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Influence of accounting information systems and budget towards service quality (case study on BPJS patients at Sidamulya Health Center, Brebes)

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ABSTRACT

This study aims to analyze the effect of accounting information systems and budgets on the quality of service at the Sidamulya Brebes Health Center. The author uses a descriptive research method using a qualitative research approach. Data collection techniques consist of interviews, observations and literature studies. Research data in the form of primary data with questionnaire instruments. The population of this study was 4,598 patients participating in registered active health insurance users. The study sample was determined 98 people, with the Slovin formula, the margin of error is 10%. Data analysis techniques with multiple linear regression assisted by SPSS. Instruments are tested with validity and reliability. Some of the data analysis tests in this study are classical assumption tests including normality tests, multicollinearity tests, heterokedasticity tests, and descriptive static tests. Hypothesis tests include statistical tests t, statistical tests F, and coefficient of determination (R2) tests. The results of this study show that the accounting information system has a positive and significant effect on service quality with t table 4.306 > t calculate 1.98525 and Sig. value 0.000, budget expenditure has a positive and significant effect on service quality with t table 2.055 > t calculate 1.98525 and Sig. value 0.043, and accounting information systems and budgets simultaneously have an influence on the quality of service for BPJS Puskesmas Sidamulya Brebes patients by 32.1%.

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1. Introduction

One of the government's efforts to provide health to the community is by establishing a government agency as a public health service delivery unit, namely the Community Health Center or what is commonly called the Puskesmas. Regulation of the Minister of Health of the Republic of Indonesia Number 75 of 2014 concerning Community Health Centers is a health service facility that organizes public health efforts and first-level individual health efforts, with more priority on promotive and preventive efforts, to achieve the highest degree of public health in its working area (Health, 2014). Based on Law Number 25 of 2009 concerning Public Services, the basis for realizing public services is as expected: the realization of clear boundaries and relationships regarding the rights, responsibilities, obligations, and authorities of all parties related to public services, the realization of a proper public service delivery systembyh the general principles of government, the fulfillment of public service delivery with statutory regulations, the realization of protection and legal capacity for the community in administering public services (Indonesia, 2009) .

The Sidamulya Health Center has IKHLAS values (Informative, Commitment, Appreciation, Loyalty, Trust, and Smiles with Others) but these values have not been implemented properly. Based on the news reported by Detiknews media (2017) "Babies in Brebes are refused treatment until they die, the Puskesmas admit to being negligent. The Sidamulya Health Center in Wanasari District, Brebes admitted that there were

officers who carried out their duties not ibythe Standard Operating Procedures. The officer was admitted to be negligent because he refused the arrival of a sick baby in an emergency just because he lacked administrative requirements. The news and incident have made the community's perspective that there is still a lack of quality of services provided by the Sidamulya Health Center. The lack of service quality at the Sidamulya Health Center is also supported by data on patient visit reports for the 2022 BPJS Sidamulya Health Center. This shows there is a deficiency in the service that causes a change in visits.

An Accounting Information System (AIS) is a system that is used to collect data, record data, store data, and process data to produce or provide information fdecision-makersers. Accounting information systems cinclude of people, procedures and instructions, data, software, information technology infrastructure, internal controls and se,curity measures (Asmaul Husna, 2022) . TheSidamulya Health Center as one of the public facilities that serves the community uses SIA in their daily activities, starting from receiving patient registration, registering patients, recording patient payments, to recording drug purchases. BasicalTheentation of SIA used by the Sidamulya Health Center is not known how mdoesh iknow it will have on improving the quality of service at the Health Center.

In terms of service quality, of course, it is supported by a budget, because the government's budget is related to the process of determining the total allocation of funds for each program and activity in monetary units that use public funds. Public budgets are a planning tool as well as a control tool. (Destiani & Hendriyani, 2021). The budget as a planning tool indicates the target that must be achieved by the government, while the budget as a control tool indicates the allocation of public funds approved by the legislature to be spent. Through the expenditure account data contained in the budget of government institutions/organizations, it will be seen whether the budget that has been made can act as a controller for the implementation of government activities (Kharisma, 2021). The budget as a planning tool indicates targets that must be achieved by the government, while the budget as a control tool indicates the allocation of public funding sources approved by the legislature to be spent (Gt. Indriani Puspitasari, 2021).

The Sidamulya Health Center records the recapitulation of the realization of BLUD expenditures every year, from 2020 to 2022. The realization of spending in 2021 is higher than BLUD spending 2 years after and before, which means that in 2020 and 2021 the implementation of BLUD spending will experience a decline. Based on the Sidamulya Health Center BLUD Expenditure Realization Report for 2020-2022, capital expenditure data shows a change from year to year where in 2020 the value of the Sidamulya Pusksmas BLUD expenditure was IDR 908,241,285.

In these 3 years, the highest increase in BLUD spending occurred in 2021 with a value of IDR 1,842,439,220.00 with a percentage increase of 102.86%. The budget for allocating funds for capital expenditures can be used to finance service improvement programs andll as service and service support activities. And the lowest Capital Expenditure Allocation occurred in 2022 which was recorded at IDR 291,339,500.00. The realization of spending that is different every year shows that the budget that has been planned has experienced absorption that has not been maximized and changes in the realization of spending every year indicate changes in budget planning which always change every year.

