

ANALYSIS OF THE ACCOUNTING INFORMATION SYSTEM (AIS) REGARDING CASH RECEIPTS AND INSURANCE RECEIVABLES FROM OUTPATIENTS AT A HOSPITAL (A CASE STUDY AT SANTA CLARA HOSPITAL, MADIUN)

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Abstrak

Penelitian ini bertujuan menganalisis penerapan Sistem Informasi Akuntansi (SIA) dalam penerimaan kas dan pengelolaan piutang asuransi pasien rawat jalan di rumah sakit. SIA berperan dalam memastikan pencatatan, pengolahan, dan penyajian informasi keuangan berlangsung akurat serta tepat waktu, sehingga dapat mendukung pengendalian internal dan efisiensi operasional. Penelitian menggunakan pendekatan kualitatif deskriptif dengan pengumpulan data melalui observasi, wawancara mendalam, dan dokumentasi. Informan terdiri atas staf kasir, billing, dan penagihan yang terlibat langsung dalam pengelolaan transaksi serta piutang asuransi. Analisis data dilakukan menggunakan model Miles dan Huberman melalui tahap reduksi data, penyajian, serta penarikan dan verifikasi kesimpulan. Hasil penelitian menunjukkan bahwa SIA telah digunakan dalam seluruh rangkaian proses, mulai dari pendaftaran pasien, pencatatan transaksi, pengajuan klaim, hingga pelunasan piutang. Namun, masih ditemukan hambatan berupa keterlambatan pembayaran klaim, perbedaan data antarunit, dan proses verifikasi dokumen yang relatif lama. Secara keseluruhan, penerapan SIA meningkatkan ketepatan pencatatan, memperkuat pengendalian internal, mempercepat pelaporan keuangan, dan mendukung koordinasi antarbagian. Peningkatan integrasi sistem dan koordinasi diperlukan agar pengelolaan piutang asuransi semakin efektif dan efisien.

Kata Kunci: Sistem Informasi Akuntansi, penerimaan kas, piutang asuransi, pasien rawat jalan, rumah sakit.

Abstract

This study aims to analyze the implementation of the Accounting Information System (AIS) regarding cash receipts and the management of outpatient insurance receivables in a hospital setting. The AIS plays a crucial role in ensuring the accurate and timely recording, processing, and presentation of financial information, thereby supporting internal control and operational efficiency. A descriptive qualitative approach was employed, with data collected through observation, in-depth interviews, and document analysis. Informants included cashier, billing, and collections staff directly involved in managing transactions and insurance receivables. Data analysis followed the Miles and Huberman model, comprising data reduction, data display, and conclusion drawing and verification. The results indicate that the AIS is utilized throughout the entire process—from patient registration, transaction recording, and claim submission to the settlement of receivables. However, obstacles remain, such as delays in claim payments, data discrepancies between units, and lengthy document verification processes. Overall, the implementation of the AIS enhances recording accuracy, strengthens internal control, accelerates financial reporting, and supports inter-departmental coordination. Improved system integration and coordination are necessary to further enhance the effectiveness and efficiency of insurance receivable management.

Keywords: Accounting Information System, cash receipts, insurance receivables, outpatients, hospital.

A. INTRODUCTION

Hospitals are healthcare institutions that play a vital role in improving public health. Beyond providing medical services, hospitals must effectively manage administration and finances—specifically regarding cash receipts and accounts receivable from BPJS Kesehatan and insurance companies. Delays in claim settlement can inflate accounts receivable balances, hinder cash flow, and impact the hospital's financial stability.

Implementing an integrated Accounting Information System (AIS) is essential to support transaction recording, patient data management, billing processes, claim submissions, and payment receipts. A robust system enhances information accuracy, strengthens internal controls, minimizes administrative errors, and accelerates the claims process. Conversely, a lack of system integration can lead to data discrepancies, verification delays, and risks of error or fraud.

This study focuses on the implementation of an AIS for managing cash receipts and insurance receivables related to outpatient care at RS Santa Clara Madiun. Employing a descriptive qualitative approach, the study aims to identify system-related obstacles and provide recommendations to enhance the hospital's effectiveness, efficiency, and financial management.

Grand Theory

This study employs Systems Theory, as developed by Ludwig von Bertalanffy (1968), as its grand theory. This theory views an organization as a unified entity composed of interconnected components working in an integrated manner to achieve specific goals. The system encompasses input, process, output, feedback, and control elements that must function synergistically.

In the field of accounting, these theories underpin the implementation of Accounting Information Systems (AIS), which integrate human resources, procedures, documents, technology, databases, and internal controls to generate financial information that is accurate, relevant, reliable, and timely.

In a hospital setting, AIS supports the revenue cycle—specifically regarding cash receipts and insurance billing for outpatients—covering processes from registration, service recording, and claim submission to billing and payment receipt. System effectiveness is influenced by the quality of each component and the coordination between units. Consequently, Systems Theory is utilized to analyze the effectiveness of AIS implementation, identify constraints, and provide a basis for recommendations to improve cash management and insurance billing processes.

