

AN ANALYSIS OF THE ACCOUNTING INFORMATION SYSTEM FOR CASH INFLOWS AND OUTFLOWS IN INPATIENT SERVICES AT PKU MUHAMMADIYAH GAMPING HOSPITAL**Lili Rahmawati****Rigel Nurul Fathah**

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ABSTRACT

Cash management plays a vital role in the operation of hospitals, primarily due to the high liquidity associated with cash and its susceptibility to mistakes and fraudulent activities. Consequently, a robust accounting information system for managing cash receipts and disbursements is crucial for ensuring internal controls, financial responsibility, and operational viability. In the context of hospitals, inpatient services constitute a significant revenue stream, underscoring the necessity for precise and dependable management of cash inflows and outflows. This study seeks to evaluate the accounting information system concerning cash receipts and disbursements specific to inpatient services at PKU Muhammadiyah Gamping Hospital.

A descriptive qualitative methodology was employed for this research. Data collection involved observations, informal interviews, and analysis of documentation. Primary data were gathered from discussions with the finance department head, treasurer, and cashier staff, while secondary data encompassed records from cashiers, accounts receivable details, and procedures related to inpatient services. The data collected were examined using qualitative descriptive methods to gain comprehensive insights into how the cash receipt and disbursement system operates.

Findings indicate that the accounting information system governing cash receipts and disbursements within inpatient services at PKU Muhammadiyah Gamping Hospital has been implemented in an effective and systematic manner. The system exhibits a distinct division of responsibilities across operational tasks, authorization processes, record-keeping duties, and cash custody functions. Cash receipts are underpinned by sufficient documentation along with appropriate recording practices; similarly, cash disbursements occur only following proper authorization from designated individuals. Furthermore, significant cash disbursements are processed via bank transfers to enhance oversight and mitigate risks associated with potential misuse of funds.

The research concludes that the accounting information system related to cash receipts and disbursements for inpatient services at PKU Muhammadiyah Gamping Hospital aligns well with recognized accounting standards and internal control methodologies. This system facilitates effective management of cash resources while helping to reduce instances of errors and fraud. The insights gained from this study offer valuable implications for hospital administration aimed at reinforcing internal controls over financial transactions while also contributing to existing literature on accounting information systems within healthcare settings.

Keywords:accounting information system; cash receipts; cash disbursements; internal control; inpatient services.

INTRODUCTION

Economic growth is a critical factor that every nation must prioritize, as all countries strive to improve both present and future living conditions. Hospitals are institutions that provide various health services, including inpatient care, outpatient care, and emergency services. These healthcare facilities are service-oriented organizations managed collaboratively by government bodies and private entities (foundations) to deliver medical services to the public. PKU Muhammadiyah Gamping Hospital is an example of a healthcare provider operated by a private foundation.

According to Decree No. 86/SK-PP/IV-B/1.c/1998 issued by the Central Leadership of Muhammadiyah, which outlines the Guidelines for Muhammadiyah Health Service Institutions, the primary mission of these institutions is to enhance community capacity to achieve better health standards. This mission contributes to the realization of a prosperous and harmonious life as envisioned by Muhammadiyah. To deliver high-quality healthcare services effectively, hospitals must implement a robust accounting information system. At PKU Muhammadiyah Gamping Hospital, the primary source of revenue is derived from inpatient services. Inpatient care refers to healthcare services provided to patients who are admitted and occupy hospital beds for observation, diagnosis, treatment, medical rehabilitation, and other supporting medical services [1].

In managing cash collections related to inpatient services, a standardized framework has been established to regulate the sequence of cash receipt procedures. Systems and procedures associated with inpatient services must be carefully organized to clearly define all activities, ranging from patient registration and treatment processes to discharge procedures [2]. Hospital management places significant emphasis on supervising and controlling cash revenues generated from patient services, as these revenues play a vital role in financing hospital operations. Therefore, effective revenue management must be supported by an appropriately designed accounting information system that meets the hospital's operational needs [3].

Accounting information systems play a crucial role in organizational operations. In business entities, these systems are used to generate financial reports for stakeholders who require information on economic activities and financial conditions, enabling them to assess organizational performance through financial statements [4].

Special attention is given to accounting information systems related to cash receipts and disbursements, as cash represents a highly liquid asset involved in all business transactions. Due to its liquid nature and ease of transfer, cash is particularly vulnerable to misappropriation during transaction cycles [5]. Consequently, cash receipt and disbursement systems must be governed by well-defined procedures that align with established management policies [6]. Transactions conducted outside prescribed procedures may lead to fraud, theft, or embezzlement, as well as inaccuracies in the allocation of cash inflows and outflows.

