

Analysis Of Plans And Realization Of The Income And Expenditure Budget For Medicines In The Pharmacy Section At Hospital X Klaten

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Abstract. This research aims to analyze the plans and realization of the income and expenditure budget for medicines in the pharmacy department at Hospital X Klaten over the last three years (2021-2023). This research uses a qualitative method with a descriptive approach. This comparison uses calculations of the level of effectiveness on income and the level of efficiency on drug spending. Data collection in this research went through several processes, namely observation, interviews and documentation. The results of this research show that the plans and realization of the income and expenditure budget for medicines at Hospital A comparison of the drug revenue budget in 2021 and 2023 is in the "very effective" category and in 2022 is in the "less effective" category. Meanwhile, the comparison of the drug spending budget in 2022 is in the "less efficient" category and in 2021 & 2023 is in the "inefficient" category.

Keywords: Budget Plan, Realization, Suitability, Income, and Expenditure.

1. Introduction

A hospital is an institution that requires a clear budget plan. The budgeting process plays an important role in the management process. The system in the hospital budget preparation process is better to use a participatory approach. This is in line with research [15] that the involvement of all parties is important in preparing the budget. Budget planning in pharmaceutical installations in calculating medicines is very important to fulfill the availability of medicines so that stock taking is necessary. Physical drug counting or stock taking is an activity of physically calculating the inventory of goods to be sold [18] The following is one of the obstacles that can occur at the planning stage, namely planning more medicines and choosing the wrong type of medicine item, so that duplication often occurs.

Hospital X Klaten is a health unit dedicated by an organization to help the community, especially the lower classes. Since 1973, Hospital X Klaten has been established to provide treatment to

the local community. The budgeting system at Hospital X Klaten has implemented a participatory method. Pharmacy installation services at Hospital X Klaten have progressed. Pharmaceutical services include clinical and managerial pharmacy activities in the form of managing pharmaceutical preparations, medical devices and consumables [9]. The existence of drug planning calculations is able to optimize the implementation of drug procurement appropriately. In fact, it is able to meet the need for the availability of needed medicines without worrying about drug shortages. So, proper budget planning and appropriate budget management are needed to avoid these worries. Therefore, to prove that optimization in procurement has been maximized, it is necessary to measure the level of effectiveness and efficiency.

Results of previous research [7] in the case study of the Depati Humazah Regional General Hospital, it shows that the income between plan and realization was only in 2015 which was categorized as very effective. Then, for the level of efficiency in spending in 2015-2018, savings have been made so that it is categorized as efficient. Based on research from [3] that the level of effectiveness of budget revenues in 2019 reached 96.95% or was in the quite effective category. This is in contrast to the results of the effectiveness level in 2020, which was 75% or in the ineffective category. 2021 until May can be said to be far from the budget realization target where results have only been achieved at 0.16% until the second quarter of the current year.

2. Literature Review

2.1 Agency Theory

According to [17] explains agency theory based on the implications of the relationship of agreement between the principal and the agent. The highest authority in agency theory is the principal, for example the director or highest official in an agency and who has the right to make decisions. [2] also stated that agency theory is part of game theory which consists of "employment contracts" which regulate the relationship between the company and top managers, as well as "lending contracts" which regulate the relationship between managers and top managers creditor.

1. Budget planning

Djuhaeni, nd, budget planning as a system, where the budget consists of interdependent components that influence overall readiness. This component aims to achieve the goals that have been set, namely input components, process components, output components, factors that influence the hospital budgeting system, and feedback.

As for planning medicines according to [8], Planning is an activity in selecting the type, quantity and price in the context of procurement with the aim of obtaining the type and quantity according to needs and available budget and avoiding the occurrence of drug stocks running out. Planning methods in medicines according to [1] there are three methods, the consumption method, the morbidity method, and the combined method

2. Budget realization in health institutions

The Budget Realization Report plays an important role in the progress of an agency. This report is useful as a source of financial analysis because it provides a report regarding the comparison between budgeted income and expenditure and realization in one period [10]. The main activities in budget realization in the health sector are divided into three, namely disbursement of the health budget (expenditure), realization of health income, and implementation of health programs [4]

3. Hospital income

Definition of hospital income according to [6] that income is a gross inflow from the hospital's normal activities during a period if the inflow results in an increase in net assets, which does not come from contributions from investors.

4. Hospital expenditure

Definition of expenditure [3] are all hospital expenses that reduce fund equity in the relevant fiscal year period.

