**			
191	This applies when a department within a ROF chooses LUM but the rest of the ROF does not. When this occurs, the department would be assigned its own Distribution Fee that would be the ROF's Total Basic Service Distribution Fee PLUS the LUM fee.				
192					
193	Choose Yes or No	ROF chooses LUM for a Department(s)	No	No	
194		Low Unit of Measure (LUM) not Selected, Annual Purchase not needed			
195					
196		$10,000- $100,000 Dept. Annual Purchase Commitment	Plus		4.80%
197		$100,001- $1,000,000 Dept. Annual Purchase Commitment	Plus		4.70%
198		$1,000,001-$2,000,000 Dept. Annual Purchase Commitment	Plus		4.60%
199		$2,000,001-$3,000,000 Dept. Annual Purchase Commitment	Plus		4.50%
200		$3,000,001-$4,000,000 Dept. Annual Purchase Commitment	Plus		4.40%
201		$4,000,001-$5,000,000 Dept. Annual Purchase Commitment	Plus		4.30%
202		Above $5,000,001 Dept. Annual Purchase Commitment	Plus		4.20%
203					
204					
205					
206					
207					
208					
209					
210					
211					
212					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
213					
214		**Wound Closure Management System**			
215		This is optional for the ROF to elect, however you must indicate whether the ROF elects it or not. If elected, the increase to the Basic Service Distribution Fee will be based on the ROF's selection of the Wound Closure Management System, which is a system that is designed to reduce inventory investment by identifying ROF improvements to both efficient ROF on-site storage strategy and more efficient wound closure product ordering. This service is available at a department level.			
216		NOTE: If a ROF elects Stockless delivery then it doesn't need to elect the Wound Closure Management System as Stockless delivery includes this service. If a department within a ROF elects Stockless delivery then it doesn't need to elect the Wound Closure Management System as Stockless delivery includes this service.			
217					
218		For entire ROF (must check ONE block):			
219		ROF **does not** select the Wound Closure Management System		X	
220		ROF elects the Wound Closure Management System			
221		**ROF does not select the Wound Closure Management System**			
222					
223		For Entire ROF:			
224		**Pricing for Wound Closure Management System**			
225					
226					
227		$10,000- $100,000 Annual Purchase Commitment	Plus		3.00%
228		$100,001-$1,000,000 Annual Purchase Commitment	Plus		2.80%
229		$1,000,001-$2,000,000 Annual Purchase Commitment	Plus		2.60%
230		$2,000,001-$3,000,000 Annual Purchase Commitment	Plus		2.40%
231		$3,000,001-$4,000,000 Annual Purchase Commitment	Plus		2.20%
232		$4,000,001-$5,000,000 Annual Purchase Commitment	Plus		2.00%
233		Above $5,000,001 Annual Purchase Commitment	Plus		1.80%
234					
235					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
236		***Wound Closure Management System Option for a Department within a ROF**			
237	This applies when a department within a ROF chooses the Wound Closure Management System but the rest of the ROF does not. When this occurs, the department would be assigned its own Basic Service Distribution Fee. This fee would be the ROF's Total Basic Service Distribution Fee (inclusive of all service level changes except for Stockless delivery) PLUS the Wound Closure Management System fee.				
238					
239	Choose Yes or No	ROF chooses Wound Closure Management System for a Department(s)	No	No	
240					
241		**Pricing for Department Level Wound Closure Management System**			
242					
243		For Each Department:			
244		Wound Closure not elected, Annual Purchase not needed			
245		$10,000- $100,000 Dept. Annual Purchase Commitment	Plus		3.00%
246		$100,001- $1,000,000 Dept. Annual Purchase Commitment	Plus		2.80%
247		$1,000,001-$2,000,000 Dept. Annual Purchase Commitment	Plus		2.60%
248		$2,000,001-$3,000,000 Dept. Annual Purchase Commitment	Plus		2.40%
249		$3,000,001-$4,000,000 Dept. Annual Purchase Commitment	Plus		2.20%
250		$4,000,001-$5,000,000 Dept. Annual Purchase Commitment	Plus		2.00%
251		Above $5,000,001 Dept. Annual Purchase Commitment	Plus		1.80%
252					
253					
254					
255					
256					
257					
258					
259					
260					
261					
262					
263		**Delivery Location Election**			
264	The increase to the Basic Service Distribution Fee based on the number of delivery sites required by the ROF. This count applies to all the non-dock sites, even if the dock is not a required delivery site. All delivery sites must be wards, floors, and/or buildings in the same general physical location (all must be on the same installation). *This election does not apply if the entire ROF chooses stockless.				
265					
266		ROF must elect ONE Range			
267		Delivery to facility dock: Included in Basic Fee			
268		Delivery to up to two additional sites within the facility:	Plus	X	0.35%
269		Delivery to three to five additional sites within the facility:	Plus		0.65%
270		Delivery to six to ten additional sites within the facility:	Plus		0.85%
271		**Delivery to up to two additional sites within the facility:**	Plus	0.35%	

