## Analysis of Internal Control System on Medicine Inventory (A Study at the Tiworo Islands Sub-district Community Health Center)

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## Abstract

This study aimed to assess the implementation of the internal control system at the Tiworo Islands District Health Center. Data was collected through interviews and documentation, and descriptive analysis was used for the research. The findings indicated that the internal control system for drug supply at the Tiworo Islands District Health Center was effective. This conclusion was drawn based on evaluating various COSO Internal Control Framework components. The study highlighted several positive aspects of internal control implementation at the health center. Firstly, the control environment was well established, with the adoption of Standard Operating Procedures (SOPs) for managing medical supplies. Secondly, risk assessment practices were evident through monthly stock checks, although occasional stockouts were noted. Thirdly, commendable control activities were observed, such as using serial numbers on supplies and inventory documents. Fourthly, information and communication systems were deemed effective, involving manual and computerized processes. Lastly, monitoring efforts were visible through periodic stocktaking exercises. However, a notable weakness was identified in the study. The absence of task segregation between the accounting and warehouse departments resulted in inefficiency. This arrangement led to a single person bearing the responsibilities meant for two, raising the risk of negligence and inadequate supervision. In summary, the study determined the effectiveness of the internal control system for drug supply at the Tiworo Islands District Health Center. While strengths were evident in various implementation aspects, the lack of task division raised concerns about potential risks and inadequacies.

Keywords: COSO, Drug Supply, Internal Control System.

#### **INTRODUCTION**

In the era of rapid development of science and technology, data processing systems and information systems play a very important role in various sectors, including managing the inventory of goods in entities such as health centers engaged in health services. Medical supplies have a risk that is very vulnerable to damage, theft, and unavailability. Therefore, an efficient and well-organized management system is required to avoid potential misappropriation or inventory shortages. Effective inventory management requires a strong internal control system.

Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 74 of 2016, the control of pharmaceutical preparations and consumables in health centers is an important activity to ensure the availability of drugs following established strategies and programs, as well as to avoid excess or lack of drug supplies in basic health service units.

Internal control of drug inventory is also significant because it can maintain availability, forecast needs, and avoid overstock or shortage of drug stocks. Good drug management in health centers is the key to maintaining the quality of health services at the first level.

The Tiworo Islands District Health Center, one of the basic health service units in the Tiworo Islands District, West Muna District, plays a significant role in providing health services to the community. The supply of medicines at health centers is important because it directly affects the quality of services offered to patients.

However, the management of drug supplies at the Tiworo Islands Health Center still uses manual recording and management methods. This can potentially cause inventory shortages, delays in data submission, and risk of overstock or drug stock vacancies. Therefore, an effective internal control system is required to solve this problem.

Over the past few years, several studies have been conducted on the internal control systems of drug supplies in various healthcare institutions. This study provides valuable insights into best practices for managing drug supplies and implementing effective internal controls (Najiyah et al., 2020; Maruf et al., 2019; Makikui et al., 2017).

# Halu Oleo International Conference on Economic and Business (IACS-HOICEB 2023)

Based on this background, this study is entitled "Analysis of Internal Control System over Drug Supplies (Study at Health Center Kecamatan Tiworo Islands)." This study aimed to analyze the internal control system in the supply of medicines at the Kecamatan Tiworo Islands Health Center. Thus, this research is expected to benefit researchers, the Health Center, and the development of science in managing drug supplies.

In addition, this research has the potential to positively contribute to a deeper understanding of drug inventory management in basic healthcare units, which can be applied as guidelines for more efficient and effective health service improvement. Thus, it is expected that the Tiworo Islands Sub-District Health Center will improve the quality of the health services they provide to the community.

In this context, the problem is the management of drug supplies at the Tiworo Islands Health Center, which still relies on manual recording and management methods. This can potentially cause inventory shortages, delays in data submission, and risk of overstock or drug stock vacancies. Therefore, a good internal control system is needed to solve this problem

#### LITERATURE REVIEW Internal Control

According to Maruf et al. (2019), internal controls use all company resources to improve, direct, manage, and supervise various activities to achieve company goals. According to the Committee of Sponsoring Organizations (COSO) (2013), IC's objectives of internal control are:

### Purpose of Operation

This objective relates to the effectiveness and efficiency of the entity's operations, including operational and financial performance goals and safeguarding assets against losses.

## Reporting Purposes

This objective relates to internal or external financial and non-financial reporting, including reliability, timeliness, transparency, or other requirements set by regulators, requirements recognized by the standard setting, or the entity's policies.

#### Compliance Objectives

This objective relates to compliance with laws and regulations to which an entity is subject.

