Digital Transformation through CMIS Implementation
Medipulse Hospital, Jodhpur

About the Organization
- 200-beds tertiary care hospital.
- Location: Jodhpur, Rajasthan
- Specialties/user base: Multispecialty tertiary care (IPD, ICU, OT, Radiology, Lab, Pharmacy, Emergency) serving ~3,300 in-patients monthly
- NABH & NABL accredited
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Key Challenge:
- Fragmented, paper-based documentation leading to missed entries, delayed discharges, and inefficiencies in workflows.

Digital Solution:
- Required to ensure accurate documentation, enhance patient safety, reduce duplication, enable real-time monitoring, and comply with NABH standards.

Most Affected Stakeholders:
- Nursing staff (documentation burden), consultants (clinical notes), admin/billing (delays in discharge), and patients (longer waiting/discharge times).

NABH Quality Indicators Impacted:
- Medication Safety (eMAR alerts, CDSS checks)
- Discharge TAT
- Patient Safety & Continuity of Care
- Environmental Sustainability (paper reduction)
- Clinical Documentation Compliance

Digital Tool / Solution Implemented
- Clinical Management Information System (CMIS) using eClinicalWorks (ABDM-certified, NABH-certified).
- Outsourced platform, implemented hospital-wide.

Key Features:
- Real-time dashboards, ClinDoc, eMAR with medication safety alerts, ADT, LIS/Pharmacy integration (HL7), KPI reporting, role-based access.

Digital Implementation Highlight
- Rollout Duration: 8 months (Dec 2023 – Sept 2024).
- Coverage: All inpatient wards, OPDs, ICUs, emergency, pharmacy, lab, billing, radiology.
- Staff Trained: Doctors, nurses, admin, IT, pharmacy & billing staff with superuser-led sessions.
- Champions: Nursing in-charges, educators, and superusers acted as peer trainers.

Digital Impact
- 100% shift to digital documentation, discharge TAT reduced by ~35 minutes/patient, 75,000 paper sheets saved monthly.
- Quality & Safety: Missed documentation dropped from 28% to <5%, medication errors reduced by ~70%, and better audit readiness.
- Ensured structured documentation, interoperability, real-time monitoring, digital audits, and safer care.

Enablers:
- Phased rollout across wards– ICU– emergency, superusers for peer support, regular training & retraining, added desktops/CoWs, weekly meetings, simplified templates for easy use.

Challenges:
- Resistance from staff used to paper, low digital literacy & typing speed, hybrid paper–digital risks, tablets unsuitable for long notes, limited adoption of voice dictation, frequent staff rotation needing retraining.

Top Learnings:
- Phased Rollout Works Best, superusers are critical, Continuous Training & Governance kept implementation on track.

What Other Hospitals Should Consider:
- Start with wards before expanding to ICUs/emergency.
- Invest in user-friendly hardware (desktops, CoWs) over tablets for heavy documentation.
- Address digital literacy early with simplified templates and role-based training.
- Screenshots of digital dashboards, clinical documentation, and nursing workflows were captured to showcase real-time implementation.