Phase 2: Project Planning phase

Field	Details
Date	9 November 2025
Team ID	NM2025TMID00719
Project Name	Medical Inventory Management System
Maximum Marks	5 Marks

1. **Project Scope**

- **Product Master Data Management: Creating and maintaining a single source of truth for all medical products (SKU, description, vendor, unit of measure, location, cost, and classification, e.g., "A, B, or C" item).**
- **Multi-Location/Warehouse Tracking: Enabling real-time visibility and stock levels across multiple locations (main warehouse, satellite clinics, surgical carts, etc.).**
- **Receiving s Putaway: System functionality to record incoming shipments, automatically update inventory levels, and capture Lot Number, Serial Number, and Expiration Date upon receipt.**
- **Inventory Consumption/Issuance: Implementing a quick, mobile-friendly method (e.g., barcode scanning via the Salesforce Mobile App) to track when items are consumed during patient care or transferred between locations.**
- **Purchase Request Automation: Triggering automated Purchase Requisition or Purchase Order (PO) creation when stock levels hit pre-defined minimum safety stock thresholds.**
- **Reporting s Analytics: Creating custom reports and dashboards within Salesforce to track KPIs like usage trends, expired stock risk, and supplier performance.**

2. Project Objectives

Category	Example Objective	Key Metrics (KPIs)
Financial s Efficiency	**Reduce inventory carrying costs** by 15% within the first 12 months post-launch by optimizing reorder points and minimizing overstocking.	Inventory Carrying Cost Percentage, Inventory Turnover Rate.
Safety s Compliance	Achieve **100% real-time tracking** of all Class II/III medical devices by lot/batch number and expiration date to ensure audit readiness.	Lot/Batch Traceability Rate, Expiration Waste Percentage.
Patient Care	**Eliminate stockouts** of all critical "Tier A" surgical and emergency supplies across all central distribution points.	Critical Stockout Rate, Order Fulfillment Time.
Process Improvement	**Increase the accuracy of physical inventory counts** to 98% by implementing barcode/RFID scanning processes in the new Salesforce system.	Inventory Accuracy Percentage, Time Spent on Physical Counts.

3. Define Project Scope and Objectives

- **Finalize Scope:** Clearly define what the new system will and will not include (e.g., will it manage all supplies, pharmaceuticals, and equipment? Will it integrate with the Electronic Health Record (EHR) or only procurement?).
- **Set Clear Objectives (Goals s KPIs):** Establish measurable outcomes. Examples include:
    - **Reduce inventory waste** (e.g., lower expiration rate by **15%**).
    - **Improve inventory accuracy** to **GG%**.
    - **Decrease stockouts** of critical supplies by **G0%**.
    - **Automate** reorder processes.

4. **Stakeholder and Requirement Review**

- **Confirm Requirements:** Review and finalize the detailed functional and non-functional requirements gathered in the initial phase (e.g., real-time tracking, barcode/RFID integration, security, HIPAA/regulatory compliance).
- **Identify Key Stakeholders:** Confirm who needs to be involved (e.g., hospital administrators, IT staff, pharmacy, nurses, supply chain managers).
- **Gather Feedback:** Ensure all key users and management have signed off on the planned features and system expectations.
-

5. **Resource and Financial Planning**

- **Resource Allocation:** Determine the project team members, including internal staff (IT, clinical) and external vendors/consultants. Define their roles and responsibilities.
- **Technology Stack/Software Selection:** If it's a new system, finalize the choice between custom development, off-the-shelf software (like an ERP module), or a specialized healthcare inventory solution.
- **Budget and Financial Analysis:** Create a detailed budget, calculating the **Total Cost of Ownership (TCO)**, including initial purchase/development, implementation, training, maintenance, and potential integration costs. Conduct a **Return on Investment (ROI)** analysis.

6. **Timeline and Schedule Development**

- **Work Breakdown Structure (WBS):** Break the entire project into smaller, manageable tasks (e.g., system design, development/configuration, data migration, testing, training, deployment).
- **Scheduling:** Estimate the duration for each task and sequence them logically. Set key **milestones** and deadlines (e.g., completion of core development, start of User Acceptance Testing (UAT)).
- **Gantt Chart:** Create a visual schedule to track progress.

7. **Risk Management and Strategy**

- **Identify Risks:** Determine potential challenges (e.g., data migration errors, resistance to change from staff, integration issues with existing EHR/financial systems, budget overruns, regulatory changes).

- **Mitigation Strategies:** Develop plans to reduce the impact or likelihood of identified risks. For instance, planning thorough data cleansing before migration.
- **Contingency Planning:** Define backup plans for critical issues.