

Consignment Inventory Management solution powered by IATM

Maximize value through efficient medical inventory management





End-to-end and efficient inventory visibility and management, are critical to ensuring reputation and profitability for the entire healthcare industry. Usage of expired medical supplies can have a domino effect on the industry that includes but is not limited to adverse effects on patients, expensive lawsuits and irreversible damages to stakeholder relationships and brand reputation.

Traditional inventory management comes with multiple challenges:

High inventory carrying costs for both the suppliers and healthcare providers

Low inventory turnover ratio that further freezes capital investments for business process improvement

High rates of expiry of medical supplies leading to high obsolescence costs and poorer carbon footprint

Possible risk of penalties carried by both supplier and the healthcare provider in the form of brand, financial and operational risks

Consignment inventory management holds advantages for both medical device manufacturers/suppliers and healthcare providers:

The consignor saves on high inventory carrying costs at own location, can instead focus on investing capital on business process innovation

For consignees, workforce productivity is higher as inventory management is now consignor responsibility

The consignor can respond quicker in terms of product innovation cycles as a result of being close to end-customer location and experiencing demand first-hand



Key drivers leading the shift in inventory management models:

Current inventory turnover in the medical supplies industry is 3.07 (Q2, 2021)

USD 25 Bn was the fully capitalized cost of excess supply expenses in 2018

Average days of inventory on hand can go up to as high as 293 - underlining the need for a closely tracked inventory management system

Average cost of goods sold for medical devices companies is 41% of the revenue - an immense potential to free capital

Sources: Guiding Metrics, Beckers Hospital Review

However, managing consignment inventory comes with multiple challenges...

Tracking inventory for the consignor comes with multiple challenges - especially when the number of consignee locations increase. Manual tracking and documentation processes, driven by visiting sales representatives is typically prone to delays and errors. While the inventory carrying costs at own location is minimized, the inventory turns ratio drops to almost 2.7 at consignee locations - given the diversity of medical supplies and the multiplicity of the locations. Ultimately, lack of inventory visibility impacts: both consignee and consignor operations, productivity of sales representatives and medical staff, and expiry of expensive medical consumables and supplies - severely impacting the profitability and carbon footprint of these stakeholders. Expired items are particularly dangerous, as their usage (when not tracked) can put the reputation of every stakeholder in the medical value chain at risk.

Underlining the importance of efficient and accurate consignment inventory management

Medical care personnel spend nearly 30% of their times per shift tracking supplies - translates to more than 2 hours per shift

Up to 15% of supplies at the consignee location expire before their usage - aggregating almost 5 Bn USD at the industry level

Sales reps. spend up to 20% of their time managing field inventory

Sources: CSI Market, Cook Medical

About the solution:

Consignment Inventory Management (CIM) powered by IATM is part of IoT WoRKS™ Internet of Medical Things (IoMT) solutions for LSH - enabling end-to-end tracking and management of medical devices, consumables, surgical kits inventory, leveraging IoT assets tags (Passive/Active RFID, BLE, Motion, Wi Fi, UWB, Visual etc.) along with their respective readers. CIM delivers an accurate, consolidated view of consignment inventory across all consignee locations, automating item picking and issue processes while ensuring real-time inventory count, enabling audit and reconciliation across locations and minimizing pilferage losses. The solution drives application of First Expired First Out (FEFO) logic, reducing losses from expiry - eliminating possible risks from using expired products in medical procedures. The solution is transforming consignment inventory management by providing end-to-end visibility from manufacturing up to the hospital/medical facility till the time of item consumption with logs and timestamps. CIM streamlines real-time inventory tracking, management and accountability, invoice reconciliation processes and billing, leading to better end-customer satisfaction.



Features:

Hardware Components:

Utilizes RFID, BLE, UWB, Wi-Fi, Motion & Visual sensors, IDs and readers – and noninterfering communication protocols

Cloud-based IoT Platform:

CIM is an End to End Platform as a Service (PaaS) offering | CIM leverages Rule (Type, Expiry, Usage, Access) Based location and Item Identification

Data Analytics:

Powerful data analytics including tracking of key metrics like: Stock to sales and Inventory turnover ratios, Shrinkage and sell through rates, Days of Inventory, Ageing analysis, time and cost of invoices processed among others

Powerful dashboard:

Consolidated view of multi-facility consignee operations, real-time tracking of Instantaneous or on demand Cycle Counting & Inventory Audits

Integration with enterprise systems:

Such as ERP, Inventory Management and CRM at consignor location, and Claims, Billing and EMR/EHR systems at consignee locations

Benefits:

Drive Profitability:

Reduce inventory carrying costs and improve working capital

Enhance Customer Relationship Management:

Enable better planning and scheduling of medical tasks for the client (consignor) personnel | Ensure systemic audit and reconciliation of consumed inventory and invoicing

Optimize Carbon Footprint:

Significantly reduce wastage by expiry of perishable, toxic or costly-to-recycle products | Help reduce cost of recycling and disposal of unused and expired products

Ensure End-to-End Visibility:

Demand driven manufacturing and distribution leveraging point of consumption data for better planning and execution | Real-time visibility of finished goods inventory to all stakeholders

“Managing consignment inventory effectively will save an average of \$30mn annually for the consignor companies”

Key Use Cases:

- Locating Inventory based on FEFO logic using passive RFIDs
- Smart Cabinet





Who we are

IoT WoRKs™ is a dedicated IoT business unit of HCL Technologies. Our award winning, best-in-class, customer and industry specific, deployment ready solutions co-created with customers, enable them to maximize effectiveness and returns on their asset investments.

Rated as a global leader in IoT consulting & services by top analysts, our solutions, enable IoT-led business transformation through creation of more efficient business processes, new revenue streams and business models that deliver measurable business outcomes.

At HCL we believe that the transformative impact of IoT is realized by IoTizing the 'things', connecting the assets to a data platform and then using the data to derive business insights, and taking business decisions, which ultimately lead to change in enterprise's processes and people practices.

Analyst Recognitions

<p>LEADER</p> <p>IDC Marketscape, IoT Consulting and Systems Integration Services, 2020</p> <p>IDC</p>	<p>LEADER</p> <p>Zinnov Zones for Connected Assets & Connected Logistics, 2019</p> <p>Zinnov</p>	<p>LEADER</p> <p>ISG Provider Lens™ for IoT managed services, USA 2019</p> <p>ISG</p>
<p>LEADER</p> <p>ISG Provider Lens™ for IoT consulting and services, USA 2019</p> <p>ISG</p>	<p>LEADER</p> <p>ISG Provider Lens™ for IoT in Manufacturing, USA 2019</p> <p>ISG</p>	