

ENHANCING UTILIZATION OF HEALTH FUNDS INSURANCE THROUGH THE ACCOUNTABILITY CONTROL MODEL

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Abstract

The Aceh People's Health Insurance Fund (known as JKA, Jaminan Kesehatan Aceh) is an investment by the Aceh's Government in the public health sector that requires continuous monitoring and control to ensure the provision of quality medical services. This study aims to develop an accountability control model in the strategic resource management of JKA, which is considered appropriate to identify the suitable and efficient level of control in managing JKA funds by hospitals in Aceh. The research framework is developed based on theoretical arguments emphasizing the need to utilize an appropriate control model that focuses on monitoring the responsiveness of health care providers to the expectations, desires, and demands of health service users. Additionally, the study also tracks financial and non-financial administration compliance aspects, as well as the achievement of stakeholder missions in the utilization of JKA funds. Despite the integration of JKA funds with the National Health Insurance program under the Social Security Administrating Body, service issues persist, and potential for improvement remains. In this study, the Performance Measurement System (PMS) control model is employed as a moderator of the JKN-JKA hospital control system, which consists of two strategic resources, namely human resource control and physical resource control, with a focus on JKA utilization performance. The utilization of the control model is categorized into two continuums, namely diagnostic control and interactive control. Respondent data were obtained through purposive sampling based on the research objectives. The sample for this research comprises hospitals, health centers, clinics, and optical facilities providing JKA health services in North Aceh and Lhokseumawe City. The study results provide empirical evidence that the utilization of a diagnostic and interactive control model enhances the performance of JKA fund utilization. This finding implies the applicability of the PMS control model for health service providers in Aceh.

Keywords: *Development of control model, diagnostic control, interactive control, health funds insurance, JKA utilization.*

1. INTRODUCTION

The use of a new approach to strengthen organizational accountability control, especially for non-profit organizations, has garnered significant attention from both academics and practitioners. The Performance Measurement System (PMS) provides companies with the means to develop accountability control models based on economic value and human resource management, set performance targets, and reward the achievement of optimal targets (Merchant and Van der Stede, 2007). PMS is a measurement model defined by organizational goals, strategy development, benchmarking, human resource management, and organizational feedback processes (Henri, 2006). It plays a critical role in planning, controlling, and communicating organizational goals.

However, the traditional PMS model, which heavily relies on performance-based accounting measures like return on investment (ROI) and net income, has faced criticism for being inadequate in

meeting organizational objectives (Ittner and Larcker, 1998; Abernethy and Lilis, 2001). Some researchers argue that the financial approach alone is insufficient to describe overall organizational performance (Widener, 2007; Pilonato and Monfardini, 2020). Factors such as the alternative use of accounting principles may allow manipulation of financial figures in organizational reports (Barth et al., 2005; Achmad and Diponegoro, 2005). Moreover, the financial approach may not provide adequate information on investments in human resources, asset utilization, and other long-term decisions (Andersen and Reeb, 2003).

Regarding the accounting approach, PMS is an integral part of the accountability model, focusing on the management control system or Management Control System (MCS). The classic definition of MCS emphasizes the measurement process that ensures effective and efficient use of resources in achieving organizational goals (Abernethy and Lilis, 2001; Kogan et al., 2015). Many companies heavily rely on individual behaviour aspects in their business activities, making PMS useful for monitoring individual performance, facilitating communication, and promoting learning among individuals, leading to improved company performance. Various PMS approaches are used for performance measurement, such as the Balanced Scorecard, Business Intelligence, Business Performance Management, and performance dashboards.

While previous studies have provided extensive evidence of PMS controls' development in manufacturing companies using an operations management approach, research in the public services sector, especially those employing an accounting approach, remains limited. As a significant sub-sector of the service industry, the Indonesian health industry contributes US \$ 880 per capita to the GDP, making Indonesia a lower-middle-income country (Ministry of Health, 2013). The country's health sector accounts for 2.5% of GDP (US \$12 per capita), with the government contributing only 30% and the remaining 70% from private health providers, including spending from the private sector (employers and health insurance). However, statistical data from the World Health Organization (WHO) in 2014 indicates an increase in annual government and private spending allocated for health infrastructure. The Indonesian government has allocated 55% of total health spending to build and renovate health facilities, demonstrating a commitment to improving public health services. This allocation is higher than Vietnam's, where approximately 33% of total health spending is allocated to public health.

Similarly, in 2016, the Aceh government continued its program to subsidize health insurance for 2.3 million people in Aceh, funded by the special autonomy budget of 506 billion rupiahs, a 9% increase from the previous year, equivalent to an allocation of 471 billion. This subsidy is channeled through the Aceh People's Health Insurance program (JaminanKesehatan Rakyat Aceh or JKA) (Serambi Indonesia, 29 December 2015). The JKA program was the pioneer in providing universal health insurance in Indonesia and was integrated with the National Health Insurance (JKN) program under the Social Security Administration Agency (BPJS), the national health insurance provider, which still had limited coverage. By early 2015, the integration of Acehese People's Health Insurance (JKA) into JKN-BPJS Health covered 1,647,013 individuals. In 2016, it increased to 2,066,979 and then decreased to 1,920,749 in 2017, with an allocation of IDR 23,000 per person (JKA Cooperation Agreement Comparison Matrix, 2017). This allocation significantly contributes to improving health services for the people of Aceh. Additionally, Aceh Province received a total of IDR 81.47 trillion in Special Autonomy Funds from 2008 to 2020, with an average of 10.2% spent on health services for Acehese people (Rahayu, 2021).

