

Ideation Phase

Problem Statement

Date	07-11-2025
Team ID	NM2025TMID06114
Project Name	Medical Inventory Management

1. Background and Context

Healthcare facilities rely on the timely availability of medical supplies to maintain patient safety and operational effectiveness. Inventory control plays a vital role in hospital and pharmacy management. Poor inventory handling can cause serious problems:

Patient Care Risks: Shortages of critical medicines or use of expired items can endanger lives.

Financial Losses: Excess inventory increases storage costs, while shortages delay treatments.

Regulatory Non-Compliance: Medical supplies must meet strict standards; poor tracking can cause audits, fines, or legal action.

Case Example:

A medium-sized hospital manages its stock manually using spreadsheets. At one point, a batch of vaccines expired due to missed expiry checks, leading to the disposal of costly stock and postponement of vaccination schedules.

Key Requirements Identified:

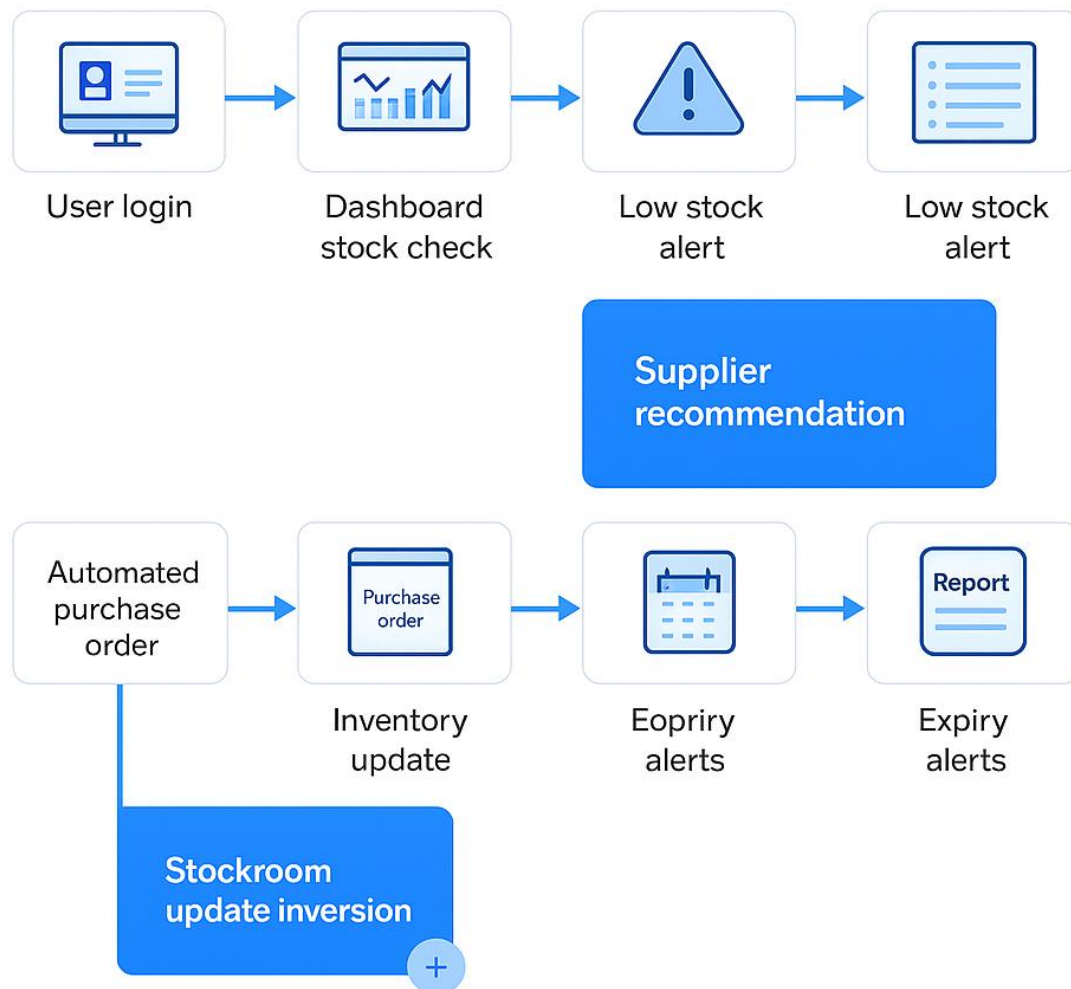
Real-time tracking of stock levels.

Centralized supplier management.

Automated purchase order creation.

Detailed reporting for audits and decision-making.

Workflow



2. User Pain Points

Inventory Manager

Wastes hours reviewing inventory by hand.

Annoyed by irregular information and absent summaries.

Anxious about regulation risks and expired stock.

Procurement Staff

Requires instant insight into vendor efficiency.

Has difficulty managing numerous purchase orders at once.

Lacks clear visibility into inventory patterns.

Warehouse Staff

Regularly needs to conduct manual inventory counts.

Experiences slow notifications for low inventory levels.

Finds it difficult to identify which items to restock or discard first.

Quote Examples:

“I usually realize stock is running out only after it’s gone.”

“Manually monitoring expiry dates is tiring and overwhelming.”

“I want a single view showing supplier performance and delivery timelines.”

3. Proposed Solution

The Medical Inventory Management System (MIMS) on Salesforce will provide a centralized, automated solution:

Key Features:

1. **PRODUCT:** Maintain all supplier information, contact details, and performance metrics in one system.
2. **INVENTORY MANAGEMENT:** Real-time stock levels, categorized by type, location, and usage.
3. **PURCHASE ORDER:** Automated creation, approval, and tracking of POs.
4. **ORDER ITEM:** Notifications for products nearing expiry to prevent wastage.
5. **SUPPLIER:** Dashboards and reports for informed decision-making.

Workflow Example:

1. Inventory Manager accesses the Salesforce dashboard.
2. Views current stock status through visual charts.
3. Gets an automated notification for low insulin supply.
4. System suggests Supplier A based on top performance metrics.
5. Purchase order is auto-created and dispatched.
6. Inventory updates instantly once new stock is received.

Benefits:

Fewer manual mistakes.

Quicker purchasing and inventory replenishment.

Adherence to healthcare compliance standards.

