



## The Effect of Management Practices on Improving the Quality of Services Through Integrated Infrastructure Practices of EFQM and Six Sigma Public Health Center in Jambi Province, Indonesia

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### ABSTRACT

This study aims to analyze the effect of management practices on improving service quality through the practice of integrated infrastructure EFQM and Six Sigma Public Health Center (PHC) in Jambi Province. This research is quantitative research using a cross sectional design approach through two stages of research. The research data was obtained using a questionnaire from a sample of 560 civil servant employees in 24 PHCs that were randomly selected and analyzed by second order using Smart-PLS 3.0. The results of the study found that the implementation of management practices, infrastructure practices had a fairly good average by employees, and each had a direct effect on the quality of PHC services. The practice of core infrastructure is able to partially mediate between management practices and the quality of PHC services. However, in practice, not all PHCs have implemented quality management practices.

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### ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh praktek manajemen terhadap peningkatan mutu pelayanan melalui praktek infrastruktur terintegritas efqm dan six sigma pukesmas provinsi jambi. Penelitian ini adalah penelitian kuantitatif dengan menggunakan pendekatan desain cross sectional melalui dua tahapan penelitian. Data penelitian ini diperoleh menggunakan kuesioner dari sampel 560 karyawan PNS di 24 Puskesmas yang dipilih acak dan dianalisis secara second order menggunakan Smart-PLS 3.0. Hasil penelitian menemukan bahwa pelaksanaan praktik manajemen, praktik infrastruktur memiliki rata-rata sudah cukup baik oleh karyawan dan masing-masing berpengaruh langsung terhadap mutu pelayanan Puskesmas. Praktik infrastruktur inti mampu mediasi secara parsial antara praktik manajemen terhadap mutu pelayanan Puskesmas. Namun demikian dalam pelaksanaannya belum semua Puskesmas menerapkan praktik manajemen mutu.

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## INTRODUCTION

Public Health Centre (PHC) is an organizational unit that has an important role in the development of public health with one of the functions that is to provide first-level basic health services that are holistic, comprehensive, integrated and sustainable for the society. In accordance with the Minister of Health Regulation Number 75 of 2014, PHC is a health service facility that organizes public health efforts and first-level individual health efforts, by prioritizing promotive and preventive efforts, to achieve the highest degree of public health in its working area. The number of PHCs in Indonesia in the last 5 (five) years has increased by an average of 50 health centers per year, from 9.731 health centers in 2014 to 9.993 health centers in 2018 consisting of 3.623 inpatients and 6.370 non-inpatients. In Jambi Province, the number of health centers increased from 176 health centers in 2014 to 195 health centers in 2018 consisting of 74 inpatients and 121 non-inpatients. The development of this health center illustrates the government's efforts to fulfill community access to services primary health (Kementerian Kesehatan RI, 2019)

As the spearhead of health services, the performance of the PHC has a very strategic value in improving the health status of the community and becomes one of the determinants in achieving the targets of the Sustainable Development Goals (SDGs) proclaimed by the United Nations (UN) in 2015 such as reducing maternal mortality and infant mortality rate, increasing coverage of births assisted by health workers, decreasing prevalence of malnutrition and stunting in children under five, increasing exclusive breastfeeding, and other health indicator targets (Badan Pusat Statistik Indonesia, 2016). This condition causes the attention and demands on the quality of services at the PHC to be higher, especially in the current era of the National Health Insurance (JKN) where the management of a good health insurance system without being supported by quality health services will not have a major impact on improving the health status of the community. Therefore, the JKN system encourages PHC to set universally applicable health service quality standards, so that it will be easier to monitor (Dewan Jaminan Sosial Nasional RI, 2012).

The poor quality of PHC services is also reflected in the low number of visits in Indonesia, amounts to only 24.16%, while the number to the doctor's visits amounts to 27.09% (Adisasmito, 2010). An evaluation study of JKN by Thabrany, et al. (2016) revealed that the lowest number of visits to First Level Health Facilities was PHC, which was around 73 visits per 1000 JKN participants, while the highest number of visits was to clinics, around 154 visits per 1000 JKN participants. Furthermore, based on data from the Jambi Provincial Health Office in 2019, the utilization rate of PHC in Jambi Province based on indicators of new visits in the last 3 (three) years experienced a downward trend, 44.028.824 visits in 2016, decreased to 41.015.024 visits in 2017, and 40.345.446 visits in 2018. This shows that PHC services are still underestimated because they are considered to be not as good as private health service providers (clinics or hospitals) with more complete facilities that also provide basic health services so in such a way that PHCs are still unable to compete and do not contribute utmost in providing services to the community.