However, despite increased government spending on health services (JKA), it is observed that hospitals in Aceh still fail to meet the medical service standards set by the World Health Organization (WHO). The apparent failure is evident from the numerous patient complaints about questionable medical practices and standard services provided by hospitals, as reported by the Ministry of Health of the Republic of Indonesia (Depkes RI, 2014; Serambi Indonesia, Tuesday 15 February 2015). The increased spending on government hospital services highlights the issue of accountability control over the funds invested in improving public health facilities, which significantly impacts the financial performance and

services of hospitals under the Badan Pengelola Jaminan Sosial (BPJS) or Social Security Administrating Body.

Problems

The integration policy of the JKA and JKN programs under BPJS is still facing challenges in achieving the set strategic targets. There are multiple accountability factors related to the users of health services that are difficult to measure and control, such as unclear identity databases, which may lead to deviations in the program's goal of providing affordable and equitable health services to all levels of society and reforming the financing system and health services in Aceh (Lakip 2012 in acehprov.go.id, Peraturan Gubernur Aceh Nomor 11 Tahun 2014).

Furthermore, hospitals, as service organizations in the health sector, also face uncertainties (contingency factors) in achieving balanced financial performance and services (Tuomela, 2005; Henri, 2006; Widener, 2007; Johansson, 2018). High service costs, varying levels of health complaints, and differences in the quality of medical services create challenges for hospitals in efficiently managing the JKA program with a large number of insurers, while health coverage subsidies remain relatively low (Rp 23,000 per person for level III services). These circumstances can lead to irregularities in hospital practices that may negatively impact patients (Serambi Indonesia, 16 February 2015). Addressing these complex issues requires effective and efficient financial accountability controls, which necessitate sophisticated measuring instruments to encourage performance improvements. Although prior research has positioned PMS as a suitable model for enhancing accountability controls (Kogan et al. 2015; Ittner and Larcker 1998; Abernethy and Lillis 2001), there are still few studies that use PMS with a performance dashboard approach in five perspectives, namely finance, customers, quality of service processes, environment, and HR development, as accountability controls.

Definition of Performance Measurement System (PMS)

The Performance Measurement System or PMS is a widely-used term in several disciplines. Neely (2005) identified at least four scientific disciplines contributing to the field of accounting performance measurement, including management, management control systems, accounting information systems, and operations research. Among these, the first two definitions are commonly used in various previous studies. Kumar, Ozdamar, and Ng (2005) define PMS as a mechanism for an organization to achieve customer satisfaction, while Neely et al. (2002) consider performance measurement systems as an important tool supporting two dimensions of performance: efficiency and effectiveness. In line with this, Folan and Browne (2005) and Gouve et al. (2009) define PMS as a process of measuring the efficiency and effectiveness of actions. Meanwhile, Neely et al. (2002) and Kumar, Ozdamar, and Ng (2005) define PMS as a tool to support non-financial efficiency and effectiveness of operations.

From an accounting perspective, PMS is associated with management accounting as an integral part of a Management Control System (MCS) (Abernethy et al., 2005; Henri, 2006a). MCS refers to a set of procedures and processes used by managers to ensure the achievement of organizational goals, encompassing both formal and informal control systems (Bisbe and Otley, 2004). Simons (1995) associates MCS with formal information-based routines and procedures that managers use to maintain or change organizational patterns. PMS generates and utilizes information capable of influencing people to pursue collective interests by aligning individual interests with shared interests and periodically assessing how performance is fulfilled (Mahama, 2006). Consistent with this contemporary view, PMS is a collection of financial and/or non-financial indicators that managers use to evaluate performance (Tuomela, 2005). PMS serves as a comprehensive accountability system designed to measure and evaluate the implications of both financial and non-financial activities, performance, and results (Abernethy and Lillis, 2001). This system ensures that the achievement of key success factors is monitored through the scorecard, justifies the use of resources, and provides feedback for future improvements. In executing strategy, PMS is constantly evolving to reflect changes in the business environment and identify ways to achieve goals (Anthony and Govindarajan, 2007). PMS is adaptable to organizational requirements, facilitating continuous monitoring of business performance. Additionally,

PMS serves as an instrument to aid organizations in decision-making, control, learning, communication, and motivating individuals to perform at their best (Simons, 2000).

In line with the public health sector, PMS is not limited to a single rule, whether it be managerial, operational, or otherwise. The entire health operations are subject to monitoring and inspection where standards exist and are implemented. The latest research by Kogan et al. (2015), which applied the PMS model in Mother and Child hospitals in America, utilized a three-level measurement approach. This approach consisted of, first, performance indicators set by the government as the main indicators; second, performance indicators based on evidence and information; and finally, the use of PMS that emphasizes processes or programs supporting the success of health indicators issued by the government. The results revealed that the designed PMS was more focused as it used clear indicators set by the government, which appeared rigid and complex. This PMS model reduced the burden of reporting that was not directly related to health performance for the government, as PMS provided clear target boundaries. Additionally, the results demonstrated that PMS was more accountable and flexible in achieving both short and long-term strategic goals.