5. Measurement of effectiveness

[12] Effectiveness is basically related to the achievement of policy goals or targets (utility results). Effectiveness indicators describe the range of consequences and impacts (outcomes) of program outputs in achieving program goals. According to [11] There is an income effectiveness value which can be categorized as follows:

Very effective	: >100%
Effective	: 100%
Effective enough	: 90%-99%
Less effective	: 75%-89%
Ineffective	: <75%

6. Efficiency measurement

Efficiency is achieving maximum output with certain inputs or using the lowest input to achieve certain outputs [5] Efficiency has a close relationship with the concept of productivity. Indicators that show the efficiency of financial performance can be measured through the spending efficiency ratio. Based on the Decree of the Minister of Home Affairs No. 690.900-327 of 1996, there are efficiency values in spending that can be categorized as follows:

Not efficient	: >100
Less efficient	: 90-100
Quite efficient	: 80-90
Efficient	: 60-80
Very efficient	: <60

3. Research Methods

This research uses a qualitative descriptive method, according to [19] this method emphasizes that this research does not rely on calculations and does not use statistical tools. Data collection in this research used three techniques, namely observation, interviews, documentation. Testing the validity of the data in this research is using the triangulation method. The object of this research is in the health sector, namely Hospital X Klaten. The research subjects were the general and finance coordinator, financial coordinator and pharmaceutical installation coordinator. The data sources used are availablePrimary data obtained is obtained through physical data in the form of Revenue and Expenditure Budget Plans (RAPB) and Financial Reports. Apart from that, there is secondary data obtained from other references that are relevant to the research in the form of books, articles, or sources from previous research which can be used as references for the research to be conducted. The data analysis technique used is a qualitative descriptive analysis technique by determining the difference (variance) comparing the drug expenditure and income budget to the budget realization report.

The formula for calculating the level of effectiveness of the income budget and the level of efficiency of the expenditure budget is as follows:

1. Calculation of effectiveness levels

$$\text{Revenue effectiveness ratio} = \frac{\text{Revenue realization}}{\text{Revenue target}} \times 100\%$$

Figure 1. Income Effectiveness Level Ratio Formula

2. Calculation of efficiency levels

$$\text{Expenditure efficiency ratio} = \frac{\text{Budget realization of direct expenditure}}{\text{Target expenditure budget}} \times 100$$

Figure 2. Expenditure Efficiency Level Ratio Formula

4. Result and Discussion

The hospital was chosen as the research object because it aims to minimize costs and maximize services so that employees are guided more towards the agency's goals [16] Hospitals require overall budget planning. Hospital X is stated to have carried out all stages related to budgeting. However, this research only focuses on the medicine budget at Hospital X Klaten. Efforts to carry out the realization of drug budget planning are called procurement. This procurement was carried out by the procurement team for the pharmaceutical installation section of Hospital X. Where the procurement team was integrated with the planning team. The Procurement Team

has the convenience of ordering goods because there are two options, namely the direct method via distributors and the online method via e-catalog.

1. Conformity of Plans and Realization of the Drug Revenue Budget

The majority of income originating from pharmaceutical drugs is from BPJS patients so the value of claims is very influential at Hospital

Table 1. Results of obtaining data on Hospital X's drug revenue budget

Year	Income	Budget	Realization
2021	Hospital medicine	Rp 10,396,630,803	Rp 10,692,314,514
2022	Hospital medicine	Rp 12,976,580,071	Rp 11,507,610,549
2023	Hospital medicine	Rp 18,370,652,683	Rp 18,578,901,256

The drug budget revenue from 2021 to 2023 has increased so that the revenue target has also increased from year to year. Based on the data obtained above, it can be concluded that the suitability of the income budget in 2021 and 2023 is due to additional services and a high patient trend. So, the realization of income in the field is able to exceed the specified budget. Apart from that, there is a discrepancy between the plan and the actual revenue budget in 2022 which is caused by several things, namely patient level, claim value, general patient number.

2. Conformity of Plans and Realization of the Drug Expenditure Budget

There is a match between the plan and the realization of the drug budget expenditure from 2021 to 2023 in 2021 and 2023. The following is the expenditure budget data for 2021-2023 obtained from Hospital X.

