CHAPTER 1 CURRENT TRENDS IN ECONOMIC DEVELOPMENT

PERFORMANCE MEASUREMENT OF DEPARTMENT OF HEALTH, WEST ACEH DISTRICT USING BALANCED SCORECARD ANALYSIS

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Abstract. This study aims to analyze the performance rating of the West Aceh District Health Office through 4 perspectives using the Balanced Scorecard approach as a measuring tool. The study approach is quantitative approach. The data analysis method used in this study is to calculate the ratio from the four perspectives of the balance scorecard to measure performance. The results of the study show that the performance of the financial perspective during 2016, 2017 and 2018 is not good. The service perspective shows a good performance value for 3 consecutive years. In 2016 and 2018 for internal bussines processes perspective internally shows the results of the performance was good, but for 2017 the results showed a quite good performance. Meanwhile, the human resource perspective shows that only in 2017 the West Aceh District Health Office performed well, but in 2016 and 2018 the results of the study showed that the performance was quite good. Overall, the accumulated value of performance measurement balanced scorecard of DHO Aceh Barat showed healthy performance for 2 years (showing 2,8 points in 2016 and 2,9 points in 2017 with healthy performance category standard values $\geq 2,8$ points) but for 2018 the results show less healthy performance (showing 2.7 points).

Keywords: Balanced Scorecard, Performance, Health Services, Health Office, Balanced Scorecard Perspective.

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Introduction. To meet the basic health needs of all levels of society, the government undertakes one of the efforts, namely by providing public services in the health sector. Public services in this sector can be provided through the Community Health Center (puskesmas) as one of the technical service units (UPTD) at the Health Office which assists the government in health development (Bappenas, 2018).

The government must face several obstacles and challenges in providing health services. The society still often find problems getting health services. Problems in health services are not only faced by the Indonesian government. As an example of the health service problems faced in Turkey. Some of the problems that are often faced by Turkish people include obtaining health services, namely high costs, expensive medicine, inadequate number of health workers and positive attitude of officers (Gurluo & Duygu, 2019). Survey result of Mercer Marsh Benefits conducted in 2018 Medical Trend Around The World revealed that in Indonesia the most expensive fee for the medical expenses is hospital expenses including operating room, inpatient rooms and inpatient equipment rental costs (Handayani, 2019).

Literature Review. The main problem for the public sector is managing health care costs and to get fair and good quality health services (Deloitte, 2014). When compared to other industries, the health industry is a very expensive industry because current medical practices require more use of modern medical technology and tests (Boon, 2002). Most health agency spend millions of dollars on buying and upgrading their medical equipment.

Patients who want to get health services in China have to go through long waiting times to get health services because of the complex operational processes and various patient conditions (Huang, Chen, Yang, Chang & Lee, 2004). This situation also occurs in Aceh, there are still people who feel they do not get the health services they wish. In Anasril study (2018) reveals there are 60 % of patients visiting health centers say they get services that are not satisfactory and 40% of patients revealed they often do not get the information in detail about their illness.

Patients dissatisfaction and increase patient complaints against health services will affect the performance of health institutions (Yuen, 2012). Gurd, B., Gao (2008) showed that patient satisfaction is a main indicator in internal processes and health services towards patients affect patient loyalty and it will lead to sustainability of the health institutions in a competitive environment. Thus, Silow-Carroll (2008) emphasizes the need for better performance measurement for health agencies.

Performance is the level of achievement of a program of activities or policies in realizing the vision, mission, and goals of the organization as stated in the form of strategic planning. An accurate and efficient performance measurement system is very useful for managers as a tool to monitor, control, and improve the quality of health service performance (Lin, Liu, & Wang, 2013). Performance can be measured if individuals or groups have set standards or criteria as a measure of success (Moeheriono, 2012). Organizations usually measure performance using a financial perspective only. This measurement cannot measure performance as a whole because it cannot show what the company needs to do in the present and in the future. Financial information, patient satisfaction, the ability to process innovation and other non-financial information are needed in measuring performance in health institutions (Lin et al., 2013).

