

Mobile Applications on Hospital Services for Public Sector

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ABSTRACT

This study aims to determine the digital innovations developed by the hospital for ease of service to outpatients at the general hospital in the Majalengka area of Indonesia, by using the RSM Mobile application of the Majalengka Regional Hospital available on Android and iOS. The researchers use the qualitative method with a case study approach. The data is collected through observations and interviews with the authorities at the Majalengka Regional General Hospital, which was then processed and analyzed to produce the information needed by the researcher to answer the questions and findings from the study. The results obtained from this research are that the General Hospital in the Majalengka area has implemented services for outpatients by utilizing digital innovations in the form of the development of RSM Mobile app which can accelerate patient services and make it easier for patients to register for hospital services online. This mobile application system can also integrate patient services with BPJS (Health Insurance provided by the Indonesian Government) so that it has an impact on speed and convenience and results in service satisfaction for patients provided by the Hospital.

Keywords: Hospital Services, Mobile Application, RSM Mobile.

1. INTRODUCTION

Majalengka District Hospital is a type C[1] hospital belonging to the Majalengka Regency Government. One of its duties is to provide services, especially health-related services, to communities both inside and outside Majalengka Regency. The demand for quality hospital services is an absolute must so that patient needs or satisfaction can be achieved [2]. In order to provide these services, Majalengka Hospital has an online outpatient registration system available on both Android and iOS. This is one of their innovations in providing better services [3].

In providing services to patients, there are expected to be many obstacles, especially for patients who are experiencing recovery or emergency situations. Thus, it is necessary for a hospital to provide a quick service. Patients who

will undergo treatment or examinations need to register beforehand, with a fairly long queue, which will be tiring for the patient. Plus, waiting for their turn at the polyclinic or at the pharmacy will certainly take a long time.

Seeing these problems, the design of an online registration system for RSM Mobile Majalengka Hospital[4] for outpatients is very much needed. It is helpful for patients who will be examined, so that the registration can be done without having to come directly to the hospital. In the RSM Mobile app, patients can access other hospital information / services, including doctor information, room information, queue monitoring, facilities, and other services. [5]

Previously, the public vocally complained in the mass media about Majalengka Hospital's services. However, with the implementation of

this app, the public complaints are expected to reduce. The Majalengka Regency Government continues to support attempts at improving the hospital's service quality in impactful ways for the patients, thus indirectly improving the overall healthiness of the community and improving the regional income.[6] On this occasion, the author tries to analyze the quality of service to patients after the implementation of said online patient registration.

2. METHOD

The author used the qualitative research method [7]. It was used to evaluate the service policies that had been carried out. The subjects of this research were the outpatients at the Majalengka District Hospital. The object of this research was the quality of outpatient services at the Majalengka Hospital.

In an effort to obtain objective information, concrete data collection techniques were used, as follows: The object of this research on the Online Registration of Outpatients at Majalengka Hospital based on Android/iOS was the patient at Majalengka Hospital.

3. BASIC THEORY

3.1. Understanding Mobile Applications

The definition of application, according to the Great Dictionary of the Indonesian Language, is: the utilization of a framework configuration to deal with information utilizing the principles or arrangements of a specific programming language. An application is a PC program made to perform a lot of explicit undertakings for the client [8]. Mobile applications are applications designed for the convenience and speed of obtaining useful information for its users.[9] Mobile applications for health are one of the innovations carried out with the aim of providing convenience and speed by utilizing technology that aims to reduce costs and improve services for the community [10].

3.2. Understanding Android/iOS

Android is a working framework for cell phones based on Linux. Android gives an open stage to engineers to make their own applications that can be used in different cell phones [11]. iOS is an operating system developed by Apple, one

of the more popular consumer technology companies. iOS is used on devices manufactured by Apple such as iPad and iPhone [12].

3.3. Customer Satisfaction

Customer satisfaction is very important for a company. Customer satisfaction is part of the company's or organization's efforts to provide the best service to consumers, whether in the form of products, services or goods, with the aim that customers are satisfied with what they receive [13]. In determining patient satisfaction in hospitals, patients will usually see two aspects, namely the facilities of the hospital and the services provided by the hospital [14].

