

# Performance Evaluation of Pharmaceutical Services Using the Balanced Scorecard Method in a Financial Perspective at Baitus Syifa Pharmacy

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**Abstract.** Performance measurement is an important factor in a pharmacy, where the measurement is to assess the achievement of performance that has been carried out by the pharmacy. One of the performance measurement tools that can be used is the Balanced Scorecard (BSC). This study evaluates one perspective in performance measurement, namely the financial perspective. The financial condition of a company can be known from the evaluation carried out on the company's financial statements, where the financial condition will be related to the availability of drugs in pharmacies. This study aims to determine the performance of pharmaceutical services at Baitus Syifa Pharmacy using the balanced scorecard method from a financial perspective. This study uses a non-experimental case study research design with a descriptive approach. The data collected is in the form of quantitative data obtained through financial data and drug stocks for the 2019-2021 period. This research was conducted in April-May 2022 at the Baitus Syifa Pharmacy. The results showed that the ITOR values in 2019-2021 were 6, 5, and 7 times respectively, while the NPM values in 2019-2021 were respectively 2.671%; 1.624%; 2.757%. This shows that the ITOR value meets the standard, while the NPM value does not meet the standard.

**Keywords:** [Pharmacy Services, Balance Scorecard, Financial Perspective]

## INTRODUCTION

Performance is a benchmark for an organization's ability to achieve goals (Febrianto, 2015). Performance measurement is an important factor in a pharmacy, where the measurement is to assess the achievement of performance that has been carried out by the pharmacy (Trihasutii, 2012). One of the performance measurement tools that can be used is the Balanced Scorecard (BSC). The BSC is a tool used to measure performance which consists of 4 perspectives which include internal business, customer, growth and learning, and financial perspectives (Satibi *et al.*, 2020).

According to Muslim (2020), the BSC method is the most appropriate in helping to evaluate the performance of the pharmacy business, which as a whole represents complex pharmacy performance. This is the reason for using the BSC method in this study, but in this study, it only evaluates one perspective in performance measurement, namely the financial perspective. A financial perspective aims to develop the finances to be achieved by an organization in the plan. The financial perspective has 3 indicators that can describe financial performance, including Return On Assets (ROA), Net Profit Margin (NPM), and Inventory Turn Ratio (ITOR) (Machfoed, 1996; Gaspersz, 2003; Pandaleke *et al.*, 2021).

The financial condition of a company can be known from the evaluation carried out on the company's financial statements, where the financial condition will be related to the availability of drugs in pharmacies. Based on research conducted by Jannah (2017) showed that 51.5% of patients were dissatisfied with the availability of drugs due to the complete availability of drugs. Complete availability of drugs is a pharmacy strategy in facing competition from other pharmacies (Maharani & Mukaddas, 2016). Availability of drugs can affect finances, where excess availability of drugs (overstock) can lead to wastage of the budget and has the potential to expire or damage. Lack of drug availability (stockout) can disrupt pharmaceutical services (Suryagama *et al.*, 2019).

Based on the results of observations of one pharmacy that has never implemented BSC in measuring the performance of pharmaceutical services, namely Baitus Syifa Pharmacy. Baitus Syifa Pharmacy is one of the pharmacies in Kudus Regency that sells both prescription and over-the-counter drugs without a prescription. The pharmacy is active and engaged in structuring and developing in all matters, including patient services at the pharmacy so that service performance must be improved in a competitive environment. This is done to maintain proper pharmacy growth in the future. Therefore, it is necessary to evaluate the performance of pharmaceutical services using the BSC method from a financial perspective at Baitus Syifa Pharmacy.

