MedRec – Medical Records Tracking System

Disha Mane, Bhaskar Gurram, Niriksha Sheth, Prof. Yogesh Doulatramani

[1]*Disha Mane, Dept. Of Information Technology, Vidyalankar Institute of Technology, Maharashtra, India*
[2]*Bhaskar Gurram, Dept. Of Information Technology, Vidyalankar Institute of Technology, Maharashtra, India*
[3]*Niriksha Sheth*, Dept. Of Information Technology, Vidyalankar Institute of Technology, Maharashtra, India
[4]*Prof. Yogesh Doulatramani*, Dept. Of Information Technology, Vidyalankar Institute of Technology, Maharashtra, India

---

Abstract - *MedRec is a comprehensive record-keeping system for your personal medical information. In the present scenario, the medical history of a patient is recorded on paper and stored in various files. Over the years, these records are lost. The medical history holds immense value to both patients and doctors. Keeping track of medical records can be difficult if your health information is in multiple places or in a format (such as paper) that is difficult to use. This challenge gets harder when working with several doctors to address several health concerns. Your doctor and other health care providers maintain their own medical records about you. But many patients see advantages in also maintaining their own personal health records to record past appointments, test results, prescriptions, and more. Therefore it's the perfect replacement for unreliable paper records or various electronic systems that hold bits and pieces of your medical history.*

***Key Words*: MedRec, Medical Records, Tracking, Digitization, Patient's History.**

1. INTRODUCTION

The first visit to a new doctor usually starts with yet another recitation of medical history. You recount your peanut allergy and Grandma's hypertension but forget to mention the medication you were on two years ago. Electronic medical records are designed to circumvent such problems by providing an easily shareable record of all that information in one place.

Medical history, health information of patients are digitized and uploaded to a secure online account. The management of personal health records is a tedious task, which is why digitization is being offered as a viable alternative. While service providers like Microsoft and Google have already entered this sector, a few India players are also eyeing it. In India, there are entities like Noida's Myhealthrecords.in, the Bangalore-based Yos Technologies and the new-born Pune-based ArogyaDarpan, among others. Myhealthrecords.in enables its customers to store, manage and access their health records online while Yos Technologies offers an end-customer-focused health system of secure personal records. ArogyaDarpan, only a couple of months old, hopes to provide a holistic service of collecting electronic/paper medical records, scanning and digitizing the information and saving it in an online repository.

1.1 Significance

i. The proposed system will digitalize the traditional file system in hospitals, clinics etc.
ii. Patients will never lose their medical history records.
iii. Data scattered into various medical files is brought together onto one platform to get meaningful information.
iv. Patients will be able to gain insights from their medical history and be better prepared for future.
v. Doctors will be able to examine the patients in a more efficient way.
vi. The eco-friendly by-product of the proposed system is: Save Paper.

2. PROPOSED SYSTEM

1. Storing the medical records

i. We will be building a web app and an android app which the user can download on his android mobile or desktop/PC.
ii. The user (patient) will have a unique id which he can use to log in.
iii. The doctor will ask the users (patients) for their unique id and use the app to prescribe medicines to the patients on their id.
iv. The prescription gets saved on the user's id.
v. Blood test reports, X-rays, CT/MRI Scans, Immunizations and Other tests can be stored.
vi. The user can upload a scanned copy of the reports.
vii. All the data will be stored in a database.

2. Retrieving the medical records

i. The medical records will be saved in a chronological order for easy reference.
ii. There will be different categories in the app under which the appropriate records will be stored.
iii. The user can search his medical records by category or by entering the doctor's name or appointment date.
iv. When the user visits the doctor, he need not carry his prescription file along with him, he should only know his user id which will be used by the doctor to retrieve his medical history.

3. Plotting the data into a graph

i. The Reports can be mapped into a graph which provides the medical professional with a better view for understanding the data in a much efficient way.
ii. It will also help the patient monitor his blood pressure, blood sugar, hemoglobin levels etc.

