

# Relationship of Pharmacy Installation Drug Management towards the Quality of Health Services and its Impact on the Performance of XYZ Hospital

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**Abstract:** *The implementation of Jaminan Kesehatan Nasional (JKN, National Health Insurance) program has increased drug demand. However, a lack of inventory is known to have caused drug stock-out that affected hospital performance. In this descriptive analytic study a cross sectional approach was used and 100 patients were taken as a random sample. Primary data were obtained through structured questionnaire interviews and analyzed using multiple logistic regression tests. In general, the results of the study showed: 36.8% of respondents thought that the quality of PengelolaanObat was not good, 36.0% were doubtful about the quality of health services, and 41.0% agreed that the performance of XYZ District Hospital was good. Pearson's correlation test results showed there was a relationship between PengelolaanObat and service quality ( $p < 0.05$ , 95% CI) with procurement as the most dominant indicator ( $B = 1.343$ ). In addition, there is a relationship between service quality and performance ( $p < 0.05$ , 95% CI), with physical evidence as the most dominant indicator ( $B = 1.299$ ) and between PengelolaanObat and performance ( $p < 0.05$ , 95% CI), with internal business ( $B = 1,239$ ) and customers ( $B = 1,012$ ) as the most dominant factor.*

**Keywords:** Drug management, quality of health services, performance

## 1. Introduction

RSUD XYZ is a class B government-owned hospital in Kuningan Regency, with the status of XYZ Hospital as one of the local government-owned hospitals, it is demanded to continuously improve performance in order to serve patients fully.

There are 5 revenue centers in the hospital, one of which is a pharmaceutical installation. Pharmacy installation is one of the main revenue centers considering that more than 90% of health services in hospitals use pharmaceutical supplies and 50% of all hospital revenues come from managing pharmaceutical supplies. It can be predicted that hospital revenues will decline if the problem of pharmaceutical supplies is not managed carefully and responsibly.

From the data obtained at XYZ Hospital, information was obtained that there were frequent drug vacancies due to poor management at XYZ Hospital. This causes a decrease in income at XYZ Hospital and complaints against health services. To overcome this deficiency, it is necessary to analyze the effect of drug management on the quality of health services and its impact on performance, because considering that good management is very important to improve the efficiency of the quality of health services.

Around the hospital there are also private pharmacies, which continue to grow, some are even bigger, this shows that most of the prescriptions issued by the hospital are served in these pharmacies. This makes it difficult for IFRS to control the circulation of pharmaceutical and health supplies in the hospital, so that their duties and functions in the hospital cannot be carried out perfectly..

With the status of XYZ Hospital as one of the regional government-owned hospitals, it is demanded to continuously improve performance in order to fully serve patients. Based on data in 2018, the income of outpatients, inpatients and emergency departments has exceeded the target set, the details can be seen in table 1.3. below

Table 1. Target and Realization of Income in 2018

No.	Category	Budget	Copy of Recipe
1.	Budget	IDR7.000.000.000	IDR 2.084.565.217
2.	Patient	38.015	11.404

To overcome this deficiency, an approach method was created that measures company performance by considering four aspects, including financial or financial, customers, internal business processes and learning and development processes. Efforts to balance the measurement of financial and non-financial aspects resulted in a balanced scorecard, the first to be developed by Kaplan and Norton.

## 2. Literature Review

There are four strategic objectives in pharmaceutical procurement, including procurement of drugs in a cost effective manner and in the right quantity, select suppliers that have reliable and high quality products, ensure timely delivery, and achieve the lowest possible total cost. [1].

One of the most important managerial functions in inventory management is inventory control. If the company invests too much of its funds in inventory, this will result in excessive storage costs, and may have an opportunity cost. Likewise, if the company does not have sufficient

inventory, it can result in costs from material shortages (stock out). [2].

Service is an activity or a series of activities that are invisible to the eye (cannot be felt) which occurs as a result of interactions between consumers and employees or other things provided by service providers that are intended to solve consumer problems [3].

The quality of health services is a step towards improving health services both for individuals and for populations in accordance with the expected health outcomes and in accordance with current professional knowledge. The delivery of health services must reflect the appropriateness of using the latest scientific, clinical, technical, interpersonal, manual, cognitive, organizational, and management elements of health services. [4].

Quality is a comprehensive and multi facet phenomenon. The service quality dimension is based on the five aspects of the quality component. The five components of service quality are known as ServQual. The five dimensions of quality include: Responsiveness, Reliability, Assurance, Empathy, and Tangible [5].

Performance is the success of personnel, teams or organizational units in realizing predetermined strategic goals with the expected behavior. Company performance is something that is produced by a company in a certain period by referring to the established standards. The company's performance should be a measurable result and describe the empirical conditions of a company from various agreed sizes. So, it can be concluded that performance is the ability, effort and opportunity of personnel, teams, or organizational units in carrying out their duties to realize the strategic goals that have been set. [6].