Every organization including PHC is always trying to find ways to enhance competitive advantage and strive to achieve it using a quality management approach that systematically improves the performance of the organization's product or service quality (Guion, 2010).

Quality management is an entirety of an organization effort with full involvement of all forces and focus on continuous improvement to achieve customer satisfaction (Manaf, 2005). The implementation of quality management has been identified and is increasingly recognized as one of the most important key elements for organizations to be successful and have competitive advantages, including the European Foundation for Quality Management (EFQM) Model and Six Sigma.

EFQM is a complete quality management model which is a practical tool that helps organizations to build the right management system and measure where the organization is in the direction of excellence, help them understand gaps, find and stimulate solutions, and monitor progress on an ongoing basis (Geneé-Badia et al., 2001). EFQM aims to improve organizational capabilities in understanding and implementing all the needs to achieve superior performance with the core belief that lies in organizational learning (Yuri & Nurcahyo, 2013). The EFQM model is built with 9 (nine) criteria which are divided into five enabling criteria including: leadership, policy and strategy, staff, partnership and resources, process; and the four outcome criteria include: customer satisfaction; staff satisfaction; results for society; key performance results. A survey of 3500 public sector organizations in Europe shows that as many as 44% used EFQM, and 81% of them believed the model was effective for organizations (Hongyi et al., 2004).

While the Six Sigma model is a quality management strategy to improve the profitability, effectiveness and efficiency of all organizational operations to meet customer needs and expectations (Anbari & Kwak, 2016; Ayon & Kay, 2007; Hendry & Nonthaleerak, 2005; Mehmet et al., 2007). The Six Sigma model is an innovative program to achieve defect-free processes and reduce variation and this principle is very suitable to be implemented in the health sector that is not tolerant of errors (Kwak & Anbari, 2006). In addition, the Six Sigma model not only gives hope in improving the quality of health services and reducing errors (Black & Revere, 2006), but also effectively helps improve systems and processes in a service, including in PHC (Lloyd & Holsenback, 2006).

Implementation of a good quality management is the key to organizational success (Fening, 2012). Quality management is described as a philosophy and guideline that forms the basis for continuous organizational improvement. The implementation of quality management can not only guarantee the quality of products or services and increase customer satisfaction, but is also able to provide leverage to improve the performance of health service organizations, including in PHC. The low quality of service is a challenge for health center administrators to make changes for the better by adopting and implementing quality management initiatives, especially at a time when public demands and competitive pressures are increasing.

The implementation of EFQM and Six Sigma quality management have been empirically proven, respectively, as quality improvement methods that help improve organizational performance. Therefore, through this study, it is necessary to further explore the implementation of integrated quality management from the EFQM and Six Sigma methods into quality management practices to improve service quality in PHC.

This study aims to analyze the effect of management practices on improving service quality through integrated infrastructure practices of EFQM and Six Sigma of PHC in Jambi Province.

## METHOD

This study is a quantitative research using a cross sectional design approach through two stages of research. The first phase is expected to produce a questionnaire instrument that is appropriate (best fit) in measuring variables in the quality management model of PHCs in Jambi Province. In the second phase, a survey was conducted by distributing questionnaires to respondents to assess the implementation of the PHCs quality management model as the data base for this research. Then, the hypothesis was tested through Structural Equation Model (SEM) analysis to confirm the model in order to obtain the final construct of the quality management model which is expected to be applicable and feasible to apply in PHCs Jambi Province.

The population of this study were all employees or health workers of the health center starting from doctors to administrative staff apart from the head of the health center. The sample size in this study is based on a *rule of thumb* calculation for the estimation of the CFA model using *Maximum Likelihood*, at least 5 respondents for each observed variable (indicator). Considering that each observed variable in the CFA model of this study is represented by each question in the questionnaire, with as many as 113 questions (observable variables), it means that the minimum sample size required is  $5 \times 113 = 565$  samples. To prevent a shortage of samples at the time of collecting research data through the distribution of questionnaires plus 10%, so that the total sample is 622 respondents.

Each statement item from the variable is measured through answer options using a Likert scale by providing a score that distinguishes or sorts each answer from the lowest to the highest, namely: "never" (score 1), "rarely" (score 2), "sometimes" (score 3), "often" (score 4) and "Always" (score 5).