Kaplan and Norton (2001) suggest performance measurement using a *balanced scorecard* through four perspectives. In their study, they found that performance measurement using the *balanced scorecard* is the most effective measurement of performance. The four perspectives are finance, customers, internal business processes, and learning and growth. *The balance scorecard is* considered as the most suitable framework capable of providing significant information relating to internal and external organizational factors that will further contribute to organizational success. The use of the *balance scorecard* as a more accurate performance measurement system by considering financial and non-financial aspects is expected to be the right solution in optimizing performance measurement tool has been shown to improve patient safety and improve the quality of treatment for patients so as to reduce the incidence and injury of elderly cancer patients (Tsai et al., 2017).

Balance scorecard can provide an advantage in more accurate performance measurement results because it measures from the perspective of finance, customers, internal business processes, and learning and growth.

This article discusses the results of study that developed several previous studies conducted by Febriana (2012), Anshori (2018) and is a replication of study conducted by Marwal and Abdullah (2018). This study is different from previous study, namely this study uses secondary data as a source of research data and does not use primary data in the form of a questionnaire.

Performance. Performance is often defined as an organizational activity over a measured and agreed period. Performance is considered as a work achievement that can be achieved by someone (Mangkunegara, 2009). Performance can also be interpreted as a series of behaviors in individual activities to achieve the expectations or objectives within an organization (Lamatenggo & Hamzah, 2012). Thus performance is the level of achievement, result or achievement of an activity or program and policy in an organization.

Performance measurement is important to do so that the achievement of the goals and objectives that have been achieved can be known. Performance measurement means a process of assessing the achievements that have been carried out against the planned targets, including information and efficiency in using human resources in producing services and goods (Moeheriono, 2012). Performance measurement can be used as communication tools between employees and managers and aims to ensure that employees and managers in achieving, monitoring performance has been achieved and what has been planned (Tangkilisan, 2005).

The results of performance measurement can be a contribution to the progress and success of a company to achieve the planned targets when the results of these measurements become the basis for decision making and evaluation of the performance of employees and management involved in company activities (Nugrahayu & Retnani, 2015).

Some researchers consider the appropriate measurement to measure the performance of internal and external factors is to use a *balanced scorecard*. *The balanced card* is also an integrated measurement and provides a comprehensive operational description of the company. This approach has a more widely used by companies in Indonesia, not only for manufacturing, but also a service company or public sector organization (Oemar, 2010). The goal to be achieved in assessing the performance of public sector organizations is to assist managers in achieving the organizational goals set using non-financial and financial aspects. The performance is easier to achieve when there is reward and punishment in the organization (Mardiasmo, 2018).

Balanced Scorecard. Robert Kaplan and David Norton introduced the concept of a *balance scorecard* as a tool to measure organizational performance that is more balanced by adding non-financial performance as a performance measurement tool that is better than traditional performance measurement which only measures organizational performance from the financial aspect (Shukri & Ramli, 2015). The *balance scorecard* application can be applied to organizations either with business goals or organizations with non-profit goals or public sector organizations by modifying several performance measurement indicators according to the organization (Kaplan & Norton, 2001a).

Performance measurement in public health sector organizations with the *Balanced Scorecard is* able to present a more structured and comprehensive picture compared to traditional systems that are still in use today. The use of the *Balance Scorecard* concept is expected to reduce weaknesses in performance measurement which is only oriented to the financial aspect (Anshori, 2018).

The balanced scorecard is a score card that is useful for recording a person's performance score in a balanced manner using two perspectives, namely financial and non-financial perspectives, both short and long term (Erick Norman Tomasoa & Simanjuntak, 2018). The purpose of using the *balanced scorecard* according to Mohamad, Rasul and Umar (2004) is to clarify the company's vision and strategy, communicate strategic objectives, prepare targets, and increase feedback for strategic decision making and the learning process.

The Scorecard Balance Perspective. There are four perspectives used in measuring performance with balance scorecard analysis, namely:

1. Financial Perspective. Men sort Hansen and Mowen (2009) financial perspective set a goal of short-term financial performance and long-term. Financial growth has two strategic themes, namely: revenue growth, cost changes. From this perspective, criteria such as the rate of return on investment, shareholder value, profitability, revenue growth and unit costs will be determined, so as to demonstrate the strategic success of the organization (Shukri & Ramli, 2015). The assessment of the company's financial performance is related to the assessment of profitability, which is the company's ability to generate profits in one period (Nugrahayu, ER, & Retnani, 2015).

