

HOSPITAL MANAGEMENT SYSTEMS: CHANGING ORGANIZATIONAL PERFORMANCE AND IMPROVING PATIENT SAFETY IN HOSPITALS

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Hospital Management Systems: Changing Organizational Performance and Improving Patient Safety in Hospitals

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Abstract – Hospital culture doles out to encumber efforts at incessant smart and hard work to improve patient healthcare outcomes as well as organizational performance and humanizing patient safety in hospitals. First, the standing difference among providers, for example, in hospital medical/surgical wards, is often a barrier to improved quality of service delivery and unit interpersonal communications. Physicians, certainly, rightly bear all of the influence and conscientiousness for patient-related pronouncement. But physicians, since of this status, are not confidentially involved in teaming with other providers when involvement efforts are undertaken. Group meetings which are held by provider staff typically do not engage physicians in discussions of individual patient bedside care.

Keyword: Hospital Management Systems, Patient Care, Organizational Performance, Patient Safety, Health Care.

1. INTRODUCTION

Hospital Management System (HMS) is synonyms of hospital e-Governance initiatives, which means making a hospital management paperless. This includes the clinical, back office and generic management of all activities. It integrates the entire resources of a hospital into one integrated software application. Automated system plays a key role to patient-centric mechanism that has exceptional capability of handling outpatients, inpatients. emergencies, day care and different other referred patient cases. We aimed at offering fully configured web based healthcare solution enabled with mobile friendly features & characteristics. With the assistance of healthcare intelligence system, hospitals, clinics, and other medical institutions can keep all processes under control and can make quick decision through mobile or hand set support.

Impact of information system in hospital management:

The most important benefits that a hospital gains out of a HMIS implementation are:

- Least manpower requirements
- Instant information retrieval

- Timely treatment decisions
- Information sharing between the healthcare specialists across the world
- Access to DICOM images online if HMIS(hospital management information system) is web based
- Saves lot of money to the promoters if HMIS is web based
- Allows remote access to all stake holders including patients
- Web based HMIS can also provide services such as online appointment scheduling
- Accepting payment online becomes possible with Ecommerce for payment gateways
- Online claims processing for cashless patients become far too easy

The integrated Hospital Management provides several management tools such as EMR, which is more of an audit trail of doctor's encounters with patients. EMR is a modern way of a hospital treating the patients. EMR covers past history, prescription

suggested by doctors, opinion of distant consultants with the help of DICOM imaging or Tele-radiology. This means all vital information is residing in the system, which can be readily retrieved to help in making a timely decision.

2. **REVIEW OF LITERATURE:**

Healthcare quality and patient safety are the common mantra of all primary and secondary health care providers. In hospitals, over the years, a variety of models and schemes for hospital interventions and development have been deployed (Friesner, 2009). A typical approach is to hire external consultants to plan and implement organizational change efforts or interventions involving a wide variety of approaches (Hosford, 2008). Using the Malcolm Baldridge Award model, for example, has been a common model in hospital efforts to improve quality. One study of several of such efforts has reported mixed results. Administrators reported that they have made little progress in implementing the Baldridge quality control model or that the effort has not yet "matured" (Hosford, 2008).

Hospital management system (HMS) typically displays stagnant, impersonal and historical data on various aspects of hospital performance. In one study examining the effect of change interventions in hospitals, "only 38% of executives believed that their initiatives were successful and only 30% thought these initiatives contributed to the sustained improvement of their organization (Erwin 2009). Also, not surprisingly, initiatives to provide training in teamwork for error reduction efforts did not result in improved outcomes. Changing basic practices in massive, complex healthcare organizations will be especially challenging (Isern and Pung 2007). However, Mohr, Burgess and Young (2008) suggest that a teamwork culture in a hospital can reduce turnover thus providing cost savings and, perhaps, higher quality service to patients. In a hospital, these variations often confound efforts to improve patient quality. First, the traditional model at the floor level is that when an error occurs attention is directed at identifying the cause(s) of the error. This effort, ideally, leads to correction of the error(s). Hopefully, the fix will be communicated to some personnel, but obviously not to others. When external consultants are used in an organizational development effort, these individuals are rarely familiar with internal processes and procedures. Professionals are left to develop their own improved methods and implement them proactively, unlike the traditional "fix" model. Even threats of legal action and other environmental forces are not stimulating improvement and that the overall picture is one of randomness rather than of enlightened management (Griffin, et al., 2006)

