

# **Patient Health Management System**

## **Milestone: Project proposal**

Group: - Data Dynamos

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**Submission Date: 29/1/2025**

**Problem Definition: -**

Healthcare systems depend on accurate and organized patient data to deliver quality care. This project focuses on creating a database system for managing patient records in hospitals. The database is designed to simplify hospital operations, improve patient outcomes, and make administrative tasks easier. It will help doctors and hospital staff quickly access accurate and complete patient information, avoid data duplication, and minimize mistakes in care.

**Business Purpose: -**

Hospitals often face challenges with unorganized and incomplete patient data, which can lead to delays in treatment, errors in care, and inefficiencies in hospital operations. The proposed problem addresses these issues by centralizing all patient-related information in one place.

**Key problems solved include:**

1. **Improved Patient Care:** The database allows doctors and nurses to access patient details like symptoms, diagnoses, and previous treatments instantly. This makes it easier to provide the right treatment at the right time.
2. **Streamlined Administration:** By automating data entry, billing, and insurance claim tracking, the system reduces paperwork and ensures accurate handling of patient records. Notifications about claim approvals or payments will keep staff informed.
3. **Safer Medical Practices:** Storing information like prescribed medications, lab test results, and vital signs in a clear structure reduces the chances of mistakes in patient treatment.
4. **Detailed Reporting and Insights:** The database helps hospital staff analyze patient trends and make better decisions. For example, understanding recurring diagnoses or patterns in patient data can help hospitals improve services and allocate resources efficiently.
5. **Cost Savings:** The system reduces unnecessary tests, paperwork, and manual errors, saving time and money for both the hospital and patients.

This database solves major inefficiencies in patient care and hospital workflows, ensuring smoother operations and better healthcare delivery.

**Purpose of the Database:**

The database is designed to provide a central system for managing patient information in hospitals. Its main goals are:

1. **Accurate Data Management:** It organizes patient information like medical history, symptoms, and prescriptions so that all data is up-to-date and reliable.
2. **Faster Access to Records:** Doctors, nurses, and hospital staff can quickly retrieve patient records, making it easier to deliver care without delays.
3. **Error Reduction:** The database keeps all data structured and clear, reducing medical errors in diagnoses, treatments, and prescriptions.
4. **Efficient Administration:** It simplifies tasks like billing, insurance claim processing, and vaccination record-keeping, making hospital operations smoother.
5. **Supporting Analytics:** The database provides reports and data insights, helping hospitals improve care quality, identify trends, and plan better for the future.

In summary, the database aims to improve the quality of care provided to patients while making hospital operations more efficient and reliable.