The Balanced Scorecard is used to balance executive effort and attention to financial and non-financial performance, as well as short-term performance and long-term performance. The study concluded that to measure future executive performance, a comprehensive measure is needed. Based on the Balanced Scorecard approach, the financial performance produced by executives must be the result of realizing performance in satisfying customer needs, implementing productive and cost-effective processes, and / or building productive and committed personnel. [8].

### 3. Problem Definition

The pharmacy installation is an important unit in pharmaceutical services in hospitals. The demand for drugs for BPJS participants at XYZ Hospital is increasing, but the lack of sufficient supplies causes drug vacancies so that they have to make purchases at the pharmacy outside the RSUD. These conditions affect the performance of XYZ Hospital. Evaluation in the form of data using a balanced scorecard consists of four perspectives, namely financial perspective, customer perspective, internal business perspective and learning and growth perspective. Therefore, this study was conducted to analyze the effect of inventory management on health services and the performance of XYZ Hospital.

### 4. Methodology

This research is an analytical study with a cross sectional approach which aims to explain the relationship between drug management and the quality of health services and its impact on performance.

The variables in this study include independent variables, namely drug management which includes planning, procurement, supervision and control. The intervening variable is the quality of health services which includes physical evidence, reliability, responsiveness, assurance and empathy. The dependent variable is performance which includes customer, financial, business internal and catch-up and growth.

While the data used in this study are primary data and secondary data. Primary data are interviews with patients and secondary data are information sourced from literature. The population in this study were all patients and employees of RSUD XYZ during the data collection time in June 2019. The sample in this study was the total population (total sampling) which was calculated using the Slovin formula, so a sample of 100 people was obtained. The technique of sampling is accidental sampling, because considering the number of samples used not only for patients but also employees. The conditions set are that respondents can communicate and are willing to be interviewed.

The data obtained through questionnaires were processed using statistical analysis with the help of SPSS version 23. Tests conducted on the data included validity tests, reliability tests, and descriptive analyzes (bivariate, multivariate and univariate tests).

### 5. Results of Research

#### a) Relationship between Drug Management and Quality of Service

**Table 2:** Correlation Test 1

Drug Management	Pearson Correlation	1	,964**
	Sig. (2-tailed)		,000
	N	100	100
Service Quality	Pearson Correlation	,964**	1
	Sig. (2-tailed)	,000	
	N	100	100

The results of the Pearson correlation analysis showed that the result was 0.964, namely the level of the relationship between Drug Management and the quality of health services was perfect.

#### b) Relationship of Health Service Quality to Performance

**Table 3:** Correlation Test 2

Service Quality	Pearson Correlation	1	,930**
	Sig. (2-tailed)		,000
	N	100	100
Performance	Pearson Correlation	,930**	1
	Sig. (2-tailed)	,000	
	N	100	100

The results of the Pearson correlation analysis showed that the result was 0.930, namely the level of the relationship between health service quality and performance was perfect.

- c) The relationship between drug management and performance

**Table 4: Correlation Test 3**

Drug Management	Pearson Correlation	1	,915**
	Sig. (2-tailed)		,000
	N	100	100
Performance	Pearson Correlation	,915**	1
	Sig. (2-tailed)	,000	
	N	100	100

The results of the Pearson correlation analysis showed that the result was 0.930, namely the level of the relationship between drug management and performance was perfect.

- d) Correlation Test of Drug Management and Health Service Quality on Performance

**Table 4: Variables in the Equation**

	B	S.E	Wald	df	Sig.	EXP (B)	95% C.I. for EXP (B)	
							Lower	Upper
Drug Management	1,530	,389	15,291	1	0,3	3,206	2,145	9,038
Service Quality	1,165	,457	6,195	1	0,13	4,617	1,261	8,021
Constant	-2,659	,662	6,288	1	,000	,190		

The results of the analysis show that there is an effect of drug management and the quality of health services on performance. The results of the analysis show that the significance of a very strong relationship between drug management and quality of health services with performance is 0.043 and 0.13 ( $>0.005$ ). The results of the multivariate analysis showed that the level of relationship between drug management and the quality of health care providers on performance was perfect.

## 6. Conclusions

Based on the results of the analysis, it can be concluded as follows.

- 1) There is a relationship between Pharmacy Installation Drug Management ( $p$  0.00) on the quality of XYZ Hospital Health Service with a value of 0.964;
- 2) There is a relationship between the quality of health services ( $p$  0.00) on performance with a value of 0.930;
- 3) There is a relationship between Drug Management ( $p$   $<0.05$ ) on performance with a value of 0.915;
- 4) There is a significant correlation between Drug Management and the quality of health services with performance, namely 0.043 and 0.13 ( $>0.005$ ).

## 7. Scope of the Future

This study provides information that assessing the quality of health services in a hospital, one of which depends on good drug management, an assessment of good service quality will have an impact on the performance of the hospital in serving its patients. This means that from the perspective of

patients or hospital service users, the quality of hospital services is one of them assessed and influenced by the hospital's ability to manage drug procurement in the hospital pharmacy installation. The ability of a hospital to plan and procure medicines is very important, considering that the need for medicine is the most basic thing in an effort to cure patients..

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