

Ideation Phase

Problem Statement

Date	07-11-2025
Team ID	NM2025TMID05637
Project Name	Medical Inventory Management

1. Background and Context

Healthcare facilities depend heavily on the timely availability of medical supplies to ensure patient safety and operational efficiency. Inventory management is at the core of hospital and pharmacy operations. Inefficient inventory practices can lead to several critical issues:

Patient Care Risks: A shortage of essential medicines or using expired products can have life-threatening consequences.

Financial Losses: Overstocking leads to unnecessary holding costs, while stockouts delay treatments.

Regulatory Non-Compliance: Many medical supplies are subject to strict regulations; mismanagement can lead to audits, penalties, or legal issues.

Case Example:

A mid-sized hospital manually tracks its inventory using spreadsheets. On one occasion, a batch of vaccines expired because staff failed to check expiry dates accurately. This resulted in discarding stock worth thousands of dollars and delayed 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

Spends hours manually checking stock.

Frustrated by inconsistent data and missing reports.

Worried about compliance and expired products.

Procurement Staff

Needs quick access to supplier performance.

Struggles with tracking multiple purchase orders simultaneously.

Limited visibility into stock trends.

Warehouse Staff

Has to physically count stock frequently.

Delays in receiving low-stock alerts.

Unable to easily prioritize items for restocking or disposal.

Quote Examples:

“I often don’t know which items are running low until it’s too late.”

“Keeping track of expiry dates manually is exhausting and stressful.”

“I wish I could see supplier ratings and delivery times in one place.”

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 logs into Salesforce dashboard.
2. Checks stock levels via dashboard charts.
3. Receives automated alert for low-stock insulin.
4. System recommends Supplier A based on performance rating.
5. Purchase order is automatically generated and sent.
6. Stock levels updated in real-time upon receipt.
7. Expiry alerts are scheduled weekly to prevent waste.

Benefits:

Reduction in manual errors.

Faster procurement and restocking.

Compliance with healthcare regulations.

