

Front End Work Pays Off for Defense Medical Logistics Standard Support (DMLSS) Program

DMLSS Automated Information System (AIS) Will Replace Service Legacy Systems

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Underlying principles of program management apply equally to weapon systems and automated information systems (AIS). Simply stated, program managers for both weapon systems and AISs manage cost, schedule, and technical performance. The Department formally acknowledges this common approach to program management in DoDD 5000.1, *Defense Acquisition*, and its accompanying regulation, DoD 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs (MDAP) and Major Automated Information System (MAIS) Acquisition Programs*.

System development, whether it be a weapon system or an AIS, is one possible response to a mission deficiency. A new start implies that the decision-making authority recognizes the need to eliminate a mission deficiency and is willing to obligate the funds for that purpose. For a weapon system, a mission need statement (MNS) will cite a threat that can not be eliminated through changes in tactics, a non-materiel solution, or even an upgrade to an existing system. An AIS MNS, on the other hand, may have little to say about threat. More likely, it will identify a need for improving efficiency by automating reengineered business processes.

Why develop a new AIS? AIS development begins because there is a bona fide need for an AIS, and return on investment (ROI) estimates support a new start decision. If an investment of \$1 in an AIS will produce \$2, \$3, \$4 or more in benefits, that level of ROI is reason enough to consider the investment. Without an acceptable ROI, support for a new AIS may be difficult to obtain.

A lot may be said about the similarities of weapon system and AIS program management, but that is not the intent here. This is simply a brief article on the successes achieved to date by one ACAT IAM program, the Defense Medical Logistics Standard Support (DMLSS) Program.

The DMLSS Program, which has earned a 6.5:1 ROI for the period FY 91 to FY 96, is similar in complexity to many weapon systems. It encompasses business process reengineering of medical logistics functions at the wholesale (depot) and retail (medical treatment facility or MTF) level, and system development activities needed to support reengineered business processes (Figure 1).

Currently, a number of software applications and systems are being devel-

oped as part of the DMLSS Program. The one major AIS being developed is logically called the DMLSS AIS.

DMLSS will be used in peace and war, in fixed and transportable facilities, and consists of three main modules:

- Materiel Management (MM)
- Facility Management (FM)
- Equipment and Technology Management (E&TM)

Both MM and FM have multiple increments.

The DMLSS AIS will replace eight Service and one DoD aging legacy medical logistics systems, including the Air Force's Medical Logistics System and the Army's Theater Army Medical Management Information System. The DMLSS Program is co-sponsored by the Assistant Secretary of Defense (Health Affairs) and the Deputy Under Secretary of Defense (Logistics).

The DMLSS MNS, approved in 1993, cited the following major deficiencies in the Department's medical logistics operations:

- Excessive inventories of medical

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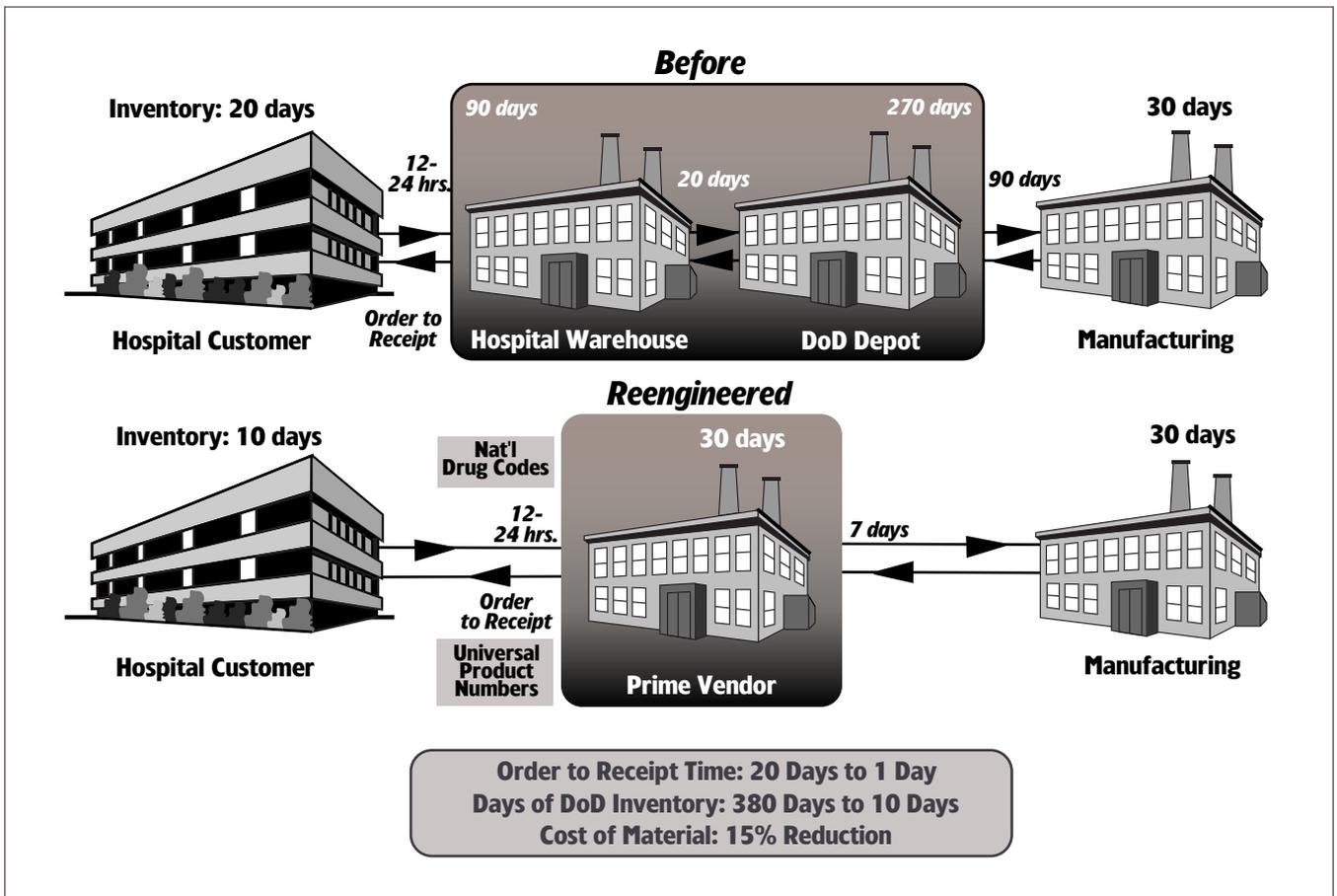


