



# Puskesmas Medical Record Information System (Case Study: Gedangan Health Center, Sidoarjo Regency)

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## ABSTRACT

Puskesmas Gedangan, Sidoarjo District, in recording Medical Record and administration of patient visit and data processing to patient still manual, so administrative process takes a little time, either in handling patient, or in case of making report. Medical Record Information System of Gedangan Public Health Center of Sidoarjo Regency, Medical Record Tool, Patient Data, Drug Data, Action Data, Doctor Data, and admin configuration, but the system is not built all the services in Puskesmas Gedangan Sidoarjo District. In this research used the Waterfall method, where the means to analyze the problems that occurred in Gedangan Public Health Center of Sidoarjo Regency and a Medical Record Information system which was immediately implemented in the form of computer based application. The results of research on the application of Medical Record Information System, at Public Health Center of Gedangan Kabupaten Sidoarjo, on the guided performance of the employees, so that the process of health services to the community can be done quickly and avoid the mistakes in making the patient's Medical Record report.

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## 1. INTRODUCTION

Information technology is a field of technology that is growing very rapidly and almost touches all levels of society. Its development makes it easier for users to receive the information they need quickly. In this super fast era, technology has covered various fields, both private and government, such as communication, education, entertainment, economy, health and others. One of its uses in the health sector is a medical record recording information system. Medical record is a collection of data from facts or evidence of the patient's condition, past and current medical history and medication written by medical personnel who provide services to patients. This medical record will later be used by medical officers to view and add to the health records of the patients being treated.

Recording medical records by writing in patient books is an old method used, and the problem that often arises when using the old medical record system is the difficulty in managing archives, such as grouping patient medical record data. Another problem is the need for a large storage area to accommodate all the data that comes in and increases every day and the main problem is the resistance of the storage media which is relatively easy to damage, so that it will bring new problems such as difficulty in storing backup data or backing up data. Apart from the problem of data management, another problem faced by the manual medical record system is the relatively long duration required to access data so that it can disrupt the patient handling process.

The advantages of recording medical records using an information system are the process of searching for medical record data quickly, increasing the effectiveness of communication between medical officers, not requiring large storage space and will also provide information or reminders to

medical officers to follow up on outpatient information. From the above review, it can be concluded that manual recording of medical records can cause various problems that can affect the running system in a health service unit, as experienced by the Gedangan Sidoarjo health center, which currently still uses manual recording of medical records. In order to improve the system that runs in a health service,

## **2. RESEARCH METHOD**

The research method is a technique or method of searching, obtaining, collecting or recording data, either in the form of primary data or secondary data used for the purpose of compiling a scientific work and then analyzing the factors related to the main issues so that there will be a truth of the data. which will be obtained.

Understanding research methods according to, Sugiyono (2012, p:2) research methods are scientific ways to obtain valid data with the aim of discovering, proving and developing knowledge so that it can be used to understand, solve and anticipate problems.

The method used in this study is a descriptive method with a qualitative approach, using this research method will be known a significant relationship between the variables studied so that conclusions will clarify the description of the object under study. The descriptive method according to Sugiyono (2013, p: 7), is a method used to describe independent variables, either only on one or more variables (stand-alone variables) without making comparisons and looking for that variable with other variables.

## **3. RESULTS AND DISCUSSIONS**

### **3.1 Problem Analysis**

To be able to create an effective system, we must create a system that can solve problems that occur repeatedly. In this study, we will create a medical record information system for the Gedangan Health Center, Sidoarjo Regency. In order for the system to be made to solve the problems that often occur, it is necessary to conduct interviews and observations with the relevant parties or agencies.

### **3.2 System Design**

System design is a phase where a design expertise is needed for computer elements that will use the system, namely the selection of equipment and computer programs for the new system.

### **3.3 Interface Design**

User Interface is a communication mechanism between the user and the system. The User Interface can receive information from the user and provide information to the user to help direct the flow of troubleshooting until a solution is found.

### **3.4 Discussion**

#### **a. Research result**

Through original observation, it was known that there were problems at the Gedangan Health Center, Sidoarjo. As for the problems found from initial observations, there is a system that must be updated, but the proposed system does not change the existing system, therefore to add new features to the system, a system design is needed by collecting files related to the medical record system and the system used. walking at the Gedangan Health Center, Sidoarjo.

#### **b. System analysis**

System analysis is a description of a complete information system into the parts involved in the system with a view to identifying and evaluating problems, opportunities, and obstacles that occur to fit the expected needs, so that improvements to the system itself can be proposed.

#### **c. Document Flowchart**

Document Flowchart is a description of the process flow that occurs in the system where in the document flowchart there is a flow chart that shows the flow of documents, reports, and forms including the fields that are passed. This document flowchart uses the same symbols used in system flowcharts.

## **4. CONCLUSION**

Based on the test results, the system built can facilitate employee performance in processing patient data, medical records and making reports, especially at the counter which is a place for storing

medical records for all patients registered at the Puskesmas. Overall the health service system that runs at the Puskesmas can run effectively and efficiently.

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