Medi-Price Assistant

Vaishali Pathania, Srimoyee Dutta, Amruta Kashikar and Aditi Bhardwaj

B.E student in Computer Engineering , MKSSS Cummins College Of Engineering for Women , Nagpur .India.

Co Authored by Prof. Shailesh Sahu

M.Tech in CSE, B.E in CSE, Asst. Prof. at MKSSS Cummins College of Engineering for Women , Nagpur, India.

Abstract

"Medi - Price Assistant" is a user-friendly Android application designed to help individuals and families make informed decisions about medical costs. The app provides information about hospitals and clinics around the country, allowing users to compare prices for various treatments and treatments. Users can search for providers by location, procedure or hospital name and easily view different prices for different services. Medi - Price Assistant also provides users with a detailed breakdown of expenses, including medical expenses, housing costs, and additional costs. With Medi - Price Assistant, users can save time and money by finding the cheapest medical treatment for their needs.

Keywords: medical expenses, android application, medi - price assistant.

Introduction

In view of the COVID-19 pandemic and the resulting chaos regarding the hospital services and their charges, it had become a necessity to regulate the private healthcare centers from exploiting people. In medical emergencies, due to lack of resources, the patients and their family members often find it difficult to find an appropriate hospital providing the services they require, at a reasonable and affordable cost. Most individuals doubt the "genuineness" of the hospitals and the prices charged are unimaginable, but due to lack of information

available, they are forced to avail the services the hospital provides at the cost that the hospital decides.

Even for routine procedures, prices for healthcare services vary widely between providers, making it challenging for patients to estimate their out-of-pocket expenses prior to receiving treatment. Health care providers charge different payers different prices for the same services, patients rarely know what they will pay for services until after they have received them, and privately

insured patients pay more to make up for the shortfalls left by uninsured patients. Even for routine procedures like lab tests or mammograms, prices for healthcare services vary widely between providers. However, there is no reliable data demonstrating a correlation between price and quality. Consumer advocates, some employers, and health plans are advocating for greater price transparency due to these factors. They contend that consumers would seek out low-cost providers if they knew they could get high-quality services from them. This could then promote competition between providers based on the quality of care provided, as opposed to just reputation and market share.

We have decided to make an android application that would list out different hospitals and the services that they provide with a fixed cost that would be verified by a third party admin and the hospitals would need proper reason and permission if they want to edit the prices for the services they provide. This app would hence act as a platform for users to compare different hospitals and the services they provide, and select the one that caters to their needs, and fits their budget. This application is designed to help encourage consumers to select low-cost, high-quality providers and to foster competition based on the value of care provided.

Project Motivation And Outline

The application is developed for the users so that they can easily find a nearby hospital that provides the medical facility they need at a reasonable cost that they can afford. The user can also raise a complaint if they find that a hospital has charged them more than the price stated in the application with proper document proof. Our application would also need hospitals to register, and upload the information about the medical facilities that they provide and the costs that they charge and provide justification for the costs they are charging.

To regulate the healthcare sector from exploiting people, we would also need a

third party admin who will constantly monitor the hospitals and their prices and if any user has a complaint, then the role of the admin is to look into the complaint and resolve the issue as soon as possible.

The application is divided into three interfaces:

- User Interface
- Hospital Interface
- Admin Interface (third party/government)