Figure 1. **DMLSS Reengineered Peacetime Business Practice**

items at the wholesale and retail levels.

- Excessive prices paid for pharmaceutical and medical/surgical items.
- Excessive time spent by MTF clinical staff on ordering and receiving supplies and equipment, and accounting for property.
- The need for an enhanced medical readiness capability to support wartime/contingency operations.

The Department's medical logisticians realized early on that correcting deficiencies noted in the MNS would involve medical logistics process reengineering and AIS development. Emphasis on consolidating and reducing the number of legacy systems being supported at MTFs throughout the Department provided the appropriate backing for a new AIS. This new AIS would support the reengineered

business processes, provide a common system for use by all the Services, and permit legacy system shutdown.

Developing a new major AIS would take time. As a result, medical logisticians asked themselves what business process changes could be implemented in the near term that would provide fast payback on an investment. The answer was Prime Vendor Pharmaceutical and Prime Vendor Medical/Surgical.

Under the Prime Vendor fast payback initiative, the Defense Personnel Support Center (DPSC) negotiated distribution and pricing agreements with manufacturers, and Prime Vendor contracts with distributors. Electronic commerce/electronic data interchange (EC/EDI) is at the core of these contracts and agreements. EC/EDI permits direct electronic ordering of drugs and medical/surgical items by MTFs from Prime Vendors. The results are –

- substantial reduction in prices;
- overnight direct delivery;
- 95-percent demand satisfaction; and
- elimination of large inventories in Defense depots and MTFs.

For the period FY 91-FY 96, DPSC reduced its wholesale inventories of medical items by \$404 million, and the cost of drugs to the Department by \$154 million. During this same period, MTFs decreased their inventories by \$84 million. An automated product and price comparison tool, first introduced as part of the automation piece of Prime Vendor, facilitated the drug cost reduction. Currently, this tool is being enhanced in the DMLSS AIS. For every drug purchase, it permits quick and easy identification of the least-expensive, generically equivalent, acceptable drug. There simply is no