The Technology Acceptance Model , hereinafter referred to as TAM, is one of the adaptation theories of TRA (Theory of Reasoned Action) which was previously introduced by Ajzen and Fishbein in 1980 and proposed by Davis in 1989. TRA is a theory that explains a behavior is carried out because individuals have the will or intention to carry out related activities that will be carried out on their own accord (Dewi et al., 2020). TAM explains a causal relationship between a belief (the benefits of an information system and its ease of use) and the behavior, needs and users of an information system (Afandi, 2021). TAM aims to explain and estimate user acceptance of an information system. The theory of TAM is used TRA because it is used as a basis for knowing the relationship between perceived usefulness and perceived ease of use of Information Technology users' interest. TAM is a theory that explains the perceptions of technology users. The user's perception will have an influence on the interest in using IT (Putu Ayu Yohana Putri, 2020).

Institutional theory (institutional theory) or institutional theory is formed due to the pressure of the institutional environment that causes institutionalization. This theory is based on the idea that to maintain the quality of an organization it must be able to convince the public or the public that the organization is a legitimate entity and deserves to be supported (Marietza & Wijayanti, 2021). Organizations that prioritize legitimacy will have a tendency to try to adjust to external expectations and social expectations in which the organization operates. This tendency makes organizations more focused on systems. This theory is used to explain actions and decision making in public organizations (Dumadi, 2023).

Resa Sage Agustin (2019) an Accounting Information System is a collection of resources, such as people and equipment, which are deliberately designed with the aim of converting financial and other data into information. This information is communicated to decision makers as a consideration in making decisions. SIA is a closely coordinated arrangement of forms, records, equipment, including computers and equipment, communication tools, employees, and reports that are deliberately designed to transform financial data into information needed by management in decision making (Sunanti & Rahmawati, 2022).

The model for measuring the success of information systems put forward by Willia H.DELone and Emphraim R. McLean is known as the D & M Is Success Model (2003) which is a revision of the model put forward by DeLone and McLean previously Atikah Dwi Fadhillah (2022). DeLone and McLean provide six measuring tools to determine the success of an accounting information system, namely a) system quality, b) information quality, c) service quality, d) use, *e*) user satisfaction, and net benefits.

Information systems are a combination of information technology and the activities of people who use them to support operations and management. Information systems refer not only to an organization's use of information technology, but also to the way in which people interact with this technology in supporting business processes. Systems that process data and prepare the necessary information. An information system can be said to be effective only if the information system meets the needs of its users. The theoretical implication is that organizations need to ensure that information systems and budgets are well connected to monitor, measure and improve service quality. Measuring service quality needs to be an integral part of accounting and budget information systems. That policies that support integration and efficiency in budget management and accounting can improve the quality of health services for BPJS participating patients. Thus, this research has important implications in understanding how good accounting information systems and budget management can contribute to improving the quality of services at the Sidamulya Brebes Community Health Center and perhaps also in other health institutions.

Fuad *et al.,* (2020), a budget is a plan that is systematically arranged in the form of numbers and expressed in monetary units covering all company activities within a certain period (period) in the future (Alfiani et al., 2020). Mardiasmo (2018) budget is a statement regarding estimated performance to be achieved during a certain period expressed in financial terms, while budgeting is a process or method for preparing a budget. Budget as information or statements, regarding plans or policies in the financial sector, from an organization or business entity, for a certain period of time, estimates of state revenues and expenses, and what is expected to occur in a certain period (Khumaeroh, 2022). A budget is a document that contains performance estimates, both in the form of receipts and expenditures, which are presented in monetary terms to be achieved in a certain period of time and includes past data as a form of performance control and evaluation. (Halim, 2017).

Service costs are a system that regulates the amount and allocation of funds that must be provided to organize and/or utilize various health efforts required by individuals, families, groups and communities (Dwi Harini, 2020). Increasingly intensive operational activities also contribute to increasing service costs. Thus, service standards at community health centers are closely related to service costs, because increasing service standards that include all supporting factors will directly cause an increase in service costs that must be borne by the community health center. Appropriate budget allocation and use can have a positive impact on the quality of health services. The theoretical implication is the importance of efficiency and effectiveness in public sector budget management to improve services to the community. Good budget management can be a key factor in improving quality aspects such as speed, accessibility and patient satisfaction. Well-coordinated budget management can support the achievement of health service management goals.

Direct expenditure budget, namely expenditure that is directly affected by the planned programs and activities (Dwi Harini, 2020). Types of direct expenditure can be in the form of employee/personnel expenditure, goods/service expenditure, maintenance expenditure and official travel expenditure. Indirect expenditure budget, namely expenditure that is not directly affected by the existence of programs or activities. Types of Indirect Expenditures can be in the form of employee/employee salary expenditure, goods/service expenditure, maintenance expenditure and official travel expenditure (Gt. Indriani Puspitasari, 2021). Budget indicators include: a) the social sector is a person's ability to relate well to other people or to be able to interact with other people or groups without discriminating against race, ethnicity, religion or belief, social status, economy, politics; b) social ideological aspects, socio-political aspects, socio-economic aspects, socio-cultural aspects, social security aspects are aspects in national life that relate to the life and association of each individual; c) spending on central government administration; and d) personnel expenditures, goods

expenditures, capital expenditures, debt interest expenditures, subsidy expenditures, grant expenditures, social assistance expenditures, other expenditures, and transfers to the Holy area Alfiani et *al.*, (2020).