## RESULT AND DISCUSSION

### Descriptive Analysis Results

The results of the collected sample data (BD) were 574 (92.28%) from a total of 622 questionnaires. From the collected sample data, there were 14 questionnaires (2.44%)

### Inferential Statistical Analysis

**Table 1**  
**Research Indicator Reliability (*cronbach' alpha Composite, Reliability* and *AVE*)**

Construct/dimension	Cronbach' alpha	Composite Reliability	Average Variance Extracted (AVE)
<b>MANAGEMENT PRACTICES (PM)</b>	<b>0.942</b>	<b>0.952</b>	<b>0.714</b>
Leadership (K)	0.942	0.952	0.714
<b>INFRASTRUCTURE PRACTICES (PINF)</b>	<b>0.980</b>	<b>0.981</b>	<b>0.630</b>
Staff Focus (FS)	0.940	0.951	0.737
Policy & Strategy (KS)	0.937	0.946	0.639
Partnerships & Resources (KSD)	0.938	0.949	0.699
Quality Infrastructure (IM)	0.905	0.927	0.679
<b>QUALITY OF HEALTH CENTER SERVICES (MPP)</b>	<b>0.965</b>	<b>0.969</b>	<b>0.561</b>
Reliability (R)	0.875	0.914	0.727
Tangibles (T)	0.864	0.962	0.649
Responsiveness (RS)	0.886	0.922	0.747
Assurance (A)	0.811	0.876	0.640
Empathy (E)	0.849	0.899	0.691

incomplete, so 560 questionnaires complete questionnaire (KL) were used in the research analysis.

### Characteristics of Respondents

Respondents who became the sample in this study can be explained from several biographical variables which includes; age, gender, education, work unit, and working period. The age range of respondents is classified into four age range levels, namely;  $\leq 30$  years, 31–40 years, 41–50 years,  $\geq 51$  years. The age range in this study were dominated by 31-40 years (47.68%) and 41-50 years (25.36%), while the rest aged  $\leq 30$  years (12.86%) and  $\geq 51$  years (14,11%). In terms of characteristics, the gender of health workers were dominated by female with a percentage of 85.84% and male about 14.16% of the total respondents.

Other biographical characteristics of respondents were their level and educational background, where almost all of them are health educated and dominated by Diploma III (72.68%), with details in the order as follows; Diploma III Midwifery 31.25%, Diploma III Nursing 25.89%, Diploma III in Dental Nursing 5.18%, Diploma III Pharmacy 4.82%, Diploma III Health Analyst 2.68%, Diploma in Environmental Health (2.32%) and Diploma III Nutrition (0.54%). The remaining (27.32%) were S1 Medical/General Doctor and Dentistry, S1 Public Health, S1 Nursing/Nurse Profession, S1/Pharmacist Profession, Diploma IV Health and High School Education.

Characteristics of the working period of the respondents were classified into four groups with the highest to lowest frequency distribution, 11-15 years (51.07%), 6-10 years (35.18%),  $\leq 5$  years (6,96%), and  $\geq 16$  years (6.79%).

Whereas for work units, there were Maternal and Child Health (KIA) (24.29%), Polyclinic Medicine/Outpatient (17.50%), Inpatient Service Units (16.96%), Emergency Units (12.86%), Pharmacy Units (5.71%) and Laboratory Units (2.68%) (only 15 health workers from 24 PHCs were studied).

The results of the study also obtained an overview of the limited number of health analysts whose duties were to carry out laboratory examinations to support disease diagnosis. Of the 24 health centers that became the research sample, there were only 15 health analysts on duty in the health center laboratory, each health center should have at least 2 staff.

### Inner Model Analysis (Second Order Confirmatory Factor Analysis)

The first-order confirmatory analysis (stage) only takes measurements from the construct to the indicator, while the second-order confirmatory factor analysis (stage) analyzes from the latent construct to its dimensional construct. This factor analysis aims to identify the dimensions of a structure and then determine to what extent each variable can be explained by each dimension. The approach for *second order CFA* uses *repeated indicator approach* or also called *hierarchical component model*.