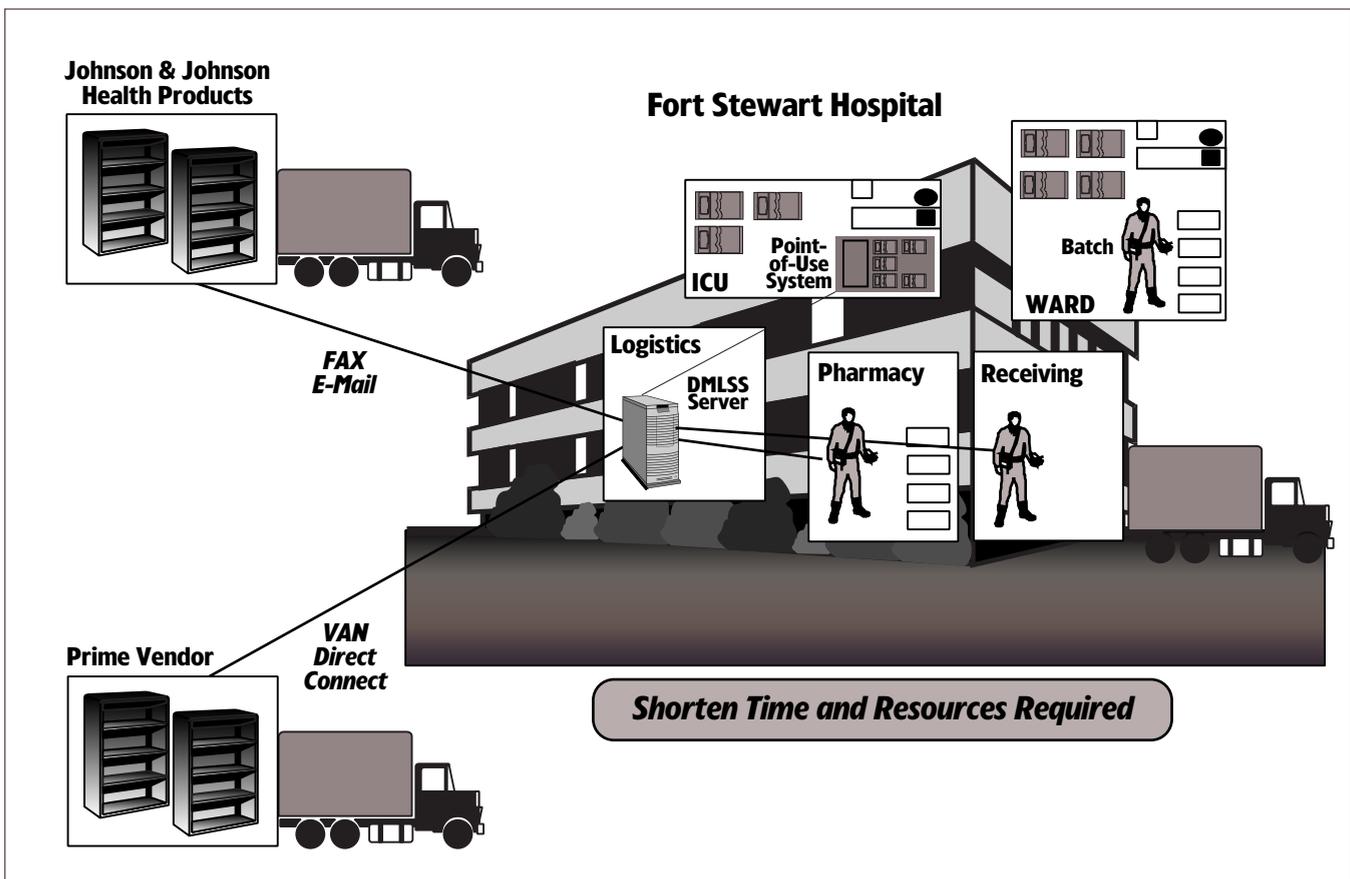


Figure 2. **DMLSS Release 2.0 — Customer Area Inventory Management**

reason for an MTF to place orders for any drug or medical/surgical item that is not the least-expensive, acceptable item.

The DMLSS AIS is being developed in three major releases. Release 1.0, contains an FM and Forward Customer Support (FCS) capability. FCS contains product and price comparison tools introduced to MTFs originally as part of Prime Vendor. FM automates critical facility management functions heretofore done manually. In May 1997, DMLSS Release 1.0 was deployed to 68 MTFs. This release is continuing to be deployed to five or six additional sites each month.

DMLSS Release 2.0, targeted for release to the first test site in January 1998, contains the Customer Area Inventory Management (CAIM) module and the second increment of FM (Figure 2). CAIM uses hand-held, wireless, bar code technology to con-

trol receipts and inventories. A streamlined interface with the Defense Finance and Accounting Service (DFAS) and streamlined EC/EDI procedures between MTFs and Prime Vendors are also being designed into this release. The streamlined DFAS interface will simplify financial transactions between medical logistics systems and DFAS by a factor of 98 percent, by adopting a minimum set of standard data items and transactions and instituting bulk invoice payment procedures. The DFAS streamlining initiative is a classic illustration of concurrent business process reengineering and system development. DMLSS Release 2.0 is targeted for deployment in the summer of 1998.

Targeted for deployment in July 1999, the final DMLSS release, Release 3.0, contains Stock Room Inventory Management (SRIM) and E&TM capabilities.

DMLSS has not forgotten about deployed forces. In addition to tailor-

ing the DMLSS AIS for field use, DMLSS is a principal player in developing the commercial asset visibility (CAV) and joint total asset visibility (JTAV) concept. With the drastic reduction of wholesale inventories of medical items, CAV/JTAV will ensure that deployed forces are properly supported with medical items.

The DMLSS Program happened at the right time. Streamlining initiatives that are the mainstay of DMLSS would not have been possible 10 years ago. Today, with Government reinvention identified as one of DoD's top priorities, the sky is the limit. Not only is "thinking outside the box" accepted, but our senior DoD acquisition leadership now encourages program managers to do the things that make sense for their programs.

The beneficiaries are many. Hospitals can manage more efficiently through reduced operating costs and provide better patient care. There are no losers!