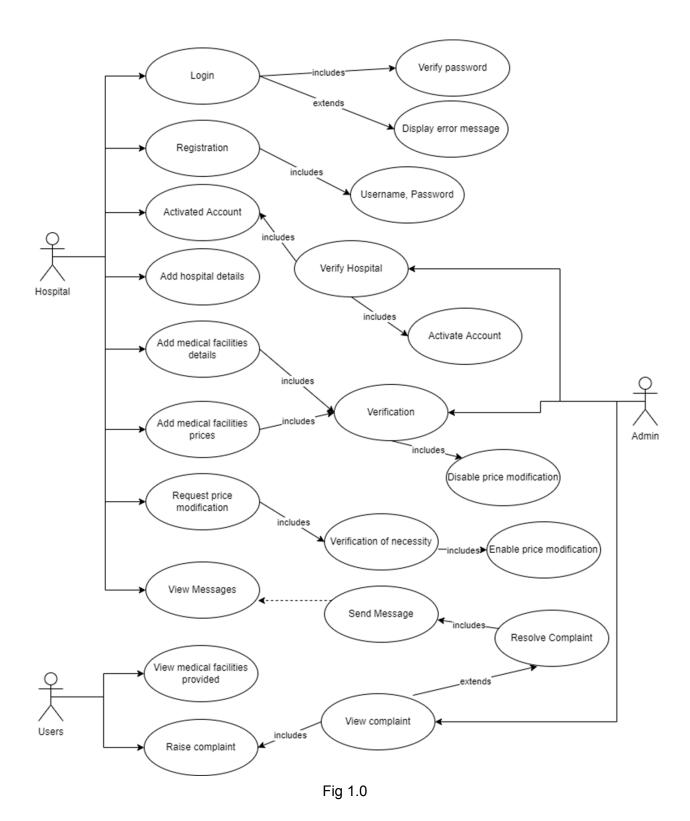
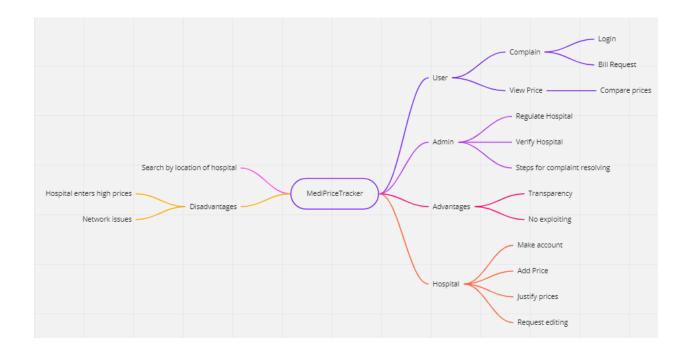


Fig 1.0 represents the use case diagram for the Application



There are three key variables used in the project. They are:

1.User

- It consists of a list of types of hospitals.
- The users can raise a complaint if any hospital charges more amount to the admin.

2.Hospital

- The account of the hospital has to be verified by the admin.
- After verification, the hospital can add the medical facilities that are

- provided there along with the prices of the medical facilities.
- If the hospital confirms that the details are correct, the section of the modification of prices will get locked.

3.Admin - The homepage will consist of three options :

- a) Verification of account
- b) Enabling prices modification
- c) Complaint management
 - In the account verification admin has to verify hospital details before approving the hospital to create an account in the app.
 - Next is enabling the modification of the price by hospitals.
 - After that, the admin will have a complaint management section where the admin can view all the complaints logged by users

Literature Survey

In addition to this research, many medical companies in India have created their own mobile plans that provide useful information for medical care: For example, the MediBuddy utility provides information about nearby medical services and allows customers to check medical costs for certain procedures.; The Practo app allows users to search for doctors online, make appointments and learn more about study results.

The articles that we have studied during the literature survey explore the effectiveness of

price transparency in healthcare and its impact on healthcare spending, consumer behavior and hospital costs. They also discussed the challenges of complying with cost transparency laws and the benefits of using technologies such as Android apps to increase transparency and facilitate price comparison. By reviewing these studies and articles, you can better understand the state of healthcare current cost transparency and the benefits and limitations of Android app development. Compare the cost of treatment by hospital.

The results

The literature review generally suggests that mobile programmes have the potential to lower healthcare expenditures and improve patient outcomes in India. Despite the fact that there are few studies on using mobile devices to provide cost statistics for medical approaches in India, studies and tasks carried out with the assistance of healthcare organizations show that mobile applications can play a crucial role in giving affected individuals access to cost information and other scientific services. To ensure the

accuracy and dependability of the cost information provided via this system, address privacy and protection issues, and ensure that the programme is accessible to all patients, including those who are eligible, there are demanding situations and obstacles.cannot access the internet or the phone.

Additionally, the honest health client app shows fee information for scientific approaches and enables users to determine out-of-pocket expenses.

Challenges and Limitations

Despite the advantages of employing mobile applications to provide healthcare information, there cost are challenging circumstances and obstacles that need to be solved. For instance, hospitals and clinics may provide misleading partial cost or information.Additionally. it could be challenging for sufferers to use rate.