Service quality focuses on evaluations that reflect customer perceptions of specific dimensions of service. Service quality is a component of customer satisfaction (Dumadi, 2019). In this case, service quality is a factor that can affect customer satisfaction (Noviai et al., 2022). Service quality is how far the difference is between customers' expectations and reality for the service they receive (Fitralisma, 2021). Service quality can be identified by comparing customer perceptions of the service they actually receive with the actual service they expect. Service quality is the main thing that is seriously considered by the company, which involves all the resources owned by the company. Antonius Along (2020) indicators of service quality are: a) *tangibles*, b) empathy, c) reliability, d) responsiveness, and assurance.

The quality of service to puskesmas patients is the importance of understanding how the quality of service can affect patients who use BPJS as their health insurance. Good quality service at community health centers can increase BPJS patients' access to quality health services. Patients will feel more motivated to use BPJS if they believe that they will receive good care without discrimination. Patients who receive appropriate and preventive care can reduce long-term care and hospitalization costs, which can help BPJS maintain their financial sustainability. The theoretical implications of the quality of service for BPJS patients at the Sidamulya health center are important in efforts to improve the quality of service, optimize the use of resources and maintain the sustainability of this health insurance. This will also support the broader goal of improving access and quality of health services, especially in the Sidamulya Health Center working area.

2. Research Method

Research Approach

In this study, quantitative methods were used with a case study approach. This research will focus on the Sidamulya Health Center, located in Wanasari District, Brebes Regency, Central Java. The research period lasts for two months, from June to July 2023. The primary data used in this study were data from questionnaires. The research location in the working area of the Sidamulya Health Center is located at Jalan Raya Sidamulya, Wanasari District, Brebes Regency, Central Java 52252.

Data Sources and Data Collection Techniques

The main data source in this study is primary data derived from filling out questionnaires regarding accounting information system variables, budgets, and service quality. This study used three data collection methods. Observations were made at the Sidamulya Health Center by observing the health service activities that took place there. In addition, structured interviews were also conducted with puskesmas employees and patients participating in BPJS. Documentation data is obtained from the financial statements of the Sidamulya Health Center and the Minimum Service Standards (SPM) report of the Sidamulya Health Center. The object of this study is patients who use BPJS insurance who are actively registered at Faskes 1, Puskesmas Sidamulya.

The population in this study is the average number of BPJS patients who are actively registered at Health Facility 1 Puskesmas Sidamulya in 2022 with a total of 4,598 people. The sample determination of this study used the Slovin formula with a determination of a significance level of 10%. The underlying reason for determining the 10% significance level is the sample size. The smaller the level of significance, the researcher will need larger data. Conversely, the greater the level of significance, the researcher will need smaller data. If the population is large and it is impossible for the researcher to study everything in the population, for example because of limited time, funds, and energy, the researcher can describe the sample taken from that population. This quantity can be calculated using the slovin formula as follows:

$$n = \frac{N}{1 + Ne2}$$

Where:

n = Number of samples

N = Total population

e = error that is still tolerated, taken 10%

$$n = \frac{4598}{1 + 4598\ x\ 010\ x\ 010}$$

$$n = \frac{4598}{46{,}98} = 97{,}87$$

Based on the formula above, the number of samples in this study is 97.87 so that it is rounded up to 98 respondents. The data analysis technique used in this research is descriptive statistics. Descriptive statistics are statistics that are used by researchers as a data analysis tool by describing or illustrating previously collected data without the aim of making general conclusions and generalizations (Sugiyono, 2017). Some of the tests used in analyzing the data in this study were descriptive statistical tests, validity tests, reliability tests, classical assumption tests including normality tests, multicollinearity tests, heteroscedasticity tests, multiple linear regression analysis, hypothesis tests including statistical t tests (partial) and F statistical tests (simultaneous), coefficient of determination test (R^2).

3. Results and Discussions

Respondents who became the object of this study were based on questionnaires that had been distributed to 98 patients using BPJS/KIS/JKN/AKSES who were actively registered at Faskes 1 at the Sidamulya Health Center. Presentation of data regarding the respondent's identity is included to provide an overview of the respondent's condition, which includes: last education, occupation, age, gender, length of time joining the Sidamulya Public Health Health Facility. The data obtained from the list of questions in the questionnaire can be seen in table 3 regarding the last education of patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center as follows:

Table 1. Characteristics of Respondents Based on Last Education

Last education	Number of people)	Percentage (%)
SD/MI	37	37,8
SMP/MTs	11	11,2
SMA/SMK	22	22,4
D3	16	16,3
D4	4	4,1
S1	8	8,2
Amount	98	100

Source: Processed Data

Table 3 shows that there are 37 patients with SD/MI education level or 37.8%. Patients with SMP/MTS educational level were 11 people or 11.2%. Patients with SMA/SMK education level were 22 people or 22.4%. There are 16 patients with education level D-3 or 16.3%. Patients with education level D-4 were 4 people or 4.1%, and patients with education level S-1 were 8 people or 8.2%. Data on the characteristics of respondents based on work obtained from the list of questions in the questionnaire, can be seen in table 4 regarding the work of patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center, as follows:

Table 2. Characteristics of Respondents by Occupation

Work	Number of people)	Percentage (%)
Student	2	2.0
Self-Employed	19	19,4
Farmer	14	14,3
Employee	20	20,4
IRT	26	26.5
Civil servant	17	17,3
Amount	98	100

Source: Processed Data

Table 4 shows that there are 2 students or 2% of patients with student work. Patients with self-employed jobs as many as 19 people or 19.4%. Patients with farming jobs as many as 14 people or 14.3%. Patients with employee work as many as 20 people or 20.4%. Patients with IRT work as many as 26 people or 26.5%. Patients with civil servant jobs as many as 17 people or 17.3%. It can be concluded that patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center, the majority with IRT jobs are 26 people or 26.5%. Characteristics of respondents based on age obtained from the list of questions in the questionnaire, can be seen in table 5 regarding the ages of patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center, as follows:

Table 3. Characteristics of Respondents by Age

Age	Number of people)	Percentage (%)
17-20	2	2.0
21-30	24	24.5
31-40	18	18,4
41-50	29	29,6

51-60	22	22,4
>60	3	3,1
Amount	98	100

Source: Processed Data

In table 5 respondents aged 17-20 are as many as 2 people or 2%. Respondents aged 21-30 were 24 people or 24.5%. Respondents aged 31-40 were 18 people or 18.4%. Respondents aged 41-50 were 29 people or 29.6%. Respondents aged 51-60 were 22 people or 22.4%. Respondents aged >60 were 3 people or 3.1%. Characteristics of respondents based on gender obtained from the list of questions in the questionnaire, can be seen in table 6 regarding the gender of patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center, as follows:

Table 4. Characteristics of Respondents by Gender

Gender	Number of people)	Percentage (%)
Man	23	23.5
Woman	75	76.5
Amount	98	100

Source: Processed Data

Table 6 shows that of the 98 respondents, 23 people or 23.5% were men and the remaining 75 people or 76.5% were women. From the table it can be concluded that the number of patients using BPJS/KIS/JKN/AKSES who are actively registered at Faskes 1 at the Sidamulya Health Center are more women. Characteristics of respondents based on the length of time they joined the Sidamulya Public Health Facility obtained from the list of questions in the questionnaire, can be seen in table 10 regarding length of time joining the health facilities at the Sidamulya Health Center from patients using BPJS/KIS/JKN/AKSES who are actively registered at Health Facility 1 at the Sidamulya Health Center, as follows:

Table 5. Characteristics of Respondents Based on Length of Joining the Health Facility

Old Joined Faskes	Number of people)	Percentage (%)
1 month	1	1.0
6 months	2	2.0
1 year	1	1.0
>1 Year	94	95.9
Amount	98	100.0

Source: Processed Data

Table 7 shows the length of time the patient has joined the Sidamulya Health Center. Old patients join for a period of 1 month as many as 1 person or 1%. Old patients join for a period of 6 months as many as 2 people or 2%. Old patients join for a period of 1 year as many as 1 person or 1%. Patients with old jobs join with a period of 1 month as much as 1 person or 1%. Old patients joined with a period of > 1 year as many as 94 people or 95.9%.

Descriptive Statistical Analysis

Descriptive analysis aims to describe the respondents' answers to the questions in the questionnaire for each variable. To describe the answers can be done by making a percentage of the answers to the research variable question items. These variables are described in several indicators that are measured with an Ordinal scale of 1-5. By describing the variable indicators it is expected to be able to explain respondents' responses in general regarding the SIA variable, budget and service quality. From the results of the questionnaires that have been filled in by the respondents, an overview of the descriptive statistics of the research variables is obtained in the following table.

Table 6. Descriptive Statistical Test Results

Descriptive Statistics					
		N	Minimum	Maximum	Means
AIS (X_1)	98	45.00	60.00	56.9082	3.56121
Expenditure Budget (X_2)	98	30.00	40.00	38.2143	2.50052
Service Quality (Y)	98	38.00	50.00	47.2755	3.10231
Valid N (listwise)	98				

Source: Data processed by SPSS

Based on the data presented in the table above, it can be explained the description of the data used in this study as follows:

a. The SIA variable has a total sample of 98, with a minimum value of 45, a maximum value of 60, and a *mean* (average value) of 56.90 and a standard deviation of 3.561.

b. The budget variable has a total sample of 98, with a minimum value of 30, a maximum value of 40, and a mean (average value) of 38.21 and a standard deviation or standard deviation of 4.500.
c. The variable of work motivation has a total sample of 98, with a minimum value of 38, a maximum value of 50, and a mean (average value) of 47.27 and a standard deviation of 3.102.