Romey and Steinbart (2016) stated that internal control performs three important functions: Control for prevention (preventive control) by preventing a problem before it arises. Highly qualified accounting staff are hired to separate duties from employees who adequately and effectively control physical access to assets, facilities, and information. Detective control is required to uncover problems that arise. Examples of rules for inspection include checking copies of calculations and preparing monthly bank reconciliations and balance sheets. Corrective control resolves the problems identified by authorities for inspection. These controls include procedures implemented to determine the cause of the problem, correct any errors or difficulties, and modify the system so that future issues can be minimized or eliminated. **Supplies** 

The Indonesian Institute of Accountants (2014) PSAK No.14 inventory is an asset that is available for sale in the normal course of business, in the production process or transit, and in the form of materials or equipment (*Supplies*) for use in the process of production or service delivery(Maruf et al., 2019). According to Ristono (2014), the objectives of inventory control are as follows:

- 1. To meet consumer needs and demands quickly (satisfy consumers).
- 2. To maintain production continuity or keep the company from running out of inventory, which results in the cessation of the production process, this is due to:
- 3. The possibility of goods (raw and auxiliary materials) becomes scarce, making them difficult to obtain.
- 4. Possibility of the supplier being late in sending ordered goods.
- 5. Maintain and increase a company's sales and profits.
- 6. Maintaining small purchases can be avoided because they can result in large message costs.
- 7. Maintaining storage in an emplacement is not large because it results in large costs.

Mulyadi (2016) there are two types of inventory recording, which are as follows:

## Perpetual Inventory Method

Each inventory mutation is recorded in the inventory card and is suitable for determining the cost of raw materials in companies whose fees for goods



products are collected by the cost of goods ordered method.

#### Physical Inventory Method

In the physical inventory method, only additional inventory from purchases is recorded, whereas mutations in reduced stock due to usage are not recorded on the inventory card.

## METHODS

This study was conducted in the Tiworo Islands District Health Center District, West Muna District. The objective of this study was to analyze the internal control system for the supply of medicines in the Tiworo Islands District Health Center District. Qualitative data were used in this study. Qualitative data in this study include a brief history of establishing the Tiworo Islands Sub-District Health Center, the geographical location of objects, vision and mission, and organizational structure. In this study, secondary data were in the form of order letter documents, purchase invoices, payment receipts, stock cards, and other documents needed to support the research.

The informants in this study were three staff members related to the supply of general patient medicine at the Tiworo Islands District Health Center District, who were considered to be able to provide information or data input that could be used in writing this thesis. The list of staff is:

Table 1. Informant

No	Name	Position	Work
			Duration
1.	Marwa Safana,	Pharmacy	3 years
	Amd.Farm	Staff	
2.	Wa Ode Sitti	Medicine	3 years
	Munirah, S.Si,	Warehouse	
	Apt	Staff	
3.	Sarni, AMG	Finance	3 years

Source: Tiworo Islands District Health Center.

The data collection methods are as follows: interview is a data collection technique that looks for data directly from respondents in small amounts, both structured and unstructured (Sugiyono, 2020). The type of observation that researchers will apply is observation, which is a kind of systematic observation. The use of systematic observation aims to ensure that statements made by researchers are structured, not out of the research flow. Documentation: Documents used in this study in books and reports owned by the Health Center related to data needed for data analysis and to support the research process.

The data analysis method used in this study is a descriptive analysis method with a qualitative approach that aims to provide a picture of the reality in the field when researchers conduct research (Ningi, 2022). According to Miles and Huberman (2019), there are four main factors in the data analysis process: 1. Data Collection. 2. Data Reduction. 3. Data Presentation (Data Display), 4. Conclusions and verification.

## **RESULTS AND DISCUSSION**

The internal control structure provides a means through an internal control process. If a Health Center can implement the right SPI, all operations, physical resources, and data will be monitored and controlled properly so that they can be easily manipulated. Thus, the goals of the Health Center will be easier to achieve, and various risks will be minimized properly with the results of more reliable information.

The drug inventory control environment at Health Center Tikep is very important because it is the basis for all internal control components built into the entity and can affect the effectiveness of the internal control. Therefore, the Health Center Tikep must create a conducive environment that encourages the implementation of an effective control system.

Integrity and ethical values are products of an entity's ethical standards and attitudes and how well they are communicated and applied in practice. Integrity and moral values include management actions to eliminate or reduce incentives that may encourage individuals to engage in dishonest, illegal, and unethical behaviors.

Competence refers to the knowledge and expertise necessary to complete a task. Commitment to competence requires the Tikep Health Center to consider the level of competence needed to carry out work related to drug supply. One way that the Tikep Health Center should ensure that each employee can carry out their duties and jobs according to their level of skills and knowledge is to make a selection by giving tests according to the type of work to be provided. This has been applied, especially in the pharmaceutical department where the head of the Warehouse is a Pharmacist so he is expected to be able to carry out his duties and work properly, as well as those who become Assistant Pharmacists. The internal control system can perform well if supported by a good organizational structure. The organizational structure at Health Center Tikep has been well-designed and arranged, which shows the division of labor, and the different functions or parts are coordinated, which are then outlined in an organizational structure.