4. Analyzing the data

i. The doctors can use the medical history to prescribe medicines according to the medicines prescribed earlier so that there are no complications in the future.
ii. The data can be used by the patient to analyze which medicines is he allergic to and also to see a pattern as to when he gets ill and what caused his illness.
iii. MedRec provides a range of common test result templates for you to track test results.

5. Digital file cabinet

i. MedRec devotes an entire area to extra files that can be attached to your record.
ii. Not only that, you can tie files to particular items anywhere within your information.
iii. Add a picture of the pill next to a medication or lab work, x-rays and other important documents that can't be typed directly in.

6. Notification system

i. MedRec will automatically put doctor's appointments and upcoming lab tests on your calendar.
ii. You can even set reminder alarms directly from the system, without ever going into your calendar.

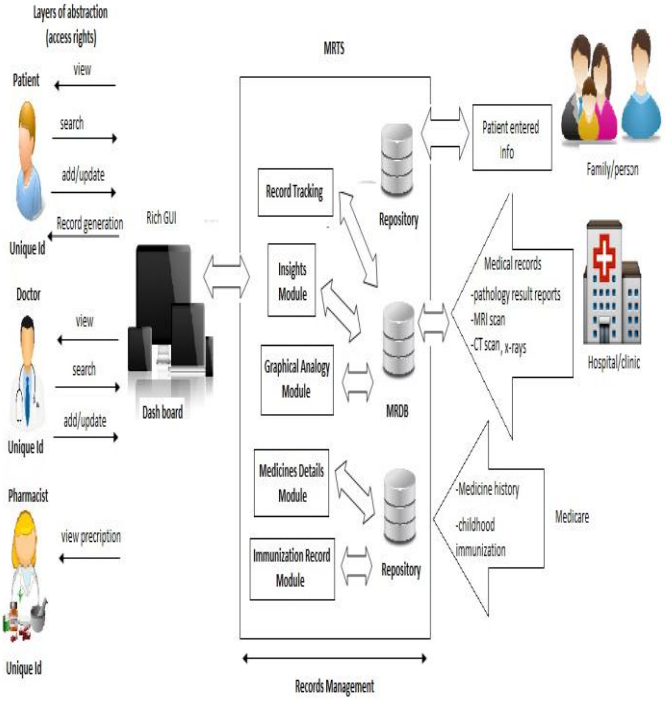
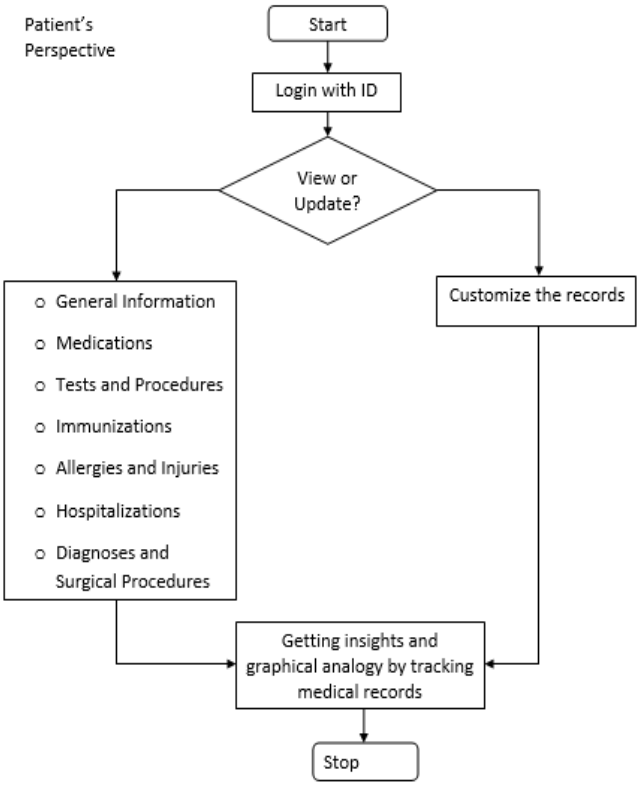
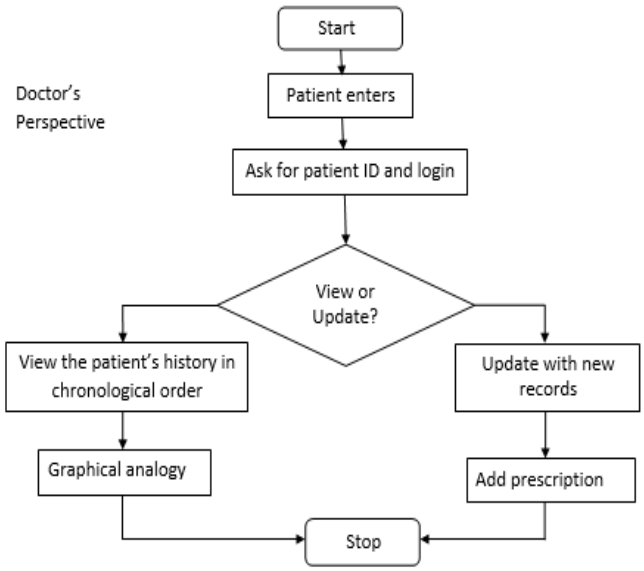
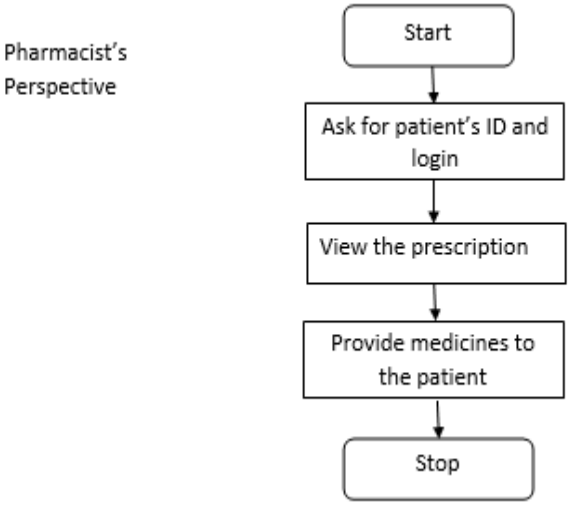