1. Cash Receipt

Cash receipt is a crucial element of the accounting cycle, encompassing all inflows of funds whether via cash or non-cash transactions derived from both operational and non-operational activities. In a hospital setting, cash receipts play a strategic role in maintaining liquidity and supporting the continuity of healthcare services.

Funds received by a hospital may originate from patient payments, the settlement of accounts receivable, insurance claim disbursements, or other legitimate revenue sources. The cash receipt process must adhere to systematic procedures to ensure that every transaction is accurately recorded, monitored, and accounted for in accordance with regulations.

Furthermore, internal control is essential for safeguarding cash, minimizing recording errors, preventing potential fraud, and enhancing the quality of financial reports. By implementing structured cash receipt procedures supported by an effective Accounting Information System, hospitals can optimize financial management, improve data accuracy, and ensure transparency and accountability in fund management.

2. Accounts Receivable

Accounts receivable constitute a crucial element of hospital financial management, as they are classified as current assets that can impact the organization's financial health. According to Sabarguna (2007), managing accounts receivable yields information that serves as a valuable basis for management in formulating policies and making decisions. Meanwhile, Zelman (2003) outlines a six-stage accounts receivable management cycle:

- Pre-admission: verifying patient identity, insurance/coverage status, document completeness, and applicable entitlements and benefits.
- Admission: recording patient data, completing the registration process, and determining the payment method.
- Treatment: documenting all medical procedures, medication usage, examinations, and support services to serve as the basis for billing.
- Billing: compiling, calculating, and reviewing all service charges prior to claim submission.
- Collection: submitting claims, monitoring the process, and following up until payment is received.
- Account closure: recording payments and adjusting or writing off the settled receivable balances.

Optimal implementation of these stages can help accelerate cash inflows, minimize payment delays and uncollectible receivables, and enhance the overall effectiveness of hospital financial management.

3. Internal Control

Internal control can be understood as a set of policies, procedures, and actions implemented to safeguard assets, enhance the reliability of accounting information, support operational efficiency, and ensure organizational activities comply with applicable regulations. According to Mulyadi (2013) and Hery (2014), internal control functions to minimize errors, misuse, and fraudulent acts, while also improving the accuracy of financial statement presentation.

In a hospital setting, internal control plays a crucial role given the high volume of financial transactions, particularly those involving cash receipts and insurance receivables. Internal control comprises five key components: the control environment, risk assessment, control activities, information and communication, and monitoring. These components are interconnected in establishing an effective management system.

Optimal implementation of internal control helps minimize recording errors, reduce the risk of fund misuse, improve the quality of financial statements, and foster transparency and accountability in financial management. Consequently, effective internal control serves as a supporting factor in enhancing the performance of the Accounting Information System and assisting the hospital in achieving its organizational goals.

B. METHOD

Research findings indicate that system performance still faces several challenges, including the level of user understanding regarding system operation, the quality of network and IT infrastructure, and the diligence of staff in verifying transaction data. Therefore, the hospital needs to continuously refine the system, enhance human resource capabilities through training, and strengthen oversight mechanisms. These measures are essential to ensure that the information

generated by the system is increasingly accurate and of high quality, thereby supporting more effective decision-making processes.

Solutions implemented to enhance internal control

- Control Environment: Defining the duties and authority of each department in a structured manner, supported by clear Standard Operating Procedures (SOPs) and periodic performance evaluations.
- Risk Assessment: Identifying potential issues—such as data entry errors, incomplete documentation, rejected claims, and payment delays—and establishing preventive measures.
- Control Activities: Ensuring the segregation of duties, verification of data and documents, authorization protocols, periodic data reconciliation, system access restrictions, and follow-up on problematic claims.
- Information and Communication: Strengthening system connectivity and inter-unit coordination to ensure that information regarding transactions, claims, and receivables is obtained quickly, precisely, and accurately.
- Monitoring: Conducting routine oversight via accounts receivable aging reports and analyzing the underlying causes of rejected or returned claims and payment delays.

C. RESULTS AND DISCUSSIONS

Based on observations and interviews, it was found that the accounting information system for cash receipts in outpatient services is supported by a computer system that interconnects various units—such as registration, medical services, the cashier, medical records, finance, and accounting. The implementation of this integrated system streamlines transaction recording and processing, thereby enhancing operational effectiveness and efficiency while minimizing the likelihood of errors.

The cash receipt process takes place after the patient has completed all received services. Information regarding the services provided, which has been entered into the system, serves as

the basis for the cashier to generate an itemized bill. Once payment is made, the system produces a transaction receipt and automatically records the receipt in the cash journal.