Based on the above discussion, it can be concluded that each discipline has its own perspective on PMS. Operational management focuses on the content of PMS, particularly the set of performance matrices to achieve resource efficiency and effectiveness. Healthcare organizations emphasize using PMS to improve overall service quality and meet patient satisfaction. On the other hand, the management accounting perspective sees PMS as a control instrument or tool to manage, monitor, provide signals, and serve as a learning tool to optimize company resources and improve organizational performance. MCS facilitates strategy formulation and implementation to motivate managers in achieving organizational goals.

Use of Performance Measurement Systems

As an integral part of the organization's management control system (MCS), PMS serves as a management control tool to ensure that resources are obtained and utilized efficiently and effectively in achieving organizational goals (Abernethy et al., 2005). PMS plays a crucial role in strategy implementation by translating organizational strategy into desired behavior and results, communicating expectations, monitoring progress, providing feedback, and motivating employees through performance-based rewards. Strategic control can be achieved by integrating the four control focuses introduced by Simons (1995), which consist of the following:

1. Value systems: Used to enhance core values related to the business strategy and inspire seeking new opportunities aligned with these values. It is formally related to the organization's core values, goals, and direction.
2. Boundary systems: Establish strategic behaviour to reduce unwanted risks.
3. Diagnostic systems: Used to motivate, monitor, and reward the achievement of set targets.
4. Interactive systems: Stimulate search and learning, enabling new strategies to respond to perceived opportunities and threats.

All these control focuses must work simultaneously to achieve comprehensive control (Simons, 2000). In the context of strategic control through PMS, a more transparent feedback and measurement system is employed to achieve organizational goals.

Performance Measurement System (PMS) - Dashboard Performance from a Management Control System Perspective

The Performance Dashboard is a crucial component of the performance management system. Identifying and monitoring the main key indicators is the most important stage in designing a performance dashboard. Furthermore, it is essential to manage performance information in an integrated manner, linking it to established strategic objectives. This enables management to better measure the success of the company's performance based on the established work strategies and initiatives. Key Performance Indicators (KPIs) can be obtained through interviews, discussions, and internal document

research that describes the hospital system. To obtain hospital KPI indicators, the 2001 MOH book that uses the Balanced Scorecard concept can be referenced. According to Irfan and Mustafid (2011), the Performance Dashboard for hospital management can be classified into five perspectives based on the Balanced Scorecard: Financial Perspective Dashboard, Customer Perspective Dashboard, Service Quality Perspective Dashboard, Environmental Perspective Dashboard, and HR Development Perspective Dashboard.

Preliminary Research

Previous studies have shown that hospitals in Indonesia are still not optimal in providing medical services to patients due to improper resource management. The lack of control in managing strategic hospital resources causes hospitals in Indonesia to fail in achieving first-class performance in providing health services (Gunawan et al., 2007). Moreover, many hospitals in Indonesia struggle to meet the medical service standards set by the Indonesian government and international standards set by World Health Organization (Barber, Gertler, and Harimurti, 2007; Gunawan et al., 2007).

Additionally, numerous patients have complained about the quality of medical services provided by hospitals. Veronica and Heribetus (2003) and Gunawan et al. (2007) identified several factors contributing to the low quality of health services. These factors include unclear roles, where employees are unsure of management's expectations in providing health services and how to achieve them; a deficient control oversight system, indicating the lack of control and monitoring of employee performance by management; perceived lack of control and employees' inability to solve problems, hindering the process of providing quality health services; lack of teamwork and cooperation between employees and management in delivering health services; and finally, the absence of effective information systems and technology.

Regarding the JKA underwriting carried out by hospitals in Aceh, there has been no research that focuses on examining problems in service control and accountability that have not been satisfactory. However, several opinions published in the Serambi Indonesia edition of February 12, 2014, can serve as a basis to strengthen the problem in this research.

Hypotheses of Study

Based on the above description, the following hypotheses are proposed:

- H1 = There is a significant effect of the control system moderated by PMS Interactive on the accountability of utilizing health funds insurance.
- H2 = There is a significant effect of the control system moderated by PMS Diagnostic on the accountability of utilizing health funds insurance.

2. RESEARCH METHODS

The population in this study comprised all health service providers for the BPJS Kesehatan program in government and private Public Hospitals/Puskesmas/Clinics/Optics in North Aceh District and Lhokseumawe City, totaling 63 service providers. From this total, only 25 (public hospitals/private hospitals/clinics/public health centers) were selected as research samples, resulting in a total of 100 respondents with 4 staff/employees each participating in the study by filling out the questionnaire. Thus, a total of 100 respondents were collected from the administration and finance departments of each public/private hospital/clinic/Puskesmas. The details are presented in the table below:

Table 1. Population dan Sample of study

No	Description	Population	Sample	Respondent
1	RSUP	3	3	12
2	RSUS	3	3	12
3	Puskesmas	37	6	24
4	Klinik	13	8	32

