

Digitalization of kits using Technology -Inventory Management Application-Anytrac

Category: Digital Excellence

Focus Area: Patient

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Problem Statement / Digital Challenge

â€¢ Manual preparation of average 1200 planned cases/month and daily transfer of all such kits from Basement -1 location to 8th Floor OT Complex in unhygienic conditions and unorganized way of handling medicines in crates would lead to quality issues and inventory getting damaged during transit. Manual kit preparation is a limitation and a patient safety issue to identify the culprit batch in case of ADEs/ADRs incidences in patients, if any. It is also risk that may lead to dispensing errors due to lack of system control.

â€¢ Manual kit preparation would also take time due to material replenishment happening manually leading to kit handover TAT >24 hrs.

â€¢ Cold chain compliance needed to be strengthened across the channel in OT till administration.

Aim is to remove the manual intervention, dependency by way in adopting technology not only as an advancement but also as an advantage, thereby transitioning from manual processes to system driven, controlled and monitored application use and finally, scale up to auto run mode across inter departments functioning in OTs removing risks and improving patient safety to the core.

Nursing and Patients were the stake holders most affected.

1. Incomplete kits
2. Dead/Block Inventory
3. Complaints
4. Kit handover TAT

Digital Tool / Solution Implemented

1. Developed Inhouse Application and WIFI support. 2. High transmission Speed and easy to use hand held devices. 3. Integration with SAP 4. Provision for customization and related updating. 5. User friendly. 6. Team IT 24*7 support 7. Real time Dashboard and KPI Reports.

- â€¢ Developed the application Inhouse for the ease in adopting to our internal OT processes, system updates, scope of customizations in terms of adding features/tabs, no additional cost to the company, user friendly, maintain patient confidentiality, high transmission speed, Integration with SAP, Dashboards and KPI Support.
- â€¢ Formed Cross functional Teams representing -Nursing, IT, Pharmacy
- â€¢ Strengthened communication by introducing 24*7 On call phone and group IDs.
- â€¢ Train the Trainer- Identified Internal Champions to train, motivate and convince small teams for ground level operations.
- â€¢ Start Small and Grow Big- defined scope of procedures.
- â€¢ Three Rules & Gemba Walks-Insights, feedbacks and suggestions.

Digital Implementation Highlight

Started Small in Grew Big in a Phased Manner-

1. Project Nursing Oct'24 to Oct'25

2. Technicians and Perfusionists- Oct'25 and Ongoing
3. Cath Lab- Mar'26
4. LR OT-June'26

Staff Training by Two IT Team Members,

Nursing Team- Approximate 70 nos.

Technicians- Approximate 30 nos.

Cath Lab- 10 nos.

LR OT- 5 Nos

Internal Champions - Team Leader and Coordinators in each department.

Nursing Side had 10 senior level leaders including managers and coordinators.

Two Technicians.

Ten Cath Lab on ground level nurses and one Manager.

LR OT- 5 nurses and 1 Manager.

Digital Impact

• In OT Complex- Daily Manual requirements reduced from 100% to 60% for nursing side kits. Technicians and Perfusionists side kits digitalized 100% • Kit Handover TAT reduced from 24 hours to 8 hours. • Process efficiency cases/day increased from 0 to 30-35 cases. • Dispensing errors reduced from 50% to 0 • Inventory Coverage- Medicines/Month/800 cases from Zero to Nurses •increased from 0 to 10K-11K/Technicians-30K/ Perfusionists-4K • Complaints-50% of the kits either had incompleteness/ dispensing errors reduced to 10 to 15% -No

complaints. â€¢ Inventory-Block Inventory is now 0/No stock outs/Tied up capital (Dead Inventory) reduced by 17% (Julyâ€™25 to Decâ€™25) â€¢ Inventory/ Work Duplication/Transaction Duplication-Reduced to 70% due to template uniqueness and merged to a single template from 107 to 76 medicines. â€¢ In Cath Lab and Labor OT - Incomplete kits/day- Reduced from 3 to 4 cases to Zero, Staff moving steps reduced in day shift during peak hours. â€¢ Kit Preparation Time shifted from Night to Day. Feb 2026- Won Special Recognition at the RIL SPECTRUM â€“Annual learning Event in the Challengers League as LEARNING CHAMPIONS amongst the group. Re-Felicited in our organization. January 2025-Won the WOW award for driving 100% compliance.

Key Enablers / Innovations

Enablers

1. Advantage of Inhouse application helped Go Live
2. 24*7 IT Team support
3. TL acted as Trainers forming small groups in ground support.
4. Inventory Categorization
5. Gemba Walks
6. Process as well as Department re-Engineering.

Key Learnings & Sustainability

Top Key Learnings:

1. Digitalization is way forward Vs human dependency when it comes to Patient Safety.
2. Adoption Policy- Just Culture.
3. ERIC Framework

What other hospitals should consider while adapting

1. Choose and Adapt- Translate but don't Transplant
2. Measure and Defend wisely.
3. Design to sustain.

Reference Sources (If Applicable)

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