Similar to other hospitals, PKU Muhammadiyah Gamping Hospital conducts various healthcare service activities that also serve as sources of revenue. Among these activities, income generated from inpatient services constitutes one of the most significant revenue sources. Previous studies examined the effectiveness of accounting information systems in internal control over cash receipts, examined the effectiveness of accounting information systems in internal control over cash receipts at Hospital X. Their findings revealed that although most internal control components related to cash receipts were adequately implemented, several elements had not yet been fully adopted [7]. Effective internal control systems for cash receipts must ensure accurate recording and safeguarding of cash to support financial accountability and prevent fraud [8]. Furthermore, other studies found that while segregation of duties was implemented in hospital cash receipt systems, weaknesses in risk assessment and documentation increased the risk of financial misstatements and fraud [9]. Other findings indicate that robust authorization, documentation, and segregation of duties strengthen internal control systems, reported that hospitals with well-established authorization, documentation, and segregation of duties demonstrated robust internal control over cash receipts [10]. Effective internal control systems for cash and cash equivalents are essential in hospitals to prevent fraud and ensure the reliability of financial reporting [11]. Unlike previous studies that focus only on cash receipts, this study simultaneously evaluates both cash inflows and outflows in inpatient services using an integrated internal control perspective. Accordingly, this study aims to analyze the internal cash control system applied at PKU Muhammadiyah Gamping Hospital

This study addresses two main research questions: (1) How is the accounting information system for cash receipts and cash disbursements implemented in inpatient services at PKU Muhammadiyah Gamping Hospital? and (2) Has the system been implemented effectively? The objective of this study is to obtain comprehensive insights into the operation of cash receipts and cash disbursements related to inpatient services at the hospital.

OBJECTIVES

The main objective of the study is

- 1) To furnish insights and managerial considerations for the administration of PKU Muhammadiyah Gamping Hospital regarding the management of cash revenues generated from inpatient services.
- 2) To assess the accounting information system utilized for cash inflows and outflows associated with inpatient services at PKU Muhammadiyah Gamping Hospital.
- 3) To examine the efficacy of the accounting information system in facilitating control and management over cash transactions related to inpatient care.

- 4) To aid in the advancement of accounting knowledge, specifically within the domain of accounting information systems pertinent to cash inflows and outflows in hospital inpatient services.

METHODOLOGY

Type of Research

This research utilizes a descriptive methodology with a qualitative focus, eliminating the need for hypothesis testing [12]. It initiates with the gathering of secondary data from the cashier and accounts receivable departments, alongside relevant documentation concerning inpatient service procedures at the hospital. The acquired data is subsequently described and analyzed to facilitate a thorough understanding of the research subject.

Research Object

The investigation took place at PKU Muhammadiyah Gamping Hospital in September 2022. The focal point of this study is information pertaining to the accounting system related to cash receipts and disbursements. One approach to acquiring this information involved interviewing key personnel such as the head of the finance department, the treasurer, and cashier staff members at PKU Muhammadiyah Gamping Hospital.

Data Sources

The data sources utilized in this study are essential for supporting both the completion and analysis phases. This research incorporates both primary and secondary data, outlined as follows:

Primary Data

Primary data were obtained directly through interviews conducted with the head of finance, treasurer, and cashier staff at PKU Muhammadiyah Gamping Hospital.

Secondary Data

Secondary data were gathered from records maintained by the cashier and accounts receivable departments, in addition to documentation outlining inpatient service procedures at PKU Muhammadiyah Gamping Hospital.

Data Collection Techniques

Data collection techniques encompass the various methods employed to gather information during a research study. In this instance, techniques used include observation, interviews, and document review.

Data Analysis Techniques

The analytical approach adopted in this study is qualitative descriptive analysis, which incorporates unstructured interviews and document examination. The primary emphasis is on describing, elucidating, collecting, and interpreting data. Information derived from interviews, observations, and documentation undergoes qualitative analysis and is presented descriptively based on actual conditions observed in PKU Muhammadiyah Gamping. Conclusions are subsequently drawn to fulfill the objectives of the research.

RESULTS AND DISCUSSION

Overview of the Research Subject

Brief History of PKU Muhammadiyah Gamping Hospital

PKU Muhammadiyah Gamping Hospital was established as an extension of PKU Muhammadiyah Yogyakarta Hospital, which is situated at Jalan Ahmad Dahlan No. 20 in Yogyakarta. Owned by the Muhammadiyah organization and overseen by its Central Board, this hospital initially operated under the name PKU Muhammadiyah Yogyakarta Hospital Unit II. The official establishment date is recorded as February 15, 2009.