5	Optik	7	5	20
Total		63	25	100

Table 2. Number of Population

No	Population of Study	Sample of Study
1	Rumah sakit Melati	Rumah sakit Melati
2	Rumah Sakit Sakinah	Rumah Sakit Sakinah
3	Rumah sakit Kasih Ibu	Rumah sakit Kasih Ibu
4	Rumah Sakit Cut Mutia	Rumah Sakit Cut Mutia
5	Rumah Sakit Kesrem	Rumah Sakit Kesrem
6	Rumah Sakit PMI	Rumah Sakit PMI
7	Puskesmas Muara I	Puskesmas Muara I
8	Puskesmas Muara II	Puskesmas Muara II
9	Puskesmas Banda Sakti	Puskesmas Banda Sakti
10	Puskesmas Mon Geudong	Puskesmas Mon Geudong
11	Puskesmas Blang Mangat	Puskesmas Blang Mangat
12	Puskesmas Blang Cut	Puskesmas Blang Cut
13	Puskesmas Nibong	Klinik Vinca Rosea
14	Puskesmas Paya Bakong	Klinik Nanda
15	Puskesmas Blang Geulumpang	Klinik BP Olsavi
16	Puskesmas Banda Baro	Klinik Cunda Husada
17	Puskesmas Nisam Antara	Klinik Lhokseumawe Husada
18	Puskesmas Geureudong Pase	Klinik Sikes Satrad
19	Puskesmas Simpang Tiga	Klinik Wira Bakti
20	Puskesmas Pirak Timu	Klinik Polres Lhokseumawe
21	Puskesmas Lhok Beuringen	Klinik Urkes Polres Aceh Utara
22	Puskesmas Muara Batu	Klinik Muda Chik
23	Puskesmas Dewantara	Klinik Husada
24	Puskesmas Syamtalira Bayu	Klinik Mita Sehat
25	Puskesmas Seunuddon	Klinik Bp Lanal Lhokseumawe
26	Puskesmas Tanah Pasir	
27	Puskesmas Lapang	
28	Puskesmas Syamtalira Aron	
29	Puskesmas Tanah Luas	
30	Puskesmas Matang Kuli	
31	Puskesmas Lhoksukon	
32	Puskesmas Bukit Hagu	
33	Puskesmas Cot Girek	
34	Puskesmas Baktiya	
35	Puskesmas Sampoiniet	
36	Puskesmas Tanah Jambo Aye	
37	Puskesmas Langkahan	
38	Puskesmas Samudera	
39	Puskesmas Meurah Mulya	
40	Puskesmas Kuta Makmur	
41	Puskesmas Simpang Kramat	
42	Puskesmas Sawang	
43	Puskesmas Nisam	
44	Klinik Vinca Rosea	



45	Klinik Nanda	
46	Klinik BP Olasvi	
47	Klinik Cunda Husada	
48	Klinik Lhokseumawe Husada	
49	Klinik Sikes Satrad	
50	Klinik Wira Bakti	
51	Klinik Polres Lhokseumawe	
52	KlinikUrkesPolres Aceh Utara	
53	KlinikMudaChik	
54	KlinikHusada	
55	KlinikMitaSehat	
56	KlinikBpLanalLhokseumawe	
57	Optik International	
58	Tias Optik	
59	Optik Mandiri	
	Number of Population = 59	Jumlah Sampel = 25

Operational variables and measurements

Dependent Variable

In this study, the variable "Accountability for utilization of JKA funds" is used as a latent variable or the dependent (endogenous) variable, which requires further explanation. This variable is related to how JKA funds are managed at the hospital, including aspects such as conflict of interest, gratuity control, and adherence to the code of ethics, information control, and health facility report submission (BPJS Internal Control Indicator, 2017).

A latent variable must be described by a set of manifest variables (indicators). Therefore, the dependent variable "Utilization of JKA funds" is measured using the indicator approach. This measurement is based on Directors Decree Number 04 of 2015 concerning the control of BPJS fund management fraud and the JKA Cooperation Contract Agreement (PKS) (2017) regarding the implementation of the Aceh People's Health Insurance. The scope of health services includes promotion, prevention, healing, and restoration of health. The dependent variable was assessed using a questionnaire consisting of 15 questions with a scale of 1-5 for the answers (5=Very High, 4=High, 3=Neutral, 2=Low, 1=Very Low).

Independent Variables

The independent (exogenous) variables are manifest variables built based on constructs and include:

a. Professional Competency Control (KKP)

Professional Competency Control (KKP) refers to the knowledge and skills involved in health services at hospitals/health centers/clinics. The measurement of the KKP variable is determined and developed based on standard provisions and rules in the health sector. This is in accordance with Abernethy (2005), Van der Schee et al. (2006), and Widener (2006a, 2007), who refer to the measurement of human resources based on hospital resource competency standards. The indicators that can be used include:

1. Knowledge of drugs
2. Professional knowledge
3. Knowledge of administration and management
4. Training and seminars to enhance knowledge
5. Exchange experiences with other hospitals
6. Ability to communicate between non-paramedics and paramedical staff
7. Interaction with patients (paramedic and non-paramedic)
8. The ability of individuals working in management
9. Building personal relationships between upper management and subordinates

10. Commitment of medical and non-medical staff in providing healing
11. Crisis preparedness
12. Top management's ability to make decisions
13. Management of administrative staff talents
14. Doctor's reputation

Furthermore, the KKP indicators are formulated into three main categories: Result_Based, Behavior_Based, and Judgment_Based, with a scale of 1-5 for the answers (5 = Very High, 4 = High, 3 = Neutral, 2 = Low, 1 = Very Low).

b. Physical Resource Hierarchy Control (KHAP)

Management capacity in controlling the management of financial resources, human resources, and physical resources requires internal control and a formally structured hierarchy. This is possible because hospital management requires strict control, rule-oriented approaches, maintaining stability, and applying incentives based on hierarchy.

