Drug distribution involves comprehensive processing stages that includes a number of entities, generation and maintenance of a large number of intermediate scheduled processes-related business logic.

Efficient management of such large information base is essential for effective monitoring, control & management of the drug distribution process. In addition winning public sentiment through facilitation of timely and rational disbursement of drugs, satisfying the needs of various stakeholders and control over financials is essential for the smooth functioning of the distribution system.
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, the Health Department has decided to upgrade the software to enhance its robustness in monitoring and ensure successful implementation of the scheme.

Challenges

Even though e-Aushadi was functional for processing and monitoring of drugs for OSMCL, it lacked in providing certain basic details to both the officials, PHCs and patients. While many medicines under the scheme are not available, the mechanism to deliver the medicines that are available to poor patients has also failed.

The major bottlenecks were:

> No correct stock position was available
> No stock position of local purchase was available
> No proper tracking & monitoring of indents raised
> Vulnerable data due to physical record keeping
> Absence of single platform for supplier and drug distributors
> No information of reallocation of drugs close to expiry
> No supplier rating and lab performance rating
> No online payment module or commercial accounting

Post Scenario

e-Niramaya provides database management as well as decision support system required for the supply chain management. The software has been developed taking into account the needs of the procurement agencies for operational efficiency and effectiveness. Started in April 2017, this customized IT solution e-Niramaya is being used for placement of orders, management of samples for quality testing and quality reports, apart from inventory management and generation of MIS reports. This helps in further utilization of Operations Research tools for drug forecasting reallocation amongst drug warehouses, expiry management of drugs and optimal vehicle routing for distribution. 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). The procurement module has been designed to capture critical information such as license validity of suppliers, details of performance security deposited, LOI quantity approved, deviation monitoring & approval, etc. which enables informed decision making and generation of purchase orders at a very fast pace.

e-Niramaya ensures procurement of specified drugs, surgical and other medical consumables items in required quantities for the Government health facilities including state run Medical Colleges, 30 districts headquarter hospitals (DHHs), two secondary healthcare institutions, 377 Community Health Centers (CHC) and 1350 Primary Health Centers (PHC) through a transparent and efficient procurement process.

The software also has Niramaya beneficiary screen that enables facilities to register the number of patients who visited DCC at the hospitals and got free medicines as per prescription, which enables better monitoring of patient coverage.

Data that corroborate:

> User Base: 3500 +
> Purchase Order generated: 4600+
> Sample Issue to QC: 3500
> Indent Requests by PHC/CHC: 19000+