

# E-NIRAMAYA: INTEGRATED DRUG DISTRIBUTION SYSTEM

**Access to essential medicines at the right time is the most important priority for any health care system.**

Management of pharmaceutical supply chains are necessary for every health care system but has always been a complex system as the involvement of life-saving interest of human being and requires the participation of different stakeholders such as pharmaceutical manufacturers, wholesalers, distributors, customers, information service providers and regulatory agencies. There are numerous risks involved in the process and these risks interrupt the quantity and quality of supply of medicine and their delivery to the right place and the right time.

In this contest, the Odisha government's flagship Niramaya programme for free distribution of medicine implemented since May 2015. Under this plan, the state government embarked on an ambitious drive of providing 570 types of medicines, 83 surgical items, 107 anti-cancer items, 6 child health items, 6 nutrition programme, 28 malaria control programs and 5 items to fight against leprosy which are free of cost in government. Niramaya gets going in the 8 government-run medical colleges and hospitals, 30 district headquarters hospitals which are being managed and monitored by Odisha State Medical Corporation Limited (OSMCL). But to materialize this ambitious programme, a number of hurdles were faced, major being managing procurement, distribution & quality of medicines from Central Drug Warehouses to various districts in Odisha. Therefore, a robust and dependable IT support system

is essential to manage the supply chain management for the free drugs scheme was envisioned. Government, the rates of contribution to DMF are set by the Central Government.

## Pre-Scenario

Odisha State Medical Corporation Limited (OSMCL) is the key organization of the state government for procurement & supply chain management of medicines across the state of Odisha. In order to process and monitor the supply chain management of drugs, OSMCL was using a software application known as “e-Aushadi”. But the software lacked some basic information that needed to run a supply chain management system for drugs. So, it was decided to upgrade the software to enhance its robustness in monitoring and ensure successful implementation of the scheme.

## Challenges

e-Aushadhi was functional for processing and monitoring of drugs for OSMCL but it never managed to provide some basic information to the hospitals, health officials and even to the patients like which medicine is in stock, which medicines are under this scheme etc. resulting in failure of free medicine supply to poor.\

### > The major challenges were:

- No proper tracking & monitoring of drug indents raised
- Absence of a single platform for supplier and drug distributors
- Vulnerable data due to physical record-keeping
- The process followed was manual, lengthy & time-consuming
- Inaccurate data lead to difficulty in decision making.
- No online payment module or commercial Accounting
- No correct stock position was available

## Our Solution

To provide a smooth running to this unique and wonderful pharmaceutical supply chain management system, ‘e-Niramaya’ - an integrated Drug Distribution Management System was developed and implemented at OSMC. E-Niramaya was an IT platform that provides database management as well as a decision support system required for the supply chain management. This solution automated the process of procurement, distribution & quality control of the medicines and helped in monitoring and tracking the distribution of medicine across the state.

### > The important features of the solutions are:

- It profiles all the drug suppliers to OSMC and manages the procurement made through them; generate purchase order against tender/rate contract.
- The solution automates the process of inventory & distribution management and indent Generation
- Supplier ratings and Quality Testing Labs ratings are one of the USPs of the system, along with the Equipment Procurement and Installation Management System (IMS)

- This also helps in generation of various analytical reports from the application, thereby acting as a decision support system for the client.

> **Benefits:**

- Transparency: Availability of real-time accurate data
- Efficiency: 50% reduction of PO Generation time and data stability
- Common Platform: All stakeholders are connected via a single entity -Informative & User- friendly interface
- Stock Monitoring: Real-time and automated stock monitoring
- Quality Control: Automated quality testing the of medicines and uploading of result on the dashboard

> **Impact:**

- User base: 3029
- Purchase order generated: 8860
- Sample issue to QC: 33046
- Indent requests by PHC/CHC: 35982
- Upload laboratory test reports : 18128

