



Analysis of Pharmacy Installation Performance 'Aisyiyah Islamic Hospital Nganjuk Using the Balanced Scorecard Approach

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ABSTRACT

Background: The Balanced Scorecard (BSC) is a method that provides complete performance and measurement consisting of four perspectives.

Objectives: The study aimed to determine the performance of the RSI 'Aisyiyah Nganjuk Pharmacy Installation using BSC and to determine a strategy map based on performance evaluation.

Methods: This research is non-experimental with a descriptive design. The retrospective data was used to examine personnel files, financial reports, stock, sales, patient visits, and prescriptions from January 2019 to December 2021. The prospective data was used for questionnaires, interviews, and direct observation. The data obtained is qualitative and quantitative. Gap analysis using the Wilcoxon test with non-parametric statistical methods. Data analysis was carried out descriptively, comparing with standards and management needs to determine performance, combining SWOT analysis to determine a strategy map.

Results: The financial perspective shows ITOR in 2019 (5.84%), 2020 (4.01%), 2021 (4.63%), GROS in 2019 (0.13%), 2020 (-0.18), 2021 (0.02%), GPM in 2019 (33.26%), 2020 (43.67%), 2021 (34.23%). The internal business perspective shows that the availability of medicine has yet to reach 100%, completeness of Medicine Information Services 34.54%, dispensing time of compounded medicine 43.10 minutes, non-compounded 24.40 minutes, and 100% absence of medication errors. The growth and learning perspective show high results in job satisfaction, morale, productivity, employee turnover, and the need for MIS development. The customer perspective shows reasonable customer satisfaction but still low patient connectivity.

Conclusion: Several indicators still do not meet the standards, so they need to be developed with the S-O strategy.

Keywords: Balanced Scorecard; Pharmacy Installation; Strategy Map; SWOT

INTRODUCTION

Increased competition and public demands for health services in the era of globalization have spurred hospitals to provide the best service to the community. The main thing that needs to be prioritized by hospitals in conditions of tight competition is a strategy to improve the quality of service to customers entirely and sustainably. Pharmaceutical services are among the leading services in hospitals because almost all services provided to patients involve pharmaceutical preparations and or health supplies.¹ Pharmaceutical services are a supporting service and a revenue center for hospitals, considering that more than 90% of health services use pharmaceutical supplies and 50% of all hospital income comes from pharmaceutical supplies.²

Indrayanti et al.³ stated that in pharmacy installation, performance measurement and environmental analysis must be carried out as a basis for formulating strategies to face ecological changes to continue to achieve the organization's vision and mission in a way that has never been done before. The Balanced Scorecard (BSC) is a scorecard that can be used to measure performance by considering the harmony between financial and non-

financial, short and long-term, and including internal and external factors. The advantage of the balanced scorecard in supporting strategic management is encouraging employees to think, act, and take capital-intensive strategic steps to improve company performance.⁴

Research results from Marselin et al.⁵ stated that increasing human resource capabilities can encourage customer growth and the quality of pharmaceutical services. Pharmacy installation will make more money if they increase revenue and reduce costs. According to a different research by Indrayanti et al.³ efforts to improve service quality from an internal business process perspective are expected to achieve strategic goals from a customer perspective, such as increasing patient satisfaction and the number of customers, as well as financial goals, such as increasing sales.

The 'Aisyiyah Islamic Hospital Nganjuk (RSI 'Aisyiyah Nganjuk) is a class D private general hospital in Nganjuk Regency which is currently in the development process with the construction of a 4-storey building, as well as plans to increase the type of hospital class. The RSI 'Aisyiyah Nganjuk Pharmacy Installation is one of the supporting installations whose service performance dramatically influences the quality of hospital services. So far, the performance assessment of the RSI 'Aisyiyah Nganjuk Pharmacy Installation has used financial ratio analysis only. Some of the problems faced by the RSI 'Aisyiyah Nganjuk Pharmacy Installation in providing services include problems with human resource turnover, namely employees leaving or coming in every year, financial problems, namely a decrease in the number of patients and based on the results of the 2021 financial report audit by Public Accounting Firm it shows the inventory turnover value in the pharmacy installation is 23 days, which shows that the turnover of funds embedded in inventory is 23 days, so according to the Public Accounting Firm, it must be reduced, as well as the problem with customer satisfaction, namely that there are still patient complaints regarding waiting times, thus affecting the development process of the pharmacy installation.

The difference between this research and similar previous research is Mulia et al.⁶ research regarding performance evaluation of the Pharmacy Installation of the PKU Muhammadiyah Palangkaraya Islamic Hospital, Central Kalimantan, using the balanced scorecard approach and Indrayanti et al.³ on performance analysis in the context of preparing a strategy map for the Airlangga Hospital Jombang Pharmacy Installation using the balanced scorecard approach is an indicator that is researched to carry out performance analysis from each different perspective, determining the strategy map is carried out by combining the results of performance analysis with SWOT analysis, as well as a location different research.

Based on these problems, performance analysis research using the balanced scorecard approach is very important because it can combine various perspectives and provide more comprehensive information management. This research aims to determine the performance of the RSI 'Aisyiyah Nganjuk Pharmacy Installation in terms of the balanced scorecard approach with four perspectives, namely finance, internal business processes, customers, and learning and growth perspectives, as well as to find out the appropriate strategy map based on the results of performance analysis and Strength, Weakness, Opportunity, Threat (SWOT) analysis. The research results can be used to develop the RSI 'Aisyiyah Nganjuk Pharmacy Installation, encouraging strategic managers to create growth and reduction strategies.