Documents supporting this process include patient identification, billing details, proof of payment, and daily cash receipt reports. Each unit performs functions aligned with its specific responsibilities, ranging from registration and service delivery, medical record management, and payment collection to transaction recording and financial report preparation.

Bagan Flowchart setelah dikaji



The outpatient service process involving insurance coverage begins with registration, followed by medical examinations and treatments tailored to the patient's condition. Once services are concluded, the relevant department compiles an itemized bill based on all services rendered. This bill serves as the basis for submitting a claim to the insurance company. Before the claim is

processed, the hospital verifies with the insurer that the services provided align with applicable terms and the cooperation agreement.

The next stage involves entering patient service data into the insurance company's system or platform for review and verification. If the claim is approved, the hospital prepares the required documentation and proceeds with the formal claim submission. Conversely, if the claim is rejected, the patient is informed that they must personally settle the bill. Once the claim is validated and approved, the insurance company remits payment to the hospital, which the finance department subsequently records as a cash receipt.

This entire process illustrates the interconnectedness of patient care, billing, claim submission, accounts receivable recording, and payment receipt. The implementation of an Accounting Information System plays a vital role in linking activities across units, ensuring document completeness, strengthening transaction controls, and facilitating more accurate and timely recording and receipt of cash.

DISCUSSIONS

Research findings indicate that the implementation of the Accounting Information System (AIS) for outpatient cash receipts and insurance receivables management at Santa Clara Hospital Madiun has been carried out effectively and systematically. The system is computer-based and integrated across several departments, including registration, healthcare services, the cashier, billing, and finance. Each unit performs mutually supportive functions and responsibilities spanning patient registration, healthcare delivery, cost recording, and insurance claim submission through to the receipt of payments. System interconnectivity between units facilitates the rapid and accurate exchange of transaction information and claim data, thereby enabling more coordinated management of cash receipts and receivables. Furthermore, the implementation of the AIS enhances the accuracy of transaction recording, simplifies data retrieval, and provides reliable information to support operational activities and assist management in decision-making processes.

The implementation of an Accounting Information System (AIS) plays a role in strengthening internal controls over cash receipt processes and the management of insurance receivables. This is evidenced by the clear division of duties and authority among departments, the availability of supporting documentation for transactions, and the execution of authorization and verification procedures before transactions or claims proceed. A structured separation of functions helps minimize the risk of recording errors and irregularities in the management of cash and receivables.

Internal control is further supported by the routine reconciliation and monitoring of cash receipts and insurance receivables. System integration across units facilitates faster and more accurate information sharing, transaction tracking, and monitoring of claim progress. Consequently, the implementation of an AIS—complemented by robust internal controls—enhances the quality and reliability of financial information, supports the smooth management of cash and receivables, and assists the hospital in conducting operations and making managerial decisions.

Research findings indicate that claim payments from insurance companies are not always received within the expected timeframe. Such delays are primarily associated with claims remaining in "pending" status—often due to administrative data discrepancies, incomplete documentation, or requests for corrections from the payer. Until a claim is resolved, payment cannot be received, meaning the hospital's accounts receivable remain recorded on the financial statements.

An increase in pending claims leads to a rise in the accounts receivable balance that cannot yet be converted into cash receipts. This situation has the potential to disrupt the hospital's cash flow, as funds that should have been received remain tied up in the claim verification and resolution process.

D. CONCLUSIONS

Based on research conducted at Santa Clara Hospital Madiun, it can be concluded that the implementation of the Accounting Information System (AIS) for cash receipts and insurance receivable management has been effective, supporting internal controls through the segregation of duties, claim verification, and procedural transaction recording. The AIS also assists the hospital in financial management, although system refinements are still needed to reduce pending claims, accelerate cash receipts, and minimize the risk of administrative errors. System operations involve multiple units ranging from registration and patient care to billing and finance that coordinate on service recording, receivables management, claim submission, and payment receipt. However, challenges persist, such as incomplete documentation, discrepancies between data and medical procedures, and delays in finalizing claim documents, all of which can lead to increased receivables and hinder cash flow. Therefore, improvements are required regarding document quality, inter-unit coordination, periodic system evaluations, and staff competency development.

E. SUGGESTIONS

This study recommends that the hospital enhance the effectiveness of managing cash receipts and insurance receivables by strengthening coordination and communication among the units involved in the claims process. Verification of document completeness and accuracy must also be tightened to minimize pending claims, claim rejections, and payment delays. Furthermore, the Accounting Information System requires routine evaluation and oversight to ensure that issues regarding receivable recording, claim submission, and payment receipt are promptly identified and rectified. Improving staff competence through periodic training on claim procedures, system usage, and policy changes by payers is also essential to enhance operational accuracy. The hospital needs to strengthen the monitoring of receivables—particularly pending claims—to accelerate the

settlement of receivables and the receipt of cash. Finally, future research could expand the scope of the study and incorporate additional variables to yield more in-depth and comprehensive results.

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