The Tiworo Islands District Health Center has several related functions, including medicine rooms/pharmacies and warehouses. In managing a drug inventory, the warehouse function is tasked with receiving and storing drug supplies in medicine cabinets alphabetically and then distributing them to pharmacies. In addition, the warehouse function records all receipts and expenditures of drug supplies from the warehouse. While the pharmacy function is responsible for service

Risk assessment is an assessment of the possibility of situations that threaten the achievement of the goals and objectives of the Tikep Health Center, and includes risk identification, analysis, and management activities relevant to the entity's processes or activities.

Risk assessment at Health Center Tikep, as seen by pharmaceutical officers, has recognized and studied the risks that exist and formed control activities needed to deal with risks so that mistakes do not occur. Health Center Tikep assesses drug supplies by paying attention to the condition of the goods and the period of use; for this reason, the pharmaceutical company makes a policy where stocktaking is carried out periodically and uses methods, namely First In First Out (FIFO) and first extended first out (FEFO) to store medicines. The problem of running out of stock of drugs from the pharmaceutical party is very difficult

Adequate separation of duties can prevent fraud and errors that occur in the management of drug supplies at the Tiworo Islands Health Center. However, in the separation of duties, there has not been a separate section between the warehouse and the accounting department. This is considered less effective because the workload that should be the responsibility of two people is only borne by one person, which can increase the risk of work negligence and ineffective supervision. A clear separation of duties and responsibilities is essential to ensure the effectiveness of management as well as the quality of internal control of drug supplies.

For proper control, every transaction must be authorized appropriately. Authorization of transactions and activities carried out by the Tikep Health Center, especially the pharmaceutical department, by affixing signatures by the authorized party to documents such as Request Report documents and Drug Use Sheets for the Health Office authorized by the person in charge of the pharmaceutical room and the head of the Health Center who put a signature on the document. In addition, authorization is carried out by affixing a stamp on the proof of transaction and writing a letter number on the proof of transaction carried out by the authorized party.

Health Center Tikep. especially the pharmaceutical department, has made documents and records aimed at monitoring supplies, such as proof documents of transactions between the Health Center and the District/City Health Office, LPLPO documents, hospitalization stock documents, SBBK, and proof documents of drug requests from service sub-units. These documents do not have printed sequence numbers, which can increase the risk of recording errors and manipulation. The use of documents with printed sequence numbers is important to prevent the recording of multiple transactions or unrecorded transactions, as well as to facilitate the process of supervision and control.

The Health Center Tikep already has a pharmacy warehouse/storage room equipped with medicine cabinets, document cabinets, drug shelves, refrigerators, air conditioners, and tables for officers to carry out activities. However, the drug storage room is still not equipped with *CCTV* cameras to monitor activities in the pharmaceutical room and avoid drug theft. There is no fire extinguisher to overcome fires in the event of a fire, and it has not been equipped with adequate document storage to store documents for the last five years.

The information and communication system carried out by the Tikep Health Center, judging from the recording of inventory transactions and the expenditure on inventory items carried out after the transaction occurred, all drug supplies have been numbered or coded sequentially, information that has been available on time, and allows activity monitoring. In addition, important documents sent to the West Muna City Health Office are always made in duplicate to prevent misappropriation, loss, or damage to documents.

The Health Center Tiworo Islands are also known to have used a perpetual inventory system and drug stock cards to manage their inventories. In the perpetual method, every time there is a mutation in

## Halu Oleo International Conference on Economic and Business (IACS-HOICEB 2023)

drug inventory, it will be recorded; this can make it easier for pharmacists to determine how much stock of drug supplies is available at the Health Center. In addition, the use of perpetual methods and Drug Stock Cards in recording inventories also facilitates the process of supervision and control because information on the issuance and receipt of drug supplies is recorded in more detail.

#### CONCLUSION

**1**/11

Based on the results of the research and discussion on the internal control system of drug supplies at the Tiworo Islands Health Center, it can be concluded that most components of the internal control system over drug supplies have been implemented properly. However, there are still some issues that must be improved, such as the separation of duties between several sections, especially the pharmaceutical section, and some security equipment in the drug storage warehouse that needs to be added to increase the security of drug supplies at the Tiworo Islands Health Center. In addition, the internal control system of medicine supplies at the Tiworo Islands Health Center has met all the needs of the Health Center. Although there has been a shortage of drug supplies due to depleted drug stocks and late drug arrivals, this was quickly overcome using similar drug options that had the same function.

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