METHODS

Study design

This research is non-experimental research with a descriptive design.

Population and samples

The research was conducted at the RSI 'Aisyiyah Nganjuk Pharmacy Installation in September – October 2022. The population in this research were all employees of the pharmacy installation, patients or families of patients who received outpatient treatment and bought medicine at the pharmacy installation, and all prescription sheets that entered the pharmacy installation during the research. Sampling for employee samples used the total sampling method. Customer samples were taken from patients or patient families using a purposive random sampling method, with the inclusion criteria being patients or families of outpatients in pharmacy installations, late adolescents and adults (≥ 17 years)⁷, willing to fill out the questionnaire given, cooperative and able to communicate well and are in the category of patients visiting more than twice, as well as the exclusion criteria for patients or patient families who cannot read and write. Recipe sampling was determined using the simple random sampling method, with the determination of sample size based on Isaac and Michael with an error rate of 5%.⁸ Based on the calculations, the minimum sample size used for this study was 289 samples from a total population of 1154 recipe per month.

Study instruments

Performance measurement with the BSC approach uses four perspectives, namely a financial perspective with indicators of Inventory Turn turnover ratio (ITOR), Gross Profit Margin (GPM), Growth Ratio On Sales (GROS), an internal business perspective with indicators of medicines availability levels, average length of medicine preparation time (dispensing time), no incidents of medication errors, completeness of medicine information services, growth and learning perspectives with indicators of employee satisfaction, employee morale, employee productivity levels, employee turnover, Management Information System (MIS) development, and customer perspectives with indicators of customer satisfaction and patient connectivity.

Data collection

Data collection uses observation sheets, questionnaires, and interview sheets. The observation sheet is used as a record sheet for collecting data from observations. The questionnaire uses a Likert scale ranging from 1-4, which contains several statements and answer choices. All questionnaires were tested for validity and reliability by taking a sample of 30 respondents from the population used. The statement in the questionnaire is valid if the calculated r -value $>$ r table and if the Cronbach's alpha value $>$ 0.6, it is said to be reliable.⁹ Interview sheets were used to obtain more in-depth data regarding pharmacy installation activities.

Data collection was obtained retrospectively and prospectively. The retrospective method was used to retrieve personnel files, financial reports, stock reports, sales reports, patient visit reports, and prescriptions from January 2019 to December 2021. The prospective method was used for questionnaire data, interviews, and direct observation. Quantitative data was obtained through direct observation, surveys of recipes, financial reports, questionnaires, and personnel data. Data taken through direct observation is the provision of medicines to outpatients who experience errors in the type of medicine, dose, person, and quantity of medicine, medicine information services by pharmacy installation officers when handing over medicines, and employee behavior in providing prescription services during working hours. Data taken from a survey of prescriptions is a survey of the number of medicines written in the prescription, the number of medicines handed over to the patient, and the length of time the medicine is provided from the time the prescription is handed over until the medicines are handed over to the patient. Data taken from financial reports are the price of goods sold, inventory data, receipt, and expenditure of medicines. Data from the questionnaire are customer satisfaction questionnaires, employee satisfaction, and work morale questionnaires. Data taken from personnel data is data on the number of employees who enter and leave each year. Qualitative data was obtained from statements from interviews with heads and employees of the Pharmacy Installation regarding the MIS used and its suitability to management needs.

Data Analysis

Gap analysis on customer satisfaction was carried out using the Wilcoxon test with non-parametric statistical methods. Qualitative data analysis was carried out descriptively by comparing the results of interviews regarding the MIS used with management needs. Research data processing for each research indicator can be seen in Table I.

RESULTS AND DISCUSSION

Based on the research conceptual framework, the research results are presented in four balanced scorecard perspectives, namely the financial perspective, internal business perspective, growth and learning perspective, and customer perspective, as well as the formulation of evaluations and strategy maps from the results of performance analysis and SWOT analysis. The results of the validity and reliability tests for each questionnaire statement used in the research had a correlation coefficient value of ≥ 0.361 and a Cronbach Alpha value of ≥ 0.6 , which shows that all statements in the questionnaire are valid and reliable. The results of measuring the performance of the RSI 'Aisyiyah Nganjuk Pharmacy Installation using the balanced scorecard approach can be seen in Table II.

Financial Perspective

The research results show that the ITOR value of the RSI 'Aisyiyah Nganjuk Pharmacy Installation for 2019 - 2021 was inefficient because it is still below standard. The standard ITOR value used in Indonesia is ≥ 8 -12 rounds a year. Apart from the ITOR value being below the standards used in Indonesia, the results of the ITOR value in this study are also lower when compared to similar research, namely the research of Indrayanti et al.³ at

Table I. Data Processing for Each Research Indicator

Perspective	Indicator	Data collection technique	Sample	Analysis Techniques	Standard
Financial	ITOR	Observation	Financial Report for 2019 - 2021	Calculated according to the ITOR formula	8-12 rounds ¹⁰
	GPM	Observation	Financial Report for 2019 - 2021	Calculated according to the GPM formula	20-33% ³
	GROS	Observation	Financial Report for 2019 – 2021	Calculated according to the GROS formula	≥ 10% ³
Internal Business Processes	Medicine availability levels	Observation	Recipe Report for 2019 - 2021	Calculated according to the medicine availability level formula	76 - 100% ¹¹
	Average length of medicine preparation time (dispensing time)	Observation	Simple random sampling of recipes	Calculate the average prescription dispensing time	Compounde d medicine ≤ 60 minutes, non-compounded medicine ≤ 30 minutes ¹²
	There were no incidents of medication errors.	Observation	Data on patients who experienced incidents of medication errors were compared to the total number of patients observed	The percentage of no incidents of medication errors is calculated	100% ¹²
	Completeness of Medicine Information Services	Observation	Simple random sampling	The percentage of information service is calculated compared to the number of complete information components	100% ¹³
Growth and Learning	Employee Satisfaction	Questionnaire	All employees	Validity test Reliability test Score analysis	Very high ¹⁴
	Employee morale	Questionnaire	All employees	Validity test Reliability test Score analysis	Very high ¹⁴
	Employee productivity level	Observation	All employees	The percentage is calculated according to the type of activity carried out by the employee	75% ³
	Employee turnover	Observation	Personnel data for 2019 - 2021	Calculate the percentage of employees who leave every year according to the turnover formula	5 - 10% in a year ¹⁵

