

Hospital Billing System

OBJECTIVE:

This project is aimed at developing a web site. This consists of the information about the patients in the world. By using this one can know how to bill the patient's disease. This also gives the information about the hospital. The Administrator is responsible for the additions, deletions and updating of information to the database.

Proposed System

To overcome the drawbacks of the existing system, the new system is proposed. This proposed system has the following advantages.

- 1 Maintains the data in the software format enforcing strict security levels.
- 2 Summarized data can be provided through reports.

Advantages of the System

HBS provides manifold benefits to hospitals whether large or medium sized.

Streamlined Operations:

- Minimized documentation and no duplication of records.
- Reduced paper work.

Improved Patient Care:

- Procedures for timely and effective patient care
- Faster information flow between various departments
- Easy access to reference records.

Better Administration Control:

- Availability of timely and accurate information

- Access to updated management information.

Smart Revenue Management:

- Optimized bed occupancy checks
- Effective billing of various services
- Exact stock information.

Scope of the Project

The main features of this project are providing user-friendly interface for data entry, avoiding manual carrying work. This provides data validation features. Input validation helps the user to enter correct data. This is like a prototype. This system provides an excellent support for the management of patient details like registration, diagnosis, payment details. Manually maintaining patient details is difficult, so, to overcome this problem we maintain the records through e-applications. Finally we conclude that computerized patient billing system provides easy, fast accessing and excellent support for the staff to give the reports to the patients as well as the staff and doctors can directly view the reports which reduces a lot of paper work, saves time and a lot of risk involved in the manual process.

- Although the current system is confined to firm its performance is limited and restricted to the organization. It spans over all the branches which can reach the server from their systems through LAN network.
- The application is made as simple as surfing a website. Thereby non-technical persons can also interact with the processing on the application easily.
- Provides instant information regarding the work under process within the organization.
- Easy management of data as located at a server.

BACKGROUND:

A Hospital is a place where Patients come up for general diseases. Hospitals provide facilities like:-

- Consultation by Doctors on Diseases.
- Diagnosis for diseases.

- Providing treatment facility.
- Facility for admitting Patients (providing beds, nursing, medicines etc.)
- Immunization for Patients/Children.

Existing System

The current maintenance of data by the PATIENT BILLING SYSTEM is on the form of hardcopies of forms. The job of maintaining those forms makes the job tedious.

- More risk is involved in maintaining data as it doesn't enforce strict security levels.
- Quick reference can't be made to required data as there are thousands of records.
- Generalized data regarding patient information can't be provided for decision making authorities in the existing system.
- Much time is wasted in preparing the information required for decision support and policy making.
- More manual labor is needed to safeguard the data in the existing system.

As the existing system has many drawbacks, necessity has come for developing the new system.

Problems in Existing System

The existing system does not have a means for creating an account for each user. It also does not have many features like adding the user's details to the database, updating the details of new diseases by the user through interaction with the administrator, sending mails and alerts to the registered users.

User:

- Login to the system through the user's login page.
- Submit patient's profile.
- See/change patient's details.
- Exchanging and updating the information with the administrator.

Administrator:

- Login to the system through the administrator's login page.
- Send mails and alerts to users.
- Add and update billing details.

FUNCTIONAL REQUIREMENT:

MODULES

PATIENT

This module facilitates of capturing Patients related data at different entry points, enables queries at different workstation and generates reports at required frequency. The following details are part of this module:

Functions

Patient Registration

Ward Allocation

Patient Admission

Patient Shifting

Deposits and Advances

Automatic Charge Calculation

Estimate and Final Billing

Operation Theatre Scheduling

Receipts and Refunds

Discounts and Concession

Doctor Register

Patient Discharge

Patient Inquiries

Comprehensive Search Engine for Patient Search and Analysis

Patient Registration

This function of Hospital Management Information System deals with registering the new Patient either for OPD or IPD and giving unique Identification Number to the Patient. This number is unique throughout the System for identifying the patient.

NON-FUNCTIONAL REQUIREMENT:

Scalability - The system can be scalable from small to a large business.

Availability – The system shall be available all the time.

Performance –

- The system shall give responses in 1 second after checking the patient's information.
- The system must support 1000 people at a time.
- The user-interface screen shall respond within 5 seconds.
- The system must conform to the Microsoft Accessibility.

Reliability – How general the form generation language is Simplicity vs. functionality of the form language = Speeds up form development but does not limited functional.

Safety - Human are error prone, but the negative effects of common errors should be limited. E.g., users should realize that a given command will delete data, and be asked to confirm their intent or have the option to undo.