Table 7. Validity Test Results

Questionnaire Items	Accounting Information System (X_1)	Budget (X_2)	Quality of Servive (Y)	r Table	Information
1	0.412	0,645	0.648	0.1986	Valid
2	0.623	0,701	0.623		
3	0.637	0,736	0.674		
4	0.711	0,703	0.635		
5	0.724	0.711	0.690		
6	0.672	0.758	0.662		
7	0.645	0.780	0.639		
8	0,723	0.764	0.759		
9	0,669		0.771		
10	0,709		0.721		
11	0,749				
12	0,679				

Source: Data processed by SPSS

In this study, the validity test was carried out through the calculation of the correlation coefficient *(pearson correlation)*. The validity of the instrument was determined by correlating the score obtained from each question item or statement with the total score. The instrument can be declared valid if the results of calculating the correlation coefficient show a number of 0.3 or more than that. In addition, a research instrument can also be declared valid if the significance level is below $\alpha = 0.05$. And it can also be concluded that the instrument has good construction validity and by comparing it with the r table it is obtained by using the r product moment table, namely determining n (sample) = 98-2 = 96 with sig. $\alpha = 0.05$, so that the r table is 0.1986. The provisions are if the value of r count is greater than r table, then the indicator or questionnaire can be said to be valid. The results of the validity can be seen in the following table below.

The table of validity test results above shows that the r calculated value is greater than the r table. This shows that the indicators of the AIS variable (X_1), budget (X_2) and service quality (Y) are stated to be valid as research measurement tools. This reliability test is carried out on each question item or statement that is categorized as valid. Reliability testing in this study was carried out using the alpha Cronbach technique. Cronbach's alpha is acceptable if greater than 0.6. If Cronbach's Alpha is closer to 1, the higher the internal consistency reliability (Sekaran, 2019).

Table 8. Reliability Test Results

Variable	Alpha value	Information
Accounting Information System (X_1)	0.878	Reliable
Budget (X_2)	0.868	Reliable
Service Quality (Y)	0.869	Reliable

Source: Data processed by SPSS

Table 10 of the reliability test results shows that the independent variables consisting of SIA (X_1), budget (X_2), and the dependent variable of service quality (Y) each have a Cronbach's Alpha value greater than 0.6. This condition indicates that all variables are acceptable and can be used in the next analysis.

Classic assumption test

The normality test is carried out to be able to detect the distribution of data whether the research data is normally distributed or not (Ghozali, 2018). The basis for decision making in the normality test of this method is seen in the distribution of data (dots) on the diagonal axis of the normal probability *plot graph.*

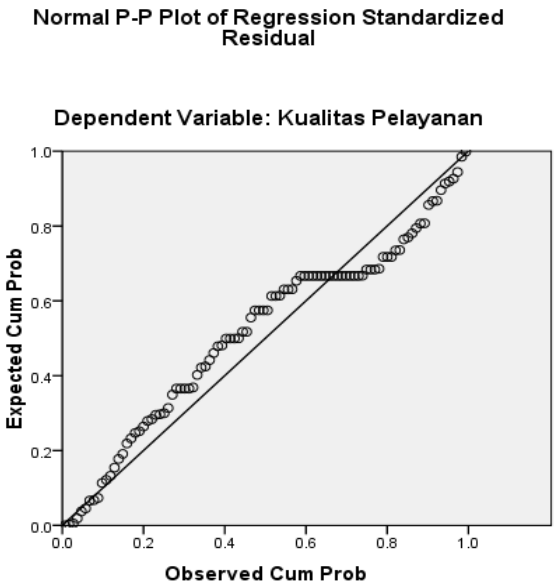

Figure 1. Normal Probability Plot Test Results

Based on the figure, the results of the normality test using the *normal probability plot method* above show that the data is normally distributed or close to normal. These results can be explained that the points spread apart but do not move away from the diagonal line, however, to prove that the data is normally distributed, a normality test will be carried out using the *One sample KS method* to minimize errors.

Table 9. Results of the Normality Test of the One Sample K-S Method

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
Normal Parameters[a,,b]	N	98
	Mean	.0000000
	Std. Deviation	2.55714569
Most Extreme Differences	Absolute	.106
	Positive	.099
	Negative	-.106
	Kolmogorov-Smirnov Z	1.050
	Asymp. Sig. (2-tailed)	.220

a. Test distribution is Normal.

b. Calculated from data.

Source: Data processed by SPSS

Based on table 11, it shows that the One sample KS test has a Probability Sig (2 tailed) value of 0.220. The value is said to be greater than 0.05. Decision making null hypothesis (H_0) the data is normally distributed, if Asymp. Sig. (2-tailed) > 0.05, then the data is normally distributed.

Ghozali (2018) states that the multicollinearity test functions to test between independent variables whether they contain a correlation or not. If a correlation is found between the independent variables, then there is a collinearity problem. This study uses multicollinearity testing in the form of the enter method, where the enter method looks at the Tolerance value or Variance Inflation Factor (VIF). If the Tolerance value is > 0.10 or VIF < 10, it can be said that the regression model does not contain symptoms of multicollinearity. A good regression model is one that does not have collinearity problems or does not contain correlations.