On June 16, 2010, the Sleman Regency Health Office granted a temporary operational license to the hospital under Decree No. 503/0299a/DKS/2010. Later, on November 18, 2013, it received official recognition as a Class C Hospital through Ministerial Decree No. HK.02.03/I/1976/2013. Following a decision from the Daily Supervisory Board on March 2, 2016 (Decree No. 0161/B-II/BPH-III/III/2016), PKU Muhammadiyah Yogyakarta Hospital Unit II was renamed to PKU Muhammadiyah Gamping Hospital. As of March 29, 2021, PKU Muhammadiyah Gamping Hospital acquired an operational license categorizing it as a Class B facility from the Investment and Licensing Office of the Special Region of Yogyakarta. The hospital currently holds Paripurna (Excellent) accreditation from the Hospital Accreditation Commission (KARS). The vision for PKU Muhammadiyah Gamping Hospital is to be recognized as a premier teaching hospital with international quality standards rooted in Islamic values. It aims to provide healthcare services that adhere to these high standards based on scientific evidence and modern medical technology. In addition to healthcare delivery, the institution also focuses on education, research, and development in contemporary science and technology within the health care sector while fostering partnerships with national and international entities to bolster service quality.

Furthermore, its mission includes promoting Islamic principles (amar ma'ruf nahi munkar) throughout education, research endeavors, and healthcare delivery.

Accounting Information System for Cash Receipts

According to this study's findings, the accounting information system governing cash receipts at PKU Muhammadiyah Gamping Hospital aligns well with established accounting principles. This system encompasses relevant organizational units involved in cash receipt processes along with associated forms and documents utilized for record-keeping.

Related Functions

The implementation of the accounting information system for cash receipts at PKU Muhammadiyah Gamping Hospital has proven effective due to a well-defined division of responsibilities among various operational functions: receipt processing, recording tasks, and cash management duties.

Operational tasks are performed by both the registration department and medical service units. The billing department manages patient billing closure and calculates total charges owed by patients; meanwhile, payment collection is handled by the cashier who prepares summaries of cash receipts.

The roles of recording transactions and managing cash are assigned to both accounting and treasury departments. The accounting team records cash receipts in their respective journals while preparing financial statements accordingly; treasury personnel ensure oversight over cash receipt reports and guard against any potential discrepancies in cash handling practices.

Documents Utilized

The Inpatient Cost Details Document (RBRI) serves as a detailed account of services rendered by the hospital to patients alongside corresponding receipts that substantiate these services provided acting both as billing documents and proof of incoming funds for PKU Muhammadiyah Gamping Hospital.

Accounting Records Employed

In terms of accounting records employed at PKU Muhammadiyah Gamping Hospital, there are reversing journals alongside general journals and a general ledger available for use. Reversing journals temporarily acknowledge cash receipts facilitating subsequent recording processes; these entries transition into both general journals and cash receipts journals for streamlined documentation purposes.

Procedures Forming Cash Receipts System

All operations within this cash receipts framework require authorization from specified officials ensuring that procedures are systematically coordinated for efficient report generation regarding cash inflows. Monthly reconciliations between bank statements are undertaken collaboratively by accounting personnel alongside bookkeeping teams focusing on tax matters aimed at preventing fraud while allowing verification during instances where recording errors may occur within either cashier or accounting sectors.

In summary, below is a table summarizing how the accounting information system for inpatient service-related cash receipts operates within PKU Muhammadiyah Gamping Hospital.

Table 1. Implementation Cash Inflow

| Description | Theory | Practice at PKU Muhammadiyah Gamping Hospital | Implementation Assessment |
|---|---|---|--|
| Related Functions | Cash receipt systems require a clear separation of duties among operational functions, authorization, recording, and cash custody to ensure effective internal control. | The functions involved include the cashier unit, finance department, accounting, and bookkeeping. Specifically, the system involves the cash receipt function, billing determination unit, cashier, treasurer, and accounting/bookkeeping unit. | The implementation at PKU Muhammadiyah Gamping Hospital is appropriate and consistent with theory , as billing determination units perform bill closing and cashier functions act as payment counters, facilitating patient payments. |
| Documents Used | Documents required in a cash receipt system include receipts, proof of cash inflows, bank deposit slips, and periodic cash receipt reports. | The documents used include inpatient billing records, receipts, and cashier daily cash reports. The receipt serves as proof of cash inflow and is summarized in daily reports to facilitate recording. | Not fully consistent with theory , as some documents overlap in function, where receipts simultaneously serve as proof of cash inflow and daily cashier reports. |
| Accounting Records Used | Accounting records in a cash receipt system include cash receipt journals, general journals, reversing journals, and the general ledger. | The accounting records used include reversing journals, general journals, and the general ledger. | Consistent with theory , although certain adjustments exist because revenue is recognized starting from patient admission at PKU Muhammadiyah Gamping Hospital. |
| Procedures Forming the Cash Receipt System | Cash receipt procedures include patient registration, service provision, cash receipt, bank deposit procedures, and recording of cash receipts. | The procedures at PKU Muhammadiyah Gamping Hospital include patient registration, inpatient services, cash receipt procedures, and recording of cash receipts. | Consistent with theory , with more detailed procedures starting from patient admission until patient discharge, providing better control and clarity. |

