

The Medical Profile

¹Mr. Diptesh Rajendra Patil, ²Mr. Pranesh Kantilal Fulfagar, ³Mr. Gitesh Harichandra Ahirrao,
⁴Mr. Prathamesh Kailas Bachhav, ⁵Prof.B.A. Khivsara

SNJB's LATE SAU. K. B. JAIN COLLEGE OF ENGINEERING CHANDWAD
NEMINAGAR

Abstract - The Medical information is one of the types of information that are characterized by the multiplicity and diversity of its sources. This diversity contributes to the emergence of many problems; of which the most important is the difficulty of communication and interaction between systems. This is what is called the problem of interoperability. The study was a non-experimental survey. Descriptive statistics were collected using a convenience sampling method. The data were collected from all hospital-funded development projects. The guide has been prepared for those seeking to document a description of health services delivery transformations to share technical know-how and lessons learned. In doing so, it aims to contribute to the evidence-base on health services delivery, it helps the user to interact with a large number of medical projects and to research similar projects and comparing them to take advantage of best practices and shared experiences to improve the quality of treatment.

Key Words: Databases, Hospitals, Medical diagnostic imaging, Blood pressure

INTRODUCTION

The hospital Management system includes registration of patients, sorting their details into the system, and also computerized billing. The software has the facility to give a search facility for every patients and the staff automatically. It include the search facility to know the current status of each room. User can search about the doctor whether they are available or not and the details of a patient. Work motivation is defined as “a set of energetic forces originating within and beyond an individual’s being, which determines the form, direction, intensity and duration of work- related behavior” This continuum ranges from autonomous motivation at the one end, through controlled motivation, to a motivation at the other end of the continuum. Autonomous motivation means that the reasons to engage in a behavior stem from within a person. Medical Profile System is a system enabling hospitals to manage information and data related to all aspects of healthcare – processes, providers, patients, and more, which in turn ensures that processes are completed swiftly and effectively. When one thinks of the various aspects and departments of a hospital, it becomes apparent that an HMS is critical. The hospital database management system was introduced in 1960, and has greatly evolved since then – with the ability to integrate with the existing facilities, technologies, software, and systems of a hospital. Today, patients can begin the process of healthcare in the palm of their hand – the mobile devices and apps – make this possible. This process then moves to the healthcare providers and hospitals.

1. PURPOSE

The hospital management system can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user friendly. The data is well protected for personal use and fast data processing. Problems with conventional system. The information is very difficult to retrieve and to find particular information like- E.g. - To find out about the patient’s history, the user has to go through various registers. The information generated by various transactions takes time and efforts to be stored at right place. Various changes to information like patient details or immunization details of child are difficult to make as paper work is involved

OBJECTIVE OF SYSTEM

- Patient find the whole process extremely cost effective.
- To build up a canny, easy to understand robotized car
- stopping framework which diminishes the labour and movement blockage.
- To easy for Doctors
- Online Health Care

LITERATURE SURVEY:

“A hospital resource and patient management system based on real-time data capture and intelligent decision making” Author(s): Musa, A. Lancashire Bus. Sch., Univ. of Central Lancashire, Preston, UK Yusuf, Y, Meckel.M. Systems and Informatics (ICSAI), 2012 International Conference One of the major challenges existing hospital management systems face is around operational efficiency and wait times between different processes, departments and persons. This paper highlights such limitations of existing systems and proposes a RFID(Radio Frequency ID) and wireless sensor based , location and information management framework that facilitates real time tracking of hospital assets, personnel and patients as they move through pre-set procedures as part of daily activities of the hospitals. The system covers the visual simulation and providing ability to analyse the ongoing operations so they

can be corrected to achieve increased process efficiency and service levels. The system have to keep data in secure place and controls who can reach the data in certain circumstances. These systems enhance the ability of health care professionals to coordinate care by providing a patient's health information and visit history at the place and time that it is needed. Patient's laboratory test information.[1].