Table 10. Multicollinearity Test Results

Variable X	Tolerance Value	VIF	Information
Accounting Information System (X_1)	0.377	2,653	Didn't happen / didn't exist Multicollinearity
Budget (X_2)	0.265	3,766	

a. Dependent Variable: Service Quality (Y)

Source: Primary data processed from SPSS, 2022

Table 12 shows that the SIA Tolerance value (X_1) is 0.718 > 0.10; the VIF value is 1.393 < 10. The budget Tolerance value (X_2) is 0.718 > 0.10; the VIF value is 1.393 <10. It can be said that the regression model does not contain symptoms of multicollinearity. A good regression model is one that does not have collinearity problems or does not contain correlations.

The heteroscedasticity test has the benefit of measuring whether in the regression model the variance mismatch applies from one residual observation to another. The heteroscedasticity test can be observed using the scatterplot between the estimated value of the dependent variable and the residue, if the scatterplot graph shows a wavy dot pattern or spreads and then narrows, then it is concluded that heteroscedasticity has occurred, but if the scatterplot does not form a special pattern, then there is no heteroscedasticity (Ghozali, 2018).

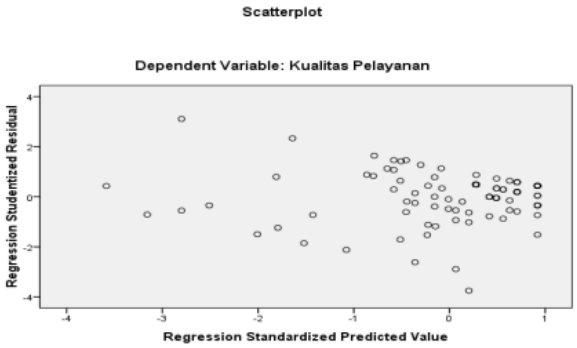

Figure 2. Scatterplot test results

In the scatterplot graph above, it can be seen that the points are spread randomly and are scattered above and below the number 0 on the Y axis. This condition can be defined as there is no heteroscedasticity in the regression model, so the regression model is appropriate for use in estimating service quality based on income and budget accounting information systems.

Multiple Linear Regression Analysis

Multiple linear regression analysis serves to determine the direction and how much influence the independent (free) variables, namely AIS (X_1), budget (X_2) have on the dependent (tied) variable, namely service quality (Y). Multiple linear regression is only used when the research has more than one independent (free) variable. Calculations using the SPSS program obtained the following regression results:

Table 11. Multiple Linear Regression Results

Coefficientsa					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Betas	t	Sig.
1 (Constant)	16,239	4,698		3,457	001
Accounting Information System (X_1)	.374	087	.430	4,306	.000
Budget (X_2)	.254	.124	.205	2055	043
a. Dependent Variable: Service Quality (Y)					

Source: Data processed from SPSS

Based on the results of multiple linear regression shows the regression equation formed in the regression test:

$Y = \alpha + \beta_1X_1 + \beta_2X_2 + e$

$Y = 16.239 + 0.374X_1 + + 0.254X_2$

From the results of the equation above, it can be interpreted that:

a. The constant value (α) is 16.239. This means that if the independent variables, namely AIS (X_1) and budget (X_2) are constant, then the value of the dependent variable is Service Quality (Y) is 16.239.
b. The coefficient value of the SIA variable (X_1) is 0.374, meaning that every one unit increase in the SIA variable (X_1) will result in an increase in the service quality variable (Y) of 0.374, assuming that other factors are constant or fixed.
c. The coefficient value of the budget variable (X_2) is 0.254, meaning that for every increase of one variable unit budget (X_2) will result in an increase in the service quality variable (Y) of 0.244, the unit with the assumption that other factors are constant or fixed.

d. The service quality of the Sidamulya Brebes Health Center is already high with the influence of accounting information systems and budgets.

Hypothesis Testing

Statistical Test t (Partial)

Ghozali (2018) states that the t statistical test functions to determine the effect of each independent (free) variable on the dependent (bound) variable. The criteria for testing this hypothesis are carried out using a significance level of 0.05, where:

a. If the significance value is > 0.05, it means that there is no significant effect between the independent (free) variables partially on the dependent (bound) variable.
b. If the significance value is < 0.05, it means that there is a significant influence between the independent (free) variables partially on the dependent (bound) variable.

The t table value at the level α = 5% or 0.05 and degrees of freedom (df) = nk = 98-3 = 95, then the t table value is 1.66105. The results of the t test analysis using SPSS, the following results are obtained:

Table 12. Statistical Test Results t

Coefficients [a]					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Betas	t	Sig.
1 (Constant)	16,239	4,698		3,457	001
AIS (X_1)	.374	087	.430	4,306	.000
Expenditure Budget (X_2	.254	.124	.205	2055	043
a. Dependent Variable: Service Quality (Y)					

Source: Data processed from SPSS

Based on the results of statistical test result t shows that the calculated t value for the AIS variable (X_1) is 4.306 with a significant level of 0.000. Therefore the calculated t value (4.306) > ttable (1.66105) and the resulting significant value is 0.000 < 0.05 then (H_1 is accepted). This means that the SIA independent variable (X_1) partially has a significant influence on the dependent variable of service quality (Y). The tcount value for the budget variable (X_2) is 2.055 with a significant level of 0.043. Therefore the calculated t value (2.325) > ttable (1.66105) and the resulting significant value is 0.043 <0.05 then (H_2 is accepted). This means that the budget independent variable (X_2) partially has a significant influence on the dependent variable of service quality (Y).