## METHODS

This research is a non-experimental case study research with a descriptive approach. The research was conducted at the Baitus Syifa Pharmacy in April - May 2022. The flow of data collection can be seen in Figure 1 below:

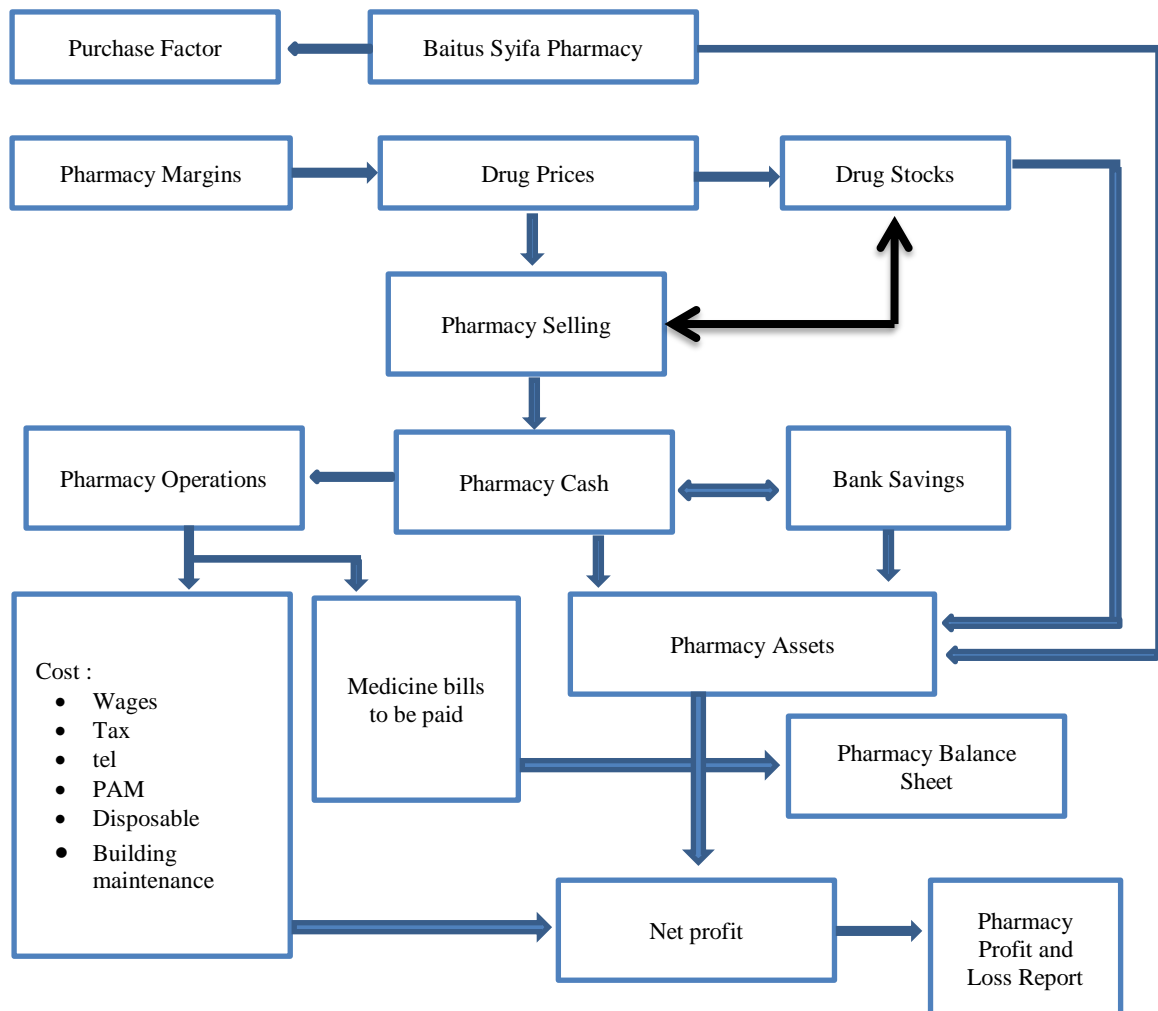


Figure 1. Data Retrieval Flow

After knowing the flow of data collection, the secondary data we need can be obtained from financial reports and drug stocks for 2019-2021. The data used includes drug purchase books, collection books (payments to PDF), drug sales books, operational books, or pharmacy operating expenses (employee salaries, pharmacy taxes, electricity costs, telephone, PAM, consumable costs, building maintenance costs), books pharmacy cash register and savings book at the bank, drug stock card, pharmacy inventory data book, drug receivables book at the pharmacy. The data obtained was analyzed to see the financial performance of the Pharmacy. This study uses 2 financial performance indicators, namely ITOR and NPM. These two indicators are obtained from calculations using the formula that can be seen in Figures 2 and 3:

$$ITOR = \frac{\text{Cost of goods sold}}{\frac{\text{beginning Inventory Level} + \text{End of year}}{2}}$$