2. Customer Perspective. The customer perspective describes the internal ability to improve product performance, innovation, and technology in understanding market tastes. This perspective really requires market research in order to know the market situation (Rumintjap, 2013). According to Hansen and Mowen (2009) the customer perspective is defined as a component that is a source of income. This perspective describes how to select customers and market segments in which the company will compete. According to Kaplan and Norton (1996) not all customers have the same capabilities and conditions. Companies have different desires and tastes for products and services.

3. Internal Business Process Perspective. The third perspective of the balanced scorecard is internal business processes perspective. Kaplan and Norton (2001) state that this perspective explains how companies assess all activities that the company carries out in the form of manager or employee activities in creating a product that will provide customer and shareholder satisfaction.

4. Growth and Learning Perspectives. According to Kaplan and Norton (1996) retaining employees is important for the company. In achieving the three perspectives above, the company must monitor the welfare of employees and increase employee

knowledge and insight. This is because by increasing knowledge, employees will participate in achieving company goals. This fourth perspective is the ability that aims to develop the organization. According to Gaspersz (2013), the growth and learning perspective has the goal of achieving excellence in the three perspectives above.

Strengths and Weaknesses of the *Balanced Scorecard.* Kaplan and Norton (2001) state that there are five advantages of the *balanced scorecard*, namely:

- 1. *The balanced scorecard is* able to observe the long -term and short term performance of the organization.
- 2. *The balanced scorecard is* able to show a relationship in a causal relationship including financial and non- financial measures.
- 3. *The balanced scorecard* includes a driver in achieving financial goals. Progress in building the company's future capabilities is always considered in addition to the company's main goal of seeking profit.
- 4. *The balanced scorecard* pays attention to important aspects from the external side of the company, for example the customer does not only pay attention to the internal side of the company.
- 5. *The Balanced Scorecard* can be used as a strategic management framework, not just a performance measurement system.

In practice the application of *balanced scorecard* is not as easy as one might think. Because the implementatin of the *balanced scorecard* requires full commitment from top management. According to Atkinson, Kaplan, Matsumura and Young (2012) inserting a new management system into an organization is very difficult, so there are several weaknesses of the *balanced scorecard*, namely:

1. No commitment from top management.

- 2. The scorecard does not flow down his responsibility.
- 3. *The scorecard* is over-designed.
- 4. The balanced scorecard is treated as a consulting system.

Aims. The purpose of this study was to measure the performance of the Aceh Barat District Health Office from a financial perspective, a customer perspective, an internal business process perspective and a learning and growth perspective.

Methods. This study uses quantitative methods with an emphasis on objective phenomena. The study design was formed using numbers and controlled experiments. This study is included in non-experimental research, namely study with descriptive quantitative methods (Syamsudin & Damiyanti, 2011). The unit of analysis is an organization, namely the West Aceh District Health Office. This study uses secondary data sources, namely data obtained from the Health Office of West Aceh district in the form of organizational profiles, as well as literature research, literature, journals, articles, magazines, and literature related to the subject of writing, especially Statistical Reports (BPS) and Financial Report issued by the Supreme Audit institution (BPK) as a result of the audit by the West Aceh District Health Office.

The initial stage for analyzing the data is performing performance calculations to measure each financial perspective, customer aspects, internal business processes and human resources. After measurement perspective of *the Balanced Scorecard*

(BSC), then the next stage is the interpretation stage where the findings on the scorecard are interpreted. After doing the interpretation, the third stage is to perform the calculation of the accumulation of measurement of performance after getting the scorecard value through the weighting of the individual indicators perspective, resulting in the total value of the performance of the average scorecard every perspective of *Balanced Scorecard*. Researchers at this stage can draw the final conclusion whether the organizational performance is in the healthy category or not. With regard to performance measurement, the weighting system, method of multiplication of weights and values, the total value of the resulting performance and the categorization of whether the West Aceh District Health Office is healthy or not must be based on the following flow chart:



Fig. 1. Performance Value Calculation Method

Source: BPPSPAM Standart, 2015

Information:

- Perspective weights are the sum of weights for each perspective;
- Indicators are performance indicators for each perspective;
- Weights are the weight figures for each of the performance indicators;
- The indicator value is the standard value of each indicators;
- The performance value is the result of multiplying the weight to the indicator value.