Statistical Test F (Simultaneous)

Ghozali (2018) states that the F statistical test serves to show that all independent (free) variables are included in the model which have a simultaneous influence on the dependent (dependent) variable. The criteria for testing this hypothesis are carried out using a significance level of 0.05, where:

a. If the significance value is < 0.05, it means that there is influence between all the independent (free) variables simultaneously on the dependent (bound) variable.
b. If the significance value is > 0.05, it means that there is no influence between all the independent (free) variables simultaneously on the dependent (bound) variable.

F table value at a significant level of 5% and degrees of freedom (df1/N1=k-1=3-1=2), (df2/N2=nk=98-3=95) then an F table value of 3.09 is obtained

Table 13. Statistical Test Results F

ANOVA [b]					
Model	Sum of Squares	df	MeanSquare	F	Sig.
1 Regression	299,279	2	149,639	22,412	.000 [a]
residual	634,282	95	6,677		
Total	933561	97			
a. Predictors: (Constant), Budget, Accounting Information System					
b. Dependent Variable: Service Quality					

Source: Data processed from SPSS

Based on the results of the F statistical test above shows that the calculated F is 299.279 with a significance of 0.000. Calculated F value (299.279 > F table (3.09) and considered significant resulting at 0.000 < (0.05), it can be concluded that (H_3 is accepted), meaning that the AIS variable (X_1) and budget (X_2) together (simultaneously) have a significant effect on the dependent variable of service quality (Y).

Determination Coefficient Test (R^2)

Ghozali (2018) states that the coefficient of determination is carried out to measure how far the ability of the regression model is to explain the variation of the dependent (bound) variable. The value of the coefficient of determination is between zero and one. The higher the value of the coefficient of determination, the better the ability of the independent (free) variable to explain the dependent (dependent) variable. If the value of R square (R^2) is small, it means that the ability of the independent (free) variable to explain the variation of the dependent variable is very limited. If the value is close to one, it means that the independent (free) variable provides almost all the information needed to predict the variation of the dependent (bound) variable.

Table 14. Correlation Coefficient and Determination Results

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.566 [a]	.321	.306	2.58392

a. Predictors: (Constant), Budget, Accounting Information System

b. Dependent Variable: Service Quality

Source: Data processed from SPSS

Based on the results of correlation coefficient and determination results shows that the correlation coefficient (r) is 0.566. This shows that between the independent variable and the dependent variable has a relationship level of 56.6%. As for knowing the magnitude of the contribution of the influence of the independent variable on the dependent variable, it can be seen from the value of the determinant coefficient (R^2). The value of the coefficient of determination (R^2) was obtained at 0.321 at 32.1%. This means that the independent variable has an influence on the dependent variable of 32.1%, while the rest is influenced by other variables not examined in this study. The more independent variables are included in the model, the higher the R-Squere value, even though there are insignificant independent variables.

The Effect of Accounting Information Systems on Service Quality

The statistical test t or parameter significant test serves to determine the influence of each independent (free) variable, namely the accounting information system on the dependent variable (bound), namely service quality. The result of t count for the accounting information system variable (X_1) is 4.306 with a significant level of 0.000 while the table t value at the level of α = 5% or 0.05 and the free degree (df) = n-k = 98-3 = 95, then obtained the table t value 1.66105, therefore the calculated t value (4.306) > from the table t (1.66105) and the resulting significant value is 0.000 < 0.05 then (H1 is accepted). This means that the independent variable of the accounting information system partially has a significant influence on the variable related to service quality at the Sidamulya Brebes Health Center. The results of this study are in line with the research of Hery Haerudin and Napisah (2018) stating that the application of accounting information systems has a positive effect on improving service quality. In line with Haerudin's research that the application of accounting information systems has a positive effect on improving service quality at Mitra Sehati Clinic, Cibiru Bandung (Hery Haerudin &; Napisah, 2018).

Information systems are technically interconnected component units that collect (or recover), process, store, distribute information to support decision making and control in organizations (Wardhana, 2015). Information systems can be said to be of high quality if the system is designed to meet user satisfaction through the ease of use of the information system. The higher the quality of information and the quality of the system can increase user satisfaction and improve individual and organizational services. Accounting information systems help organizations manage funds and budgets more efficiently. With accurate and real-time financial information, organizations can better allocate resources, minimize waste, and maximize the use of budget to improve service quality. It allows the integration of financial data with other data in the organization, such as patient data, inventory, and human resources. It helps in a holistic analysis of the efficiency and effectiveness of health services. Ultimately, a good accounting information system helps healthcare organizations to manage their resources more efficiently, monitor their financial performance, and provide a solid information base for decision making

The Influence of Expenditure Budget on Service Quality

The statistical test t or parameter significant test serves to determine the effect of each independent (free) variable, namely the budget on the dependent variable (bound), namely service quality. The calculated result for the budget variable (X2) is 2.055 with a significant level of 0.043 while the table t value at the level of α = 5% or 0.05 and the free degree (df) = n-k = 98-3 = 95, then the table t value is 1.66105, therefore the calculated t value (2.325) > from the table (1.66105) and the resulting significant value is 0.043 < 0.05 then (H2 is accepted). This means that the variable free budget has a partial influence on the variable related to service

quality at the Sidamulya Brebes Health Center. The budget is the basis for resource allocation for Puskesmas. With sufficient and proper budget, Puskesmas can purchase medical equipment, medicines, and hire and retain qualified medical and paramedical staff. This means better and more efficient medical services. With sufficient budget, Puskesmas can ensure the availability of necessary medicines and up-to-date medical equipment. This can speed up the process of diagnosis and treatment, which in turn improves the quality of care. Good supervision and management of budget use can ensure that funds are used efficiently and effectively to improve service quality. Puskesmas can also plan ongoing service programs, such as immunization programs, disease prevention programs, and reproductive health services.