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
272					
273					
274					
275		The ROF Requires this many delivery locations, as listed below, including the ROF, if applicable:		6	
276	List the delivery locations, in order, as they correspond to their ordering sites listed above. Provide the name and address for each delivery location, both inside and outside the ROF. This includes delivery for: the facility dock, departments, Low Unit of Measure, and Wound Closure Management. Do not include any Stockless delivery locations below as they should be included above under Stockless Delivery.				
277					
278		Up to 15 locations	Department ID (CUSTID) DoDAAC		
279	Site #1 Name:	Medical Supply Warehouse	W71PEC		
280	Address 1:	Bldg 178, 2461 Linden Lane			
281	Address 2:	Forest Glen Annex			
282	Address 3:	Silver Spring, MD 20910			
283					
284	Site #2 Name:	WRAMC Materiel Distribution Branch (MDB)	YMENCM		
285	Address 1:	Bldg 2 Loading Dock			
286	Address 2:	6900 Georgia Ave., N.W.			
287	Address 3:	Washington, DC 20307-5001			
288					
289	Site #3 Name:	WRAMC Materiel Distribution Branch (MDB)	YMENC1		
290	Address 1:	Bldg 2 Loading Dock			
291	Address 2:	6900 Georgia Ave., N.W.			
292	Address 3:	Washington, DC 20307-5001			
293					
294		Please enter additional Delivery Sites on the Delivery Sites Tab!			
295					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
296	**Outside Delivery Location Election to distances less than or greater than 25 miles, but within the same TRBO Region as the ROF**				
297	The increase to the Basic Service Distribution Fee based on the number of outside delivery locations/sites required by the ROF. This count applies to all deliveries outside the general physical location (all must be outside the installation). This is OPTIONAL for the ROF to select.				
298		**25 MILES OR LESS:**			
299		Delivery to one additional site:	Plus		0.25%
300		Delivery to two additional sites:	Plus		0.30%
301		Delivery to three additional sites:	Plus	X	0.35%
302		Delivery to four additional sites:	Plus		0.40%
303		Delivery to five additional sites:	Plus		0.45%
304		Delivery to six additional sites:	Plus		0.50%
305		Delivery to seven additional sites:	Plus		0.55%
306		Delivery to eight additional sites:	Plus		0.60%
307		Delivery to nine additional sites:	Plus		0.65%
308		Delivery to ten additional sites:	Plus		0.70%
309		Delivery to eleven additional sites:	Plus		0.75%
310		Delivery to twelve additional sites:	Plus		0.80%
311		Delivery to thirteen additional sites:	Plus		0.85%
312		Delivery to fourteen additional sites:	Plus		0.90%
313		Delivery to fifteen additional sites:	Plus		0.95%
314					
315		**Delivery to three additional sites:**	Plus	0.35%	
316					
317		**GREATER THAN 25 MILES:**			
318		Delivery to one additional site:	Plus	X	0.40%
319		Delivery to two additional sites:	Plus		0.45%
320		Delivery to three additional sites:	Plus		0.50%
321		Delivery to four additional sites:	Plus		0.55%
322		Delivery to five additional sites:	Plus		0.60%
323		Delivery to six additional sites:	Plus		0.65%
324		Delivery to seven additional sites:	Plus		0.70%
325		Delivery to eight additional sites:	Plus		0.75%
326		Delivery to nine additional sites:	Plus		0.80%
327		Delivery to ten additional sites:	Plus		0.85%
328		Delivery to eleven additional sites:	Plus		0.90%
329		Delivery to twelve additional sites:	Plus		0.95%
330		Delivery to thirteen additional sites:	Plus		1.00%
331		Delivery to fourteen additional sites:	Plus		1.05%
332		Delivery to fifteen additional sites:	Plus		1.10%
333					
334		**Delivery to one additional site:**	Plus	0.40%	