Table I. (Continued)

Perspective	Indicator	Data collection technique	Sample	Analysis Techniques	Standard
Customer	MIS development	Interview	All employees	Descriptive	According to Hospital needs ¹⁶
	Patient Satisfaction	Questionnaire	Purposive random sampling	Validity test Reliability test Gaps analysis	There are no gaps
	Patient connectivity	Observation	Data on prescriptions and outpatient visits for 2019 - 2021	The percentage of polyclinic outpatient prescriptions purchased at the Pharmacy Installation was calculated	100%

Table II. Overall Performance Measurement Results of the RSI 'Aisiyah Nganjuk Pharmacy Installation

Perspective	Indicator	Measurement Results			Standard
		2019	2020	2021	
Financial	ITOR	5,84	4,01	4,63	8-12 rounds ¹⁰
	GPM	33,26	43,67	34,23	20-33% ³
	GROS	0,13	-0,18	0,02	≥ 10% ³
Internal Business Processes	Medicine availability level	99,94	99,75	99,94	76 - 100% ¹¹
	Average length of medicine preparation time (dispensing time)	Compounded = 43,10 minutes Non Compounded = 24,40 minutes			≤ 60 minutes ¹² ≤ 30 minutes ¹²
	No incidents of medication errors	100%			100% ¹²
	Completeness of Medicine Information Service	Medicine Information Services based on WHO = 34,54% Additional information = 46,98%			100% ¹³
	Employee Satisfaction	2,99 (High)			Very high ¹⁴
Growth and Learning	Employee morale	3,03 (High)			Very high ¹⁴
	Employee productivity level	Directly productive = 75,33% Indirectly productive = 12% Personal Activities = 9,33% Non Productive = 3,33%			75% ³
	Employee turnover	8	14,29	-14,29	5 - 10%/year ¹⁵
Customer	MIS development	Management needs have yet to be met.			According to Hospital needs ¹⁶
	Patient Satisfaction	There is a significant difference between the patient's perceived performance and the desired expectations (not satisfied)			Satisfied
	Patient connectivity	87,77%	87,16%	87,05%	100%

the Airlangga Hospital Pharmacy Installation in Jombang, amounting to 9.61 rounds in 2016, 8.22 rounds in 2017, and 7.94 rounds in 2018. The higher the ITOR value, the more efficient medicine management, if the ITOR value is low, it means there is still a lot of unsold medicines stock, which results in excess medicine inventory.¹⁷ Based on the results of interviews with the pharmaceutical supplies management coordinator, the low inventory turnover in 2019 occurred due to excess inventory in the operating room. In 2020 and 2021, inventory turnover will be lower because, apart from dead stock and slow-moving medical equipment in operating rooms, it is also due to the accumulation of medicines in warehouses, where the purchase value of pharmaceutical supplies

increases but is not accompanied by good management and distribution. The excess inventory of pharmaceutical supplies was caused by the COVID-19 pandemic in 2020-2021, resulting in a decrease in the number of hospital patients because RSI 'Aisyiyah Nganjuk did not serve COVID-19 patients. Inventory turnover can be increased by increasing sales without increasing inventory, reducing slow-moving drug inventory, and improving inventory control.

The results of the Gross Profit Margin at the RSI 'Aisyiyah Nganjuk Pharmacy Installation were above the standard GPM value of 20-33%, but there was quite significant fluctuation, especially in 2020 and 2021, which experienced a decline. In 2021, although it still meets standards, there will be a significant decrease in GPM compared to 2020. Based on the results of interviews with the head of the Pharmacy Installation, it was stated that in 2021, there will be changes to the drug discount payment system, which will result in an increase in operational costs and an impact on the price of goods sold. The results of the GPM value in this research were higher compared to similar research, namely Rachmawati¹⁸ research at the Nganjuk Regional General Hospital Pharmacy Installation, amounting to 34% in 2014, 32.06% in 2015, and 10.20% in 2016.

The 2019-2021 GROS value is far below the standard GROS value in Indonesia. This shows that the RSI 'Aisyiyah Nganjuk Pharmacy Installation needs to increase sales well. According to the head of the Pharmacy Installation, the factors that influenced the decline in GROS in 2020 were because there had been an increase in COVID-19 cases and RSI 'Aisyiyah Nganjuk had not yet become a COVID-19 referral hospital, so there was a decrease in the number of patients. The GROS value in 2021 does not yet meet standards in Indonesia. It has only reached 0.02% but has increased compared to 2020. Based on the results of interviews with the head of the Pharmacy Installation, this increase in the GROS value is because, in 2021, RSI 'Aisyiyah Nganjuk started serving COVID-19 patients even though only two beds were available. Efforts can be made to increase GROS by increasing patient connectivity, the availability of medicines, and infrastructure that supports the quality of service, which will increase the number of patients. The GROS value results in this study are lower than the research of Indrayanti et al.³ at the Pharmacy Installation of Airlangga Hospital Jombang, namely 22.50% in 2016 and 5.04% in 2018, and much lower than similar research at hospital competitors in Nganjuk, namely Rachmawati¹⁸ research at the Nganjuk Regional General Hospital Pharmacy Installation, namely 27.61% in 2014, 102% in 2015 and 20.50% in 2016 so that the RSI 'Aisyiyah Nganjuk Pharmacy Installation must be more optimal in running efforts to increase GROS.