1. Location and geographic location
2. Buildings and vehicles
3. Laboratory Equipment and Information Systems
4. Radiology Equipment and Information Systems
5. Other medical equipment and information systems
6. Non-medical equipment, such as computers
7. Financial assets (cash on hand, financial capital)

Moderation Variable

There are two approaches used for the moderating variable (Performance Measurement System), which consist of the use of PMS in a diagnostic control and interactive control.

a. Diagnostic Use of the PMS Approach

A performance measurement and control system (PMS) diagnostically represents a control mechanism that is formally implemented according to guidelines and standards that support achieving the expected goals. The diagnostic control system acts as a superior attention-protecting device, allowing the organization to operate without continuous monitoring and thereby improving Return On Management. Diagnostic measurements include:

1. Achievement of progress in accordance with the objectives
2. Monitoring results
3. Comparing results with expectations
4. Reviewing key measurements
5. Providing an overview of the organization
6. Discussing problems with superiors, subordinates, and staff
7. Assumption data and action plans are provided
8. Handling the organization together
9. Ability to analyze criticism for organizational success
10. Developing common terms within the organization

b. Interactive Use of PMS

The interactive PMS is a formal control system approach used by leaders to continuously and personally involve themselves in the decisions of subordinates. The interactive control system increases the attention of organizational leadership with the responsibility for interpreting the data contained in this system, and the interpretation of the data in the interactive control system is not delegated. The form of measurement, according to Henri (2006a) and Widener (2007), includes:

- a. Setting or negotiating performance targets on a regular basis
- b. Receiving and reviewing exception reports
- c. Following up on significant exceptions
- d. Designing and maintaining data interpretation systems
- e. Preparing exception reports

- f. Ensuring the integrity and reliability of control system diagnostic data
- g. Choosing which system to use interactively
- h. Scheduling face-to-face meetings with subordinates to discuss the data contained in the system
- i. Demanding that managers respond to information contained in the system
- j. Collecting and compiling data to facilitate interactive processes

To describe the relationships developed, this study formulates a measurement model that describes the relationship between latent variables and their indicators. The relationships to be tested in this study are described as follows:

3. RESULTS AND DISCUSSION

3.1 Effect of KKAP and KHAP control systems moderated by PMS Interactive and their influence on accountability for the use of JKA funds

The hospital control system plays a crucial role in enhancing the performance of JKA fund utilization. A well-functioning control system ensures more optimal implementation of health services. The hospital's control system is observed in terms of competency control and the management of the hospital's physical asset hierarchy. The regression test results in Table 5.8 indicate a significant influence of the PMS Interactive moderating variable on the KKAP and KHAP controls, with an estimated value of 3.16 and a significance level of 0.01 ($P < 0.05$). This implies that the two exogenous variables, moderated by PMS Interactively, have a notable impact on the accountability performance of JKA fund utilization. This finding aligns with previous research conducted by Merchant and Van der Stede (2007), which developed a control system as a means of measuring accountability.

However, it is worth noting that the results also reveal that the control of the KKAP model, without being moderated by PMS Interactively, does not exhibit significant effects on the performance of AKUN_JKA. This finding is intriguing because the specific form of control demonstrates superior results in enhancing utilization and JKA performance.

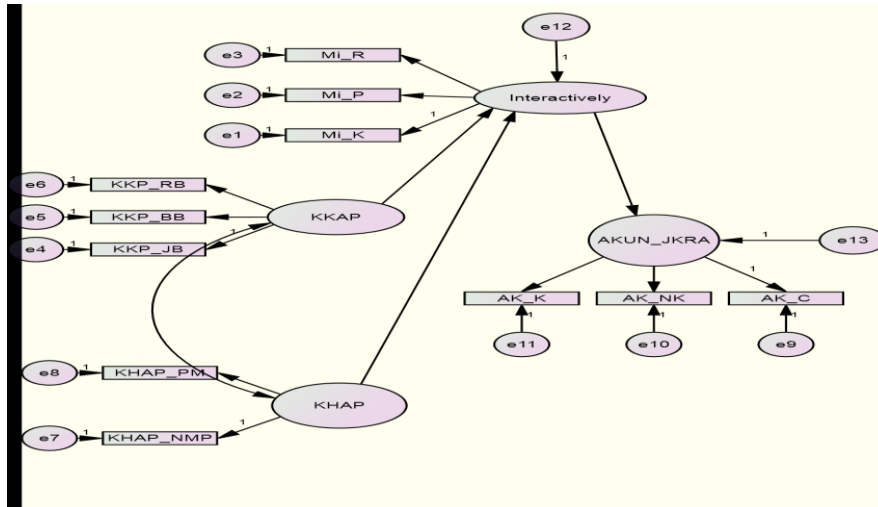
Table 3 Result analysis of PMS Interactively