The determination of organizational performance based on the assessment of each perspective can be seen in table 1.

I abit .	1. Calculation weight of the Datanced Score	<i>curu</i> i cispecti	vc		
Aspect	Key Performance Indicator	Weight	Decimal		
	1. Solvency	6.25%	0.0625		
Einenee	2. Operating Ratio	6.25%	0.0625		
Finance	3. Cash Ratio	6.25%	0.0625		
(25%)	4. Income Effectiveness Ratio	6.25%	0.0625		
	Total	25%	0.25		
	1. Patient Service Coverage	5%	0.05		
	2. Patient Growth	5%	0.05		
Customer	3. Postpartum service Coverage	5%	0.05		
(25%)	4. Management of Neonatal Complications	5%	0.05		
	5. Infant Health Service Coverage	5%	0.05		
	Total	25%	0.25		
	1. Neonatal Mortality Rate	5%	0.05		
	2. Infant Mortality Rate	5%	0.05		
	3. Infant Mortality Rate	5%	0.05		
Internal Business	4. Maternal Mortality Rate	5%	0.05		
Process (35%)	5. Case Notification Rate Tuberculosis	5%	0.05		
(33%)	6. Coverage of Diarrhea Cases	5%	0.05		
	7. Dengue hemorrhagic fever morbidity rate	5%	0.05		
	Total	35%	0.35		
	1. Health Worker Ratio	5%	0.05		
Growth and	2. Employee Training Ratio	5%	0.05		
Learning	3. Training Expenses Against	5%	0.05		
(15%)	Employee Expenses				
	Total	15%	0.15		
Total Scorecard 100%					

Table 1. Calculation Weight of the Balanced Scorecard Perspective

Source: Marwal & Abdullah, 2018

The score card indicators of the resulting ratios are categorized into several assessments, namely the range 0 - 0.19 in the very bad category, the range 0.2 - 0.39 in the bad category, the range 0.4 - 0.59 in the fairly good category, range 0.6 - 0.79 is categorized as good and range > 0.8 is categorized as very good. As for the scorecard, indicators of employee and customer responses produced will not be categorized into several ratings because the maximum value of the highest Likert scale for each indicator is different (Marwal & Abdullah, 2018).

Results. *Performance Measurement Perspective Balanced Scorecard At Health Office In Aceh Barat. Financial Perspective.* Based on the results of the analysis of the performance of the financial perspective of the West Aceh District Health Office 2016, 2017 and 2018, it is obtained an illustration of the extent to which the contribution of the financial perspective is seen from the point of view of the level of solvency ratios, operating ratios and cash and income effectiveness. The results of the analysis prove that the state of each degree of performance appraisal management shows varying numbers, this can be shown in Table 2.

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Financial Indicators	Ac	tual 201	6	Ac	tual 201	7	Ac	tual 201	8
Financial indicators	Ratio	Score	Level	Ratio	Score	Level	Ratio	Score	Level
1 Solvenov	75,76%	1	Not	55,89%	1	Not	42,50%	1	Not
1.Solvency	75,70%	1	good	33,89%	1	good	42,30%		good
2 Operating Patio	4,54%	1	Not	5,16%	1	Not	5,74%	1	Not
2. Operating Ratio			good		1	good	3,7470	1	good
3.Cash Ratio	3,92%	1	Not	2,83%	1	Not	1,95%	1	Not
5.Cash Katio	3,92%		good		1	good	1,93%	1	good
4. Income Effectiveness	89,21%	4	Well	94,56%	5	Very	85,66%	4	Well
4. Income Effectiveness	09,2170	4	wen	94,30%	5	good	85,00%	4	wen
Total		7	Not		8	Not		7	Not
Average		1,75	good		2	good		1,75	good

