

## Asian Journal of Environmental Research

E-ISSN: 3047-4930

DOI: https://doi.org/10.69930/ajer.v1i2.82





Page: 83-89

# **Analysis of Non-Medical Logistics Procurement on the Availability of Goods in Hospital X Bandung**

Salma Hanifah \*, Ai Susi Susanti

Department of Hospital Administration, Faculty of Health, Institut Politeknik Piksi Ganesha, Indonesia

\*Email (corresponding author): piksi.salma.21305037@gmail.com

#### Abstract

This study aims to analyze the procurement of non-medical logistics related to the availability of goods at Hospital X Bandung. The research method used is qualitative, with data collection through interviews and direct observation. The findings show that the non-medical logistics procurement process involves several stages and parties, including the Head of Non-Medical Logistics Department, Logistics Manager, Director, Finance Department, and Business Actors. The accumulation of goods in the logistics department is caused by overstocking and inadequate storage space conditions. To address these issues, it is recommended to improve the inventory management system, provide training to staff, optimize storage space, improve coordination between parties, and conduct regular evaluations. This study emphasizes the importance of effective and efficient logistics management in supporting hospital operations and improving the quality of health services.

**Keywords:** Non-medical logistics procurement, item availability, inventory management, hospital X bandung

#### 1. Introduction

The role of logistics in government organizations includes internal logistics, namely the need for goods for the operation of government organizations and serving external logistics, namely serving logistics for the community, companies and other institutions. The implementation of government tasks is external, namely the provision of services to the community.

In external logistics services, the government does not act as a logistics actor directly, but the government acts to serve in terms of policy, information, support for public facilities such as roads, transportation, terminals, ports and markets. Properly managed logistics in terms of quantity, quality, time and cost can be the main asset of public organizations, which is a strategic source of income and plays a role in encouraging economic activity.

Analysis of non-medical logistics procurement on the availability of goods in hospitals has a significant influence in improving the effectiveness of health services. Non-medical logistics is an internal part of the hospital system that ensures the availability of items needed to provide optimal service to patients. The availability of non-medical logistics items in accordance with the needs of the work unit is very important to ensure that the hospital can provide effective and efficient services. Effective and efficient logistics management is important in supporting services in health facilities (1).

There are several things that cause the vacancy of goods in the logistics storage warehouse, including: First, in the procurement process with a contribution of 33%, second, in the application of SOPs with a contribution of 27%, third, in training with a contribution of 20%, fourth, in coordination with a contribution of 13%, and finally, in the budget with a contribution of 7% (2). Currently, there are no established standards for hospital logistics systems regarding the determination to address stock-outs and overstocks (3). Not only that, it turns out that logistics in hospitals can use up to 46% of the budget.(4) Therefore, it is very important to have effective and efficient logistics management to avoid the occurrence of excess and shortage of stock items which greatly impacts the use of the budget. Therefore, with the high budget expenditure to meet logistics needs, it is a big challenge for hospitals to be able to organize good and efficient logistics management (5). Good and efficient logistics procurement is influenced by good procurement management and a good strategy for analyzing the needs of goods (6).

Based on preliminary observations made by the author at Hospital X Bandung, that the procurement of non-medical logistics still has obstacles, including the planning of non-medical logistics procurement that is less effective and efficient, so that frequent vacancies or excess stock in storage warehouses can ultimately affect the quality of hospital services.

Thus, based on observations made by the author at Hospital X Bandung, that there is still a lack of supporting facilities for storing goods such as limited storage space and limited number of shelves for goods so that there is often a buildup of goods on one of the shelves or on the floor. So based on the background that the author found, the author is interested in conducting research and pouring the results into the form of a scientific paper entitled "Analysis of Non-Medical Logistics Procurement on the Availability of Goods at Hospital X Bandung".

#### 2. Methods

In this study the method used is qualitative, qualitative research is research to explore and understand the meaning that a number of individuals or groups of people ascribe to social or humanitarian problems (7). In accordance with qualitative methods, in obtaining data, researchers do the following 2 things:

- 1) Direct observation of the ongoing process
- 2) Conducting interviews with resource persons in charge of the Logistics unit.