The second-order confirmatory factor analysis (stage) is carried out by adjusting the compiled hypothesis, so that it can directly answer research questions by conducting a structural model test (*inner model*) to determine the relationship between latent constructs, namely R-Square ( $R^2$ )

**Table 3.**  
Bootstrapping Results of Direct and Indirect Effects

Direct Effects			Original Sample(O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	p-values
H1	PM	MPP	0.290	0.290	0.058	4.963	0.000
H2	PINF	MPP	0.514	0.513	0.077	6.706	0.000
H3	PM	PINF	0.960	0.960	0.005	200.410	0.000
Indirect Effects							
H4	PM→PINF→MPP		0.494	0.493	0.073	6.718	0.000

The results of the path estimation test above, it can be described the results of each hypothesis in this study as follows:

Hypothesis 1 (H1) has a direct influence on Management Practices (PM) on the Quality of Public Health Center Services (MPP). The results of the structural model equation show that the T-statistical value is 4.963 and the p-value is 0.000 <0.05. This value indicates that the Practice of Management (PM) has a significant direct effect on the Quality of Public Health Center Services. The results of the analysis indicate that the alternative hypothesis which states that there is an influence of management practice factors on the quality of health center services is accepted.

Hypothesis 2 (H2) has a direct influence of Infrastructure Practices (PINF) on the Quality of Public Health Center Services (MPP). The infrastructure practice factor has a significant direct effect on improving the quality of health center services with a T-statistic value of 6.706 and a p-value of 0.000 <0.05.

Hypothesis 3 (H3) has a direct effect of Management Practices (PM) on Infrastructure Practices (PINF). Management Practices (PM) on Infrastructure Practices (PINF) can be seen from the results of the analysis carried out that shows Management Practice (PM) has a significant effect on Infrastructure Practice (PINF) with the results of T-statistical values of 200,410 and p-value of 0.000 <0.05.

Hypothesis 4 (H4) has an indirect effect of Management Practice (PM) on the Quality of Public Health Center Services (MPP) through Infrastructure Practice (PINF). Infrastructure Practice (PINF) obtained a T-Statistic value of 7.488 and a p-value of 0.000 <0.05, indicating that the relationship between the three variables is significant. This means that infrastructure practices have a partial mediating role between management practices and the quality of health center services.

Effect Size (f Square), Q Square ( $Q^2$ ) and Goodness of Fit (Gof). The result is as follows.

**Table 2.**  
Value of R-Square

Construct	R Square
Quality of Public Health Center Services (MPP)	0,930
Infrastructure Practices (PINF)	0,922

The R-Square value is a determination of the endogenous construct with a standard value according to Chin (1998), the  $R^2$  value is 0.67 strong, 0.33 moderate and 0.19 weak. Table structural model 5.25 shows that the 92.20% R-Square of Infrastructure Practitioners can be explained in the practice of quality management of PHC services.

## DISCUSSION

### The direct influence of Management Practices (PM) on the Quality of Public Health Center Services

Management practice (PM) is the most tangible part of management science that focuses on the *artifacts* created by top management to achieve the organization's vision and mission (Kujala & Ullrank, 2004). The results of this study prove that management practices (PM) as proxied by leadership have a positive and significant effect on the Quality of Public Health Center Service (MPP) as proxied by *Reliability (R), Tangibles (T), Responsiveness (RS), Assurance (A), and Empathy. (E)*. Thus, the Management Practice (PM) research hypothesis has a significant effect on the Quality of the Public Health Center Service (MPP) in the implementation of the EFQM and Six Sigma integration models of health centers in Jambi Province and cannot be rejected or accepted. The results show that the better the practice of management (leadership), the better the quality of health center services.

These results are reinforced between the dimension of management practice, that is leadership, and the dimensions of each quality of health center services have a strong relationship. This finding corroborates the results of previous studies that emphasized the importance of top management support (leadership) in the implementation of quality management (Adam et al., 1997; Anderson et al., 1995; Flynn et al., 1995), particularly to improve quality management practices (Lakhali et al., 2006; Montgomery & Woodall, 2008).

This finding supports the study of Lakhali, Pasin, & Limam (2006) which proved that management practices have a direct and statistically significant effect on quality management. According to the study, management practices that are proxied as commitment and support from top management are very decisive for the implementation of

quality management practices in order to improve organizational quality and performance (Lakhal et al., 2006). This finding is also in line with the study conducted by Zu et al. (2008) which proved that top management support (leadership) directly affects product quality. This phenomenon further emphasizes that top management support (leadership) is a very important factor for creating quality management practices. Leadership is the foundation of a quality management system that greatly influences the successful implementation of other quality management practices (Sousa & Voss, 2002). Likewise, the research results of Karno et al. (2017) showed that leadership is closely related to the quality of health center services with dimensions indicators of physical appearance, responsiveness, assurance, empathy and reliability.