			Estimate	S.E.	C.R.	P	Label
PMS Interact	<---	KKAP	,239	,199	1,202	,229	par_10
PMS Interact	<---	KHAP	,076	,123	,616	,538	par_12
AKUN_JKA	<---	PMS Interact	3,155	,949	3,324	***	par_11
AKUN_JKA	<---	KKAP	-,294	,569	-,518	,605	par_13
AKUN_JKA	<---	KHAP	,434	,368	1,179	,238	par_14
Diagnostically	<---	PMS Interact	1,558	,541	2,878	,004	par_15
Interactively	<---	PMS Interact	1,000				
KKP_JB	<---	KKAP	1,000				
KKP_BB	<---	KKAP	1,517	,201	7,544	***	par_1
KKP_RB	<---	KKAP	,845	,157	5,378	***	par_2
KHAP_NMP	<---	KHAP	1,000				
KHAP_PM	<---	KHAP	,555	,074	7,531	***	par_3
AK_K	<---	AKUN_JKA	1,000				
AK_NK	<---	AKUN_JKA	,701	,057	12,231	***	par_4
AK_C	<---	AKUN_JKA	,603	,078	7,772	***	par_5
Mi_R	<---	Interactively	1,000				
Mi_P	<---	Interactively	3,915	1,159	3,377	***	par_6
Mi_K	<---	Interactively	1,995	,635	3,142	,002	par_7
MD_P	<---	Diagnostically	1,000				
MD_D	<---	Diagnostically	1,629	,316	5,152	***	par_8
MD_BD	<---	Diagnostically	2,558	,463	5,527	***	par_9

	Estimate	S.E.	C.R.	P	Label
KKAP <--> KHAP	1,105	,193	5,726	***	par_16

	KHAP	KKAP	PMS Interact	Diagnostically	Interactively	AKUN_JKA
PMS Interact	,076	,239	,000	,000	,000	,000
Diagnostically	,000	,000	1,558	,000	,000	,000
Interactively	,000	,000	1,000	,000	,000	,000
AKUN_JKA	,434	-,294	3,155	,000	,000	,000
MD_BD	,000	,000	,000	2,558	,000	,000
MD_D	,000	,000	,000	1,629	,000	,000
MD_P	,000	,000	,000	1,000	,000	,000
Mi_K	,000	,000	,000	,000	1,995	,000
Mi_P	,000	,000	,000	,000	3,915	,000
Mi_R	,000	,000	,000	,000	1,000	,000
AK_C	,000	,000	,000	,000	,000	,603
AK_NK	,000	,000	,000	,000	,000	,701
AK_K	,000	,000	,000	,000	,000	1,000
KHAP_PM	,555	,000	,000	,000	,000	,000
KHAP_NMP	1,000	,000	,000	,000	,000	,000
KKP_RB	,000	,845	,000	,000	,000	,000
KKP_BB	,000	1,517	,000	,000	,000	,000
KKP_JB	,000	1,000	,000	,000	,000	,000

	KHAP	KKAP	PMS Interact	Diagnostically	Interactively	AKUN_JKA
PMS Interact	,076	,239	,000	,000	,000	,000
Diagnostically	,000	,000	1,558	,000	,000	,000
Interactively	,000	,000	1,000	,000	,000	,000
AKUN_JKA	,434	-,294	3,155	,000	,000	,000
MD_BD	,000	,000	,000	2,558	,000	,000
MD_D	,000	,000	,000	1,629	,000	,000
MD_P	,000	,000	,000	1,000	,000	,000
Mi_K	,000	,000	,000	,000	1,995	,000
Mi_P	,000	,000	,000	,000	3,915	,000
Mi_R	,000	,000	,000	,000	1,000	,000
AK_C	,000	,000	,000	,000	,000	,603
AK_NK	,000	,000	,000	,000	,000	,701
AK_K	,000	,000	,000	,000	,000	1,000
KHAP_PM	,555	,000	,000	,000	,000	,000
KHAP_NMP	1,000	,000	,000	,000	,000	,000
KKP_RB	,000	,845	,000	,000	,000	,000
KKP_BB	,000	1,517	,000	,000	,000	,000
KKP_JB	,000	1,000	,000	,000	,000	,000