Fig -1: Architecture

2.1 Flowcharts







3. CONCLUSIONS

Patient records are the primary repository of data in the information-intensive health care industry. Although clinical information is increasingly likely to be computerized, the current, predominant mode for recording patient care data remains the paper record. Paper records have the advantages of being familiar to users and portable; when they are not too large, users can readily browse through them. Paper records, however, have serious, overriding limitations that frequently frustrate users and perpetuate inefficiencies in the health care system. Health care professionals today face an unprecedented information explosion as the quantity and complexity of patient data and medical knowledge increase practically daily. Current patient records cannot adequately manage all the information needed for patient care. Paper patient records have not kept and cannot keep pace with the rapidly changing health care system. Implementation of medical records tracking system promises significant advances in patient care because it enhances readability, availability, and data quality.

REFERENCES

[1] Ubiquitous Computing for Medical Records Retrieval by Silvio E. Quincozes,Universidade Federal do Pampa, Av. Tiarajú 810, Alegrete, RS, Brasilsilvioereno@alunos.unipampa.edu.br - IEEE Paper

[2] Ubiquitous Computing for Medical Records Retrieval by Juliano F. Kazienko†, Universidade Federal do Pampa, Av. Tiarajú 810, Alegrete, RS, Brasil, kazienko@unipampa.edu.br - IEEE Paper

[3] Smart Under-Five Health Care SystembyTawachi NYASULU, University of Leeds, Woodhouse Lane, Leeds, LS2 9JT, United Kingdom, Email: tawachi.nyasulu.2016@ieee.org - IEEE Paper