# 3. Results and Discussion

#### 3.1. Results

Researchers conducted an interview on June 19, 2024 with a resource person who is one of the logistics staff at Hospital X Bandung. There are several points that researchers get when conducting interviews with sources including:

# 3.1.1. Stages of Non-Medical Goods Procurement

Based on the results of the interview, in the process of procuring non-medical goods, of course, there are stages that must be carried out, including the following:

- 1) The head of the non-medical logistics section analyzes the items needed.
- 2) The head of the non-medical logistics section makes a cost budget plan according to the items needed.



- 3) After the cost budget plan is made, the head of the logistics section immediately reports to the logistics manager for review and consideration, if the cost budget plan is appropriate, the logistics manager immediately reports to the director to request approval for budget expenditure on the procurement of these goods.
- 4) If the director approves, the head of the non-medical logistics section reports directly to finance to request a budget for the procurement of non-medical goods.
- 5) After the finance department gives the budget money, the logistics department directly contacts the business to buy the goods needed.
- 6) the businessman sends the goods to Hospital X Bandung in accordance with the request and the Hospital X Bandung makes payment.
- 7) After the goods arrive at Hospital X Bandung, the head of the non-medical logistics section checks the goods that have been sent, whether they are in accordance with what is needed.
- 8) the logistics party distributes the goods to the relevant units as needed.

# 3.1.2. Purpose of Procurement of Non-Medical Goods

Based on the results of the interview, the purpose of the X Bandung Hospital to procure non-medical goods is of course to support the operation of hospital services and the procurement of non-medical goods has become an obligation that must be carried out by the hospital to meet the service standards set by the law.

# 3.1.3. Non-Medical Goods Procurement Planning Process

Based on the results of the interview, logistics must of course carry out planning for the procurement of non-medical goods. In the process, the head of the non-medical logistics section plays an active role in analysis and planning. The head of the non-medical logistics section must analyze the number of stocks and types of goods needed, the analysis is carried out based on the number of distributions of goods to related units each month.

## 3.1.4. Parties Involved in the Procurement of Non-Medical Goods

Based on the results of the interview, there are several parties involved in the procurement process at Hospital X Bandung, including the following:

- 1) Director
- 2) Logistics manager
- 3) Head of non-medical logistics section
- 4) Finance
- 5) Business person

## 3.1.5. Accumulation of Goods in the Logistics Section

Based on the results of interviews with informants, the accumulation of goods is caused by overstocking of goods. In addition, inadequate room conditions create a lack of shelves for storing goods which results in many items being stored out of place.

## 3.2 Discussion

In this study, the authors aim to find out how the excess and shortage of stock can occur at Hospital X Bandung, based on the data that the authors have obtained from interviews and direct analysis in the field, the following is a discussion based on the findings:



## 3.2.1 Stages of Procurement of Non-Medical Goods

In the process of procuring non-medical goods, of course, there are several stages that must be carried out so that all processes can run smoothly. The first stage is that the head of the non-medical logistics section analyzes the needs of the goods needed, after analyzing, a cost budget plan is immediately made. After making the cost budget plan, the head of the non-medical logistics section immediately reports to the logistics manager to be examined and analyzed. If it is appropriate and correct, the logistics manager immediately reports the draft cost budget to the director to request approval to spend the budget on the necessary goods.

Then, after the director gives approval, the head of the non-medical logistics section makes a report to the finance department for the disbursement of the budget for the purchase of non-medical goods. After the finance department grants the purchase budget, the head of the non-medical logistics section contacts the business actors to purchase the required goods. Business actors immediately process requests for goods needed in accordance with requests from the head of the non-medical logistics section. After the goods arrive at the hospital, the head of the non-medical logistics section immediately checks the goods that have been sent and makes payment to the business actor. After checking the goods sent by the business actor, the head of non-medical logistics together with his staff distributes the goods to the relevant units as needed.

## 3.2.2. Purpose of Procurement of Non-Medical Goods

In addition to meeting the needs and supporting operational services at the hospital, procurement of goods is something that must be done by the hospital in accordance with Law No. 44 of 2009 concerning hospitals. which in article 7 paragraph 1 reads "Hospitals must meet the requirements for location, buildings, infrastructure, human resources, pharmaceuticals, and equipment"(8) and article 16 paragraph 1 which reads "Equipment requirements as referred to in Article 7 paragraph (1) include medical and nonmedical equipment that must meet service standards, quality requirements, security, safety and usability"(8). Based on this article, the hospital is obliged to procure non-medical goods, to meet service standards.