Accounting Information System for Cash Disbursements

Based on the results of the study, the accounting information system for cash disbursements at PKU Muhammadiyah Gamping Hospital indicates that the system implemented by the hospital is adequately effective. This is evidenced by the clear separation of duties within the cash disbursement process.

In the daily cash disbursement system, the treasurer routinely performs reconciliation between the cash balance recorded in the bank and the records maintained in the *My Accounting* system. In addition, manual recording is maintained by the cashier as a backup measure in case the Hospital Management Information System (*SIMRS*) experiences system errors. This practice is intended to prevent discrepancies or bookkeeping errors and to facilitate verification and cross-checking.

Cash disbursements related to inpatient services at PKU Muhammadiyah Gamping Hospital are not limited to pharmaceutical inventory purchases but also include logistics expenses, food supply purchases (nutrition services), and investment in medical equipment. Cash disbursements are executed only when supported by valid documentation and after passing through established verification procedures. These supporting documents subsequently serve as cash disbursement vouchers. The implementation of such procedures reflects the hospital's strong commitment to internal control and supervision in minimizing the risk of cash misappropriation.

For cash disbursement transactions involving large amounts, PKU Muhammadiyah Gamping Hospital does not utilize cash payments but instead applies a bank transfer system. Funds are transferred only after receiving approval from the hospital director. This method is considered highly effective, as it eliminates the need for the finance department to handle large amounts of cash and allows for better control and monitoring through bank accounts.

Critical Reflection on System Implementation

Although the findings indicate that the accounting information system for cash receipts and cash disbursements in inpatient services at PKU Muhammadiyah Gamping Hospital has been implemented effectively, several aspects merit critical reflection.

First, while the segregation of duties and authorization procedures are clearly defined, the system still relies heavily on manual backup records, particularly at the cashier level. Although this practice serves as a contingency measure when the Hospital Management Information System (SIMRS) experiences technical disruptions, it may increase the risk of data inconsistencies and reconciliation delays, especially if transaction volumes increase.

Second, the effectiveness of the current system is strongly dependent on the scale of operations. As inpatient service demand and transaction frequency grow, the existing procedures particularly those involving manual documentation and daily reconciliation may face efficiency constraints. Without further automation and system integration, the risk of processing delays and human error could increase.

Third, the hospital's cash management system demonstrates a significant dependency on SIMRS and supporting accounting applications. While system integration enhances control and monitoring, it also introduces potential systemic risks, such as operational disruptions caused by system errors, network failures, or cybersecurity threats. Although manual recording functions as a short-term safeguard, long-term reliance on digital systems necessitates stronger system redundancy, regular system audits, and enhanced IT controls.

These reflections suggest that while the current accounting information system is effective under existing operational conditions, continuous system evaluation and incremental improvements are necessary to ensure sustainability, scalability, and resilience in the face of growing service complexity.

ACKNOWLEDGEMENT

We would like to express our gratitude to the research team for providing us with supports and making this research a success. We would also like to thank Aisyiyah University Yogyakarta dan PKU Muhammadiyah Gamping Hospital for granting us permission to conduct this research.. We are expressing our gratitude to our families for being an inspiration. Above all, to God.

CONCLUSION

Based on the findings of the study and the analysis of the accounting information system for cash receipts and cash disbursements in inpatient services at PKU Muhammadiyah Gamping Hospital, several conclusions can be drawn.

First, the hospital has implemented its accounting information system for managing cash receipts and cash disbursements in inpatient services **effectively and systematically**, in line with practices applied in other hospitals. Second, there is a **clear segregation of duties** among functions related to cash receipt processing, recording and reporting, as well as cash custody and disbursement. Third, all cash disbursements are carried out **only after obtaining approval from authorized personnel**, which strengthens internal control mechanisms.

Finally, the procedures governing cash receipts and cash disbursements are **properly enforced**. All supporting documents related to cash inflows and outflows are reported and safeguarded by designated personnel. In addition, accounting records are maintained in an organized and systematic manner, starting from journal entries, continuing to the general ledger, and culminating in the preparation of financial statements.

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