Internal Business Processes Perspective

Based on the research results, the level of medicine availability at the RSI 'Aisyiyah Nganjuk Pharmacy Installation has yet to reach 100% but shows quite good results compared to the standard 76-100%.¹¹ Based on observations and interviews with the pharmaceutical supplies management coordinator, several factors causing the level of medicine availability not to be 100% is due to empty pharmaceutical supplies in the Pharmacy Installation warehouse, empty goods from distributors, and delays in delivery of goods from distributors. Determining the time between placing an order and delivery time (lead time) to avoid delays in delivery and strengthening commitment to cooperation with medicines distributors, especially regarding delivery times, needs to be done to increase medicine availability. In the results of this study, although the level of medicine availability has not reached 100%, the level of medicine availability shows quite good results when compared with the standard 76-100%.¹¹ and when compared with similar research with similar measuring instruments carried out at the Aventura Hospital Pharmacy Installation from November 2019 to October 2020, where medicine availability was less than 100%, namely 93.30% due to empty pharmaceutical supplies in the Pharmacy Installation warehouse which was the cause mainly, empty pharmaceutical supplies from distributors and prescription of non-formulary medicines due to doctors' non-compliance in writing prescriptions according to the formulary.¹⁹

The average length of medicine preparation time (dispensing time) at the RSI 'Aisyiyah Nganjuk Pharmacy Installation for compounded and non-compounded has met the Minister of Health's standards, namely ≤ 60 minutes for compounded and ≤ 30 minutes for non-compounded¹² but for compounded medicine services it still takes longer when compared with Gagola's²⁰ research entitled Measuring the Performance of Pharmacy Installation at the Liun Kendage Tahuna Regional Hospital using the Balanced Scorecard Approach 39.48 minutes, while the dispensing time for non-compounded medicines is faster 28.45 minutes. The average waiting time for medicine services in this study, both compounded and non-compounded, is longer compared Indrayanti et al.³ research, entitled Performance Analysis in the Context of Preparing a Strategy Map for Pharmacy Installations at Airlangga Hospital Jombang using the Balanced Scorecard Approach with a waiting time for compounded medicines of 24 minutes and the waiting time for non-compounded medicine is 18 minutes. Based on the results

of interviews with the head of the Pharmacy Installation, the dispensing time is longer compared to the research above due to patient visits at the Pharmacy Installation at the same time, which is caused by the same polyclinic opening hours, the location of the Pharmacy Installation and the cashier are not side by side, causing patients have to go back and forth, unavailability of medicines, there are problems with prescriptions, lack of human resources, bridging has not been carried out between MIS Hospital and the Social Security Agency on Health online pharmacy, the space is narrow which affects the staff's space for movement. Efforts that the Pharmacy Installation can make to reduce waiting time are by increasing the number of human resources according to the workload, implementing electronic prescriptions, bridging MIS Hospital with the Social Security Agency on Health online pharmacy, bringing cashiers closer to the Pharmacy Installation, expanding and adding facilities and infrastructure to speed things up service. A temporary effort that can be made before adding human resources is to modify employee schedules by maximizing the number of employees during peak hours.

Measuring the absence of medication errors shows that the absence of medication errors occurring at the RSI 'Aisyiyah Nganjuk Pharmacy Installation is 100% by the standards set out in the Minister of Health's Regulation that the rate of absence of medication errors 100%, which indicates that there were no errors in administering the medicine.¹² According to the head of the pharmacy installation, employees at the pharmacy installation have instilled discipline in providing services and medication as well as carrying out double checks or repeated examinations by different people before the medication is handed over to the patient. Achieving results of 100% absence of medication errors can be maintained by improving the quality of human resources through regular education and training on pharmaceutical services, periodically reviewing all pharmacotherapy carried out by pharmacists and other drug-related health professionals, increasing officer compliance in filling out complete requests medication, ensuring clarity of medication instructions.²² The results of this study are different from the research of Fatimah et al.²³ at Hospital X Cilacap. The results of medication errors were obtained from the medication error prescribing stage 30,46 %, transcribing stage 11,50%, dispensing stage 25,00%, and administration stage 1,28%, so the rate of no medication error incidents at RSI 'Aisyiyah Nganjuk needs to be maintained.

Based on observations, medicine information services show that only 34.54% of medicine information services delivered are based on WHO standards. Based on the results of interviews with the head of the pharmacy installation, this is because there are two medicine information service standards according to WHO that are not implemented at the RSI 'Aisyiyah Nganjuk Pharmacy Installation, namely information services regarding recommendations not to share with others and warnings to keep it out of reach of children. Two standards for medicine information services need to be implemented because the services of medicine information at the RSI 'Aisyiyah Nganjuk Pharmacy Installation refer to the standards set by the Ministry of Health in the Regulation of the Minister of Health. Based on the Minister of Health Regulation, the ideal place for delivering medical information is in a separate room equipped with information sources and information technology.²⁴ However, at the RSI 'Aisyiyah Nganjuk Pharmacy Installation, medicine information is still provided at the medicine delivery counter, so it is necessary to have a particular room for medicine information services to protect patient privacy.

