

28. INVENTORY MANAGEMENT & OPTIMISATION AND SUPPLY CHAIN STREAMLINING

Massimo Del Prete, Logistics Director
Antonio Draisci, Administrative Director
A.O. Ospedali Riuniti Marche Nord, Italy



BACKGROUND:

The North Marche Hospital (NMH) in Pesaro, Italy set out to become more efficient by optimising its inventory management and streamlining its supply chain. The first phase of its project involved centralising the hospital warehouses and computerising inventory management to increase the rotation index.

OBJECTIVES:

- Input receipts and ward stocks in correct and timely manner
- Trace lots and expiration dates
- Achieve zero risk of expiration date and financial immobilization
- Computerise processes to increase efficiency and resources

METHODS:

The NMH designed a computerised system to manage materials on consignment. This included: tracking products during loading/unloading that were recognized via barcodes (EAN codes); automatic generation with defined frequencies of reintegration or invoicing requests to the supplier; automated requests sent by e-mail, indicating the products to be invoiced (batch/expiration date/delivery note) and relative quantities to be reintegrated on consignment.

The tool was implemented progressively, by involving the coordinators and explaining the advantages for all of the parties involved - users, the ordering office, suppliers, etc. Resources were recovered progressively and inventory management costs were gradually reduced.

The instrument was continuously developed to optimise efficiency in loading/unloading, in managing multiple packs, in automatically identifying unused reintegration requests, and in automatically reporting expiring products to their supplier.



New computerised system to manage materials on consignment.
Source: A.O. Ospedali Riuniti Marche Nord

RESULTS:

What has been achieved?

- ✓ **Increase in products managed on consignment**
 - End 2013: 150 references; EUR 166,000 of goods
 - End 2017: over 3,400 references; >EUR 3,400,000 of goods
- ✓ **Lots and expiration dates traced by reading the EAN on products, with zero risk of error during loading**
- ✓ **Recovery of passive cycle efficiency and reduction of invoices and payment terms**
 - Invoices automatically paid: >90%
 - Average invoice payment time: 53 days
- ✓ **Reduction in overdue risk and inventory management costs**
- ✓ **Reduction in human resources used in procurement processes**
- ✓ **Correct and timely accounting for flows of goods**
 - Accounting burden of deposit and delivery account: within 24 hours of receipt
 - Delivery tracking: computerized using EAN documents
 - Management of multiple packing units using internal registry associated with the EAN
 - Valuation of order and transport document following unloading: by association with an accounting contract

TAKE-AWAYS:

What worked well?

- ✓ Sharing the objectives to be achieved with staff, which helped overcome their resistance to change
- ✓ Ensuring the active participation of internal staff involved in managerial and administrative processes
- ✓ Regularly sharing the results achieved
- ✓ Involving suppliers and explaining the advantages for them - reduced payment terms, timing of order receipts, exact tracking of batches and expiration dates, automatic notification of unpaid requests
- ✓ Persuading HCPs to manage change - by discussing the advantages of computerised stock management
- ✓ Developing a computerised tool by progressively improving functionalities based on the needs identified - to increase efficiency (use of EAN codes for tracking loads/unloads, management of multiple packs, automated requests for undelivered orders, automatic invoice and automated payment authorisation, reports to suppliers of products expiring shortly)