“Study on information system of health care services management in hospital” Author(s): Daiping Hu, Antai Sch. of Manage., Shanghai Jiaotong Univ., China Weiguo Xu ; Huizhang Shen ; Mengyu Li. Services Systems and Services Management, 2005. Proceedings of ICSSSM '05. 2005 International Conference This paper reviews the HIS (Hospital Information Systems) which are widely used in many hospitals in China mainly to provide easier and faster way for daily medical tasks /activities with a GUI And provides for overcoming some of the limitations of HIS , eg. HIS aims at improving quality of health care services but do not have way of evaluating /measuring those. So this paper proposes HSMS (Hospital Services Management System) which aims at improving quality of services, identifying cost reduction areas , analyses and evaluate /rate health care services . The ability to evaluate the services facilitates hospital achieve higher Customer satisfaction scores and get a competitive edge against those hospitals which score less or use HIS and do not have ways of promoting the quality of their services. This new system is designed for medical practitioner/physician to keep track of all patient's medical record/information such as diagnosis, drug prescribed, admission and discharged, etc the new system will take care of the long processes and tedium work involved in tracing and retrieving a patient's record in the old system in a nutshell this will improve the efficiency of the management in a daily work as it can provide required records on time.[2].

“Specification of a Reference Model for the Domain Layer of a Hospital Information System” Author(s): Gudrun Hübner-Blodera , Elske Ammenwertha , Birgit Brigl b , Alfred Winter b a Institute for Health Information Systems, UMIT – University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria b Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig, Germany, ENMI, 2005. Many enterprise projects get scrapped due to high costs involved in initial planning requirement gathering and design phase. The costs in this phase become unmanageable due to lot of unknown factors. Like lack of Subject area expertise, lack of knowledge on different Hospital enterprise functions 1) Patient admission 2) Patient Treatment planning 3) Order Entry 4) execution of diagnostic and treatment procedures 5) administrative documentation 6) billing 7) Clinical documentation 8) discharge and 9) referral to specialised medical institutions, lack of knowledge /experience on the entities types involved (example: patient, Clinical finding) , their roles and responsibilities and the relationships /associations between different enterprise function and /or entity types. This paper aims at creating a reference data model that will serve as a generic starting point for any new HIS development projects so costs involved in studying and analyzing current state and coming up with gaps analysis and additional requirements can be significantly reduced. The model is Hierarchical in nature that is it is divided into 3 levels of sub models and units so a choice for full or partial implementation can be offered based on the requirements. According the evolution of technology has become necessary intervention technology to medical system not only in the Patient registration system even beyond that to the stage of patient management but also in process management of entity hospital.[3] The hospitals around the world have widely utilized information system (IS) for over 30 years. for many hospitals in US and UK have been automated since the emergence of IBM systems.

“Developing Effective Hospital Management Information Systems: A Technology Ecosystem Perspective”. DATE OF SUBMISSION: 5 October 2014 PREPARED BY: Dr Christopher Bain MBBS, Master Info. Tech Student No: 10054499 The author of this paper focuses more on needs of hospital manager and the ecosystem in which he/she operates. The internal and external Environment shaping factors ESFs that bear an impact or association on daily hospital activities and decision making process that the hospital manager has to go through in each situations. Some of the challenges that this ecosystem needs to work on are high demand pressure, greater customer satisfaction level and low profit margins. This paper more so contributes to Planning, Design and development aspects of any Hospital management system by highlighting ESFs that should be considered. The external and internal factors the author mentions are: The public at large, Law and policy makers, Funders Medical suppliers the biggest of which are pharmaceutical companies, the scientific community, the software development community. Internal influencer authors can obviously also be at play in terms of what services are provided by the hospital and how they are provided. These can include: the skills and experience of staff, internal business strategies such as competition and subsidization, Soft factors such as morale and culture, Equipment availability. Computer-based patient record (CPR) implementation over the past decade reveals that clinical, workflow, administrative, and revenue enhancement benefits of the CPR outweigh barriers and challenges but only if healthcare organizations redesign certain work processes. Among other key efforts, organizations must train and motivate users to navigate CPR systems, as well as develop a common structured language. Clinicians who used CPRs found that electronic access to clinical information saves time and provides a thorough and efficient way to manage patient information.[4]

PROPOSED SYSTEM

In our proposed system we are developing medical profile application where any patient can easily communicate with doctors and ask query also get suggestion immediately modules as follow

