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# ANALYSIS OF ACCOUNTING INFORMATION SYSTEM IN INTERNAL CONTROL OF REVENUE IN REGIONAL PUBLIC HOSPITAL IN THE PANDEMIC ERA

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### **ABSTRACT**

Health institutions face various challenges, such as changes in the behavior of the hospital community and patients, the use of technology in the socialization and marketing of hospital products, changes in service processes, and changes in leadership styles. Therefore, modifications and changes to the system and policies of health institutions are needed by utilizing information technology. One application of information systems that play an important role in operational activities is the Accounting Information System. This study shows the role of accounting information systems in public services in hospitals, is adequate and plays a role in increasing internal control over hospital revenues. There is already a clear separation of functions between operational functions, receiving and storing functions and recording and reporting functions. Internal revenue control that has been implemented is effective and efficient in accordance with the elements of the internal control system except for risk assessment and monitoring that still needs attention. This study uses descriptive research that aims to describe or accurately describe the nature or something that is happening and taking place related to the role of accounting information systems in public services in hospitals.

Keywords: Accounting Information System, Internal Control of Revenue, Regional Public Hospital, Pandemic Covid 19

### 1. INTRODUCTION

Health systems around the world are facing challenges in the form of an increased need for health care by people with COVID-19, which is further exacerbated by fear, stigma, misinformation, and restrictions on movement that interfere with the delivery of health care for all diseases. Strengthening primary health services in the context of realizing universal health coverage provides an important foundation for adapting to the pandemic context. A well-organized and prepared health system will be able to maintain equitable access to quality essential health services during an emergency. In the early stages of the COVID-19 outbreak, many health systems were successful in maintaining routine service delivery when faced with a limited number of COVID-19 caseloads. As demand for services soars and healthcare workers are increasingly impacted by the COVID-19 infection and by the indirect consequences of this pandemic,

The Covid-19 pandemic has also resulted in a decrease in outpatient visits and non-Covid-19 inpatients. This condition resulted in a decrease in occupancy rates. Decreased income has an impact on hospital cash flow. Disrupted cash flow causes the hospital's operating expenses to increase. If this condition continues, the hospital will be in danger of collapse and services will stop. In responding to the new normal due to the COVID-19 pandemic, health institutions face various challenges, such as changes in the behavior of the hospital community and patients, the use of technology in the socialization and

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marketing of hospital products, changes in service processes, and changes in leadership styles. Therefore, modifications and changes to the system and policies of health institutions are needed by utilizing information technology.

One application of information systems that play an important role in operational activities is the Accounting Information System. Accounting information systems have roles and functions to support daily activities, support decision-making processes, assist company managers in fulfilling their responsibilities to external parties (Azhar, 2013). What is needed by external parties related to accounting information systems is financial statements. So financial statements are a product of accounting information systems (Albrecht, etc; 2008).

Accounting Information System is useful for collecting, recording, storing, maintaining, and processing data in the process of routine accounting transactions so as to produce accounting and financial information. The information produced is needed by management in making decisions, making internal and external reports, planning strategies to be able to compete with other companies, and making internal controls. If there is no accounting information system, it will have difficulty in controlling the activities that occur so that it affects the condition of the hospital. Here it is clear that the function of the accounting information system plays a very important role in the controls that are carried out. In managing a company, of course, it requires large costs for business continuity, the income obtained from services is an important part to finance operational expenses.

Problems that often occur in Regional General Hospitals are delays in reporting from each unit which can result in cash receipts activities being ineffective and inefficient (Nurazila, 2018). Another problem that often occurs is deviations and frauds that are carried out intentionally or unintentionally (Maria, 2016). If irregularities and fraud have occurred, it will automatically affect the income of the hospital, its safety will be threatened and the activities carried out will be ineffective and inefficient. From the above phenomenon that occurs because of a procedural error in the accounting information system process. Procedure according to (Krismiadji, 2008) that information systems cannot process data to produce information without instructions and procedures. And procedures are components of an accounting information system, as stated (Azhar, 2013) that the components of an accounting information system are hardware, software, software, procedures, databases, and communication networks. Based on the problems described above, this study aims to determine whether the Accounting Information System at the Regional General Hospital is effective for use in internal control of revenue.