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
335					
336					
337		**CUSTOM PALLETIZATION:**			
338	This is optional for the ROF to select, however you must indicate whether the ROF elects it or not. If elected, the increase to the Basic Service Distribution Fee based on the PV's segregation of the ROF's pallets by delivery order/call number, by ordering site within the ROF, or by any reasonable custom palletization arrangement as requested by the ROF. Each ROF has the option to select this service and the fee applies to the entire ROF. Delivery is to the ordering facility dock unless a different delivery location is selected.				
339					
340		ROF must check ONE block:			
341		ROF **does not** select Custom Palletization			
342		ROF elects Custom Palletization		X	
343		**ROF elects Custom Palletization**			
344					
345		Custom Palletization	Plus	X	1.00%
346		Lower Level Custom Palletization for O&M to batch pick orders with the contents of each pallet affixed to each pallet for rapid identificationa and put away	Plus		0.25%
347		**Custom Palletization**	Plus	1.00%	
348					
349					
350		**PV-SUPPLIED ROF ON-SITE MATERIEL MANAGER:**			
351	This is optional for the ROF to select, however you must indicate whether the ROF elects it or not. If elected, the increase to the Basic Service Distribution Fee based on the ROF's selection of a PV-Supplied ROF On-Site Materiel Manager, which is to report daily to the ROF, filling the function of the ROF's materiel manager. The ROF is required to provide a duty station for this person.				
352					
353		Fee for PV-Supplied ROF On-Site Materiel Manager for a 20-month period			$320,000
354					
355		ROF must check ONE block:			
356		ROF **does not** select a PV-Supplied ROF On-Site Materiel Manager			
357		ROF elects a PV-Supplied ROF On-Site Materiel Manager			
358					
359					
360					
361					
362		DO NOT ENTER/WRITE BELOW THIS LINE.			
363					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
364		DSCP COMPLETES THIS PORTION BELOW:			
365		Annual Purchase Commitment: The Primary PV shall indicate the decrease to the Basic Service Distribution Fee based on the ROF's Annual Purchase Commitment. The ROF's commitment level shall be based on the most recent 12 months purchases plus 10%, unless the Primary PV and the ROF agree to a different commitment level. The ROF shall receive this reduction on all orders placed. There will be no compensation to either the Primary PV or the customer should the Annual Purchase Commitment be overestimated or underestimated as compared with the actual purchases incurred at the completion of the year.			
366		DSCP will check the appropriate block: (DSCP will check one upon RECEIPT of the completed SLEF from the customer)			
367			Prior $	Plus 10%	
368		Annual Purchase Commitment: (Commitment Level Based on the Last 12 Months of Sales PLUS a 10% Growth Factor)	$19,196,760.60	$21,116,437	
369					
370		under $100,000 included in basic fee			
371		$100,001 to $ 250,000	Minus		0.05%
372		$250,001 to $ 500,000	Minus		0.05%
373		$500,001 to $ 1,000,000	Minus		0.05%
374		$1,000,001 to $ 2,000,000	Minus		0.05%
375		$2,000,001 to $ 3,000,000	Minus		0.10%
376		$3,000,001 to $ 4,000,000	Minus		0.15%
377		$4,000,001 to $ 5,000,000	Minus		0.20%
378		$5,000,001 to $ 6,000,000	Minus		0.25%
379		$6,000,001 to $ 7,000,000	Minus		0.30%
380		$7,000,001 to $ 8,000,000	Minus		0.35%
381		$8,000,001 to $ 9,000,000	Minus		0.60%
382		$9,000,001 to $10,000,000	Minus		0.60%
383		$10,000,001 to $11,000,000	Minus		0.65%
384		$11,000,001 to $12,000,000	Minus		0.70%
385		$12,000,001 to $13,000,000	Minus		0.75%
386		$13,000,001 to $14,000,000	Minus		0.80%
387		$14,000,001 to $15,000,000	Minus		0.85%
388		$15,000,001 to $16,000,000	Minus		0.90%
389		$16,000,001 to $17,000,000	Minus		0.95%
390		$17,000,001 to $18,000,000	Minus		1.00%
391		$18,000,001 to $19,000,000	Minus		1.05%
392		over $19,000,000	Minus	X	1.05%
393					
394		over $19,000,000	Minus	1.05%	
395					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
396		ROF'S CALCULATED DISTRIBUTION FEE:			
397					
398		**Basic Service Distribution Fee:**			4.50%
399		Delivery Service Frequency Election			
400		Stockless Service Election			
401		Delivery Location Election	Plus		0.35%
402		Outside Delivery Location Election			
403		**within 25 miles or less**	Plus		0.35%
404		**greater than 25 miles or less**	Plus		0.40%
405		Customer Service Election	Plus		0.75%
406		Low Unit of Measure (LUM)			
407		Custom Palletization	Plus		1.00%
408		Wound Closure Management System			
409		SUB-TOTAL DISTRIBUTION FEE FOR ROF:			7.35%
410		Annual Purchase Commitment	Minus		-1.05%
411		TOTAL DISTRIBUTION FEE FOR ROF:			6.30%
412					
413					
414		IF APPLICABLE:			
415		DEPARTMENT'S CALCULATED DISTRIBUTION FEE BASED ON STOCKLESS SERVICE:			
416		Total Distribution Fee for ROF:			
417					
418		Department Stockless Service not elected			
419					
420					
421					
422					
423					
424					
425		DEPARTMENT'S CALCULATED DISTRIBUTION FEE BASED ON LUM:			
426		Total Distribution Fee for ROF:			
427					
428		Department Low Unit of Measure (LUM) Service not elected			
429					
430					
431					
432					
433					
434					