1. Patient Registration
2. Patient Login
3. Doctor Login.
4. Doctor Registration
5. Add Queries
6. Get Suggestion

SYSTEM ARCHITECTURE

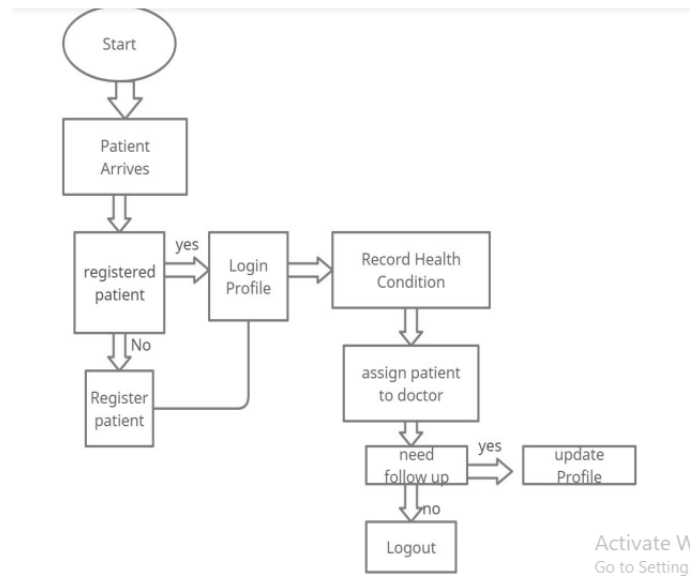


Fig -1: System Architecture Diagram

Registration Process of Adding Patients: The Hospital Management enables the staff at the front desk to include new patients in the system. Assigning an ID to the patients: The HMS enables the staff at the front desk to provide a unique ID for each patient and then add them to the record sheet of the patient. The patients can utilize the ID throughout their hospital stay.

Deleting Patient ID: The staff in the administration section of the ward can delete the patient ID from the system when the patient checkout from the hospital. Adding to the beds available list: The Staff in the administration section of the ward can put the bed empty in the list of beds available. Report **Information of the Patient:** The Hospital Management System generates a report on every patient regarding various information like patients name, Phone number, bed number, the doctor’s name whom its assigns, ward name, and more. Availability of the Bed: The Hospital Management system also helps in generating reports on the availability of the bed regarding information like bed numbers unoccupied or occupied, ward name, and more.

Mandatory Patient Information: Every patient has some necessary data like phone number, their first and last name, personal health number, postal code, country, address, city, 'patient’s ID number, etc. Updating information of the Patient: The hospital management system enables users to update the information of the patient as described in the mandatory information included.

HMS was introduced to solve the complications coming from managing all the paper works of every patient associated with the various departments of hospitalization with confidentiality. HMS provides the ability to manage all the paperwork in one place, reducing the work of staff in arranging and analyzing the paperwork of the patients.

ADVANTAGES

- Easy to used system
- Avoid the internet
- This system is convenient, effective and easy for patient and doctors
- Decreased Management Costs: - More automation and less manual activity save on labor cost and resource exhaustion.

SYSTEM REQUIREMENTS

- **Software Used:**
 1. Operating System: Windows XP and later versions Front End: HTML,CSS
 2. Programming Language:Php
 3. Tool: Netbeans IDE
 4. Domain: Health care Computing
- **Hardware Used:**
 1. Processor – i3 or above
 2. Hard Disk – 150 GB
 3. Memory – 4GB RAM

CONCLUSION

Everyone needs to be well informed and concerned about the quality of care. Everyone means patients and their families, consumer agents and advocates, health professionals, administrators of health plans and facilities, purchasers of health care services, and policymakers at all levels. Contributing to the interest in health improvement and performance monitoring is a wider recognition that health embraces well-being as well as the absence of illness. For both individuals and populations, health can be seen to depend

not only on medical care but also on other factors including individual behavior and genetic makeup and social and economic conditions. Reinforcing these messages means making sure that quality of care stays on the health care-delivery agenda, with clear identification of the risks and opportunities that are posed by the changes in health care. It also means describing how health plans, health care organizations, and clinicians should be accountable to patients and society and, conversely, how individuals can take appropriate responsibility for their own health. In conclusion, we need a healthy lifestyle to build up a healthy immune system and to avoid disease. Here, "maintain" means a healthy immune system to protect your body. To maintain body immunity.