Table 2. Degrees	of Performance	Management fro	om Financial	Perspective

Source: Secondary data processed in 2020

The first financial indicator is the solvency ratio where this ratio aims to measure the level of ability to pay off all existing debt using all assets. In 2016, resulted a solvency ratio of 75.76% which was considered not good and experienced a decrease in 2017 which resulted in a solvency of 55.89 %, which is also rated not good. Likewise in 2018 this ratio continued to decrease, which was only able to produce a solvency ratio of 42.50%. Operating ratio are used to measure how much of the cost efficiency or operating expenditures incurred to produce income, in this case the District Health Office Aceh Barat is able to produce a ratio of operating at 4,54 in 2016, the operating ratio of 5,16 for the year 2017 and 5,74 in 2018 in the bad category. The results of the calculation resulted in a cash ratio of 3.92% in 2016, of 2.83% in 2017 and 1.95 % in 2018 in the bad category.

Ratio of effectiveness revenue in Aceh Barat District Health Office showed the results were very good, that the ratio of the effectiveness revenue can generate ratio of 89,21 % in 2016, and then increased in 2017 by 94.56% and 85,66% of 2018. Overall, where the average value of indicators of the financial perspective generates a value of 1,75 for the year 2016, 2 for 2017 and 1,75 for the year 2018 to the category of less well. A summary of the calculation of the performance from a financial perspective can be seen in the following table 3.

1	abic 5.1 m	ancial	cispectiv		mance		
	Indicator	2	016	20	17	20	18
Financial Perspective	Weight (0,25)	Score	Score	Score	Score	Score	Score
1. Solvency	0,0625	1	0,0625	1	0,0625	1	0,0625
2. Operating Ratio	0,0625	1	0,0625	1	0,0625	1	0,0625
3. Cash Ratio	0,0625	1	0,0625	1	0,0625	1	0,0625
4. Income Effectiveness	0,0625	4	0,25	5	0,3125	4	0,25
Total			0,4375		0,5		0,4375

 Table 3. Financial Perspective Performance

Source: Secondary data processed in 2020

Total scorecard generated a financial perspective with a weight of 25% in 2016 by 0,4375, in 2017 amounted to 0.5 and in 2018 amounted to 0,4375. The proportion of donations *scorecard* for performance on the financial perspective range of 0,4 -

0,59 categorized quite good. These results indicate that the contribution of the *scorecard* from a financial perspective to the total *scorecard* is considered quite good.

Customer Perspective. The results of measuring indicators related to organizational services can be seen in the following table:

Customer	Ac	ctual 2016		Actual 2016		Ac	tual 201'	7	Actual 2018		3
Indicators	Ratio	Score	Level	Ratio	Score	Level	Ratio	Score	Level		
1. Patient Visit	165%	5	Very	15,85%	5	Very	152,89%	5	Very		
Service Coverage	10570	5	good	15,0570	5	good	152,6770	5	good		
2. Growth in	-51,54%	1	Not	-3,2%	1	Not	1,49%	1	Not		
Patient Visits	-31,3470	1	good	-3,270	1	good	1,4970	1	good		
3.Postpartum	118,96%	5	Very	116,03%	5	Very	134,09%	5	Very		
Service	116,90%	5	good	110,05%	5	good	154,09%	5	good		
4. Management of			Deattry			Deattry			Deattry		
Neonatal	54,95%	3	Pretty	46,85%	3	Pretty	57,17%	3	Pretty		
Complications			good			good			good		
5.Infant Health	56,90%	3	Pretty	45,12%	3	Pretty	44,67%	3	Pretty		
Services	30,90%	3	good	43,12%	3	good	44,07%	3	good		
Total		17	and		17	and		17	Well		
Average		3.40	good		3.40	good		3.40	wen		

Table 4. Degrees of Management of Customer Perspective Performance

Source: Secondary data processed in 2020

Patient visit service coverage resulted in a percentage of 165% in 2016, 153.85% in 2017 and 152.89% in 2018 in the very good category. This indicates that the Aceh Barat District Health Office has been able to provide services for visiting patients or residents who must be served in the service area.

Through these measurements show that there has been a decrease in the growth of patient visits by -51.54 % in 2016, but in 2017 the decrease in visit changed to - 3.2% and in 2018 there has been an increase in visits by 1,49%. The results of measuring the growth of patient visits at 3 consecutive years were categorized as not good. These results indicate that the West Aceh District Health Office has not been able to invite the public to get health services in their service areas. Based on data from the calculations, the level of ability in its service area health Aceh Barat District Health Office reached over 100% in last three years. This shows the commitment of the West Aceh District Health Office to serve postpartum mothers very well.