Puskesmas management must manage the budget effectively and plan its use wisely to ensure quality health services to the local community. In line with research (Kristianingsih et al., 2022) that in general, the regional budget of Lebak Regency is of high quality in providing services to the community and is able to encourage the acceleration of development of underdeveloped areas. The results of this study are in line with the results of a study from Lewis (2016) in which states that local government spending affects access to public services provided by the local government concerned. Education spending in local governments is able to produce improved performance in presenting public services in the health sector (Nasution, 2019). In addition, the results of Vitanto's research (2019) The Effect of APBD and APBN Direct Spending on the Community Satisfaction Index (IKM) with Intervening Variables Achievement of Key Performance Indicators (IKU): A study at the Madiun Regency Health Center where the results showed that APBD direct spending had a positive effect on the achievement of IKU, but APBN direct spending did not affect the achievement of IKU Puskesmas. Halim, Khalil Samihah &; Aras Mukhammad (2016) The fund factor is an input in the implementation process rather than village government activities in achieving a quality public service achievement.

The Influence of SIA and Expenditure Budget on Service Quality

Statistical test F or simultaneous significant test serves to show that all independent variables, namely accounting information systems and budgets, have a simultaneous influence on the dependent variable (bound), namely service quality. The F result is calculated at 299.279 with a significance of 0.000 while the F value of the table is at a significant level of 5% and free degrees (df1/N1 = k-1 = 3-1 = 2), (df2/N2 = n-k = 98-3 = 95) then the F value of the table is 3.09. Therefore, the value of F is calculated (299.279 > F table (3.09) and the resulting significant value is 0.000 < (0.05), then it can be concluded that (H3 is accepted). This means that there is a significant positive influence between the accounting information system and the budget on the quality of service at the Sidamulya Brebes Health Center.

Accounting information systems allow organizations to track and monitor the use of funds in detail. With good monitoring, organizations can avoid waste and misuse of funds that can affect the quality of service. Accounting information systems can help ensure that funds allocated for the purchase of medicines and medical care are used efficiently. This can lead to cost savings that can be reallocated to improve service quality. Accounting information systems ensure that financial statements and the use of funds are prepared accurately and transparently. This is important to maintain the trust of the community and stakeholders, as well as maintain accountability in the use of funds. High trust can positively affect the perception of service quality.

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Careful and wise budget allocation can ensure that funds are used to support quality services. Conversely, if the budget is insufficient or undirected, it can affect the availability of resources needed for good service. The budget can be used to support innovation in services. Funds allocated for research and development or improvement projects can improve the quality of service. For example, budgets can be used to adopt new technologies that improve efficiency and effectiveness in service. The combination of a robust accounting information system and an efficient and targeted budget can have a positive impact on service quality.

However, it is important to remember that other factors, such as good management, community participation, and commitment to quality services, also play a role in achieving this goal. In addition, continuous evaluation and monitoring are needed to ensure that accounting information systems and budgets continue to contribute to improving service quality. The results of this study are in line with research (Hery Haerudin &; Napisah, 2018) stating that the application of accounting information systems has a positive effect

on improving service quality. Vitanto (2019) stated that direct expenditure on the APBD has a positive effect on the achievement of IKU. An increase in APBD direct expenditure consisting of employee expenditure, goods expenditure and capital expenditure can improve the performance of Puskesmas.

4. Conclusion

Based on research on the effect of accounting information systems on service quality at Puskesmas Sidamulya, Brebes, it can be concluded that accounting information systems have a positive and significant effect on service quality at Puskesmas Sidamulya, Brebes, budgets have a positive and significant effect on service quality at Puskesmas Sidamulya, Brebes, and accounting information systems and budgets have a significant effect on service quality at Puskesmas Sidamulya, Brebes. Puskesmas Sidamulya must always make improvements to the accounting information system, namely for system reliability (reliability). Researchers suggest that the improvement of accounting information systems must be done on an ongoing basis, by continuously improving (updating) hardware, software and brainware (users) of the system itself. With continuous improvement, it will increase the resilience of the information system from system damage and errors so that the quality of service will increase. The community is expected to provide input in the form of criticism and suggestions to support government programs from the financial side and for the community, especially welfare in accordance with the needs of the local community. Research may not fully consider external factors that may affect the quality of services at Puskesmas, such as changes in government policies, technological developments, or economic conditions. Research may not fully consider external factors that may affect the quality of services at Puskesmas, such as changes in government policies, technological developments, or economic conditions. More in-depth and lengthy research might yield more comprehensive results, but this is not always possible within certain time limits and budgets.

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