

Integrated HIS Dashboards for Clinical Excellence

Category: Digital Excellence

Focus Area: Digital dashboards and analytics for clinical and quality decision-making

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Problem Statement

Ujala Cygnus Healthcare Services operates 28 hospitals across North India, making timely monitoring of clinical quality indicators, patient safety, NABH compliance, infection control, operation theatre performance, emergency services, and other key operational parameters a significant challenge. Although clinical data was available in the Hospital Information System (HIS), there was a need to standardize quality monitoring and enable timely analytics across all hospitals.

The organization required an integrated digital solution that could capture data during routine clinical workflows and generate meaningful dashboards for hospital leadership and the Corporate Quality & Operations team. The initiative primarily benefited clinicians, nursing staff, quality teams, infection control professionals, hospital administrators, and corporate leadership by improving visibility of quality indicators and supporting evidence-based decision-making.

By utilizing the Shivam Medisoft Hospital Information System (HIS) and its integrated Quality, Patient Safety, Infection Control, Operation Theatre, Emergency, ICU, Pharmacy, and other functional modules, the organization established standardized digital monitoring of clinical and quality indicators across all hospitals. The built-in analytics and dashboards support continuous quality improvement, strengthen clinical governance, and enhance compliance with NABH Digital Health requirements.

Objectives

The initiative utilizes the Shivam Medisoft Hospital Information System (HIS), which is implemented across all 28 hospitals. Rather than using a separate quality application, the organization leverages integrated HIS modules, including Quality, Operation Theatre, Infection Control, ICU, Emergency, Pharmacy, Patient Safety, and Audit functions, to capture and analyze clinical and operational data.

Built-in dashboards and analytics provide real-time monitoring of quality indicators, NABH compliance, patient safety events, infection surveillance, operational performance, and departmental KPIs. The solution was implemented through in-house configuration and standardization of existing HIS modules, enabling automated reporting, hospital benchmarking, trend analysis, and data-driven decision-making while minimizing manual reporting.

Intervention & Methodology

The initiative was implemented by configuring and standardizing the existing Shivam Medisoft Hospital Information System (HIS) across all 28 hospitals. The Corporate Quality & Operations team worked closely with the Information Technology department and hospital teams to standardize quality indicators, reporting formats,

Quality, Nursing, Medical Administration, Infection Control, Operation Theatre, ICU, Emergency, Pharmacy, and other clinical departments were trained to use the standardized HIS modules for routine documentation and performance monitoring. Since dashboards are generated directly from data entered into the HIS, no additional software or duplicate data entry is required.

The implementation enabled enterprise-wide monitoring of quality indicators through existing HIS dashboards and analytics, improving data consistency, reducing manual compilation of reports, strengthening hospital benchmarking, and supporting timely clinical and operational decision-making across the organization.

Results & Impact

The implementation of the Shivam Medisoft Hospital Information System (HIS) across all 28 hospitals has significantly strengthened digital monitoring of clinical and quality performance. The integrated Quality, Patient Safety, Infection Control, Operation Theatre, Emergency, ICU, Pharmacy, and other HIS modules provide real-time access to operational and clinical data through built-in dashboards and analytics.

The availability of standardized digital reports has reduced dependence on manual data compilation, improved data accuracy, enhanced audit readiness, and enabled timely review of key performance indicators by hospital leadership and the Corporate Quality & Operations team. Enterprise-wide visibility has strengthened benchmarking across hospitals, supported evidence-based decision-making, and facilitated timely corrective and preventive actions. The initiative also supports

NABH Digital Health requirements by promoting digital documentation, standardized quality monitoring, and continuous quality improvement using a single integrated Hospital Information System.

Challenges & Critical Success Factors

The primary innovation was the effective utilization and customization of the Shivam Medisoft Hospital Information System (HIS) to support enterprise-wide clinical quality monitoring across 28 hospitals. Instead of implementing multiple standalone applications, quality analytics were integrated within existing HIS modules, including Quality, Patient Safety, Infection Control, Operation Theatre, Emergency, ICU, Pharmacy, and Audit functions.

Standardized quality indicators, uniform digital documentation, centralized data capture, and role-based dashboards enabled consistent monitoring across all hospitals. Successful implementation was driven by collaboration between the Corporate Quality & Operations team, Information Technology department, hospital quality teams, and clinical users. Continuous user training, standardized workflows, and regular dashboard reviews ensured sustained adoption and data quality.

Key Learnings

The project demonstrated that a well-configured Hospital Information System can effectively support enterprise-wide clinical quality monitoring without the need for multiple standalone applications. Standardized data entry, clearly defined quality

indicators, and active engagement of clinical and quality teams are essential for reliable analytics and meaningful decision-making.

Since quality dashboards are embedded within the Shivam Medisoft HIS, the solution is sustainable as part of routine hospital operations and requires minimal additional infrastructure. The model can be replicated across other healthcare organizations using integrated HIS platforms to strengthen clinical governance, patient safety, operational efficiency, and NABH Digital Health compliance.

Reference Sources (If Applicable)

NABH 6th Edition Accreditation Standards for Hospitals

â€¢ NABH Digital Health Accreditation Standards

â€¢ Shivam Medisoft Hospital Information System (HIS) â€” Internal Configuration and User Modules

â€¢ Internal Quality Indicators, Audit Reports, Patient Safety Data, Infection Control Dashboards, and Corporate Quality Reports

â€¢ Ujala Cygnus Healthcare Services â€” Internal Quality & Operations Documentation

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