The measurement results generate a neonatal complication management ratio of below 60% in the last three years. This indicates that the Aceh Barat Health Office is quite good at handling neonatal complications that occur in Aceh Barat District. Likewise, the indicator of infant health service coverage, which is based on the average number of infant health services for the number of babies in a certain period. From the calculation, the baby's health care coverage in 2016 amounted to 56,90% of the entire number of babies in West Aceh district by category quite well, in 2017 decreased the percentage that becomes 45,12%, but this number is still in the category of quite good, and continued to decrease in 2018 to 44.67% even though the category was still quite good. This suggests that the coverage baby's health care continues to decrease from year to year but is still in the category quite well.

Overall, the calculation of the customer perspective shows the average customer perspective indicator value of 3,4 for 3 years of observation. After analyzing the indicators from this perspective, the next step is to multiply the standard value of the resulting customer perspective indicators with the indicator weights can be seen in Table 5.

	Indicator	20	016	20	17	2018	
Customer Perspective	Weight (0.25)	Score	Score	Score	Score	Score	Score
1.Patient Service Coverage	0,05	5	0,25	5	0,25	5	0,25
2. Patient Growth	0,05	1	0,05	1	0,05	1	0,05
3. Postpartum Service	0,05	5	0,25	5	0,25	5	0,25
4. Management of Neonatal Complications	0,05	3	0,15	3	0,15	3	0,15
5. Infant Health Services	0,05	3	0,15	3	0,15	3	0,15
Total			0,85		0,85		0,85

Table 5.	Customer	Perspective	Performance
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Source: Secondary data processed in 2020

Total scorecard generated the customer perspective with a weight of 25% in 2016 amounted to 0,85, in 2017 of 0.85 and in 2018 at 0,85. The proportion of the *scorecard* contribution to performance from the customer perspective is rated as 0.85 which is in the range > 0.80. The result of the calculation shows that the score of the *scorecard* contribution from the perspective of the total service of the overall *scorecard is* considered very good.

Internal Business Process Perspective. The results of measuring the organization's internal business process indicators can be seen in the following table 6.

The results of measuring the neonatal mortality rate resulted in a percentage of 0,32 % in 2016, 0.25% in 2017 and 0.37 % in 2018 with the very good category. The infant mortality rate also produces a very good percentage of 0,49% in 2016, 0.43% in 2017 and 0.45% in 2018. Infant mortality rate also shows a very good percentage with a result of 0.49% for 2016, 0.43% for 2017 and 0.48% for 2018.

The calculation results show that the maternal mortality rate was 3,79% in 2016, 5.53% in 2017 and 2.04% in 2018. In three consecutive years the maternal mortality rate resulted in bad performance. One of the causes is the lack of the number of pregnant women who make k1 visits and those who make k4 visits.

Calculation of indicators *case notification rate of TBC* resulted in the percentage of 95,85% in 2016, 104,48% in 2017 and 111,71% in 2018 categorized not good. From year to year, the percentage of TB cases found is increasing. These results indicate that the West Aceh District Health Office has not been able to reduce the number of TB cases in West Aceh district.

Тегурссите									
Internal Business	Act	ual 2016)	Ac	tual 201	7	Ac	tual 201	8
Process Indicators	Ratio	Score	Level	Ratio	Score	Level	Ratio	Score	Level
1. Neonatal Mortality Rate	0,32%	5	Very good	0,25%	5	Very good	0,37%	5	Very good
2. Infant Mortality Rate	0,49%	5	Very good	0,43%	5	Very good	0,45%	5	Very good
3. Infant Mortality Rate	0,49%	5	Very good	0,43%	5	Very good	0,48%	5	Very good
4. Maternal Mortality Rate	3,79%	1	Not good	5,53%	1	Not good	2,04%	1	Not good
5. Case Notification Rate TBC	95,85%	1	Not good	104,48%	1	Not good	111,71%	1	Not good
6. Coverage of Diarrhea Case Handling	31,95%	2	Not good	22,57%	2	Not good	23,49%	2	Not good
7. DBD morbidity rate	34,72%	3	Pretty good	66,17%	2	Well	48,78%	3	Pretty good
Total		22 3,14	Well		21 3	Pretty good		22 3,14	Good
Average	;	3,14			3	guuu		3,14	

