

# HOSPITAL PATIENT MANAGEMENT SYSTEM

## PROBLEM STATEMENT

The “Hospital Patient Management System” refers to a number of efficient automated systems for tracking patient information, diagnoses, prescriptions, interactions and encounters within healthcare organizations like medical clinics or hospitals as well as integrations for obtaining and storing information from medical devices.

Emergence of new diseases each day and with the growth in number of patients have resulted in increase in the volume of massive data and thus making difficult for the hospital administration to retrieve and manage data from the case files as if when needed. Thus, the existing system is lacking many functionalities which leads to numerous problems such as:

- Inconvenience in searching records.
- Difficult to handle the whole system manually.
- Redundancy of data take place and this may lead to the inconsistency.
- It is less accurate to keep the data in case files for future reference because it may get destroyed.
- Inefficient way to track patient records and medical history.
- Administrative expenses is huge to maintain manual paper based records.
- Difficult to integrate with intra-department records.

In order to overcome the above mentioned problems we have decided to develop an efficient automated system that will eliminate the drawbacks of the existing system to a great extent. Benefits of the new system are as follows:

- Minimize the administrative expense while maintaining efficiency and excellence in patient care.
- Streamline recordkeeping, patient appointment scheduling, claims processing and billing functions.
- Enables immediate record transfers, enhances patient workflow and eliminates treatment errors that result from inaccurate or incomplete paper records.
- Digital storage capability saves actual space and is more secure than paper files.
- Many other functions like handling medical records, scheduling, inpatient encounters, medical billing get streamlined.

## INITIAL REQUIREMENT DOCUMENT

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| <b>Title of the Project</b>                            | Hospital Patient Management System               |
| <b>Stakeholders Involved in Capturing Requirements</b> | Doctors, Nurses, Administrative Staffs, Patients |
| <b>Techniques Used for Requirement Capturing</b>       | Interviewing and Brainstorming                   |
| <b>Name of the Persons along with Designations</b>     | Dr. Ruchika Malhotra, Associate Professor        |
| <b>Date</b>  | September, 2018                                  |
| <b>Version</b>   | 1.0  |

### **Consolidated List of Initial Requirements:**

1. A system is to be implemented which can run on Hospital's Server.
2. A system shall be able to register new patients by generating unique patient ID for further tracking visits.
3. System should facilitates effective scheduling of appointments of patients for the doctors.
4. The system shall be able to manages all Inpatient department needs along with the provision to manage admissions, discharges, allocation of bed and wards.
5. System shall be able to manage Inpatient billing with details of patient information and services provided on daily basis.
6. There must be a separate login for doctors, nurses, and administrative department based on roles.
7. System shall be able to allocate doctor and nurses to the admitted patient.
8. System shall be able to allocate bed or wards to the required patient.
9. System shall be able to manage doctor, nurse and patient details.
10. System shall be able to manage wards or beds details allotted to patient.
11. Nurses should be able to keep track of direct patients who need special attention.
12. System should be able to generate graphical reports like:
  - Details of all registered patient on daily, monthly, yearly basis.
  - Details of Appointments & Schedulings.
  - Status of visiting doctors/patients.
  - Details of allocated beds/rooms/wards on daily basis.