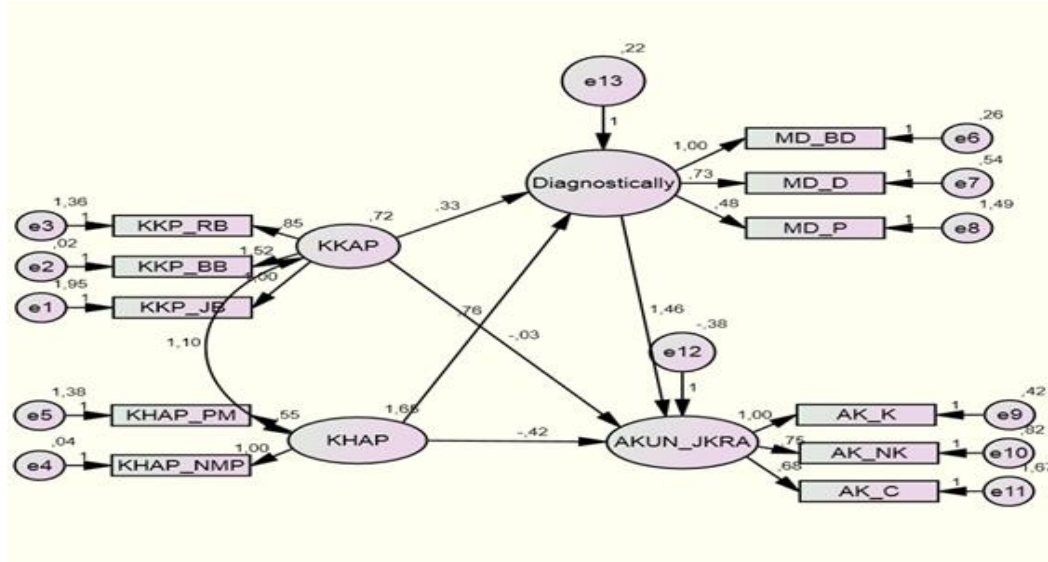
		Estimate	S.E.	C.R.	P	Label
Interactively <---	KKAP	,251	,518	,484	,628	par_8
Interactively <---	KHAP	,308	,341	,903	,367	par_9
AKUN_JKA <---	Interactively	1,232	,218	5,654	***	par_10
	Mi_K <---	Interactively	1,000			
	Mi_P <---	Interactively	1,947	,247	7,872	*** par_1
	Mi_R <---	Interactively	,566	,169	3,353	*** par_2
	KKP_JB <---	KKAP	1,000			
	KKP_BB <---	KKAP	1,517	,201	7,547	*** par_3
	KKP_RB <---	KKAP	,842	,157	5,366	*** par_4
	KHAP_NMP <---	KHAP	1,000			
	KHAP_PM <---	KHAP	,554	,074	7,518	*** par_5
	AK_C <---	AKUN_JKA	1,000			
	AK_NK <---	AKUN_JKA	1,181	,173	6,811	*** par_6
	AK_K <---	AKUN_JKA	1,672	,219	7,638	*** par_7

	Estimate	S.E.	C.R.	P	Label
KKAP <--> KHAP	1,105	,193	5,725	***	par_11

The above test also reveals a significant relationship between the KKAP and KHAP variables, which are moderated by PMS Interactively, on AKUN_JKA, with an estimated coefficient of 1.23 at $P < 0.05$. This indicates a meaningful connection between the moderating variable and an enhanced control over the utilization of JKA funds. The role of interactive control is associated with actions taken by the organization's leadership, where they bear full responsibility for managing, negotiating, designing, and preparing necessary activities, actively participating and avoiding delegation of strategic decisions. These findings align with the perspectives of Henri (2006a) and Widener (2007), emphasizing the need for specific forms of control in institutions that handle significant resources, going beyond the standard procedures that have been in place.

Effect of KKAP and KHAP control systems moderated by PMS Diagnostically and their influence on accountability for the use of JKA funds

Diagnostic control systems are linked to an organization's systems that do not necessitate continuous monitoring, with the aim of enhancing Return on Management. Based on the tested diagnostic model, the results are presented in the diagram below.



Picture 2. Framework of PMS Diagnostically

Table 4. Results analysis of PMS Diagnostically

		Estimate	S.E.	C.R.	P	Label
Diagnostically<---	KHAP	,756	,667	1,132,258		par_8
Diagnostically<---	KKAP	,333	1,020	,327,744		par_9
AKUN_JKA <---	Diagnostically	1,460	,265	5,514	***	par_10
AKUN_JKA <---	KHAP	-,421	,408	-1,031,302		par_11
AKUN_JKA <---	KKAP	-,030	,647	-,047,963		par_12
KKP_JB <---	KKAP	1,000				
KKP_BB <---	KKAP	1,520	,202	7,522	***	par_1
KKP_RB <---	KKAP	,849	,158	5,376	***	par_2
KHAP_NMP <---	KHAP	1,000				
KHAP_PM <---	KHAP	,554	,074	7,524	***	par_3
MD_BD <---	Diagnostically	1,000				
MD_D <---	Diagnostically	,729	,049	14,994	***	par_4
MD_P <---	Diagnostically	,483	,074	6,554	***	par_5
AK_K <---	AKUN_JKA	1,000				
AK_NK <---	AKUN_JKA	,746	,060	12,334	***	par_6
AK_C <---	AKUN_JKA	,677	,079	8,543	***	par_7



	Estimate	S.E.	C.R.	P	Label
KKAP<--> KHAP	1,103	,193	5,716	***	par_13

	Estimate	S.E.	C.R.	P	Label
KKAP	,722	,208	3,462	***	par_14
KHAP	1,652	,195	8,485	***	par_15
e13	,220	,060	3,671	***	par_16
e12	-,380	,082	-4,641	***	par_17
e1	1,952	,223	8,767	***	par_18
e2	,020	,018	1,090	,276	par_19
e3	1,358	,155	8,766	***	par_20
e4	,040	,028	1,440	,150	par_21
e5	1,380	,157	8,762	***	par_22
e6	,259	,044	5,905	***	par_23
e7	,535	,063	8,500	***	par_24
e8	1,493	,169	8,833	***	par_25
e9	,419	,057	7,334	***	par_26
e10	,822	,092	8,970	***	par_27
e11	1,672	,183	9,137	***	par_28