Figure 2. ITOR Calculation Formula

$$\text{Net Profit Margins} = \frac{\text{Net Profit}}{\text{Sale}} \times 100\%$$

Figure 3. Net Profit Margins

## RESULTS AND DISCUSSION

Measuring the performance of pharmaceutical services using the BSC method from a financial perspective was carried out at the Baitus Syifa Pharmacy with parameters consisting of 2 indicators, namely ITOR and NPM. Based on the data that has been collected can know that the income of the Baitus Syifa pharmacy:

Table 1. Baitus Syifa Pharmacy Revenue in 2019-2021

No	Size	Year		
		2019	2020	2021
1	Total sales	2,090,723,410	2,040,653,270	2,513,901,160
2	Initial Inventory (PA)	270,760,080	345,892,040	344,538,420
3	Ending Inventory (PAK)	340,892,430	335,582,370	306,400,140
4	Purchase (PB)	1,932,317,334	1,806,375,150	2,209,423,752
5	HPP (PA+PB-PAK)	1,862,184,984	1,816,684,820	2,247,562,032
6	Total Assets (Sales + ending inventory)	2,431,615,840	2,376,235,640	2,820,301,300
7	Stock average	305,826,255	340,737,205	325,630,780
8	Operating expenses	172,695,419	190,838,497	197,030,075
9	Gross Profit (sales – COGS)	228,538,426	223,968,450	266,339,128
10	Net Profit (Gross profit- operating expenses)	55,843,007	33,129,953	69,309,053

Source: Primary Data, 2022

Based on Table 1. it can be seen that the ITOR value makes a comparison between the cost of goods sold (HPP) in one year with the average inventory value at the end of the year. The results of calculating the ITOR value can be seen in Table 2.

Table 2. ITOR Value at Baitus Syifa Pharmacy in 2019-2021

Year	HPP (Rupiah)	Average Supply (Rupiah)	ITOR = COGS/Average Inventory	ITOR standard
2019	1,862,184,984	305,826,255	6 times	
2020	1,816,684,820	340,737,205	5 times	4-12 times
2021	2,247,562,032	325,630,780	7 times	

Source: Primary Data, 2022

Based on table 2, explains that Baitus Syifa Pharmacy has been efficient in using its assets, this is evidenced by the acquisition of ITOR values that fall within the good ITOR standard range, namely 4-12 times. A good ITOR value shows that the goods managed by Baitus Syifa Pharmacy are always moving, there is no dead stock. The higher the turnover of goods, the capital turnover is also smooth. A good turnover rate shows that the drug management cycle is going well.

This can be seen every year. The ability to circulate funds and drug supplies in 2021 has the highest ITOR value, which is 7 times a year with an HPP of Rp. 2,247,562,032 and an average inventory of Rp. 325,630,780 that have not been sold to consumers in 3 years. This is due to an increase in prescription and non-prescription services. The high prescription service is due to the large number of patient visits to the doctor's practice.

These results are different from the results in 2020, which have the lowest ITOR value, namely 5 times in one year with Rp. 1,816,684,820 with an average inventory of Rp. 340,737,205 which have not been sold to consumers. This was due to the Covid-19 pandemic outbreak that hit Indonesia starting in March 2020, resulting in an increase in non-prescription sales and a decrease in prescription sales.

