

DATA FLOW AND USER STORIES

Date	23 October 2025
Team ID	NM2025TMID08036
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Data Flow and User Stories:

The data flow in the Medical Inventory Management System represents how information moves seamlessly between different modules within the platform. The process begins when a new medicine or equipment record is created in the system, capturing details such as item name, batch number, quantity, supplier, and expiry date. Each item is linked to its supplier and storage location, allowing the system to maintain an accurate and updated inventory database. When stock is received, the system updates the available quantity and records supplier details. As items are issued to hospital departments or patients, the system automatically updates the stock balance. Expiry alerts are triggered periodically based on stored data, ensuring timely replenishment and removal of outdated stock. The billing and purchase modules retrieve data from inventory and supplier records to generate invoices automatically. Finally, analytical reports and dashboards compile information from all modules to provide actionable insights for administrators. This structured data flow ensures accuracy, reduces redundancy, and enhances the overall efficiency and reliability of the Medical Inventory Management System.

User Stories:

S.No	User Role	User Story Description / Acceptance Criteria
1	Admin / Inventory Manager	As an Inventory Manager, I want to add, edit, and track details of all medical items and equipment so that I can maintain accurate stock records. The system should allow linking items with suppliers, batch numbers, and expiry dates for real-time monitoring.
2	Procurement Officer	As a Procurement Officer, I want to manage purchase orders and supplier data so that I can ensure timely replenishment of stock. The system should generate alerts for low stock and automate purchase requests based on defined reorder levels.
3	Pharmacist / Store Staff	As a Pharmacist, I want to issue medicines to hospital departments or patients and record transactions accurately. The system should automatically deduct quantities from inventory and prevent issuing expired stock.
4	Administrator	As an Administrator, I want to view audit trails, billing data, and inventory reports so that I can ensure

regulatory compliance,
analyze performance, and
make informed decisions

Data Flow Diagram:

