

## Performance Analysis of the Pharmacy Installation Dr Harjono Ponorogo Regional General Hospital in 2023 Based on the *Balanced Scorecard* Method

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### ABSTRACT

**Background:** RSUD Dr. Harjono is a referral health facility, so far performance measurement only focused on financial aspects, therefore a more comprehensive approach is needed using Balanced Scorecard method which includes four perspectives, namely financial perspectives, internal business processes, customers, growth and learning.

**Objectives:** To determine performance of IFRS Dr Harjono Balanced Scorecard method.

**Methods:** Descriptive non-experimental research collected data of quantitative and qualitative used was purposive sampling, criteria used respondent all Pharmacy Installation employees and repeat visit outpatients.

**Results:** The financial perspective suggests that ITOR in 2022 was 12,90 and 2023 was 10,91, GPM in 2022 was 19,69% and 2023 was 19,68%, GROS in 2022 was growth 1,25% and 2023 was growth 1,52%. Internal Business Processes perspective drug availability according to standard but the value of dead stock drugs at 4.86% and expired drugs at 1.96% is still above the standard value of more than 1%. The results of customers on five dimensions still obtained negative result an average GAP of -0.54 this shows that IFRS Dr Harjono provides unsatisfactory service quality for patients. In the perspective of growth and learning, the ability and motivation to work are in a very high category

**Conclusion:** Financial perspective, internal business processes, growth and learning in the good category and according to standards except dead stock and expired date values still above the standard. In the customer perspective, they are still dissatisfied with the service, so the pharmaceutical installation requires an improvement strategy.

**Keywords:** Performance; Performance Analysis; IFRS; *Balanced Scorecard*

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### Introduction

According to the mandate of the 1945 Constitution of the Republic of Indonesia, every Indonesian citizen has the right to health. The state is therefore responsible for ensuring a decent, healthy and prosperous life both physically and mentally in order to achieve national goals <sup>(1)</sup>. Since 2014 the government has implemented the National Health Insurance System (SJKN) which is regulated in the

Minister of Health Regulation No. 28 of 2014<sup>(2)</sup>. Hospitals as health care facilities are responsible for providing comprehensive services including promotive, preventive, curative, and rehabilitative, besides that hospitals are defined as health care facilities that provide comprehensive services to individuals including inpatient, outpatient, and emergency treatment <sup>(3)</sup>. This is because hospitals are capital, technology and labor-intensive public sector economic actors so they must take full responsibility for their performance <sup>(4)</sup>. Hospitals in providing services to patients and families of patients are not only concerned with the benefits obtained but need to be emphasized to provide quality and quality services <sup>(5)</sup>.

To achieve organizational goals, performance measurement is needed when preparing work plans and as work evaluation material. The success of an organization is greatly influenced by the quality of performance demonstrated by the organization <sup>(6)</sup>. Hospital performance measurement often focuses only on financial aspects, although this approach has weaknesses <sup>(7)</sup>. Balanced Scorecard (BSC) is a method that measures overall performance by considering financial, customer, internal process, and learning and growth perspectives. It helps evaluate performance and strategize to improve service quality <sup>(8)</sup>. The Balanced Scorecard provides a framework for management to implement the organization's mission and strategy into objectives and measures that can be observed from four perspectives <sup>(9)</sup>. The Balanced Scorecard is also relevant for evaluating the performance of health care facilities <sup>(10)</sup>. Performance measurement using the Balanced Scorecard serves as an evaluation tool and feedback analysis system to obtain real and relevant data as a basis for long-term decision making <sup>(11)</sup>. Balanced Scorecard is also used as a tool to formulate strategies, make changes and can be integrated with business strategy methods in order to significantly improve organizational performance <sup>(12)</sup>.

Some previous research by Kartikasari (2024)<sup>(13)</sup> examined the Performance Analysis of the Pharmacy Installation at the Bhina Bhakti Husada Rembang hospital with the Balanced Scorecard method, the study concluded that from a customer perspective there is a need to improve hospital performance. Previous research in 2014 in the form of applying the Balanced Scorecard to the performance measurement of the Dr. Harjono Ponorogo Regional General Hospital concluded that the overall performance measurement obtained a very good value but in the customer perspective experienced a decrease in the number of visits this was due to many complaints about the quality of service of officers who were still not optimal <sup>(14)</sup>. Previous research shows that the customer perspective is still a challenge in various hospitals, this study is different from previous research where this study focuses on performance variables in the pharmaceutical installation specifically not the performance of the hospital as a whole. balanced scorecard method has advantages including using four perspectives in assessing the performance of an organization, these perspectives will describe the performance of an organization in detail and interconnected. Dr. Harjono Ponorogo Regional General Hospital (RSUD), as a type B teaching and referral hospital in Ponorogo, needs to analyze its performance using BSC. This analysis aims to provide an overview of performance and recommend service improvements, especially at the pharmaceutical installation, to achieve national service standards and meet community needs.

## **Methodology**

### **Study design**

This study is a descriptive non-experimental observational study with a retrospective approach to determine the performance of IF Dr. Harjono Ponorogo Hospital based on 4 perspectives, namely finance, internal business processes, customers, growth and learning. Qualitative data was obtained through questionnaires related to customer satisfaction, employee morale, ability, and work motivation in the Pharmaceutical Installation, processed with a Likert scale, and supported by observations and interviews. Quantitative data was taken from 2023 documents for financial indicators in the form of ITOR, GPM, GROS and internal business processes. Quantitative data is analyzed using statistics while qualitative is presented in descriptive form.

### **Population and samples**

The population in this study were all employees of the Dr. Harjono Ponorogo Regional General Hospital Pharmacy Installation and patients or families of patients who received outpatient treatment and redeemed drugs at the Dr. Harjono Ponorogo Regional General Hospital Pharmacy Installation. Customer sample criteria are patients or families of repeat visit outpatients at the Dr. Harjono Ponorogo Regional General Hospital Pharmacy Installation, adults over 17 years old willing to fill out a questionnaire. The estimated number of patients per month at the Dr. Harjono Regional General Hospital Outpatient Pharmacy Installation is 15,000 people. Determination of the sample size according to the table by Isaac and Michael, the population is 15,000 per month with an error rate of 5%, namely 340 outpatient respondents. The sample of this study were all employees of the Dr. Harjono Ponorogo Regional General Hospital Pharmacy Installation who were not on study assignments or leave and outpatients who were taken by purposive sampling method.

### **Study instruments**

In this study, the instruments used were primary data and secondary data. Primary data was obtained by means of questionnaires, in-depth interviews with the head of the Pharmacy Installation of Dr. Harjono Ponorogo Regional General Hospital, direct observation, survey of archives and documents. The customer satisfaction questionnaire Gap five dimensions of customer satisfaction refers to Zainudin (2013). employee satisfaction questionnaire using Harsono's questionnaire (2010). Secondary data in this study are data in the form of monthly sales reports and financial reports of the Pharmacy Installation of Dr. Harjono Ponorogo Regional General Hospital in 2023.

### **Data collection**

Data collection was carried out by distributing questionnaires to patients and pharmaceutical installation employees. The data obtained in the form of reality scores and expectations are processed by the GAP analysis method with the help of

Microsoft excel to determine the difference between expectations and reality. As well as data collection on financial reports and IFRS inventory in 2023.

## Data Analysis

### Measurement of Validity and Reliability of Questionnaires

In this study, testing the validity of each statement item was carried out using the product moment correlation formula between each item that measured a scale with the total score of the scale with the help of SPSS 20. The criteria used in validity testing are if the Corrected Item-Total Correlation coefficient value of an item is positive and  $\geq 0.361$ , it means that the item is valid (Azwar, 1999). The correlation value between the data in each statement and the total score is calculated using the Product Moment correlation technique formula. Reliability testing uses the Cronbach's Alpha coefficient with the help of the SPSS 15 program. The criterion used is that the Cronbach's Alpha coefficient must have a value  $> 0.60$ , then the variable is reliable or acceptable (Sekaran, 2000).

The next data processing is to calculate the gap in the form of participants' expectations regarding services to the reality of services felt by patients and the calculation of employee questionnaire scores. First calculated the average answer per dimension both the level of expectation and the level of perception. Calculation of the average answer between customer expectations regarding services and the reality of services felt by participants based on the five dimensions of Parasuraman et al. (1988) which consists of reliability, responsiveness, assurance, empathy, tangibles. The performance evaluation assessment categories to see the success and failure of the organization in carrying out mandated activities and functions can be seen in table 1.

**Table 1. Patient Satisfaction, Employee Morale and Employee Morale Scores**

Range Skor	Assessment Criteria
$1,0 \leq x \leq 1,75$	Very Low
$1,75 \leq x \leq 2,5$	Low
$2,5 \leq x \leq 3,25$	High
$3,25 \leq x \leq 4,00$	Very High

All questionnaire results were analyzed using a Likert scale referring to Azwar (2013), which can be observed in Table 2.

**Table 2. Employee morale questionnaire assessment**

Favorable Answer	Value	Unfavorable Answer
Strongly Agree	4	Strongly Disagree
Agree	3	Disagree
Disagree	2	Agree
Strongly Disagree	1	Strongly Agree

## Result and Discussion

### Respondent Characteristics

In the description of the characteristics of respondents in the customer perspective, namely in the patient satisfaction questionnaire, while in the growth and learning perspective in the employee morale questionnaire and the employee work ability and motivation questionnaire.

**Table 3. Discription of patient demographic data (Source : Primary Data, 2024)**

Category	Frequency	Percentage
<b>Gender</b>		
Male	150	44,12%
Female	190	55,88%
Total	340	100%
<b>Respondent</b>		
Patient	336	98,82%
Patient Companion	4	1,18%
Total	340	100%
<b>Category</b>		
<b>Age</b>		
Teenager ( $\leq 18$ )	0	0%
Adults (19-59)	313	92,06%
Elderly ( $\geq 60$ )	27	7,94%
Total	340	100 %
<b>Education</b>		
SD	10	2,94%
SMP	55	16,18%
SMA	160	47,06%
Diploma	4	1,18%
Scholar	109	32,06%
Others	2	0,58%
Total	340	100%
<b>Membership Status</b>		
Umum	11	3,23%
BPJS	329	96,76%
Total	340	100%

**Table 4. Description of Employee Demographic Data (Source : Primary Data, 2024)**

Category	Frequency	Percentage
<b>Gender</b>		
Male	11	21,57%
Female	40	78,43%
Total	51	100%
<b>Age (Yaers)</b>		
$\leq 25$	1	1,96%
26 - 31	15	29,42%
32 - 37	12	23,53%
38 - 43	18	35,29%
$> 43$	5	9,80%
Total	51	100%

<b>Education</b>		
Apoteker	16	31,37%
D3 Farmasi	27	52,94%
SMA	5	9,80%
Others	3	5,89%
Total	51	100%
<b>Length of service</b>		
1 - 5	25	49,02%
6 - 10	4	7,84%
> 11	22	43,14%
Total	51	100%

### Financial Perspective

Performance assessment from a financial perspective at the Pharmaceutical Installation of Dr. Harjono Ponorogo Hospital uses three indicators, namely ITOR (Inventory Turn Over Ratio), GPM (Gross Profit Margin) and GROS (Growth Ratio on Sale) using data from the financial statements of the Pharmaceutical Installation of Dr. Harjono Hospital in 2022-2023. Based on the analysis of the financial perspective, the results obtained are in accordance with the standards of both ITOR, GPM and GROS.

**Table 5. ITOR Analysis (*Inventory Turn Over Ratio*) (Source : Primary Data, 2024)**

Description	Year 2022	Year 2023	Standard Value
ITOR	12,90 times	10,91 times	8- 12 times

**Table 6. GPM Analysis (*Gross Profit Margin*) (Source : Primary Data, 2024)**

Description	Year 2022	Year 2023
GPM	19,69%	19,68%

**Table 7. GROS Analysis (*Growth Ratio on Sales*) (Source : Primary Data, 2024)**

Description	Year 2022	Year 2023	Standar Value
GROS	1,25 %	1,52 % Naik 21,6 %	Mengalami peningkatan

### Internal Business Process Perspective

In the perspective of internal business processes, several indicators are used, including data on drug availability, percentage of dead drug stock, percentage of expired drug stock data in 2023 as well as questionnaires on facilities and human resources dimensions distributed to all employees of IFRS Dr. Harjono Ponorogo. The results of the employee work enthusiasm questionnaire are in the very high category. For the level of drug availability, there are 173 drug items in the excess category while 1,204 drug items are in the safe category. In the analysis of the percentage of dead stock and the percentage of expired drug stock is still above the

standard value of 4.86% and 1.96% where the standard according to the Ministry of Health must be below 1%.

The following table analyzes the answers to the employee morale questionnaire and the employee ability and motivation questionnaire.

**Table 8. Results of Analysis of Employee Morale Questionnaire Answers (Source : Primary Data, 2024)**

No	Question	Average Value	Category
<b>Equipment</b>			
1	Work equipment is in good condition and fit for use	3,43	Very High
2	Equipment is available in sufficient quantity	3,39	Very High
3	Required stationery is available in good condition	3,82	Very High
4	Checking office inventory regularly	3,29	Very High
<b>Office Facilities and Infrastructure</b>			
5	Computerization is running well to support the efficiency and effectiveness of work	3,61	Very High
6	Data and information can be obtained easily and completely to support work	3,37	Very High
7	Building is in good condition and clean	3,53	Very High
8	Hospital infrastructure (water, electricity, information and communication systems) is functioning well	3,51	Very High
9	Checking of hospital infrastructure facilities is carried out regularly	3,27	Very High
<b>Pocess</b>			
10	Target time to complete work in accordance with the capabilities of hospital employees	3,37	Very High
11	Hospital employees are able to overcome obstacles in their work	3,49	Very High
12	Hospital staff able to provide services according to Minimum Service Standards	3,49	Very High
Average		3,47	Very High

**Table 9. Drug Availability Level (Source : Primary Data, 2024)**

Description	Medicine Items	Value	Standar Value
Excess	173 items	46,19 month	8- 12 times
Safe	1.204 items	12,83 mothh	

**Table 10. Dead Stock (Source : Primary Data, 2024)**

Description	Medicine Items	Value	Standar Value
Dead stok	67 items	4,86 %	< 1%
Total Items	1.377 items		

**Table 11. Percentage Data of Expired Medicines (Source : Primary Data, 2024)**

Description	Number of Medicine Items	Persentase (%)	Standar Value
Expired Medicine	27 items	1,96 %	< 1%
Total ItemS	1.377 items		

### Customer Perspective

This analysis is expected as monitoring patient satisfaction in IFRS in providing services whether it is in accordance with the expectations expected by patients. Based on table 12 above, it can be analyzed for the average score of each dimension in the reality questionnaire of 3.13 which is perceived as high, meaning that patients of IFRS Dr Harjono feel that pharmaceutical services are good in all dimensions. While the average score of each dimension in the expectation questionnaire on the performance of IFRS Dr. Harjono is 3.67 in a very high category, this illustrates the expectations desired by patients for IFRS performance are very high.

**Table 12. Data Score of Respondents' Answers to Reality and Expected Performance (Source : Primary Data, 2024)**

No	Dimensions of Service Quality	Skor	Category
<b>Reality</b>			
1	<i>Tangibles</i>	3,12	High
2	<i>Reliability</i>	3,15	High
3	<i>Responsiveness</i>	3,14	High
4	<i>Assurance</i>	3,14	High
5	<i>Emphaty</i>	3,11	High
Average		3,13	High
<b>Expectation</b>			
1	<i>Tangibles</i>	3,67	Very High
2	<i>Reliability</i>	3,69	Very High
3	<i>Responsiveness</i>	3,69	Very High
4	<i>Assurance</i>	3,66	Very High
5	<i>Emphaty</i>	3,63	Very High
Average		3,67	Very High

The next analysis is the calculation of measuring how big the gap is between performance and expectations of Dr. Harjono's IFRS service. This analysis is by looking at the difference in each dimension. The resulting GAP has a difference level, this indicates that the performance of reality and patient expectations is not yet in line so that it is necessary to improve its performance.

**Table 13. GAP Analysis Data of Reality and Expectation Performance (Source : Primary Data, 2024)**

No	Quality Dimension	Reality skor	Expectation Skor	GAP	Category
1	<i>Tangibles</i>	3,12	3,67	-0,55	
2	<i>Reliability</i>	3,15	3,69	-0,54	
3	<i>Responsiveness</i>	3,14	3,69	-0,55	dissatisfied

4	<i>Assurance</i>	3,14	3,66	-0,52
5	<i>Emphaty</i>	3,11	3,63	-0,52
Average		3,13	3,67	-0,54

### Growth and learning perspective

This analysis aims to measure performance from the employee side at IFRS Dr. Harjono relating to ability and motivation in working as an IFRS employee. This perspective is grouped with two indicators including ability and motivation. From the data in Table 32, it can be concluded that the overall average value of work ability answers of 3.38 is in the very high category, the work ability of employees is very high and satisfied with the impact on IFRS performance is getting better but regular monitoring is needed so that employee work ability does not decrease in the following year.

**Table 14. Results of Analysis of Respondents' Answers to Employee Work Ability (Source : Primary Data)**

No	Question Indicator	Average	Category
1	There is training for employees	3,53	Very High
2	Favorable working environment	3,41	Very High
3	Jobdesk from the leader is clear	3,31	Very High
4	Existence of direction from the leadership in work	3,35	Very High
5	Leaders increase work passion to be productive	3,31	Very High
Average		3,38	Very High

Based on the data analysis of table 33, the work enthusiasm score with an average value of 3.45 is in the very high category, this can be described that the work enthusiasm of IFRS Dr. Harjono employees is very high in doing each job.

**Table 15. Results of Analysis of Respondents' Answers to Employee Work Motivation (Source : Primary Data)**

No	Question Indicator	Average	Category
1	Remuneration for employees	3,51	Very High
2	Clear career opportunities	3,43	Very High
3	Opportunities for employees to develop their potential	3,51	Very High
4	Rewards for outstanding employees	3,45	Very High
5	There is a warning to employees who work not according to service standards	3,37	Very High
Rata- rata		3,45	Very High

### Conclusion

The performance of the financial perspective obtained the ITOR value in 2022 of 12.90 in 2023 of 10.91 times, the GPM value in 2022 of 19.69% in 2023 of 19.68% and the GROS value in 2022 of 1.25% in 2023 of 1.52%, for the GPM and GROSS values the performance of the Dr. Harjono Regional General Hospital Pharmacy Installation is quite stable and has increased.

The performance of the internal business process perspective employee morale is very high, for the availability of 1,204 items of drugs in accordance with the standards of the Ministry of Health but 173 items of drugs are overstocked, for the percentage value of drugs that experience dead stock of 4.86% and the value of expired drugs is still high at 1.96%.

The performance of the customer perspective shows high patient satisfaction with the performance of IFRS Dr. Harjono while in the expectation of patient satisfaction in the very high category. However, there is still a GAP between performance satisfaction and expectations in pharmaceutical services at IFRS Dr. Harjono Ponorogo, the performance reality score is 3.13 and the performance expectation score is 3.67, there is a GAP between reality and expectations of 0.54.

The performance of the growth and learning perspective can be seen from the level of employee work ability with a score of 3.38 and employee motivation with a score of 3.45 both in the very high category, this illustrates that the hospital always wants to improve the competence of human resources by conducting regular training for all employees. In addition, the communication relationship between leaders and subordinates is well established, there is a remuneration system and opportunities for employees to develop their potential in order to achieve common goals. The work ability and work motivation of employees are very high and satisfied will have an impact on the performance of IFRS getting better but regular monitoring is needed so that the work ability of employees does not decrease so that it can be concluded that the ability and motivation of IFRS Dr. Harjono employees are in the very high / very satisfied category. So that it can be concluded that the score of the ability and motivation of IFRS Dr. Harjono employees is in a very high category.

### **Declaration of Competing Interest**

Thanks to all parties involved in this research, thanks to Allah SWT, both parents, supervisors, the pharmaceutical installation of Dr. Harjono Ponorogo Hospital, the campus, and other parties that cannot be mentioned one by one.

The ethics committee has been submitted, proven by the issuance of a Certificate of Ethics Review Approval by the Health Research Ethics Committee of Dr. Harjono Ponorogo Hospital with No. 00542135021211420240720181/VII/KEPK/2024, and declared ethically acceptable.

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