

REDUCTION IN DISPENSING ERRORS IN IPD PHARMACY

BRIEF HISTORY

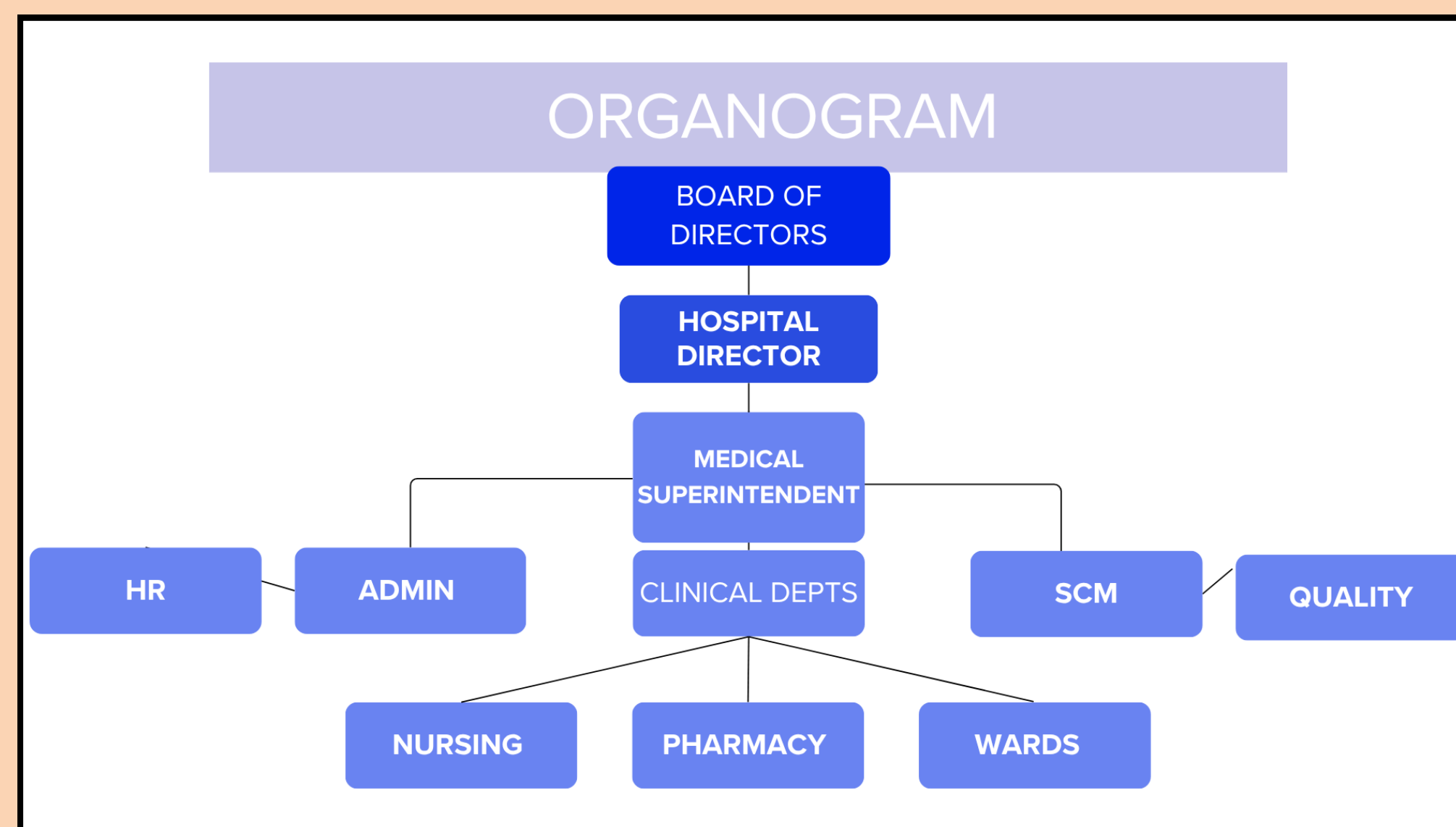
One of India's top providers of integrated healthcare services is Fortis Healthcare Limited, an IHH Healthcare Berhad company. With 28 medical facilities, 4,500+ operational beds (including O&M facilities), and more than 400 diagnostic centres (including joint ventures), it is among the biggest healthcare organisations in the nation.

VISION

To create a world-class integrated healthcare delivery system in India, entailing the finest medical skills combined with compassionate patient care.

MISSION

To be a globally respected healthcare organisation known for Clinical Excellence and Distinctive Patient Care.



INTRODUCTION

Medication dispensing has a direct impact on patient safety and treatment results, making it a crucial procedure in clinical operations and hospital supply chains. A Quality Improvement Project (QIP) was required at Fortis Memorial Research Institute (FMRI), Gurgaon, a tertiary care multispecialty hospital with NABH accreditation, due to an increase in near-miss dispensing errors in the IPD pharmacy.

AIM

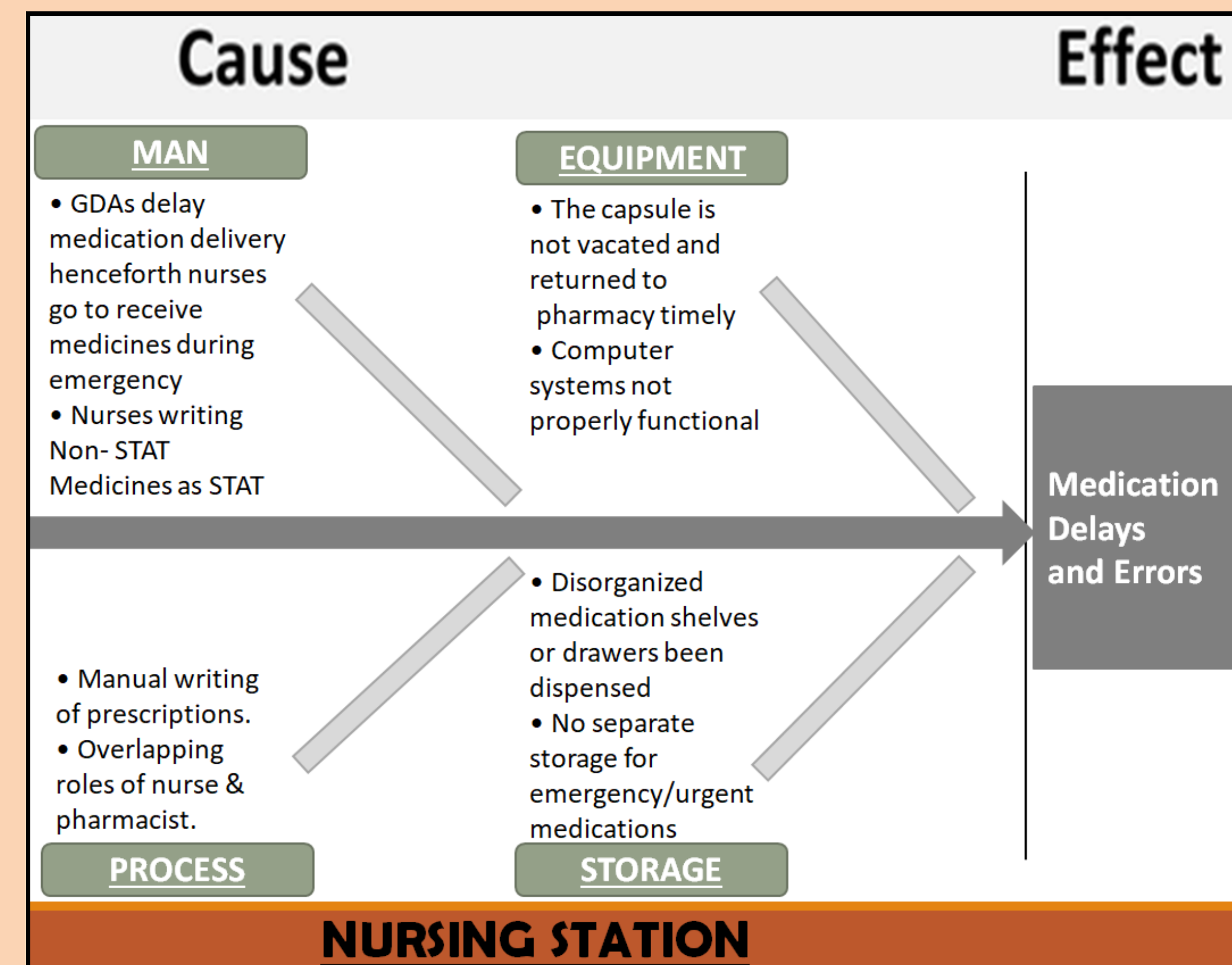
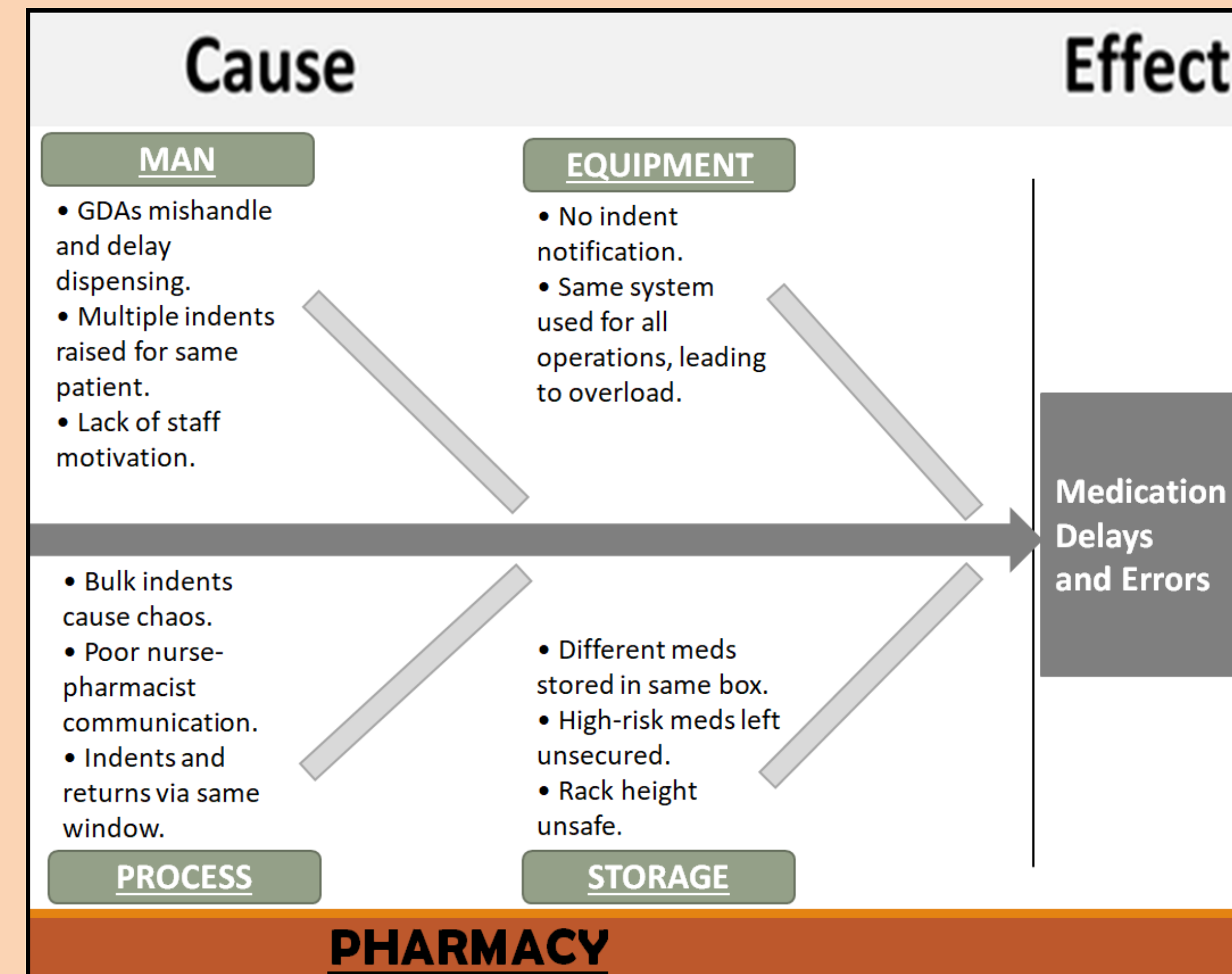
To improve the efficiency of IPD medication dispensing practices.

