



MOBILE ENABLING SUPPLY CHAIN OPERATIONS

**DARTMOUTH HITCHCOCK
MEDICAL CENTER
CASE STUDY**

PROVIDER PROFILE

Dartmouth-Hitchcock Medical Center (DHMC) comprises of Dartmouth Medical School, the fourth-oldest medical school in the country, founded in 1797 by Dr. Nathan Smith; Mary Hitchcock Memorial Hospital, built in 1893 by Hiram Hitchcock in memory of his wife, Mary Maynard Hitchcock; Dartmouth- Hitchcock Clinic, established in 1927 by a group of five physicians; and the Veterans Affairs Medical Center in White River Junction, Vermont, which opened in 1938.

In addition, Mary Hitchcock Memorial Hospital is affiliated with Dartmouth-Hitchcock Alliance, an innovative collaboration between ten community-based health-care organizations. During the 1980s, the Medical Center began planning for a new facility. Construction of the \$228 million project began in 1988 on a 225-acre wooded site in Lebanon, New Hampshire. On October 5, 1991, the new Dartmouth-Hitchcock Medical Center facility opened for business. One of the few completely new medical centers in the country.

Mary Hitchcock Memorial Hospital (MHMH) is a non-profit, charitable hospital whose mission is the provision of high quality, compassionate health care services to patients, their families and the communities it serves. It has a 429-inpatient bed capacity with 372 beds currently in operation.

Dartmouth-Hitchcock Clinic (DHC) is a not-for-profit organization with historical roots in the Mayo Clinic traditions of physician leadership and representative governance. DHC is a part of a regionally distributed network of approximately 600 physicians and other providers that span New Hampshire and Vermont.

BUSINESS DRIVERS

Shrinking budgets

As hospital expenses rise and budgets shrink healthcare organizations must look elsewhere to control costs and remain competitive. With most margins on the procurement having been negotiated to death, DHMC looked at more creative ways to reduce labor costs, inventory costs, and drive efficiencies up – **“MOBILE ENABLE”**.

Nursing Shortage

Healthcare industry is struggling with nationwide shortage of nurses, and, like most institutions this has affected DHMC. One of the business drivers has been to move nursing staff away from inventory management and devote their valuable time for their core competency – **“PATIENT CARE”**.

Better Par Locations Management

Having departments handle ordering led to numerous problems. Busy nurses tended to over order in an effort to spend less time managing inventory leading to high on-hands, and sometimes waited till the last minute leading to costly rush orders – **“EFFICIENT REPLENISHMENT”**.

Costly Purchasing Practices

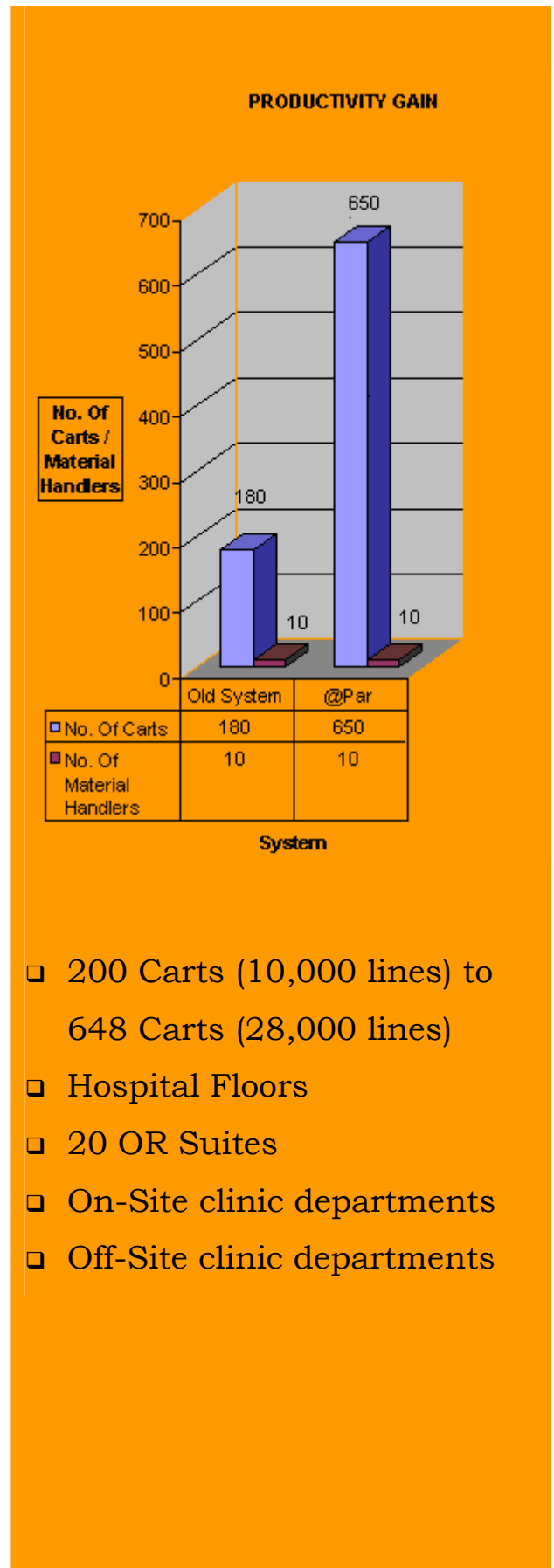
DHMC was charged with removing the burden of inventory management from the departments. With departments managing their inventories product standardization and contract compliance was always going to be an issue. This meant looking for better ways to utilize Materials Staff to assume responsibilities of these departments – **“CONTRACT COMPLIANCE IMPROVEMENT”**.

