Project Design Phase
Problem – Solution Fit Template

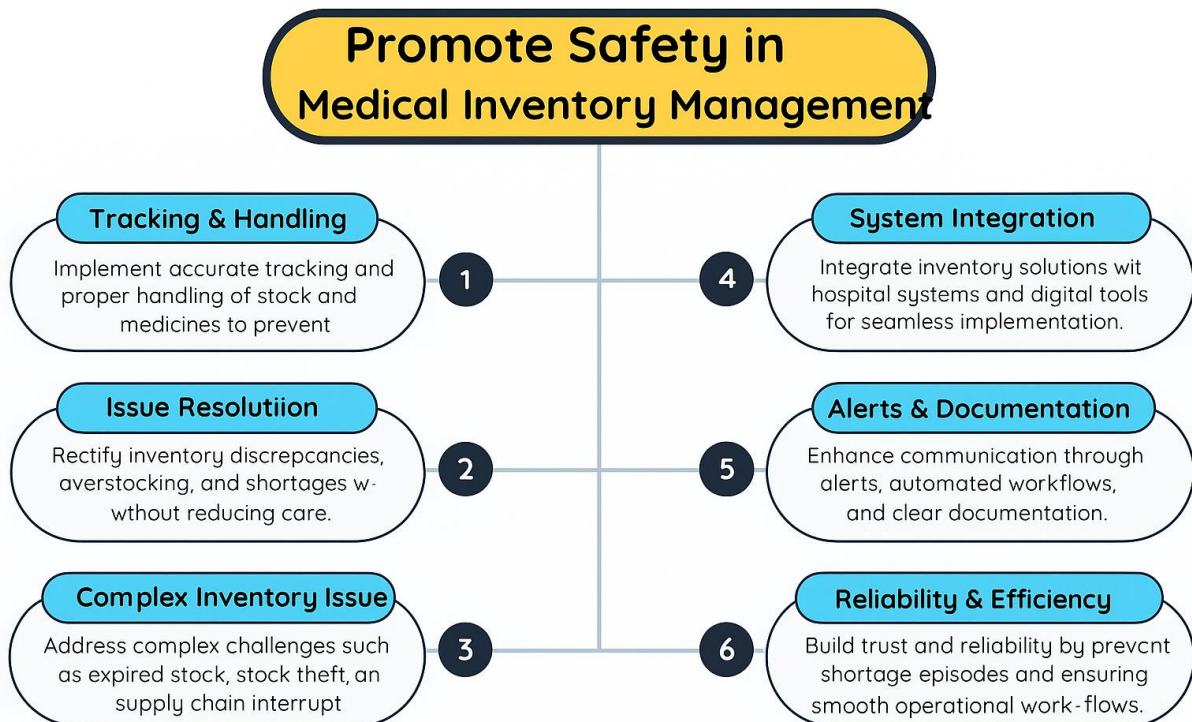| Date	30 october 2025
Team ID	F6ECDDC2BAA51CF97204E983A5BEFB35
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit in medical inventory management means identifying a critical challenge faced by healthcare facilities—such as stock shortages, expired medicines, or inefficient manual tracking—and ensuring that the solution implemented truly resolves these issues. It focuses on validating that the system or method you introduce effectively improves inventory accuracy, reduces wastage, prevents supply interruptions, and supports timely patient care. Achieving this fit helps hospital administrators, pharmacists, and medical supply managers understand real-world workflow needs, recognize gaps in their current inventory practices, and confirm that the new system provides measurable improvements in efficiency, compliance, and patient.

Safety Purpose in Medical Inventory Management:

❏ Ensure accurate tracking and handling of medicines and medical supplies to prevent errors and protect patient safety.

❏ Address complex inventory issues—such as expiry management, stock-outs, or over-stocking—by implementing systems aligned with healthcare workflows.

❏ Improve adoption of the inventory system by integrating it with existing hospital processes, digital tools, and supply chain channels.

❏ Strengthen communication and coordination between pharmacy staff, store managers, and clinical teams using alerts, automated reports, and clear documentation.

❏ Build trust and reliability by preventing critical supply shortages, eliminating expired drug usage, and ensuring timely availability of essential items.

❏ Continuously analyze current inventory challenges to enhance efficiency, reduce wastage, and support better patient care outcomes.

Template:

Promote Safety in Medical Inventory Management

Tracking & Handling
Implement accurate tracking and proper handling of stock and medicines to prevent

1

Issue Resolutiion
Rectify inventory discrepcancies, averstocking, and shortages w- wthout reducing care.

2

Complex Inventory Issue
Address complex challenges such as expired stock, stock theft, an supply chain interrupt

3

System Integration
Integrate inventory solutions wit hospital systems and digital tools for seamless implementation.

4

Alerts & Documentation
Enhance communication through alerts, automated workflows, and clear documentation.

5

Reliability & Efficiency
Build trust and reliability by prevcnt shortage episodes and ensuring smooth operational work-flows.

6

The project **"Prevent Deletion of Medical Items Linked to Active Records"** solves a critical challenge in hospital and inventory management systems. By ensuring that no active medical item, consumable, or equipment that is currently associated with patient records, prescriptions, or ongoing procedures can be accidentally removed, the system protects essential operational data and patient safety. This mechanism strengthens data accuracy, supports smooth treatment workflows, and upholds healthcare compliance standards. Through automated rule-based validation and continuous system monitoring, this solution ensures inventory transparency, prevents stock mismanagement, and builds a more reliable and secure medical supply system for healthcare environments.