Another reason for the decrease in the value of ITOR during the pandemic was that because doctors and some of the employees were confirmed to have Covid-19, so pharmacy operations were temporarily suspended. This is supported by research conducted by (Zheng *et al.*, 2021) which stated that during a pandemic various efforts were made to minimize patient visits to pharmacies to prevent patients from leaving the house and controlling the risk of exposure to the Covid-19 virus, besides that remote pharmaceutical services using electronic media such as telephone or the internet can be carried out while still prioritizing treatment effectiveness and patient compliance. The cessation of pharmacy operations during the pandemic had a major impact on drug circulation, where there were stocks of medicines that were not rotating causing drug supplies to accumulate. The results of drug turnover in 2020 showed less turnover compared to the previous and following years but still met the drug turnover standard. The greater the turnover of drug supplies, the better and more efficient.

Drug circulation in 2019 showed different results from the results in 2020, where in 2019 the ITOR value was higher than in 2020 but lower than in 2021 with a turnover value of 6 times in one year. In 2019 it shows a COGS of Rp. 1,862,184,984 and an average inventory of Rp. 305,826,255. It is known that the reason is that there are not many drug items available. Based on the results of an analysis of the ITOR value at the Baitus Syifa Pharmacy from 2019-2021 it has met the pharmacy ITOR standard, namely 4-12 times a year. According to Hartih *et al.*, (2013) the inventory value from each previous month has increased due to more and more prescriptions being served and showing more precise drug supplies. The results of research by Satibi *et al.* (2007) stated that the financial performance of pharmacy X from the ITOR indicator increased by 4.86 times in 2003, meaning that the inventory turnover of the pharmacy was running well.

The second indicator measurement that is calculated is the NPM value, this value is obtained by calculating the amount of profit earned by the pharmacy related to sales or turnover. The calculation of this value aims to determine the influence of the cost of goods sold on sales at pharmacies in 2019, 2020, and 2021. The NPM value can be seen in Table 3.

**Table 3.** NPM Value at Baitus Syifa Pharmacy in 2019-2021

Year	Net Profit (Rupiah)	Net Sales (Rupiah)	NPM(%)	NPM standard
2019	55,843,007	2,090,723,410	2.671%	5-7.5 %
2020	33,129,953	2,040,653,270	1.624 %	
2021	69,309,053	2,513,901,160	2.757%	

Source: Primary Data, 2022

Based on Table 3 shows that the NPM in 2019, 2020, and 2021 was 2.671% respectively; 1.624%; 2.757%. This shows that the NPM value at the Baitus Syifa Pharmacy has not met the standard NPM value, where the standard value is 5-7.5%. The greater the NPM value, the more productive and efficient the pharmacy's performance. Heri (2019) states that high net income is obtained from each sale because the company has a high ability to earn profits. The higher the NPM value, the higher the company's ability to earn profits on the condition that increased sales within the company must be accompanied by controlling operating expenses or reducing costs.

Mark The NPM for 2019-2021 shows that the lowest value in 2020 is due to the start of the Covid-19 pandemic. Doctors who usually practice in pharmacies were unable to provide services because they reduced physical contact with patients. In addition, there are many quarantine applications in various sectors, one of which is the drug factory, so there is a shortage of supply. This is supported by Nurazizah (2021) who stated that due to the Covid-19 pandemic, sales of vitamins, multivitamins, and medicines have increased by around 50-100% and there has been a surge in demand for vitamin C, multivitamins, pharmaceutical and herbal based products. Pharmacy revenue has decreased due to the slow running of drug stocks. The slow decline in drug stocks was due to the many implementations of quarantine at drug factories which resulted in closures, stated that the main causes of drug supply shortages were related to economic reasons, regulations that closed factories due to quarantine, border closures, and export bans which caused drug production to start slowly and disrupt the supply chain of pharmaceutical raw materials. The results of this study indicate that the performance of pharmacies is good and efficient from a financial perspective with ITOR and NPM indicators, thus proving that pharmacies can control

costs well and demonstrate successful management performance. This is by research by Muslim (2020), which states that performance management has managed to control costs well and can set product prices correctly so that it is more efficient.

## CONCLUSION

The performance of the pharmaceutical service at Baitus Syifa Pharmacy using the Balanced Scorecard method from a financial perspective shows that the ITOR values for the 2019-2021 period have met the standards, while the NPM values for the 2019-2021 period have not met the standards so that they must maintain the good performance of pharmaceutical services and improve those that are not good.

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