OBJECTIVE

- The IPD pharmacy's goals are to identify the root causes and lower the number of dispensing errors.
- To determine the elements causing the pharmacy's IPD dispensing delays.
- To determine the causes of the IPD nurses' delays in administering medication.

METHODOLOGY

- Direct Observational Study
- Root Cause Analysis: Fishbone Diagram (Ishikawa) to identify factors contributing to delays and errors
- Staff Interaction: Interacted with pharmacists, nurses, and GDAs to understand challenges and workflow patterns.



PHARMACY -

- Assign only designated staff for dispensing, train GDAs on proper handling and motivate staff via recognition and role clarity.
- Add separate systems for indenting & other tasks and alert system for indents, especially stats.
- Separate counters for returns and dispensing, improve interdepartmental communication channels and fix tat for processing and delivering indents.
- Store each med in separate containers, lock high-risk/high-value meds and adjust racks to fire-safety standard.

NURSING STATION -

- GDAs to handle only transport, not dispense. train nurses on correct indenting & stat use.
- Ensure functioning computers at all stations and set reminders for capsule return.
- Fix indent timing by shift and improve coordination between nurse & pharmacy.
- Label and categorize meds clearly and label and categorize meds clearly.



THEORETICAL LEARNINGS	PRACTICAL LEARNINGS
Turnaround Time (TAT) is a measurable indicator of process efficiency	TAT is not consistently tracked across departments, especially during night shift.
Lean methodology improves efficiency and reduces wastage	SOPs exist but are often not followed due to time pressure or manpower issues
Quality improvement tools like Fishbone	Communication gaps between pharmacy and nursing lead to medication errors

CHALLENGES OBSERVED	SUGGESTIONS
Manually written prescriptions	Role of cross-verification in reducing medication errors.
Lack of communication within departments causing misunderstanding.	Each medication should be stored in separate container
Limited access to data due to confidentiality	Mandate Continuous Staff Training
GDA mishandling/sliding of medication packets	Conduct workshops for better and safe handling.

MAJOR LEARNINGS
Manual systems create delays and errors-automation is necessary.
GDAs should be trained and limited to transport roles.
Night shifts need better planning, as limited staff often leads to increased errors.
Inter-department coordination (nurses, pharmacy, GDAs) plays a huge role in timely and safe medicine delivery.

STRENGTHS	WEAKNESS
• Use of digital indenting system • Existing SOPs and Lean methodology framework • Direct communication channels between pharmacy and nursing units	• Manual handling of prescriptions and labeling • High dependency on GDAs for medicine transport • Poor shoot system operations and delayed returns
OPPORTUNITIES	THREATS
• Automation of dispensing process through robotic or semi-automatic systems • Implementation of barcode-based tracking and verification • Staff re-training and upskilling on SOP compliance	• Medication errors may compromise patient safety • Increase in near-miss events if gaps continue • Risk of legal and regulatory non-compliance

SWOT