Almost all quality management studies have shown that leadership is one of the main practices of implementing quality management and has proven it to be a critical factor that influences and plays an important role in the successful implementation of organizational quality management, including in PHC. The results showed that the implementation of PM in health centers in Jambi Province with an average of more than 65% was generally quite good. Out of 24 public health centers respondents, PM implementation had better conditions (majority  $\geq$  average). This condition illustrates that in general the Head of the public health center as a leader has sufficient ability and commitment to direct the organization, manage the management system, and be involved in efforts to improve the quality of services at the public health center.

The leader's commitment can be seen from his involvement in the program planning and evaluation process, as well as assisting employees in understanding the implementation of quality management as a continuous process (Naser Alolayyan et al., 2011). The results of this study is in line with Claver et al. (2003) and Wardhani et al. (2009) that concluded leadership is an important factor that enables the realization of the implementation of a quality management system through the integration of quality improvement efforts into the overall strategic plan and organizational processes, as well as promoting the values and techniques of quality improvement into operational processes. Manaf (2005) also concluded that leadership is the commitment and support of top management that will determine how the organization moves to achieve long-term goals (strategic plans). These studies confirmed that leadership is the main determinant of the success of quality management which acts as a driver in creating values, goals, and systems to meet customer expectations and improve organizational quality (Ahire et al., 1996).

#### **Direct influence of Management Practices (PM) on Infrastructure Practices (PINF)**

In management practice, the success of a leadership can be seen and obtained from strategic policies in the strategic plans that have been established, and the weak support of a leader for strategic planning is an obstacle to the successful implementation of quality management, which is caused by organizational rigidity to environmental changes and technological developments, unclear organizational goals, inadequate long-term plans and policies, weak mechanisms in formulating strategic plans, and lack of clarity. One of the highlights of quality management practice is emphasis on implementing leadership practices, where top management must devote sufficient personal energy to ensure success. The results of this study prove that Management Practices (MP)

have a positive and significant effect on infrastructure practices by obtaining T-statistics = 200,410 and p-value = 000 which means that Management Practices (PM) have a significant effect on infrastructure practices in the implementation of the EFQM and Six Sigma Integration Model at the PHC in Jambi Province.

The results are also consistent with previous studies that have demonstrated a significant relationship between management practices and infrastructure practices (Flynn et al., 1995; Lakhal et al., 2006), and specifically Zu, Fredendall, & Douglas (2008) that proved leadership (top management support) directly affects infrastructure practices including structured procedures and role structures (Zu et al., 2008). This finding also strengthens previous studies which emphasize the importance of leadership aspects in quality improvement.

#### **The direct influence of Infrastructure Practices (PINF) on the Quality of Public Health Center Services (MPP)**

The results of this study prove that infrastructure practices with staff focus indicators (HR), strategic policies, partnerships and resources as well as quality infrastructure have a positive and significant direct effect on the Quality of Public Health Center Services (MPP) through aspects of *Reliability (R)*, *Tangibles (T)*, *Responsiveness (RS)*, *Assurance (A)*, and *Empathy (E)* with a T-statistic value = 6.706 and a p-value = 0.000, meaning this hypothesis is accepted. The results also show that in quality management infrastructure practices have an influence on service quality which indicates that the implementation of effective infrastructure practices at the health center through the determination of staff focus (HR), strategic policies, partnerships and resources as well as quality infrastructure and high attention to HR management contributes greatly on improving the quality of health center services in Jambi Province. Descriptively, the implementation of the integration of EFQM and Six Sigma infrastructure practices is generally quite good (62%) which means that it has attempted to create systems and processes within the organization to achieve goals and improve service quality.

The results of this study support previous studies which found that infrastructure practices are directly and significantly related to the quality of organizational performance. Study conducted by Dow et al. (1999) proved that employee commitment, shared vision and customer focus, as indicators of infrastructure practices can be combined to improve the quality of performance produced by management. This finding is also consistent with Powell (1995) which found that having a zero-defect mentality, employee empowerment efforts, use of cross-functional teams, quality commitment, and relationship with suppliers statistically had a positive effect on the quality of organizational performance. The study of Barker & Cagwin (2000) confirmed the positive influence of infrastructure practices on organizational quality.