Growth and Learning Perspective

The level of employee job satisfaction in this research was in the high range. The employee job satisfaction statement that shows very high results is employee satisfaction with the relationship with the head of the pharmacy installation, and the other statements show a high average value. The results show that employee satisfaction with the RSI 'Aisyiyah Nganjuk Pharmacy Installation is reasonable or high. A high level of employee job satisfaction is expected to increase productivity, service quality, and patient satisfaction with pharmaceutical services.²⁴ In the statement item, satisfaction with the service money obtained is in the high range but has the lowest value compared to the values in the other statements. According to respondents' responses during interviews, the honorarium they receive is not commensurate with their current workload. According to observations made during the research, the high workload is due to the pharmacy installation not having sufficient resources to meet needs, namely only having 61.9% of the total human resource requirements. The results of the employee satisfaction assessment in this study show a lower average value range of 2.99 compared to Agow, et al.²⁵ research at the Manado Advent Hospital Pharmacy Installation with an average score of 3.06.

Employee morale has high average results so it can influence the performance of the RSI 'Aisyiyah Nganjuk Pharmacy Installation. The very high employee morale is the statement that employees feel satisfied if the work can be completed on time, and the lowest is the statement that employees never think about moving work to

another place and, if possible, employees do not do additional work. The results of this research on employee morale are lower than those of Saharuddin et al.²² at the Pharmacy Installation at Parikesit Tenggara Kutai Kartanegara General Hospital. Based on the results of interviews with the pharmaceutical service coordinator, this is due to the high workload of pharmacy installation employees, so it is necessary to re-evaluate the job description and employee income. According to Satibi et al in Sumiati.¹⁴ work morale is supported by the suitability of each employee's job description and is also influenced by the employee's income being appropriate by their duties, authority, and position. A person's work enthusiasm will increase more if the sources come from within himself and not simply because there is a reward to be received. Work enthusiasm comes from within oneself, namely loyalty or fidelity to one's work and organization, which will provide prosperity and security at work.²⁶ The head of the RSI 'Aisyiyah Nganjuk Pharmacy Installation, provided encouragement and motivation by exchanging ideas about the obstacles to patient care in the pharmacy installation to further increase employee morale and cohesion.

The level of work productivity at the RSI 'Aisyiyah Nganjuk Pharmacy Installation with direct productivity is 75.33%. According to Sulistyningrum et al in Indrayanti et al.³, the level of productivity is good if the utilization of direct productive work time reaches 75%, so it can be said that the level of productivity at the RSI 'Aisyiyah Nganjuk Pharmacy Installation is good. Based on the results of the interviews, direct productive activities are high because there is a shift schedule that is adjusted to the busy times of visitors to the pharmacy installation, so officers do not have time to carry out non-productive activities. Direct productive and indirect productive activities can be further improved by improving and optimizing the use of information technology in the RSI 'Aisyiyah Nganjuk Pharmacy Installation so that several indirect productive activities carried out manually can be replaced using information technology. This research shows higher results when compared with research by Indrayanti et al.³ at the Airlangga Jombang Pharmacy Installation, which showed that 75% of employees used their time for direct productive activities.

Employee turnover at the RSI 'Aisyiyah Nganjuk Pharmacy Installation in 2019 met the standard of 8.00%, in 2020, it exceeded the standard, namely 14.29%. The employee turnover value is said to be low if it is below 5% every year, it is called regular if it is in the range of values between 5-10% per year, and it is called high if it is more than 10% every year.¹⁵ Ratna Hidayati et al.¹⁵ research in 2019 showed a turnover value of 0%, lower compared to this research in 2019, namely 8%, while in 2020, it showed a value of 13.8%, also lower than this research in 2020, namely 14.29%. Based on the results of interviews with the head of the Pharmacy Installation, in 2020, there were three new employees and one employee who was transferred to another installation because he married a fellow employee in the same room, by hospital regulations, he had to be transferred, whereas in 2021 employee turnover fell below the standard is -14.29 because in 2021 two employees are leaving the Pharmacy Installation, namely one person was accepted as a government employee and one person did not renew their contract because they were married. Several strategies that pharmacy installations can implement to ensure turnover meets standards are providing motivation, appropriate compensation, career clarity, and improving recruitment.

Research regarding the development of MIS was carried out using direct interviews with coordinators of clinical pharmacy services and management of pharmaceutical supplies. Based on the results of an interview with the Head of the Pharmacy Installation regarding MIS, it was stated that the Pharmacy Installation already uses an MIS integrated with all rooms in the Hospital, which are limited by access rights. Hospitals have also tried to use electronic prescriptions for outpatients, but the implementation could be more optimal because several polyclinics still need to comply with using electronic prescriptions. Several other efforts that the Hospital has made include the use of a prescription service queue system with an integrated online queue system starting from the patient registration queue to the medicine queue at the Pharmacy Installation, which can be seen directly by patients on the patient queue monitor screen at the Pharmacy Installation. The queuing system is also integrated with the Health online queuing system so that the Social Security Agency on Health can monitor hospital patient response times. In line with the demands of laws and regulations regarding Health Information Systems in Health Service Facilities and the Minister of Health's Regulation on Medical Records.¹⁶ as well as demands from third parties who collaborate with hospitals, the use of the Pharmacy Installation MIS must be optimized, developed and needs to be updated. According to Sumiati¹⁴ MIS support in medicine management is crucial for determining strategic decisions on medicine selection, procurement, and inventory control. The inventory control process for pharmacy installations is essential because it can affect the services of hospital pharmacy installations.