Table 2. Results of obtaining data on Hospital X's drug expenditure budget

Year	Expenditure	Budget	Realization
2021	Hospital medicine	Rp 7,426,164,859	Rp 8,486,085,027
2022	Hospital medicine	Rp 9,268,985,765	Rp. 8,425,966,050
2023	Hospital medicine	Rp 13,121,830,488	Rp 14,783,635,220

Based on the data obtained, it can be interpreted that this spending budget is indeed in accordance with patient needs. So, when the number of patients increases, drug purchases or drug shopping costs will automatically increase. Through the use of consumption methods that have been prepared by looking at real conditions in the field. If there is a drug that is not available because the factory's production runs out, it can be transferred first.

The implementation of the consumption method is indeed more accurate, it does not require disease data and treatment standards. However, this method cannot see the number of difficult patient contacts, cannot provide a basis for drug use and improve prescribing patterns, if there is a shortage or excess or loss of medication, it is difficult to rely on.

3. Comparison of Budget Plans and Realizations on Drug Revenue

Analysis of budget plans and realization of income can be done by comparing the budget and realization using a percentage level. The following is a comparison of the income budget and realization of Hospital X Klaten.

Table 3. Comparison results of the 2021-2023 revenue budget

Year	Income	Budget	Realization	Difference	Information	
					%	Effectiveness Ratio
2021	Hospital medicine	Rp 10,396,630,803	Rp 10,692,314,514	Rp 295,683,711	102.84%	Very effective
2022	Hospital medicine	Rp 12,976,580,071	Rp 11,507,610,549	-Rp 1,468,969,522	89%	Less effective
2023	Hospital medicine	Rp 18,370,652,683	Rp 18,578,901,256	Rp 208,2248,573	101%	Very effective

The results of the calculations above show that in 2022 the percentage gain will decrease. This is because the actual acquisition is lower than the budget plan. So, the level of effectiveness in 2022 is in the "less effective" category with a percentage of <100%. Apart from that, the calculation results in 2021 and 2023 show that the nominal percentage has exceeded 100%. So, if we look at the level of effectiveness in 2021 and 2023, it is in the "very effective" category. This condition is in line with the study [13] effectiveness of the income and expenditure ratio of the 20152019 budget is generally effective with an absorption rate of 93%.

4. Comparison of Planned and Realized Budgets for Medicines Expenditures

Based on the budget plan and actual expenditure, calculations can be made by comparing the budget and realization to a percentage level and tracing the causes of budget increases and decreases.

This calculation also looks at the budget difference which can be used to measure financial efficiency [14]. The following is a comparison of the expenditure budget and realization of Hospital X Klaten as follows:

Table 4. Comparison of expenditure budgets for 2021-2023

Year	Expenditure	Budget	Realization	Difference	Information	
					%	Efficiency Ratio
2021	Hospital medicine	Rp 7,426,164,859	Rp 8,486,085,027	Rp 1,059,920,168	114%	Not efficient

2022	Hospital medicine	Rp 9,268,985,765	Rp 8,425,966,050	-Rp 843,019,715	91%	Less efficient
2023	Hospital medicine	Rp 13,121,830,488	Rp 14,783,635,220	Rp 1,661,804,732	113%	Not efficient

Calculating the processing results above, it can be seen that the percentage value $<100\%$ will only be found in 2022 at 91%. So, the level of efficiency falls into the "less efficient" category. Then, in 2021 and 2023, actual spending will be greater than the predetermined budget plan. This causes the percentage value to be $>100\%$, so that the efficiency ratio is in the "inefficient" category. The above results are confirmed by statements from sources who concluded that instability in budget realization was caused by three things, namely an increase in the number of patients, additional drug items, and an increase in the number of drugs administered.

5. Conclusion

1. The correspondence between the budget plan and the realization of income and expenditure is as follows:
 - a. The budget plans and realization for drug revenues in 2021 and 2023 have been in line with achieving the specified targets. Meanwhile, the revenue budget in 2022 will not be consistent due to a decrease in the number of patients, a decrease in the value of claims and a decrease in the number of general patients.
 - b. The plans and realization of the budget for medicines spending in 2021 and 2023 have been in line with achieving the specified targets. Meanwhile, the revenue budget in 2022 is not consistent due to the decreasing number of patients and changes in doctor's prescriptions.
2. Analysis of effectiveness and efficiency between plans and budget realization on income and expenditure on medicines, as follows:
 - a. The effectiveness between plans and budget realization on drug revenues has been included in the "very effective" category in 2021 and 2023. However, in 2022 there has been a decline in budget realization so that it has fallen into the "less effective" category.
 - b. The efficiency between the planned and actual budget for drug spending in 2022 is in the "less efficient" category. Meanwhile, 2021 and 2023 are in the "inefficient" category because the percentage calculation is $>100\%$.

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