 Table 6. Degrees of Performance Management in the Internal Business Process

 Perspective

Source: Secondary data processed in 2020

Based on calculations, the West Aceh District Health Office produced a coverage for handling diarrhea cases of 31.95% in 2016, 22.57% in 2017 and 23.49% in 2018. The results of the calculation of this indicator are included in the not good category. This indicates that the number of cases of handling diarrhea in West Aceh is still far from the target.

The DBD morbidity indicator was only able to produce a pretty good performance in 2016 of 34.72%, this number continued to increase in 2017 by 66.17% in not good category and in 2018 48.78% was categorized as good. Overall, based on the measurement results, it shows that the average value of the internal business process perspective indicator value is 3,14 for 2016 with the good category, for 2017 it decreased with a result of 3 in the pretty good category and increased again in 2018 by 3,14 with good category. The performance of the internal business process perspective is seen in the following table 7.

The total *scorecard* produced by an internal business process perspective with a weight of 35% resulted in a value of 1,10 in 2016, 1,05 in 2017 and 1,10 in 2018. The proportion of the scorecard contribution from the internal business process perspective is considered very good because it is in the range > 0,81. Overall, the total achievement of the scorecard has described the Health Office Aceh district of Aceh Barat have been doing internal business process organization with excellent although for certain aspects, the Health Office Aceh district of Aceh Barat had to make corrections at the rate of maternal mortality, *case notification* TB *rate*, as well as the coverage of diarrhea cases.

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Internal Business	Indicator	20	016	20	17	20	18
Process Indicators	Weight (0.25)	Score	Score	Score	Score	Score	Score
1. Neonatal Mortality Rate	0,05	5	0,25	5	0,25	5	0,25
2. Infant Mortality Rate	0,05	5	0,25	5	0,25	5	0,25
3. Infant Mortality Rate	0,05	5	0,25	5	0,25	5	0,25
4. Maternal Mortality Rate	0,05	1	0,05	1	0,05	1	0,05
5. Case Notification Rate TBC	0,05	1	0,05	1	0,05	1	0,05
6. Coverage of Diarrhea Cases	0,05	2	0,10	2	0,10	2	0,10
7. DBD morbidity rate	0,05	3	0,15	2	0,15	3	0,15
Total			1,10		1,05		1,10

 Table 7. Internal Business Process Perspective Performance

Source: Secondary data processed in 2020

Learning and Growth Perspective. The results of measuring the indicators of learning and organizational growth can be seen in the following table 8.

Table 8. Degree of Performance Management in Learning Process and GrowthPerspective

Learning and Growth Process	Actual 2016			Ac	tual 201	7	Actual 2018			
Indicators	Ratio	Score	Level	Ratio	Score	Level	Ratio	Score	Level	
1. Total Employee Ratio	5 people	5	Very good	4 people	5	Very good	5 people	5	Very good	
2. Employee Training Ratio	57,67%	3	Pretty good	75%	4	Good	31,08%	2	Not good	
3. BDTBP Ratio	1,39%	1	Not good	0,23%	1	Not good	0,32%	1	Not good	
Total		9	Pretty		10	Well		8	Pretty	
Averag	e	3	good		3,3	wen		2,67	good	

Source: Secondary data processed in 2020

The measurement resulted in a ratio of 5 people in 2016, 4 people in 2017 and 5 people in 2018 with a very good category for 3 consecutive years. The measurement results show that the ratio of employee training is only able to reach 57,67% in 2016 which is categorized as pretty good, increasing to 75% in 2017 in the good category but in 2018 it fell to 31,08 % in the not good category. The results of measurements in the year 2016 indicates the ratio of the burden of education and training to personnel expenses only amounted to 1,39% with the category is not good.