Customer Perspective

Measurement of patient satisfaction is carried out by analyzing performance scores and expectation score analysis to find out the outpatient assessment of the quality of service at the RSI 'Aisyiyah Nganjuk Pharmacy Installation according to what is felt by the patient and to find out the extent of patient expectations regarding the service quality of the RSI 'Aisyiyah Nganjuk Pharmacy Installation. Significant differences between the performance sample scores and expectations are measured by measuring gap analysis. A gap analysis using the Wilcoxon test with non-parametric statistical methods was carried out. The test result criteria are that the performance and expectation scores are significantly different if the significance value is smaller than 0.05. Conversely, there is no real difference if the significance value is more significant than 0.05. Based on the results of statistical tests using the Wilcoxon test, a significance value of 0.043 was obtained in this research. This significance value is smaller than 0.05, so it can be concluded that there is a significant difference between the performance perceived by respondents and the expectations desired by respondents this means that patient satisfaction with the performance of the Pharmacy Installation has not been achieved and still needs to be improved. The results of this research are inversely proportional to Indrayanti et al.³ research at the Airlangga Hospital Pharmacy Installation in Jombang, which had statistical test results using the Wilcoxon test with a significance value of 0.893, which was more significant than 0.05. The results of the average score for each dimension of service quality between performance and expectations can be seen in Table III.

Based on the research results, data showed that there are gaps in all dimensions, so it can be said that the tangible, reliable, responsiveness, assurance, and empathy services at the RSI 'Aisyiyah Nganjuk Pharmacy Installation are still not in line with what outpatients expect. A negative value indicates that the patient's expectations have not been met, so the higher the negative value, the higher the patient's expectations have not been met.²⁷ These differences in dimensions often cause patient disappointment, even though staff have implemented standard operational procedures well. Therefore, customer satisfaction needs serious attention because it can determine subsequent preferences when choosing health service facilities.²⁸

The results of the patient network research based on data on the number of patients registered at the polyclinic and the number of prescriptions served at the Pharmacy Installation with the assumption that one patient receives one prescription shows that the patient network level at the RSI 'Aisyiyah Nganjuk Pharmacy Installation has not yet reached 100%. Based on the results of interviews with the head of the Medical Records Installation and the head of the Pharmacy Installation, this is because the data on the number of patients registering at the outpatient clinic is the total number of outpatient polyclinic patients for all types of medical needs, including patients who only require treatment, but do not require medication prescription to be redeemed at the Pharmacy Installation. Based on observations during the research, the low level of patient connectivity, apart from the factors above, is also due to the use of electronic prescriptions, which is not yet optimal, so patients bring their prescriptions from the polyclinic to the Pharmacy Installation, which has the potential for patients not handing over the prescription to the Pharmacy Installation, but immediately taking it home and redeeming it at the pharmacy, pharmacy outside the Hospital to avoid queues at the Hospital, especially at certain times when the polyclinics are open at the same time, which causes a buildup of queues at the pharmacy installation. The number of patient connectivity in this study showed lower results compared to similar research by Sulistyningrum et al.²⁹ at the Pharmacy Installation of Regional X General Hospital with patient connectivity of 99%.

SWOT Analysis Results

Strength, Weakness, Opportunity, and Threat (SWOT) analysis was carried out on the strengths and weaknesses as well as opportunities and threats to the RSI 'Aisyiyah Nganjuk Pharmacy Installation based on the results of the balanced scorecard measurement. The SWOT analysis results based on internal and external conditions, linked to the performance analysis results based on the balanced scorecard, show that the RSI 'Aisyiyah Nganjuk Pharmacy Installation has significant strengths and opportunities to suppress weaknesses and threats. The following are the results of the SWOT analysis of the RSI 'Aisyiyah Nganjuk Pharmacy Installation, listed in Table IV.

The development strategy that Pharmacy Installations can carry out is to use the S-O (Strength - Opportunity) strategy, namely by utilizing all strengths to seize and exploit existing opportunities. The strategy that can be used from the results of this research is the same as the strategy from Sugiono et al.³⁰ research at the Pharmacy Installation at Baptist Batu Hospital, which shows that the Hospital is in quadrant one, namely that the Hospital is implementing a strategy that leads to growth, which can be interpreted as saying that the Hospital is in a perfect position so that it can rely on its strengths to develop rapidly.

Table III. Average Service Quality Dimension Score Between Performance and Expectations

No	Dimensions of Service Quality	Performance	Expectations	Gap
1	Tangible	3,23	3,67	-0,44
2	Reliability	3,21	3,64	-0,43
3	Responsiveness	3,19	3,70	-0,51
4	Assurance	3,29	3,68	-0,39
5	Empathy	3,19	3,65	-0,46