In developing quality management practices related to HR (staff) focus, generally it is in three dimensions, namely staff empowerment, staff involvement, and staff training (Ahire et al., 1996; Lakhal et al., 2006; Manaf, 2005). Fening's research (2012) proved that one of the factors that play an important role in the implementation of quality management in organizations is the focus on staff or Human Resources (HR), namely how to effectively manage the knowledge, skills, and expertise of employees that can be used to produce products of high value to customers and

have a direct impact on employees resulting in positive outcomes for the organization.

The results showed that the implementation of infrastructure practices based on human resources (staff focus) at the PHC in Jambi Province had done quite well, an average of 62.17% to improve the ability of the human resources of the health center in order to achieve better service quality. This is in line with previous studies which concluded that to achieve success, an organization must focus on human resources (HR) as a quality management practice (Fening, 2012; Lagrosen et al., 2007; Manjunath et al., 2007). Its relation to strategic policies in an effort to improve the quality of health center services. An excellent organization is able to carry out its vision and mission by developing policies and strategies to meet customer needs. The results show that the implementation of health center policies and strategies in Jambi Province are generally quite good because most of them on average more than 61.67% have been carried out by making or establishing policies and service quality strategies based on current and future needs and information on service quality measurement. Meanwhile, health center efforts in implementing partnerships and infrastructure practice resources in quality management to meet the needs of health services from various aspects of financial support, health facilities and relationships with partners are above average (60%). For quality infrastructure, an average of 62.44% of health center has been able to meet the needs of service quality. The development of quality infrastructure at the health center is carried out by forming a group of quality teams which are formally determined through the decision of the leader (head) of the health center. The study of Linderman et al. (2003) is needed to form a team as a parallel structure that operates specifically for quality improvement.

There is a descriptive relationship between the efforts of the health center in implementing infrastructure practices to the implementation of the dimensions of service quality. The health center has a fairly good average, which is above 65%, meaning that the two have a relationship in the implementation of the quality management of the health center.

#### **Indirect Influence of Management Practices (PM) on Quality of Public Health Center Service (MPP) through Infrastructure Practices (PINF)**

The results of this study reveal that indicators form latent constructs/variables with loading factor criteria set more than 0.7 are Infrastructure Practices (PINF) which are reflected in indicators of human resources (Staff), policies and strategies, partnerships and resources and quality infrastructure are able to play a role in partially mediating management practices with leadership indicators on the quality of health center service in Jambi Province as measured by dimensions or indicators of *Reliability, Tangibles, Responsiveness, Assurance and Empathy*.

Infrastructure practices through quality infrastructure must be developed by organizations in order to instill and maintain continuous improvement efforts, ensure that everyone speaks the same, and provide easy access to information about the progress of quality improvement carried out and their impact on organizational performance. To improve the quality of the organization in the study of Linderman et al. (2003), it is necessary to form a parallel structure that operates.

## **CONCLUSION AND RECOMMENDATIONS**

The results of the SEM analysis of the integration of EFQM and Six Sigma in quality management practice on improving the quality of health center services in Jambi Province can be concluded as follows:

1. Management practices have a direct effect on the quality of services of the integrated EFQM and Six Sigma Public Health Center in Jambi Province.
2. Management practices have a direct effect on the infrastructure practices of the integrated EFQM and Six Sigma Public Health Center in Jambi Province.
3. Infrastructure practices have a direct effect on the quality of services of the integrated EFQM and Six Sigma Public Health Center in Jambi Province.
4. Core practices have a positive and significant direct effect on the quality of services of the integrated EFQM and Six Sigma Public Health Center in Jambi Province.

Based on conclusions, some suggestions can be submitted as follows:

1. For Public Health Center management, it is hoped that they can apply the integrated quality management practice model of EFQM and Six Sigma by paying attention to quality management practice factors, Core Practices by improving processes based on quality improvement procedures and prioritizing activities for quality measurement by systematically designing and managing quality programs, Quality Public Health Center services by making service quality standards based on *Reliability, Tangibles, Responsiveness, Assurance and Empathy*.
2. For the Local Government of Jambi Province, it is expected to make a policy to develop a quality management program for health center by utilizing the EFQM and Six Sigma Integration model in quality management practices, including providing infrastructure and supporting resources such as implementing personnel, regulations and implementation guidelines, training technical quality management, and budget allocation needed by PHC in implementing quality management practices.
3. For further research, it is possible to develop research on the implementation of integrated quality management practices of EFQM and Six Sigma in PHC with an implementative design so that the development of quality management practices and their impact on quality and performance can be more accurate.

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### **Conflict of Interest statement**

The author declares that there is no conflict of interest.

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