## 2.2.3. Non-Medical Goods Procurement Planning Process

Logistics activities include planning, design, execution, and management of materials in the supply chain to support functions such as procurement, distribution, inventory management, packaging, and manufacturing (9). In the procurement of non-medical goods, of course, there is prior planning to determine what types of goods are needed. Logistics procurement requires precise and clear procedures to ensure everything can run according to predetermined standards (10). Logistics planning is the process of planning logistics needs carried out by all potential users or users, then submitted in accordance with the procedures that apply in each organization (11).

In this case, the head of the non-medical logistics section analyzes the items needed, the analysis carried out is by looking at the number of items distributed each month, for example: the head of the non-medical logistics section analyzes the need for A4 paper for the BPJS service information unit, in 1 month the information unit uses 8 reams of paper, so for the following month, the logistics procures A4 paper goods for the BPJS service information unit as many as 8 reams.



## 2.2.4. Parties Involved in The Procurement of Non-Medical Goods

## 1) Director

In the process of procuring non-medical goods at Hospital X Bandung, of course the director plays a very important role, in this case the director has the authority to approve the procurement of goods needed by the hospital, because in the process of procuring goods, there is a budget issued and it must be based on the director's approval.

## 2) Logistics manager

The logistics manager has the duty and authority to organize all procurement processes, coordinate and supervise all procurement processes at the hospital.

## 3) Head of non-medical logistics section

The head of the non-medical logistics section has an important role in the procurement process of non-medical goods, including the following:

- Compile a procurement plan for non-medical goods based on needs
- Analyzing the need for goods on a regular basis
- Making reports related to the procurement of non-medical goods
- Carry out the procurement process in accordance with applicable regulations
- Make a cost budget plan according to the needs of the goods
- Document all incoming and outgoing items from the non-medical goods logistics storage warehouse(12)

## 4) Finance

Finance has a very important role in the procurement process. After the head of the non-medical logistics section makes a cost budget plan and gets approval from the director, the cost budget plan is given to the finance department, then the finance department calculates the budget expenditure for the purchase of the item.

#### 5) Business Actors

Business actors are every individual or business entity, both in the form of legal entities and not legal entities established and domiciled or carrying out activities within the jurisdiction of the Republic of Indonesia, either alone or jointly through agreements organizing business activities in various fields of economy (13). In the process of procuring non-medical goods, the role of business actors is certainly no less important, because logistics requires business actors to fulfill the needs of goods needed by the hospital.

# 2.2.5 Accumulation of Goods in the Logistics Department

There are 2 factors that cause the accumulation of goods so that the goods are not stored in place, namely: excess stock and inadequate room conditions.

## 1) Overstock

overstock of goods is a major factor in the accumulation of goods. if the stock of goods exceeds demand, then the goods cannot be distributed to related units effectively and efficiently.

Excess stock can occur due to inaccuracy in analyzing the needs of goods and lack of procurement management.



## 2) Inadequate room conditions

In addition to excess stock which causes the accumulation of goods, inadequate room conditions also affect the accumulation of goods which results in the goods not being stored in place. The narrow and inadequate storage room conditions make it difficult for Logistics to provide storage rack facilities. Due to the lack of storage rack facilities, overstocked items are stored out of place.

Overall, researchers can conclude based on previous journals, the accumulation of goods and the lack of good logistics procurement management are caused by the lack of logistics officers (14) who help to analyze the needs of goods. In this case, it can be concluded that the quality of health services can be influenced by effective and efficient logistics management (15). In accordance with the previous journal, it is necessary to have hospital logistics indicators so that logistics management (16) can run effectively and efficiently so as to minimize the occurrence of shortages and accumulation of goods that cause goods not to be stored in place.