REALIZED INVENTORY MANAGEMENT INITIATIVE THROUGH MOBILE SUPPLY CHAIN EXECUTION

After extensive evaluation, DHMC realized there is no one system that can cater to all their business drivers. They chose to partner with AtPar, Inc to co-develop products that are focused towards healthcare, flexible, provides seamless integration with their MMIS, provides key decision support reports that can identify significant cost reduction opportunities.

"We (DHMC) have been able to see significant labor savings due to the efficiencies realized by using @Par products"

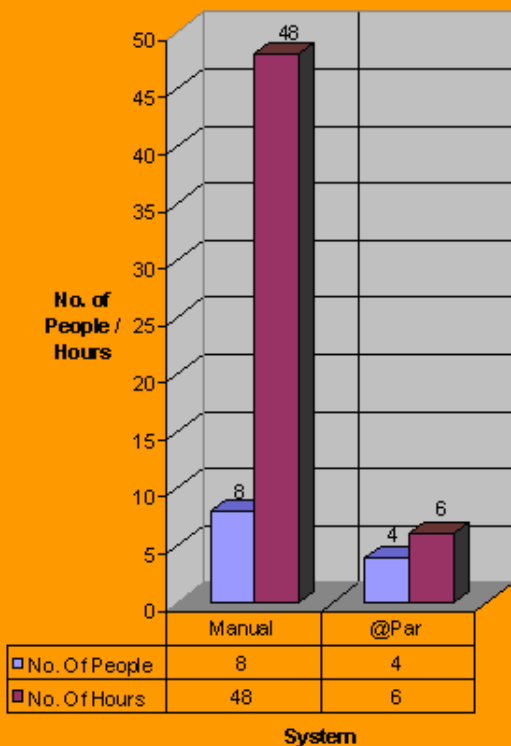
DHMC first experienced significant cost savings by reducing on-hand inventory and streamlining the Par location counting using @Par CartCount. DHMC started with managing 200 carts and soon were able to take over more departments and expand their services without the need to hire additional staff. Today, DHMC manages 650 carts using @Par CartCount. One of the most significant ROI points came from moving the activity of counting to Materials staff. In terms of the solution's impact on the organization as a whole, DHMC now receives a more accurate, real-time look at their inventory, usage, which is helping to drive savings through contract compliance and product standardization. And, most importantly nurses are able to devote more time to patient care, secure in the knowledge that the supplies they need will be in the right place at the right time.



"Moving this activity to the hands of materials personnel has freed up the nurse's time to do nursing related activities (direct patient care), eliminated incorrect orders and reduced labor costs, and we are able to maintain lower on-hand quantities without experiencing stock outs. When we combined the anesthesia workroom and the OR workroom, not only did we free up space for two new operating rooms but we were able to decrease the inventory value more than half. At the same time, materials services took over the restocking of the clean core, OR corridors, and all operating rooms. This enabled us to transfer one fte to materials for case cart picking."

- June E. Smith, Projects Coordinator
 Perioperative Services

Productivity Gain - @Par CycleCount



Before Mobile Enabling materials staff, DHMC needed lot of people for an entire weekend to do their Physical Inventory counting. It was very cumbersome, time intensive, and had issues with achieving accuracy. DHMC was able to reduce the time needed to do their counts, achieve accuracy and save lot of labor costs using @Par CycleCount combined with its robust reporting capabilities. Today they are able to complete their counts with only 4 people in less than 6 hours. There is no extra inventory stocking since it is like any other day. Looking at the efficiencies they have achieved DHMC has increased their counting frequency. With increased count frequency and inventory accuracy DHMC's finance department is very happy and looking at the possibility of not having Physical Inventory process next year.

Other areas where DHMC has seen significant savings in terms of time and labor is in Receiving and Distribution. @Par Receive and @Par Deliver products have helped DHMC streamline their receiving and delivery process and eliminate lot of paper that was getting generated in earlier process by stopping printing of receipt delivery reports as receivers can print barcodes from mobile barcode printers for non-stock items and printing delivery receipts as needed. Customers can now lookup on-line, the status of their order, which has improved their customer service. By streamlining the delivery process DHMC has been able to reduce half FTE due to reduced travel time of staff making these deliveries. Electronic signature capture and workforce productivity reports with event timings have increased accountability and efficiency.

SUMMARY

It is not enough to be just efficient. With increasing patient safety initiatives and shrinking budgets, hospitals need to be more effective in utilizing the resources to deliver quality patient care.

Since DHMC deployed @Par, the organization has realized a significant return on investment. These benefits gained from @Par also have helped DHMC maintain same staffing levels despite expansion programs.

“At DHMC the @Par products have allowed us to expand services without the need to hire additional staff”

Receiving Label



- Streamlines delivery process
- Printed from a mobile barcode printer at the time of receiving

Delivery Receipt

From: atpar@hitchcock.org [mailto:atpar@hitchcock.org]
Sent: Friday, February 04, 2005 11:49 AM
To: debbie.l.glinos@hitchcock.org
Subject: Deliver Receipt: 2/4/2005 11:49:15 AM

PO_ID:0000040171 Location:ALLE347M01
Vendor:HOLLISTER-STIER
Recipient: sr Receipt Date:01/23/04 00:00:00

16 SYRINGE,TB SLIP,1CC,26GX3/8,DI 3
16 SYRINGE,TB SLIP,1CC,26GX3/8,DI 6
Delivered By:DAN
Delivered Date:2/3/2005 5:57:00 PM

- Print delivery receipts at the time of delivery as needed
- Send delivery receipts as an email at the time of delivery as needed
- View/Track deliveries online within the hospital

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