This ratio continued to decrease in 2017, which was only 0.23% in the bad category and in 2018 it was 0,32% in the bad category. Although employee training ratio and employee expenses ratio are considered insufficient, overall based on the measurement results of the learning and growth perspective shows that the average indicator value is 3 for 2016 3,3 for 2017 and 2,67 for 2018 with pretty good category. Performance overview perspective of learning and growth generated by the weight indicator that can be seen on table 9.

Learning and Growth	Indicator	20	016	20	17	2018		
Indicators	Weight (0.15)	Score	Score	Score	Score	Score	Score	
1. Total Employee Ratio	0,05	5	0,25	5	0,25	5	0,25	
2. Employee Training Ratio	0,05	3	0,15	4	0,20	2	0,10	
3. BDTBP Ratio	0,05	1	0,05	1	0,05	1	0,05	
Total			0,45		0,50		0,40	

 Table 9. Performance Perspective Learning and growth

Source: Secondary data processed in 2020

The total *scorecard* produced by a learning and growth perspective with a weight of 15% produces a value of 0,45 for 2016, 0,50 for 2017 and has decreased, namely with a score of 0,40 for 2018. For three years observation of the contribution of the *scorecard* to internal performance from the perspective of learning and growth was only able to achieve a pretty good performance category because a was in the range 0,4 - 0,59. Performance total value of the average scorecard every perspective as follows:

Table 10. Accumulated Performance Measurement of the Aceh Barat District
Health Office 2016-2018

No.	Perspective	Scorecard 2016 year	2017 Scorecard	Scorecard 2018 year
1	Finance	0,4375	0,5	0.4375
2	Service	0,85	0,85	0.85
3	Internal Process	1,10	1,05	1,10
4	Growth and Learning	0,45	0,50	0,40
	Total Performance Score	2,838	2,9	2,788
Category		Healthy	Healthy	Unwell

Source: Secondary data processed in 2020

Based on the accumulated performance measurement with a *balanced scorecard, it* can be concluded that the performance of the West Aceh District Health Office in 2016 is categorized as healthy with a total performance of 2,838. The total value of the performance in 2016 is lower when compared with the total performance of 2017 namely 2,9 (category healthy). In 2018 the total performance of the West Aceh District Health Office was lower than 2017, namely 2,788 in the unhealthy category.

Conclusion. Based on the results of data analysis on the performance of the West Aceh District Health Office, it can be concluded:

- 1. The assessment of the performance of the West Aceh District Health Office from a financial perspective has generally been not good for 3 consecutive years.
- 2. The performance of the West Aceh District Health Office from a service perspective has generally had a good performance from 2016-2018.
- 3. The performance of the West Aceh District Health Office from the perspective of internal business processes has performed good in 2016 and 2018 and performed pretty good in 2017.
- 4. Performance measurement Aceh Barat District Health Office visits of learning and growth perspective p there in 2016 and 2018 showed quite good results, in 2017 resulted in a good performance by category.
- 5. The accumulated performance measurement shows the performance of the West Aceh Health Office in 2016 and 2017 in the healthy category and for 2018 in the unhealthy category.

Some limitations that exist in this study are:

- 1. This study uses a limited indicator on each perspektive *balanced scorecard* to measure performance so that the measurement results do not yet reflect the overall performance of the Department of Health West Aceh District.
- 2. The object of research is still narrow, namely the West Aceh District Health Office. Study with more objects needs to be done so that the study results can cover a wider area.

Based on thestudy that has been done, the researchers provide several suggestions as follows:

- 1. For the Health Department of West Aceh can perform efficiency on personnel expenses and the electrical load into debt because of West Aceh Health Office so high that the solvency ratio can be increased so that the performance of the financial perspective of West Aceh Health Office can be better. The West Aceh Health Office must also be more active and creative in promoting health services, especially in the field of health promotion. It must be more innovative so that people are not reluctant to get health services at community health centers and in the end, it makes performance from the service perspective of the West Aceh Health Office will also be better. Education and training to employee must be a priority in improving employee competence. The West Aceh Health Office must budget the burden of education and training every year so that it can create education and training programs so that performance from a growth and learning perspective will give good results.
- 2. Further study is expected to develop and use other indicators to measure the performance of the West Aceh District Health Office so that the results of performance measurement are more accurate in describing the actual state of performance of the West Aceh District Health Office.

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