Service Level Election Form

	A	B	C	D	E
1				Fee/Selected	Rates
435		DEPARTMENT'S CALCULATED DISTRIBUTION FEE BASED ON THE WOUND CLOSURE MANAGEMENT SYSTEM:			
436		Total Distribution Fee for ROF:			
437					
438		Department Wound Closure Management System not elected			
439					
440					
441					
442					
443					
444					
445					
446		Contracting Officer approving the SLEF:	DONNA KENNEDY		
447		Date SLEF approved:	5/19/06		
448					
449					
450					

Appendix D
2007 General Schedule Locality Pay Tables: Salary Table 2007-DCB

SALARY TABLE 2007-DCB
INCORPORATING THE 1.70% GENERAL SCHEDULE INCREASE AND A LOCALITY PAYMENT OF 18.59%
FOR THE LOCALITY PAY AREA OF WASHINGTON-BALTIMORE-NORTHERN VIRGINIA, DC-MD-PA-VA-WV
(See http://www.opm.gov/oca/07tables/locdef.asp for definitions of locality pay areas.)
(TOTAL INCREASE: 2.64%)

EFFECTIVE JANUARY 2007

Annual Rates by Grade and Step

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
1	$ 19,722	$ 20,380	$ 21,037	$ 21,689	$ 22,345	$ 22,730	$ 23,378	$ 24,031	$ 24,057	$ 24,664
2	22,174	22,700	23,435	24,057	24,325	25,040	25,755	26,470	27,186	27,901
3	24,194	25,000	25,806	26,613	27,419	28,226	29,032	29,838	30,645	31,451
4	27,159	28,064	28,969	29,874	30,779	31,684	32,589	33,493	34,398	35,303
5	30,386	31,399	32,412	33,425	34,437	35,450	36,463	37,476	38,488	39,501
6	33,872	35,001	36,130	37,259	38,388	39,517	40,646	41,775	42,903	44,032
7	37,640	38,895	40,150	41,405	42,659	43,914	45,169	46,423	47,678	48,933
8	41,686	43,075	44,465	45,855	47,245	48,635	50,025	51,415	52,805	54,194
9	46,041	47,576	49,110	50,645	52,180	53,714	55,249	56,783	58,318	59,852
10	50,703	52,393	54,083	55,773	57,463	59,153	60,843	62,533	64,222	65,912
11	55,706	57,564	59,421	61,278	63,135	64,992	66,849	68,706	70,563	72,421
12	66,767	68,993	71,219	73,445	75,671	77,897	80,123	82,349	84,575	86,801
13	79,397	82,044	84,691	87,338	89,985	92,632	95,279	97,926	100,573	103,220
14	93,822	96,950	100,077	103,204	106,331	109,459	112,586	115,713	118,840	121,967
15	110,363	114,042	117,721	121,399	125,078	128,757	132,435	136,114	139,793	143,471