3.4. Community Satisfaction Survey Guidelines

The scope of the Community Satisfaction Survey in the Regulation of the Minister of Empowerment of State Apparatus and Bureaucratic Reform Number 16 of 2014 concerning Guidelines for the Survey of Community Satisfaction on the Implementation of Public Services incorporates:

- 1) **Prerequisites:** necessities that should be met in the administration of a sort of administration, both specialized and regulatory necessities.
- 2) **Methodology:** normalized administration strategies for specialist co-ops and beneficiaries, including protests.
- 3) **Administration time:** the timeframe needed to finish the whole help cycle of each kind of administration.
- 4) **Charges/Tariffs:** to support beneficiaries in overseeing as well as getting administrations from the supplier, the measure of not really settled dependent on an understanding between the administrator and the local area.
- 5) **Item Specification Service Type:** item determinations for the sort of administration are the aftereffects of administrations furnished and obtained as per the arrangements that have been set. This help item is the aftereffect of each sort of administration detail.
- 6) **Competence in execution:** capacities that should be moved by implementers including information, aptitude, abilities, and experience.
- 7) **Competence in behavior:** demeanor of officials in offering types of assistance.

- 8) **Administration Notice:** an assertion of the capacity and commitment of the coordinator to do administrations as per administration principles.
- 9) **Taking care of Complaints, Suggestions and Feedback:** dealing with objections, ideas and information sources, are methods for taking care of grievances and following up.[15].

- predetermined schedule;
- c) Visit the independent registration platform within the hospital to complete the requirements and print an SEP (Participant Eligibility Letter) for BPJS patients, and;
- d) Wait to be called at the specified polyclinic.

4. FUNDING AND DISCUSSION

4.1 Overview of Majalengka Hospital

The Hospital has several services, including emergency services, medical services, medical record services, and nursing services. Outpatient services in Majalengka Hospital are as follows.

General patient registration:

- Monday-Thursday : 07.00-10.30
- Friday : 07.00-10.00
- Saturday-Sunday :

closed.

4.1.1. Offline patient registration

Patient Registration Procedure:

- a) Patients come to the hospital to take registration queue numbers;
- b) Patients wait for their turn according to registration queue number, and;
- c) Patients go to the registration section and submit their ID card/other requirements.

Patient Examination Procedures:

- a) Patients who have completed registration will queue to the examination queue, and;
- b) After getting called, patients may get examined in the polyclinic.

Patient medication procedures;

- a) Patients who have been examined at the polyclinic get a prescription;
- b) The prescription is handed over to the pharmacist, and;
- c) Patients should wait for their drugs to be prescribed.

4.1.2. Online patient registration

The flow of outpatient online registration through the online RSM application[16] is as follows:

- a) Register through the RSM Mobile app at Majalengka Hospital;
- b) Patients come to the hospital on a



Figure 1 Online registration flow through the RSM Mobile application

4.1.2.1. Display of the RSM Mobile Application

On the main page of the RSM Mobile application, some of the menus are;

- a) Online registration: used to register online outpatients, divided into general patients and BPJS patients;
- b) Room information: contains information about room facilities and the currently vacant room in the hospital;
- c) Queue monitor: monitor registration queues for patients who register directly and monitor queues at pharmacies;
- d) Our doctor: contains information on Majalengka Hospital doctors;
- e) About us: contains the vision, mission and motto of Majalengka Hospital;
- f) Facilities and Services: contains information about existing facilities at Majalengka Hospital, such as emergency room services, polyclinics and other services;
- g) Contact us: contains information on contact person and social media for Majalengka Hospital.



Figure 2 The interface of the RSM Mobile Application

4.1.2.2. Advantages & Disadvantages of Using RSM

Some of the advantages of using the RSM Mobile application are:

- a) Patients do not need to queue for registration, thus saving time;
- b) Patients can register anywhere;
- c) Patient’s data is transparently shown.

While the disadvantages of using RSM Mobile applications are:

- a) Registration quota is limited and patients must arrive on schedule, and;
- b) For BPJS patients, if the BPJS system is undergoing maintenance/down, the RSM application will not be able to be used [17].

4.1.2.3. Benefits of Implementing RSM Mobile Application

Some of the benefits of implementing the RSM mobile application are as follows:

- a) Improving community satisfaction with the services of Majalengka Hospital;
- b) More effective and efficient services;
- c) Significantly decreased offline registration questions;
- d) Increasing community trust, and;
- e) Minimizing the risk of disease transmission [18].

5. CONCLUSION

Conclusions that can be drawn from this study are:

- a) The RSM Mobile application at Majalengka Hospital makes it easy for patients to register in outpatient care, without having to come directly to the hospital so that it saves time because it can be done anywhere with their gadgets [19];
- b) The goals and objectives of implementing online registration are clear and appropriate, namely increasing patient comfort and providing services with optimal standards [20].
- c) The RSM Mobile application, apart from functioning as an online registration service, also functions as a medium for other health information;
- d) Patient assessment of online services is good and the registration process is easy to understand.

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