	KHAP	KKAP	Diagnostically	AKUN_JKA
Diagnostically	,756	,333	,000	,000
AKUN_JKA	,683	,456	1,460	,000
AK_C	,462	,309	,988	,677
AK_NK	,509	,340	1,089	,746
AK_K	,683	,456	1,460	1,000
MD_P	,365	,161	,483	,000
MD_D	,551	,243	,729	,000
MD_BD	,756	,333	1,000	,000
KHAP_PM	,554	,000	,000	,000
KHAP_NMP	1,000	,000	,000	,000
KKP_RB	,000	,849	,000	,000
KKP_BB	,000	1,520	,000	,000
KKP_JB	,000	1,000	,000	,000

	KHAP	KKAP	Diagnostically	AKUN_JKA
Diagnostically	,756	,333	,000	,000
AKUN_JKA	,683	,456	1,460	,000
AK_C	,462	,309	,988	,677
AK_NK	,509	,340	1,089	,746
AK_K	,683	,456	1,460	1,000
MD_P	,365	,161	,483	,000
MD_D	,551	,243	,729	,000
MD_BD	,756	,333	1,000	,000
KHAP_PM	,554	,000	,000	,000
KHAP_NMP	1,000	,000	,000	,000
KKP_RB	,000	,849	,000	,000

	KHAP	KKAP	Diagnostically	AKUN_JKA
KKP_BB	,000	1,520	,000	,000
KKP_JB	,000	1,000	,000	,000

Table 4 above presents the results of a significant multiple regression analysis, indicating the influence of KKP and KHAP variables moderated by PMS Diagnostically with an estimate of 1.46 at $P < 0.05$. This suggests that diagnostic control measures can enhance accountability for the utilization of JKA funds. Diagnostic control is associated with actions that emphasize the strength of subordinate management in completing tasks, even without strict routine monitoring (Henri, 2006a, and Widener, 2007).

Overall, both PMS control models (Interactive and Diagnostic) demonstrated a significant effect in increasing the utilization of JKA funds. This provides the government with the flexibility to choose an appropriate control measure, as it is evident that the weaknesses previously identified in the management of JKA funds can be overcome through the implementation of a suitable and efficient control model. However, the results also indicate that the PMS Diagnostically action in increasing monitoring of JKA fund usage is perceived to be more effective than the PMS_Interactive control action. This suggests that the choice of using the diagnostic model is considered more appropriate. Alternatively, the two models can be utilized simultaneously, especially in busy activities involving other institutions like BPJS and the Government of Aceh, aimed at monitoring JKA funds.

For hospital institutions dealing with complex and continuously growing resources, slight changes in the organizational and operational environment must be accompanied by appropriate actions. Environmental uncertainties, particularly related to illnesses and patients, can impact service quality and the ability to continuously improve capabilities. Thus, more efficient control measures are required by management, necessitating both bound and independent monitoring, even when standard procedures are in place. The effectiveness of monitoring/control can be evaluated based on the extent to which patients receive suitable services for their specific medical conditions. By implementing diagnostic control actions, management can focus on Return on Management (ROM) in their work and problem-solving endeavours (Henri, 2006a, Widener, 2007, Canon et al., 2014).

Lastly, PMS as a moderating variable is considered suitable for measuring and evaluating the implications of both financial and non-financial activities, as well as performance and results (Abernethy and Lillis, 2001, Canon et al., 2014). This control system ensures that the achievement of key success factors can be obtained by strengthening resources and providing feedback for future improvements. PMS can be continuously developed to adapt to changes in the business environment, thereby identifying actions to achieve strategic goals (Anthony and Govindarajan, 2007).

4. CONCLUSION

Based on the conducted tests, data processing, and analysis, the following conclusions can be drawn: The results of the tests demonstrate a close and significant relationship between the hospital control system and accountability for the utilization of JKA funds. The moderating variable also exhibits a significant relationship with accountability for the use of JKA funds. The study suggests that JKA health facility services are urgently needed at the initial level or Puskesmas services, which are perceived to be weak in terms of equipment provision and follow-up services. The implementation of competency control and asset control in a diagnostic and interactive manner can improve the performance of JKA fund utilization.

For the government, the choice of either the interactive or diagnostic control model, or the combination of both, can be employed to enhance the performance of JKA fund utilization. As the hospital environment continues to evolve, the demand for implementer satisfaction and services provided can impact the objectives of the JKA program as Universal Coverage in the health sector for the broader community in Aceh. However, the subsidized health insurance funds from the special autonomy funds for non-premium individual citizens, reaching 2.2 million out of Aceh's 5.3 million populations, with a

subsidy amount of 1.2 trillion Indonesian rupiahs, still face issues regarding its sustainability. This is due to the lack of an effective control system by the healthcare provider or BPJS. The matter of non-premium health insurance is indeed crucial, considering the substantial amount of subsidies involved, which has the potential for misuse and being misdirected. For future research, it may be beneficial to modify the structural analysis model by incorporating organizational management variables specific to government hospitals, especially those with the status of the Regional Public Service Agency (BLUD) and expand the sample size for a more comprehensive study..

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