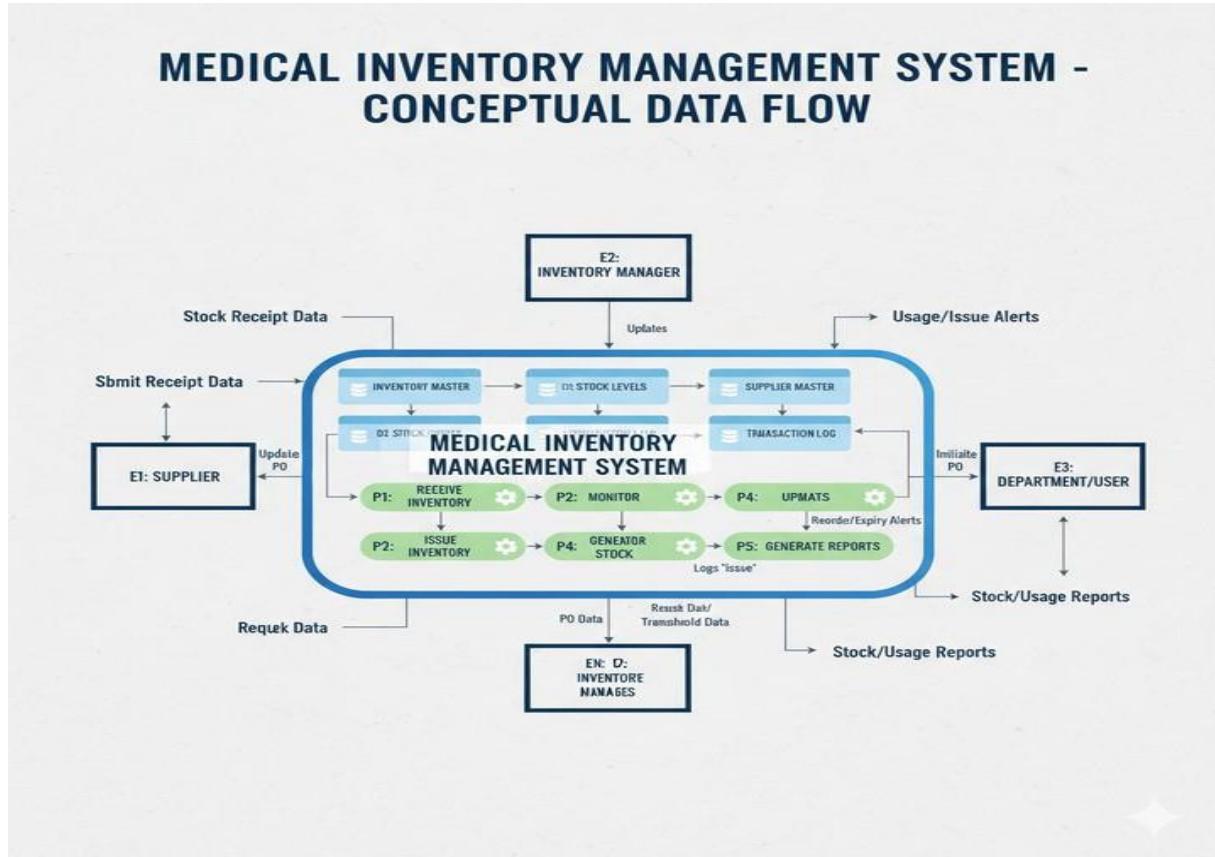


DATA FLOW DIAGRAM & USER STORIES

Date	8 November 2025
Team ID	NM2025TMID00593
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Data Flow:

The Data Flow in the Medical Inventory Management Contains the core data for newly received items: Item ID, Lot Number, Expiration Date, Quantity Received, and Supplier ID. This is crucial for compliance and tracking perishable goods. The process updates the real-time quantity for the item and creates a new record in the stock level data store with the unique Lot Number and Expiration Date. The status of the relevant Purchase Order is changed from "Sent" to "Received" or "Partially Received" to close the loop on procurement. The Medical Inventory Issuing Request data specifying Item ID, Quantity Needed, and the Destination (e.g., Ward A, Operating Room, or a Patient ID). The process determines which specific lot to issue (usually applying First-Expires-First-Out - FEFO logic) and reduces the quantity for that specific Lot Number in D2. A record is created containing Transaction ID, Item ID, Quantity, Date/Time, User ID, and Transaction Type ("Issue") to maintain a complete audit trail. The Stock Monitoring The process compares the Current Quantity (D2) against the Reorder Threshold (D1) for all active items. Generates a critical alert listing items that are Below Threshold or Nearing Expiry, including current quantity and location.



DATA FLOW DIAGRAM & USER STORIES

User Stories:

The User Stories Define the functional needs of the Medical Inventory Management Project from both the Manager and platform User Perspectives. The Outline Specific goals such as Stock Monitoring, Expiration Control, Ordering, Reporting and this role focuses on maintaining optimal stock levels, ordering, and financial control. And Role Nurse Issuing, Stock Inquiry, Requesting and this role focuses on accessing and utilizing supplies quickly and accurately.

S.No	User Role	User Story	Description / Acceptance criteria
1.	Inventory Manager	As an Inventory Manager, I want to set a minimum stock quantity for each item. I want to receive an alert for items expiring within 60 days.	The Inventory Manager system can alert me before an item runs out so that I can implement a First-Expires-First-Out (FEFO) strategy and reduce costly wastage.
2.	Nurse	I want to quickly scan a barcode when taking an item, I want to request a transfer of an item from the main store to my ward.	The Nurse system stock level is immediately updated and my administrative time is minimized so that I don't experience a stock out during patient care.
3.	System Administrator	I want to be able to create, modify, and assign user roles and permissions, and I want to be able to access an audit log of all inventory transactions.	The System Administrator I can control access to sensitive inventory and financial data so that I can trace any discrepancies in stock and maintain compliance.