REFERENCES:

1. Y. R. Awadhath-Student and A. A. Razack-Student, "Essential smart health care application for post covid (hospital management system)," 2022.
2. C. Bain, "Developing effective hospital management information systems: A technology ecosystem perspective," 2014.
3. G. Hubner-Bloder, E. Ammenwerth, B. Brigl, and A. Winter, "Specification of a reference model for the domain layer of a hospital information system," *Studies in Health Technology and Informatics*, vol. 116, pp. 497–502, 2005.
4. A. Musa, Y. Yusuf, and M. Meckel, "A hospital resource and patient management system based on real-time data capture and intelligent decision making," in *2012 International Conference on Systems and Informatics (ICSAI2012)*. IEEE, 2012, pp. 776–779.
5. Anwar Islam and Tuhin Biswas, "Health System in Bangladesh: Challenges and Opportunities", *American Journal of Health Research*, vol. 2, no. 6, pp. 366-374, 2014.
6. Hoque Rakibul, A. Mazmum, Fahami and BaoYukun, "e-Health in Bangladesh: Current Status Challenges and Future Direction", *The International Technology Management Review*, vol. 4 (2014), no. 2, pp. 87-96, 2014
7. C. R. Keenan, H. H. Nguyen and M. Srinivasan, "Electronic medical records and their impact on residents and medical student education", *Academic Psychiatry*, vol. 30, no. 6, pp. 522-527, 2006.
8. Michael Winkler, Michael Street, Klaus-Dieter Tuchs, Konrad Wrona, "Wireless Sensor Networks for Military Purposes" in *Autonomous Sensor Networks Springer Series on Chemical Sensors and Biosensors Volume 13*, 2013, pp 365-394
9. Ali Mansour, Isabelle Leblond, Denis Hamad, Felipe Artigas, "Sensor Networks for Underwater Ecosystem Monitoring & Port Surveillance Systems", *Sensor Networks for Sustainable Development*, M. Ilias (Ed.) (2013) 1-25
10. M. Reyer, S. Hurlebaus, John Mander, Osman E. Ozbulut, "Design of a Wireless Sensor Network for Structural Health Monitoring of Bridges", *Wireless Sensor Networks and Ecological Monitoring, Smart Sensors, Measurement and Instrumentation Volume 3*, 2013, pp 195-216. Reyer, S. Hurlebaus, John Mander, Osman E. Ozbulut, "Design of a Wireless Sensor Network for Structural Health Monitoring of Bridges", *Wireless Sensor Networks and Ecological Monitoring, Smart Sensors, Measurement and Instrumentation Volume 3*, 2013, pp 195-216
11. Wan-Young Chung, Seung-Chul Lee, Sing-Hui Toh, "WSN based mobile u-healthcare system with ECG, blood pressure measurement function", *30th Annual International Conference of the IEEE, Engineering in Medicine and Biology Society*, 2008. EMBS 2008, 20-25 Aug. 2008, pp: 1533-1536
12. Triantafyllidis, A., V. Koutkias, I. Chouvarda, and N. Maglaveras. "An open and reconfigurable wireless sensor network for pervasive health monitoring." In *Pervasive Computing Technologies for Healthcare*, 2008. PervasiveHealth 2008. Second International Conference on, pp. 112-115. IEEE, 2008.
13. Elaine Lawrence, Karla Felix Navarro, Doan Hoang, Yen Yang Lim, "Data Collection, Correlation and Dissemination of Medical Sensor Information in a WSN", *Fifth International Conference on Networking and Services*, 2009. ICNS '09, pp: 402-408
14. M. Fischer, Yen Yang Lim, E. Lawrence, L.K Ganguli, "ReMoteCare: Health Monitoring with Streaming Video", *Mobile Business*, 7th International Conference on 2008. ICMB '08, 7-8 July 2008, pp: 280-286