## 2. LITERATURE REVIEW

### **Accounting information system**

An information system is a computer-based system designed to convert accounting data into information. However, we use the term accounting information system more broadly, which includes transaction processing cycles, use of information technology, development of information systems, according to Bodnar & Hopwood (2003). According to DeLone and McLean; (1992), suggested that the success of information systems is assumed to be the quality of the system, the quality of information individually and collectively, affecting user satisfaction and its use. Laudon and Laudon (2006), the causes of the success and failure of system implementation are influenced by the following factors:

1. The role of users in the implementation process. 2. Level of management support for implementation efforts. 3. The level of complexity and risk of the implementation project.

4. Quality management in the implementation process.

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Susanto (2013), states that "The accounting information system is a collection of subsystems that are interconnected with each other and work together in harmony to process financial data into financial information needed by management in the decision-making process in the financial sector. Accounting Information System is a computer-based system designed to transform accounting data into information. This information is communicated to various decision makers (Paul, 2016). Based on the above definition, it can be concluded that an accounting information system can be defined as a system within an organization which is a combination of humans, facilities, technology, media, procedures and controls aimed at obtaining important communication lines, processing certain types of routine transactions.

The purpose of accounting information systems according to Fakhri (2004), is to provide accounting information for users. Specifically the objectives are: 1). To support daily operations In operating every day, companies perform a number of business events called transactions. Transactions show an exchange of economic value. Transactions are processed by the transaction processing system (TPS) media, which is a system of accounting information systems. Each TPS performs certain stages according to the system design. With the accounting information system, it is expected that the company's operations can be launched. 2). To support decision making by the company's internal decision makers. Decisions must be made by the company to plan and control the running of the company. It is concerned with the processing of information, through which transactions are processed. Accounting information systems generally provide some of the information needed in making decisions. 3). Fulfill obligations related to the management of the company. With an accounting information system, it is expected to get information that will help companies to manage their activities as effectively and efficiently as possible.

## **Internal Control of Revenue**

Revenue is the gross inflow of economic benefits arising from the normal activities of the company during a period when the inflow results in an increase in equity, which is not derived from investment contributions. under different names such as sales, service income, interest, and royalties. According to the Indonesian Accounting Association (IAI) in the Financial Accounting Standards (SAK) No. 23 (2002). According to Mursyidi (2009), income is all receipts from the state/regional general treasury account which adds equity to current funds in the period of the fiscal year concerned which is the right of the government, and does not need to be repaid by the government, Mursyidi (2009). Another definition of income is the increase in economic benefits during a certain accounting period in the form of input and increase in assets or decrease in liabilities resulting in an increase in equity that does not come from investment contributions, according to Soemarso (2004)

Income (income) includes revenue (Revenues) and gains (gains) income arising in carrying out the usual activities of the entity. While profits may arise and do not arise in carrying out the usual activities of the entity. Profits reflect increases in economic benefits and are essentially no different from income. Therefore the post is not seen as a separate element in this basic framework Bastian (2006). There are two types of revenue recording methods, namely: 1. Cash Basis method, a system where revenue has not been recognized before the income is received. 2. The Acrual Basis method, revenue is recorded when rights occur regardless of the income received.

## Covid 19 pandemic

A pandemic is called a disease outbreak that spreads globally. According to the World Health Organization (WHO), a pandemic is declared when a new disease spreads around the world beyond limits. The term pandemic according to the Big Indonesian Dictionary is defined as an epidemic that infects humans simultaneously and spreads globally covering a wide geographic area. WHO states, the pandemic situation is that the

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entire world population may be infected with this disease, and some of them may fall ill. Covid-19 is an infectious disease that has the potential to cause a public health emergency. Therefore, preventive measures against these types of infectious diseases must be carried out as soon as possible. Indonesia as a state of law, the prevention of these types of infectious diseases must be established in a rule or regulation. The urgency of the formation of rules related to the prevention of Covid-19 must be established in a Government Regulation and a Regulation of the Minister of Health because these two regulations are implementing regulations rather than Law Number 6 of 2018 concerning Health Quarantine. (Telaumbanua, 2020).