Table IV. SWOT Analysis Results of RSI 'Aisyiyah Nganjuk Pharmacy Installation

IFAS	STRENGTH (S)	WEAKNESS (W)
	<ol style="list-style-type: none"> 1. There is a vision and mission 2. There are regulations 3. There is a clear description of duties, responsibilities, and authority 4. The Hospital is accredited 5. Procurement of medicines in collaboration with KSMT so that you get cheaper prices 6. High medicine availability 7. Waiting time according to standards 8. High employee morale, satisfaction, and work productivity 9. Medication error rate 0% 10. GPM value exceeds the standard 11. Improved customer-oriented services 	<ol style="list-style-type: none"> 1. Inventory turnover is not optimal 2. Facilities and infrastructure are not yet optimal 3. High employee turnover 4. Lack of human resources and human resources knowledge 5. MIS hospital utilization is not optimal 6. The medicine information service is incomplete 7. Sometimes, there is a delay in the delivery of KSMT medicine because the discount application is still in the process 8. The parking space is not large enough 9. The waiting room is not comfortable
EFAS	S-O STRATEGY	W-O STRATEGY
OPPORTUNITY (O)	<ol style="list-style-type: none"> 1. Increase officer compliance in implementing regulations 2. Increase ability to carry out pharmaceutical activities with education and training 3. Improve the quality and quantity of human resources 4. Distribution of job descriptions according to qualifications 5. Providing rewards and punishments 6. Improve facilities to support services 7. Optimize drug availability by collaborating with other pharmacy services 8. Maintain good relations with third parties 9. Optimize medicine delivery services 10. Increase the number of patient visits 	<ol style="list-style-type: none"> 1. Improve medication management effectively and efficiently 2. Optimizing MIS hospital utilization 3. Improve employee education and training 4. Complete facilities and infrastructure 5. Increase compliance with the formulary 6. Optimize cooperation with third parties 7. Inventory control
<ol style="list-style-type: none"> 1. Service is open 24 hours 2. Serving patients with Social Security Agency on Health, Social Security Agency on Employment, Jasa Raharja, and other insurance 3. Referral hospital Covid-19 4. There is an online registration and a queue 5. Good patient satisfaction 6. Has a medicine delivery service 7. There is an MOU with other pharmaceutical services. 8. Good relationship with distributor and other third parties 		

Table IV. (Continued)

<p>IFAS</p> <p>EFAS</p>	<p>STRENGTH (S)</p> <ol style="list-style-type: none"> 1. There is a vision and mission 2. There are regulations 3. There is a clear description of duties, responsibilities, and authority 4. The Hospital is accredited 5. Procurement of medicines in collaboration with KSMT so that you get cheaper prices 6. High medicine availability 7. Waiting time according to standards 8. High employee morale, satisfaction, and work productivity 9. Medication error rate 0% 10. GPM value exceeds the standard 12. Improved customer-oriented services 	<p>WEAKNESS (W)</p> <ol style="list-style-type: none"> 1. Inventory turnover is not optimal 2. Facilities and infrastructure are not yet optimal 3. High employee turnover 4. Lack of human resources and human resources knowledge 5. MIS hospital utilization is not optimal 6. The medicine information service is incomplete 7. Sometimes, there is a delay in the delivery of KSMT medicine because the discount application is still in the process 8. The parking space is not large enough 10. The waiting room is not comfortable
	<p>THREAT (T)</p> <ol style="list-style-type: none"> 1. Development of private hospitals and clinics 2. Decrease in the number of patients 3. Patient connectivity is not optimal 4. Competition with other Pharmacy Installation 5. Customer demands speed of service and availability of medicines 6. The prescribing doctor is still a partner doctor 9. The hospital type is still D. 	<p>S-T STRATEGY</p> <ol style="list-style-type: none"> 1. Improve employee performance 2. Provide medicine prices that can compete with competitors 3. Speed up waiting time for drug services 4. Minimize the incidence of medication errors 5. Redesign the pharmacy service flow

Strategy Map

The basis for compiling a strategy map that can be implemented to improve the performance of the RSI 'Aisyiyah Nganjuk Pharmacy Installation is the problems and research results on indicators from four perspectives using a balanced scorecard approach. The development strategy that can be carried out by the RSI 'Aisyiyah Nganjuk Pharmacy Installation starts from a growth and learning perspective. A reward system for employees who have good performance is essential as a motivation for employees to create healthy competition between employees so that it will have an impact on increasing employee morale and job satisfaction, which will automatically increase employee commitment and loyalty to the organization so that employee turnover rates will decrease with the outcome obtained, namely increasing work results. Increasing work output can also be done by improving employee education and training and increasing employee productivity, where increasing productivity can be done by increasing the MIS hospital, dividing job descriptions according to qualifications, and adding staff as needed.