1. Key Components of HMS:

≻ **HMS Enterprise** Customized packaging as per customer requirements

\triangleright **HMS Professional**

- Help Desk, Scheduling, Patient Registration
- Admission, Discharges and Transfer
- **Physician Practice**
- Billing, Contract Management, Package Deal **Designer and Accounts Receivables**
- **Consumption Entry**
- Laboratory, Radiology and Cardiology Reporting
- **Discharge summary**
- Material Management System Pharmacy, Main Stores and Purchase
- Management Reporting
- In-built Tally interface
- \triangleright Laboratory Information System
- Registration, billing, contract management, accounts receivables
- Work list, processing and reporting
- Quality control
- Barcode generation, printing and reading
- In-built bi-directional interfaces with equipment
- **Cardiology Information System** ≻
- Registration, scheduling, billing, contract management and accounts receivables
- Work list, processing and reporting
- Ready HL7 interface or bundled with PACS
- In-built Interface to Tally or bundled with Tally

Radiology Information System ⋟

- Registration, scheduling, billing, contract management and accounts receivables
- Work list, processing and reporting

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- Ready HL7 interface or bundled with PACS
- In-built interface to Tally or bundled with Tally
- Material Management System
- Item master maintenance medical and nonmedical
- Item indents and issues
- Re-order level, re-order quantity, minimum and maximum levels for each store
- Enquiries and quotations for drugs, consumables, assets and general items
- Comparison of quotations and preferred vendor for each item
- Purchase requests, orders creation and approval process
- Receiving of GRN full/partial items, free items and tracking them
- Purchase returns along with returnable/nonreturnable gate pass
- Consignment stock receipt, consumption and regularization
- Expired stock and quarantine
- Drugs and consumable issues and returns to patients
- LIFO, FIFO, FEFO issues methods
- Generic Tax formula configurations
- Periodic physical stock taking and adjustments with tracking
- Clinical Data Repository
- Standalone and XML-based interface to integrate with any HIS
- Multiple views to see the patient medical record
- Graphical representation of the lab results and vitals
- 2. Reversing the Market Led Growth of Healthcare:

Market led growth of healthcare is part of the economic agenda of the ruling classes and is motivated by their "class interests" which are in antagonistic relationship with the "class interests" of the working masses. Besides harnessing healthcare as a source of profit, the interest of the ruling classes is to provide exclusive services for the affluent sections while relegating public health services to a secondary status. The interest of the overwhelming masses on the other hand lies in provisioning of universal healthcare as a "societal good" irrespective of the individual's ability to pay.

If there is willingness to search for policy options based on the empirical examination of different policies that have been implemented in different parts of the world in different contexts, as also in our own country over the last two decades, maybe there can be some scope of reasoning our way through to secure the interests of the common people. Unfortunately, as things stand today, such a possibility does not seem to exist.

The lack of political will on part of the government to act in the interest of the vast majority of poor people is linked to class interests of the people it actually represents. In other words, the question is of class struggle which is part of larger political process. Here, we can only reiterate the need to choose sooner than later the side on whose behalf we would like to pitch in, in this struggle.

As regards the government, it has made its intensions very clear by the fact that the Planning Commission rejected the "High Level Expert Group (HLEG) Report on Universal Health Coverage for India" that was instituted by the commission itself.

CONCLUSION:

An efficient and future-proof Hospital Information System (HIS) is a key component of a viable health system as Healthcare business models are evolving rapidly. Today, there is need to control processes that govern this sector as costs rise and there is a requirement to manage the information that health professionals need. Hospital Management and Information System is a comprehensive solution that automates the clinical, electronic medical records (EMR), administrative and inventory functions, thereby leading to: Improved operational effectiveness, Cost reductions, improving quality of patient care.

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