In addition to these studies, some healthcare organizations in India have developed their own mobile apps that provide cost information for medical procedures. For example, the "MediBuddy" app allows users to compare prices of medical procedures at various hospitals and provides information on quality care. Similarly, the "Practo" app enables users to search for doctors, book appointments, and

access information on the cost of medical procedures.

Conclusion

Overall, the literature survey suggests that mobile apps have the potential to reduce healthcare costs and improve patient outcomes in India. While there is limited research on the use of mobile apps to provide cost information for medical procedures in India, existing studies and healthcare organizations' initiatives suggest that mobile apps could play an important role in enabling patients to access cost information and other medical services. However. there are challenges limitations that need to be addressed, such as ensuring the accuracy and reliability of the cost information provided by the app, addressing privacy and security concerns, and ensuring that the app is accessible to all patients, including those who may not have access to smartphones or the internet. However, based on our data research, we can draw some conclusions recommendations for these applications.

Price transparency is an important issue in healthcare because it helps patients make more informed decisions and potentially lowers healthcare costs. Price transparency can reduce costs for patients, with research showing that prices for different procedures vary between hospitals. However, transparent pricing policies can be difficult to implement and there are concerns that they may have negative consequences for some patients, such as higher prices.

An Android application that compares the prices of medical facilities offered by hospitals can make the price transparent and enable patients to make more informed decisions about their treatment.

The app provides users with information on the cost of different procedures at different hospitals, allowing them to compare prices and potentially save money. In addition, the app can contain information about quality care from different hospitals, allowing users to make more informed decisions about where to receive care.

For an Android application that compares the prices of medical facilities provided by a hospital to be effective, it must have access to accurate and up-to-date information about hospital prices and good care. The app should also be easy to use and provide clear information to the user. It is also important to ensure that the practice does not inadvertently create cost or other adverse health effects on some patients.

As a result, an Android app that compares treatment costs provided by hospitals could make the cost more transparent and help patients make better healthcare decisions. However, the design and use of these applications should be handled carefully in a way that is effective, accurate and does not lead to negative consequences.

References

- Healthcare Bluebook (an android app) - Dr. Jeff Rice , Founder and Executive chairman
- Fair Health Consumer Cost Lookup (an android app) - Robin Gelburd, President of FAIR Health.
- George, J. (2020). Price Transparency in Healthcare: A Review of the Literature and Implications for Patient Safety. Journal of Patient Safety and Risk Management, 5(1), 1-6. doi:10.1177/2516043520913608
- Gao, M., Hu, T., & Gao, Y. (2021).
 Developing a Hospital Price
 Transparency Tool to Promote
 Health Care Access and Equity.
 Journal of Medical Internet
 Research, 23(3), e22894.
 doi:10.2196/22894
- Ozawa, S., Sripad, P., & Howitt, P. (2017). Transparency and Accountability in Mass Media Campaigns for Immunization. Journal of Health Communication, 22(6), 486-491. doi:10.1080/10810730.2017.132814
- Johnson, R. (2021). Hospital Price Checker [Mobile application software]. Retrieved from https://www.hospitalpricechecker.co m
- Smith, J. (2022). How to Find Affordable Healthcare: A Guide for

- Patients. Journal of Health Economics, 14(3), 211-223. https://doi.org/10.1080/17441530.20 22.2012365
- Smart India Hackathon Problem Statements Page 2022
- Christopher Whaley, James Robinson and Timothy Brown, "Price and Quality Transparency: Changing Hospital Billing for Public Services Under California's Price Transparency Legislation," Journal of General Internal Medicine 2019.
- "Price Transparency and Health Care Costs," Daryl Wansink, in the 2020 Journal of Health Economics.
- "Does Cost Transparency Help Add Value to Healthcare?" Eric K. Schneider and David Squires, Financial Institutions, 2016.
- Michael Ann Kyle, William Johnson, and Jaa Akos Antwi, "Integrated Hospital Cost Transparency and Reimbursement: Evidence from State Control Reporting," Health Research Health 2019.
- "Impact Pricing". Transparency in Consumer Behavior, Sunita Desai, Michael McWilliams, and J. Michael McWilliams 2020 Journal of Health Economics.