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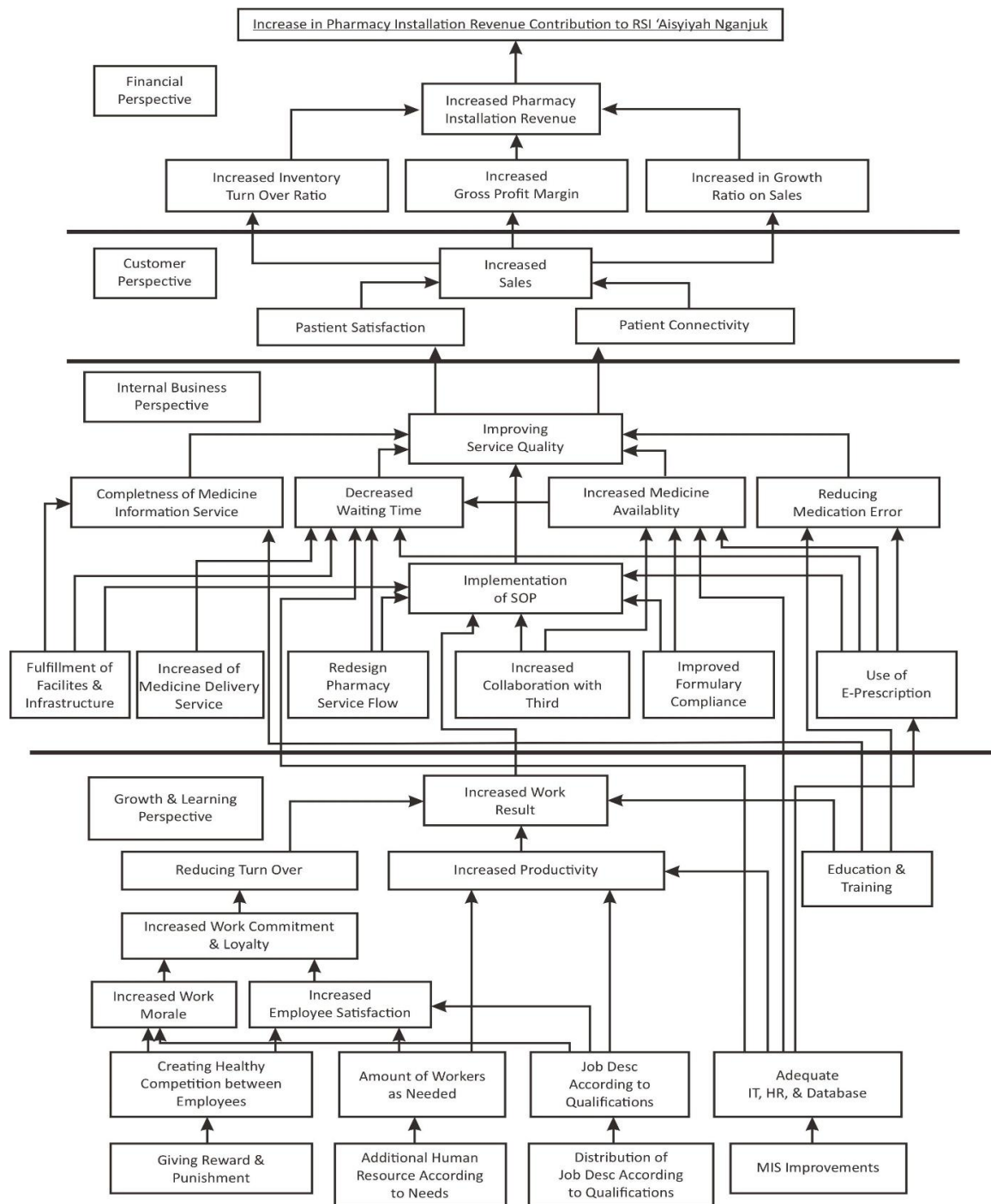


Figure 1. RSI 'Aisiyah Nganjuk Pharmacy Installation Strategy Map

Increasing work results from a growth and learning perspective will influence improving service quality from an internal business perspective with the implementation of SPO. Other efforts to improve service quality from an internal business perspective are the completeness of medicine information service, which must be supported by the fulfilment of facilities and infrastructure and MIS hospital, reducing waiting times, which must be supported by improving facilities and infrastructure, improving drug delivery services, redesigning service flow, use of electronic prescribing, education and training of staff, and increased availability of medications. Increasing medicine availability must also be supported by increased collaboration with third parties, increased formulary compliance, the use of electronic prescriptions, and staff education and training. Reducing medication

errors supported by electronic prescriptions and staff education and training can also improve service quality. Based on research by Wicaksono in Indrayanti et al.³ it is stated that to improve the quality of human resources as Pharmacy Installation employees, that is by not forget employee welfare so that the reciprocity given to customers is good because they have received good welfare from the company.

Improving service quality from an internal business perspective is expected to increase patient satisfaction and connectivity, which will impact increasing sales. It cannot be denied that currently, customer satisfaction is a factor that determines the success of hospitals, especially pharmacy installations, in maintaining and improving their performance due to increasingly tight competition. If patient satisfaction increases, the level of patient connectivity will also increase. Increased sales will significantly influence the increase in ITOR, GPM, and GROSS, automatically increasing Hospital Pharmacy Installations income. The strategy map for the RSI 'Aisyiyah Nganjuk Pharmacy Installation using the Balanced Scorecard approach can be seen in Figure 1.

The limitations of this research are the need for more awareness of outpatient respondents in participating in filling out questionnaires according to the actual situation and the varying levels of education of patients and patient families, so they have different understandings and need assistance. Suggestions for future researchers are that the results of this research be developed into other indicators that are appropriate to environmental conditions, such as a financial perspective: Net Profit Margin (NPM), medicine indicators with expired dates, internal business perspective: supplier evaluation, growth and learning perspective: employee training, customer perspective: customer loyalty and others.

CONCLUSION

The results of performance analysis research at the RSI 'Aisyiyah Nganjuk Pharmacy Installation using the four perspectives Balanced Scorecard approach show that the financial perspectives of ITOR and GROS do not meet standards. ITOR in 2019 (5.84%), 2020 (4.01%), 2021 (4.63%). GROS in 2019 (0.13%), 2020 (-0.18), 2021 (0.02%). GPM exceeds the standard in 2019 (33.26%), 2020 (43.67%), 2021 (34.23%). The internal business perspective shows that the level of medicine availability has yet to reach 100%, completeness of medicine information services is 34.54%, dispensing time for compounded medicine is 43.10 minutes, and non-compounded is 24.40 minutes. There are no medication errors at 100. Growth and learning perspective, high job satisfaction, employee morale and productivity, and high employee turnover, but we need to develop a management information system. The S-O (Strength – Opportunity) strategy is the correct strategy map for development.

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STATEMENT OF ETHICS

The research received Ethical Clearance from the Health Research Ethics Committee of RSUD Dr. Moewardi on 2 September 2022 Number: 1.154/IX/HREC/2022.

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