## 3. DATA AND RESEARCH TECHNIQUE ANALISYS

This study uses descriptive research which aims to describe or accurately describe the nature or something that is happening and taking place in the research carried out to force the causes of a certain symptom. The reason why the writer uses descriptive research in this research is to describe, systematically, factually and accurately describe the facts and the relationship between phenomena. This study uses qualitative data types which are data expressed in the form of words, sentences, and pictures. The qualitative data in this study is an income accounting information system at one of the hospitals in Central Java, which includes: human resources (HR), tools, records, reports, forms and procedures. Sources of data come from: Secondary data is data that is not obtained from the source directly but has been collected by other parties and has been processed. In this study, secondary data was obtained through documents, papers, notes, reports, archives and other supports according to the needs of the author which contained a lot of information or data related to research problems.

This study uses data analysis which includes: 1. Data collection period Data collection was carried out during observations, interviews and documentaries at the hospital under study. The results of the data collection are in the form of field notes. 2. Triangulation process The triangulation process is a technique for checking the validity of data that utilizes something else.

The researcher used source triangulation and method triangulation. Triangulation of sources and methods is that the data obtained are checked again at the same source at different times, or checked using different sources. For example, for the triangulation method, the data collected by the interview method will be checked using the observation method using document analysis 3. The data reduction process is a form of analysis that sharpens, categorizes, directs, discards unnecessary, and organizes data in such a way so that final conclusions can be drawn and verified. The results of data collection are reduced first, selecting important data, discarding unnecessary data, so that the information needed by researchers is really the information and data needed by researchers 4. The process of presenting data is a collection of structured information that is given the possibility of drawing conclusions and taking action. Researchers after going through several processes then the data is presented for analysis first. 5. Analyzing the existing system by looking at the reality in the field and comparing it with existing theory 6. The process of drawing conclusions. The process of drawing conclusions, namely providing opinions or conclusions about the accounting information system for the purchase of medicines, providing recommendations for existing weaknesses.

### 4. RESULT AND DISCUSSION

The main activity of service companies during the pandemic is the development

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of the service industry, changing lifestyles that have a serious impact on public health and management of life changes that threaten economic stability. Despite the current conditions, there are several things that can be done to survive during Covid-19. In a company must have human resources with proportions that can design situations and conditions quickly and appropriately in order to adapt to conditions that occur suddenly. So that the information provided by the strategic accounting system can reduce costs, which are more oriented to providing financial information for external users and minimizing the use of costs within the company. Companies, can predict the cost situation to run a strategic management accounting system about the costs in more detail, in fact exceeds the benefits obtained.

To handle the company's main activities, companies generally design an accounting system that is tailored to their company's activities. To produce quality financial reports, an effective accounting information system is needed. In addition, information systems can assist in making a decision on the information obtained from the information system. This makes hospitals able to compete with other hospitals and have competitive advantages such as company performance, service, production, and so on.

In building the system, the very important thing is the system design stage. This stage can take a long time, because the developer must know exactly what the hospital needs. Intensive communication here needs to be maintained between the two parties (hospital and system developer) so that the hospital can clearly explain what they want and provide in detail what they expect and this must be understood by the developer. The boundaries also need to be discussed between the two so as not to cause repudiation (disagreement) due to differences in perceptions of the scope of the system being built and only known when the system is complete and will be implemented.

DeLone and McLean (1992) state that constructing a model to describe the success of information systems by including individual impact and organizational performance in their model of information system success. DeLone and McLean's (1992) theoretical framework is known as the DeLone and McLean Model of Information System Success (D&M IS Success).

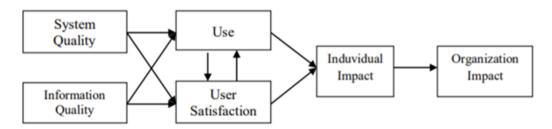


Figure 1.
Model of Information System Success (D&M IS Success).

