Introduction

There has been a significant change which has occurred in the past year or so. The healthcare industry, and particularly acute care facilities, in the midst of a flurry of merger and acquisition activity, has discovered as a whole they lack the ability to move quickly internally to assimilate new systems and to adapt to the changing environment. Quite inefficient and labor-intensive business processes are still being used.

We have seen a rapid advancement in application of information technology to almost every sector of industries. The explosion of Internet growth fueled by the Worldwide Web, further accelerates this advancement.

The Hospital Information Management System (HIMS) ultimately combine electronic copies of all documents created from admission to discharge with electronic reports, usually clinical testing or billing information, into a single electronic folder. They reduce labor, eliminate lost files and ‘loose sheets,’ improve access to authorized users, increase security and provide documentation for claims more quickly.

This scenario has rendered the almost impossible task of integrating and seamlessly managing patient’s records across hospitals, clinics and between countries or states.

HIMS is a Medical office on-line. It is a custom web site for each physician’s office. HIMS offers a web application that handles every task for a physician’s office. These tasks include billing, appointment scheduling, writing prescriptions, maintaining charts and notes, keeping lab results & X-rays, etc.

In addition to providing access to the office staff and the physician, HIMS also offers controlled access to others. Patients, pharmacists, drug company representatives, and other people could access HIMS to perform various tasks that would otherwise have to be performed by the physician’s office. MD Offices that subscribe to HIMS would benefit from increased productivity.

20 Health Data (Medical Records)

- Patient’s Demographic
- Medication History
- Previous Episodes History
- Past Surgical History
- Family History
- Social History
- Allergies
- Past and Current Medication
- Provisional & Final Diagnosis
- Treatment Plan
- Clinician Notes
- Nursing Notes
- Laboratory Reports
- PACS Integration
- Radiology Reports
- Disease Coding (ICD 10)

21 Specialty Clinics

- HIV
- Mental Health
- Maternity
- TB
- Ophthalmology
- Dental
- Casualty Management
- Day Care Management

22 Integrations

- Finance & HRMS e.g. SAI IFS
- LIS & RIS Systems
- TPAs
- Drug Database
Objectives of HIMS

- To provide an integrated solution for the hospitals, which helps in efficient management of the hospital
- Improve patient care
- Improve work efficiency
- Improve fiscal control
- To provide better MIS
- Eliminate the chances of any pilferage
- Enable the growth of the hospital
- Improve management efficiency of hospitals
- Improve management decision-making through the availability of integrated management information
- Save costs through the identification of primary cost drivers at hospital level
- Implement new patient monitoring mechanisms at lower costs
The Solution

- Applying new business processes
- Applying new technologies to problem areas like
  - Procurement
  - Human Resources
- Smarter and faster information management for better care
- Better administrative control
- Automated supply - ordering systems that save time and concentrate buying power
- Inventory management leading to smaller lots of supplies thereby saving on holding costs
- Better control of administrative cost
- Alignment of clinical and administrative leadership
- Effective, early engagement of clinicians - system is designed from the clinical perspective which ensures buy-in from physicians
- Better patient care coordination
- Information & knowledge management across care continuum
- Patient-Centric EMR
- Better performance measurement

11 Pharmacy Management
- Goods Receipt Note (GRN)
- Supplier Returns
- Patient Indents for Drugs
- Patient Issues (IP Issues)
- Inpatient Return Indents
- Inpatient Returns
- Department Indents
- Department Issues
- Department Return Indents
- Department Returns
- Stock Transfer Indents
- Store Transfers
- Transfer Acknowledgments
- Stock Taking Programs
- Outpatient Sales
- Outpatient Sales Returns
- Drug Issues to Public Patients
- Drug Returns from Public Patients
- Vendor Management

12 Materials Management (General Stores)
- Goods Receipt Note
- Supplier Returns
- Department Issue Indents
- Department Issues
- Department Return Indents
- Department Returns
- Asset allocation
- Inventory Management
- Vendor Management
- Stock Taking Programs

13 Mortuary Management
- Mortuary Setup
- Registrations
- Preservation
- Post Mortem
- Discharge
- Service Indents
- Undelivered Bodies
8 Laboratory Information System
- Order Booking
- Sample Collection
- Sample Receiving
- Sample Acceptance
- Result Entry
- Result Verification
- Report Delivery
- Samples Sent to External Laboratories
- Capturing External Lab Results
- Quality Control Checks
- Interfacing with Lab Equipments

9 Blood Bank
- Donor Registration
- RH Typing
- Antibody Screening
- Component Separation
- Blood Requisition
- Cross Match
- Blood Arrangement
- Blood Issues
- Issue Returns
- Blood Disposals
- Stock Management
- Quality Control Procedures

10 Purchase
- Requisition
- Enquiry
- Quotation
- Comparative Statement
- Vendor Finalization
- Purchase Order
- Annual Rate Contracts