#### **Conclusions**

In this study, the author aims to understand the causes of excess and shortage of non-medical goods in Hospital X Bandung. Based on the results of interviews and field analysis, there are several important findings related to the procurement process of non-medical goods and the factors that cause the accumulation of goods. This process starts from analyzing the needs of goods by the Head of the Non-Medical Logistics Section, making a cost budget plan, budget approval by the Director, budget disbursement by the Finance, to the purchase and distribution of goods by the Head of the Non-Medical Logistics Section. Procurement of non-medical goods is carried out to meet operational needs and support services in hospitals in accordance with Law No. 44 of 2009 concerning Hospitals. This includes meeting the quality, security, safety, and usability requirements of non-medical equipment. The accumulation of goods occurs due to two main factors, namely excess stock and inadequate room conditions. Excess stock is caused by inaccurate analysis of goods needs and ineffective procurement management. Meanwhile, the condition of the storage room is narrow and lacks storage facilities such as shelves, causing items to be stored out of place.

## **Funding**

This Research received no external funding

#### Acknowledgments

Thank you to piksi ganesha university, hospital x Bandung, logistics unit and other parties who participated in this journal research.

## **Conflicts of Interest**

The authors declare no conflict of interest

## References

1. Tawarma N, Marlina H. Analysis of Non-Medical Logistics Management in the Equipment and Household Sub-Division of Bangkinang Hospital in 2023. Educ J Hist Hum. 2023;6(3).



- 2. Didiet R, Hidayat R, Trisakti S, Simarmata J, Togas NL. Study on The Cause of Stock Out of Logistic Installation in Harapan Kita Hospital. J Manajemen Transp & Logist (JMTransLog). 2015;2(1).
- 3. Al-Qatawneh L, Makahleh D. An Integrated Approach for Improving Logistics Systems: A Case Study of Hospital Logistics. TEM J. 2022;11(4):1687-1693.
- 4. Jawab F, Frichi Y, Boutahari S. Hospital logistics activities. In Proceedings of the International Conference on Industrial Engineering and Operations Management 2018 Mar 6 (pp. 3228-3237).
- 5. Syahrir I, Suparno S, Vanany I. Strategic management for logistics and supply chain operation in healthcare. IPTEK Journal of Proceedings Series. 2018;3(3):10-15.
- 6. Green KW, Whitten D, Inman RA. The impact of logistics performance on organizational performance in a supply chain context. Supply Chain Manag. 2008;13(4):317-27.
- 7. Bhangu S, Provost F, Caduff C. Introduction to qualitative research methods—Part I. Perspectives in Clinical Research. 2023 Jan 1;14(1):39-42.
- 8. Law (UU) No. 44 of 2009 concerning Hospitals.
- 9. Pokharel S. Perception on information and communication technology perspectives in logistics: A study of transportation and warehouses sectors in Singapore. J Enterp Inf Manag. 2005;18(2):136-49.
- 10. Windriya A, Bagaskara SD, Fauziah L, Mashudi, Sukoco JB. Procurement of Goods and Services in Logistics and Procurement Devision of PT XYZ. Int J Soc Sci Humanit Invent. 2022;9(6):7051-7055.
- 11. Hartati DA, Tasnim T, Sunarsih S. Relationship Between Logistics Planning and Logistics Procurement Functions With The Availability Of Medical Devices In Community Health Centers In Kolaka District. Indones J Health Sci Res Dev. 2023;5(2):8-14.
- 12. Irawan YG. Manajemen Sistem Pengelolaan Logistik Barang Non Medis Di Rumah Sakit Andimas Kabupaten Merangin. J Adm RS. 2024;1(1):34-48.
- 13. Government Regulation (PP) No. 58/2001 on the Development and Supervision of Consumer Protection Implementation.
- 14. Barky SE, El Barky S, Hussein A. Root Cause Analysis for the Overstock of Goods in Arab Marine Ports. Int J Oper Logist Manag. 2015;20(4):554-573.
- 15. Tawarma N, Marlina H. Analysis of Non-Medical Logistics Management in the Equipment and Household Sub-Division of Bangkinang Hospital in 2023. Educational Journal of History and Humanities. 2023; 6(3):1574-1584.
- 16. Wajong AMR. Logistics Indicators Could Improve Logistics Performance of Hospitals. Procedia Soc Behav Sci. 2014;152:448-453.

This is an open access journal distributed under the Creative Commons Attribution License CC BY 4.0, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