The function of the Accounting Information System consists of people who run the accounting information system, procedures, documents, software, and information technology infrastructure are elements of an accounting information system that can support in fulfilling its objectives, namely:

## 1. Support daily operation

a. The existence of people who implement the accounting information system, namely the administration, medical record officers, finance department, doctors

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- and nurses who have duties and responsibilities regarding patient data management, can support the daily operations run by the hospital.
- b. Patient admission procedures are provisions that must be carried out by both patients and employees who can carry out daily operations.
- c. Data about the process of activities / documents used, namely the identity of the patient's medical record helps in finding data for patients seeking treatment at the hospital.
- d. Information technology software and infrastructure are used by hospitals as a tool to process data and store data that can help smooth daily operations.
- 2. Supporting Management Decision Making Every day the administration and finance divisions can produce reports in the form of:
  - a. Report on the number of patients who came for treatment
  - b. Report on the diagnosis of the disease suffered by the patient who came for treatment.
  - c. Reports of financial income received from patients who come for treatment.

These reports are information that is used as the basis for making management decisions regarding the activities carried out by the Hospital. With these reports the management can decide on the next plan that must be implemented so that revenue continues to increase. The accounting information system applied by the hospital can create revenue internal control which consists of the following elements:

### a. Control environment

The accounting information system applied is able to create a control environment, namely: a). The medical records department, the administration section, the finance department that operates the accounting information system are able to create a control environment by carrying out their duties. b). The patient acceptance procedure that is carried out is a provision that must be carried out by employees in receiving patients, being able to create a control environment in terms of carrying out their duties and responsibilities. c). Billing payments made in 3 copies, able to create internal control by reducing irregularities or fraud.

## b. Control Activities

The accounting information system applied by the hospital encourages the implementation of control activities, namely: a. With the existence of medical record documents, billing payments, and the number of patients used, it encourages the implementation of control activities that are filled in according to reality and complete. b. With the existence of software with the latest Windows programs that process information technology infrastructure data, it encourages control activities to be carried out, namely data is processed completely and accurately and stored properly. c. The presence of people who inform the accounting information system and patient admission procedures encourages the implementation of control activities, namely the separation of duties in the service department.

### c. Risk Assessment

The accounting information system applied by the hospital can overcome the risk assessment that may occur and be detrimental.

## d. Information and Communication

Hospital accounting information systems are able to produce accurate, reliable and trustworthy information, which will assist the management in making decisions regarding the management and control of activities carried out through

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- communication in the form of verbal actions or orders.
- e. Information and Communication
  The accounting information system applied is able to assist the supervision carried out by the head of finance to prevent fraud and fraud that can harm the hospital Based on the research that the author did on the accounting information system in improving the internal control of income, the following data were obtained:
  - a. The accounting information system consists of elements of the people who operate the accounting information system, namely the medical record officer, administration section, polyclinic section, head of medical records, head of finance, doctors and nurses. The accounting system owned is adequate to support good sales activities. This can be seen from the suitability of the following procedures: 1). Segregation of duties. 2). There is authorization on the documents used. 3). The hospital has defined the customer class.

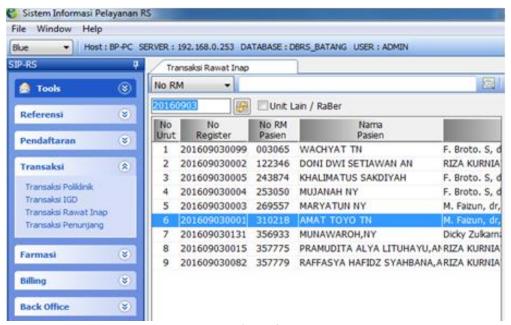


Figure 2. Medical Record

b. Control activities consist of separation of revenue and accounting functions as well as bank reconciliation. Administrative and financial service procedures consist of related officers, namely the cashier, accounts section, receivable collection section, receipt making section, archive section, accounting section, payroll section, inventory section, logistics section, purchasing section and administrative verifier sectio

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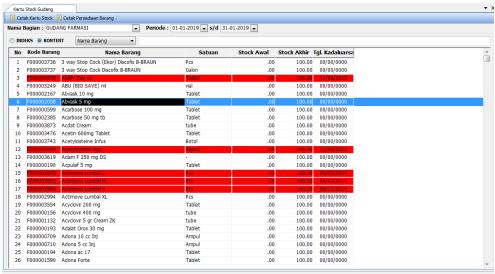


Figure 3. Stock Opname

c. To avoid the practice of manipulation and fraud on the accounting information system on income, the hospital has minimized and anticipated this by using the services of the Bank in processing income from the collection of receivables. This income will be made through an online bank transfer facility which is reviewed regularly covering performance matters, special procedures, restrictions on access to the system, internal quality audits and physical controls.