Benefits
- Intuitive User Interface
- Access to administrative and clinical information - anytime, anywhere
- Customization of business processes and standardization of medical terminologies
- Automated alerts and reminders to consultants and nursing staff
- SMS Alerts and E-mail to surgeon and consultants
- Online medication planning, drug interactions and outcome management
- Interactive search and analysis features through a powerful DSS engine
- Structured viewer for examination and investigation of clinical information
- Generate online queries and reports
- Robust security mechanism
- Audit trail of transactions for better control
- DICOM image viewing
- PACS Integration
- Efficient Integrated Supply Chain Management
- Financial Management / Cost Structure Modeling
- Analytical Reporting / System Integration / Exception Reporting
- Share information across financial, operational and clinical functions
- Almost paperless and illness environment
- Facilitate Regulatory and Statutory Compliance
- Quick access to information for prompt decision making and problem resolution

Knowledge base to help process standardization
- Improve Resource Utilization
- Improve Patient Satisfaction
- Improve Employee Productivity
- Reduce Medical and Clinical Errors
- Reduce Cost
- Increase Revenue

Special Features
- Information captured at source of generation
- Ease of Use
- Modular
- Secure Information
- Adequate and Timely Information
- Integrated System
- Interface with Equipments
- Standards
  - International Classification of Diseases (ICD-10)
  - Procedure Classification PCS
  - Package Cost Analysis (DRG)
  - Drug Classification (NDC)
  - HL7 & DICOM 3.0
- Integrated Patient Medical Records
Modules

1 Patient Registration
   • New Patient Registration
   • Review Old Record
   • Next-of-Kin Details
   • Bar Code / ID Card Generation
   • Associations - Persons
   • Past Medical History
   • Past Clinical History
   • Allergies & Habits
   • Risk Factors
   • Personal, Family & Social History (PFSH)

2 Appointment & Scheduling
   • Doctor Appointments
   • Visit Booking
   • Investigation Billing
   • Radiology Scheduling
   • Procedure Scheduling
   • Credit Notes
   • Cash Collection
   • Refunds

3 Doctor Consultation
   • Encounter’s View
   • Clinical Notes
   • Plan
   • Followup Plan (Re Visit Booking)
   • Case Sheet Management
   • Specialty Templates (HIV, Maternity, Oncology)
   • Diagnostic Reports View
   • Lab Results View
   • Specific Interface or Template for all the Clinics

4 Physician Order Entry
   • Radiology Investigation Request
   • Laboratory Investigation Request
   • ADT Request
   • Procedure Request
   • OT Request
   • Pharmacy Request
   • Nursing Request
   • Theater Booking
   • Image and Video Integration

5 In-Patient Management (ADT)
   • Room Reservation
   • Admission Work List
   • Admission
   • Transfer Work List
   • Transfer
   • Discharge Work List
   • Discharge

6 Nursing Station
   • Patient Receiving
   • Vitals Capturing
   • Admission Nursing Notes
   • Bed Side Procedure
   • Treatment Management
   • Nursing Chart
   • Ordering (Lab, Radiology, Drugs, Physiotherapy)
   • Service Charging

7 Patient Billing
   • Outpatient Billing
   • Inpatient Billing
   • Package Billing
   • Corporate Based Pricing
   • Corporate Billing
   • Insurance Billing
   • Credit Notes
   • Debit Notes
   • Social Worker Discounts
   • Hospital Bearing Amounts
   • Patient Folio Management
   • Corporate Settlements
   • Advances
   • Refunds
   • Settlement Receipts
   • Settlement Receipts

Instructions
• Drug Administration (Planning, Scheduling)
• Theater Booking
• Procedure Preparation
• Post-Op Management
• Blood Requisitions
• Incident Register
• Doctor Visits
• Transfer Notification
• Discharge Notification
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- Preservations
- Post Mortem
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- Unclaimed Bodies
14 Operation Theatre Management
- Surgery Booking
- Theatre Booking
- Pre Operative Check List & Consents Receiving
- Pre Anesthesia Checkup
- Pre Operative Procedure
- Theatre Expense Booking
- Surgery Report
- Post Anesthesia Checkup
- Post Operative Procedures
- Theatre Maintenance
- Indent to Stores
- CSSD Indents
- Maintenance Indents to Biomedical
- Incident Register

15 Radiology Information System
- Equipment Scheduling
- Resource Scheduling
- Order Booking
- Order Acceptance
- Reporting
- Verification
- Report Delivery
- Image Viewing
- Pacs Interfacing

16 Cardiology Information System
- ECG Reports
- ECG’s (Scanned or Digitally Stored)
- Echocardiogram Reports (Pediatric and Adult)
- Echocardiogram Digital Loops (Direct from the Ultrasound Machine into the System)
- Cardiac Catheterization Reports and Calculations
- Cardiac Angiographic Images Operation Reports
- Drug Dosage Guidelines for ICU

17 Cath Lab
- Angiogram
- Angioplasty
- Imaging

18 PMTCT
- Registration
- Follow-ups
- Delivery Register
- Labor Room Details
- Post Natal Configurations (Findings & Capturing Data)

19 Oncology
- Patient Registration
- Cancer Selection
- Clinical History
- Presenting Complaints
- Diagnosis of Index Cancer Outside TMH
- Treatment of Index Cancer Outside TMH
- Surgery
- Radiotherapy
- Chemotherapy

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