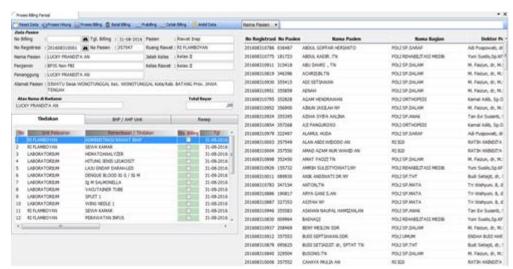


Figure 4. Billing

d. Journalizing of service transactions in the bookkeeping is accompanied by

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documents issued at the time of sale. Journalizing carried out by the accounting department is for bookkeeping purposes as evidence of the company's financial statements. This journaling is accompanied by documents that have been authorized and will then be made into the daily recapitulation journal. It aims to establish communication between interested parties to convey the risks and complaints that may arise during the course of the sales system at the hospital.

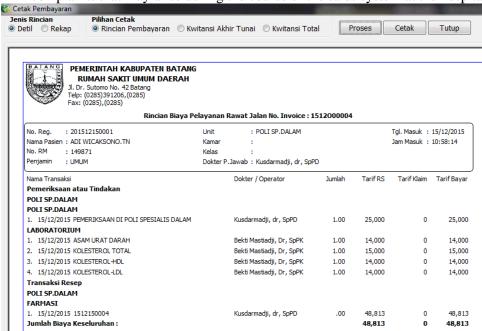


Figure 5.
Payment Details

e. The cashier checks every money received with the existing documents, to ensure the validity of the document before it is given to the verification section. Then the money is given to the financial treasurer and the recapitulation document is given to the verification section. Then the verification section checks for correctness and completeness. If there is something that is not suitable, it is resolved first with the cashier. After completion of the document is given to the accounting department. Then the accounting department re-examines and journalizes and finally makes financial statements.

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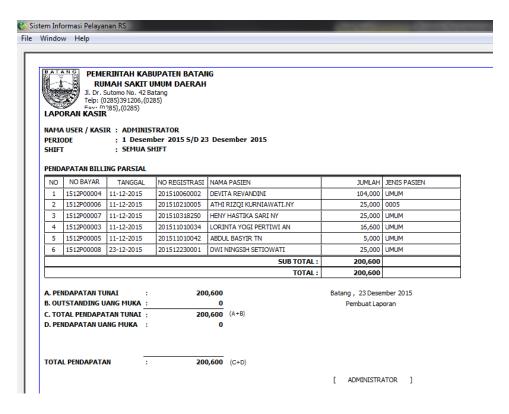


Figure 7. Cashier Report

### 5. CONCLUSION

Health institutions face various challenges, such as changes in the behavior of the hospital community and patients, the use of technology in the socialization and marketing of hospital products, changes in service processes, and changes in leadership styles. Therefore, modifications and changes to the system and policies of health institutions are needed by utilizing information technology. One application of information systems that play an important role in operational activities is the Accounting Information System. This study shows the role of accounting information systems in public services in hospitals, is adequate and plays a role in increasing internal control over hospital revenues. There is already a clear separation of functions between operational functions, receiving and storing functions and recording and reporting functions. Internal revenue control that has been implemented is effective and efficient in accordance with the elements of the internal control system except for risk assessment and monitoring that still needs attention. With the limitations of the study, further research is needed to know for sure about the accounting information system for cash receipts and disbursements in improving internal control over regional general hospital revenues. In addition, further research can compare the accounting system for cash receipts and disbursements in improving internal control over income between government public hospitals and private public hospitals.

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