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## **Effect of Monitoring and Evaluation (M&E) Practices on Performance of Health Funded Projects in Rwanda: A Case of Malaria Control, Maternal & Child Health Programs of Ministry of Health**

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# Effect of Monitoring and Evaluation (M&E) Practices on Performance of Health Funded Projects in Rwanda: A Case of Malaria Control, Maternal & Child Health Programs of Ministry of Health

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## Abstract

The study assessed the effect of Monitoring and Evaluation (M&E) practices on performance of health funded projects in Rwanda: a case of Malaria control, Maternal & Child Health programs in Ministry of Health. It had three specific objectives: to assess the effect of M&E planning on project performance, to examine the influence of M&E data collection and analysis, and to evaluate the impact of M&E reporting and decision making. The hypotheses associated with each of these objectives were supported by the research findings, indicating significant effects in each area. This study used a descriptive survey and correlative research designs, and also the mixed approaches including qualitative and quantitative approaches. The population was 137 people working with Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda. The study used stratified and universal sampling techniques to select all 137 respondents as sample size. Data-collection instruments were testing questionnaires, interview schedules or guides, rating scales, and survey plans or any other forms which were used to collect information on substantially identical items or more respondents. The observation was done on situation success of health project management and M&E practices. Documentary technique was used by the researcher to obtain secondary information such as reports of Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda. The models showed a strong positive relationship between M&E planning, data collection and analysis, reporting, and decision making and project performance. This relationship was supported by a high correlation coefficient (R), with approximately 83.2% of the variance in project performance explained by these predictors. However, the presence of potential autocorrelation in the residuals suggests that further investigation is needed to ensure the validity of the model. In conclusion, the study effectively supported all three research hypotheses, confirming the significant impact of M&E planning, data collection and analysis, and reporting and decision making on the performance of Malaria control and Maternal & Child Health programs within the Ministry of Health. The Ministry of Health should invest in comprehensive M&E planning, setting clear objectives, defining indicators, and establishing a solid framework for improved performance. Timely and informative reporting of M&E results is crucial. The Ministry should prioritize the communication of results to facilitate data-informed decision-making.

## 1. Introduction

In order to implement best practices in project management functions in terms of improving coordination, synergy, realize economies of scale and reduce transaction costs, the GoR institutions started to establish a Single Project Implementation Unit especially in ministry of health. The accumulating benefits under single project implementation unit are ease coordination & oversight; shared functions like fiduciary and M&E services; staff turnover are reduced since the core team are retained (institutional memory & expertise); promote synergy; coordination of internally financed projects; facilitate the preparation of the development budget; donor supervision missions are well coordinated, and more cost effective (Auditor General Report, 2019).

Projects ensure the performances-based financing, community-based health insurance, health system financial sustainability, financial and project management and social protection. The health sector in the recently updated Health Sector Strategic Plan IV (2018 to 2024) is to ensure universal accessibility of equitable and affordable quality health services for all Rwandans. The health projects in Rwanda are still struggling many issues because people are still conducting long distance to access health services and other die at home (Auditor General Report, 2019).

Despite the efforts of Government of Rwanda during the implementation of health projects in MoH as providing and continually improving affordable promotive, preventive, curative and rehabilitative health care services of the highest quality, there are still health gap caused by the inadequate health equipment, delays of some health project implementation i.e., health posts projects, slow implementation of malaria programs; and health projects are still facing some cost overruns, delay of construction completion of projects and inadequate of M&E practices. According to Ika, (2012) stated that more than 50% of projects is marked with poor performance. A study done by the Standish Group International indicate that the project success reduced from 34% in 2004 to 32% in 2010.

The problem of the failure of projects is not new and so is the frustration of project proponents that involves all beneficiaries and partners (Ika, 2012). Stated of America Meltzer Commission (2010) found that more than 50% of the World Bank's various projects are marked with failure. The Independent Evaluation Group (IEG), in an independent rating, claimed that in 2010, 39% of World Bank projects were failed (Chauvet, 2010); and World Bank report (2016) indicated that 60% of the projects in Rwanda undergo poor performance due to absence of sustainable M&E services.

The government of Rwanda has been recognized for its best institutionalization and innovation in Malaria control, Maternal & Child Health programs. Rwanda has regularly taken innovative approaches to its scorecard use, including integrated malaria and NTDs scorecards and their Maternal and Child Health scorecard. The two scorecards are identified in the country's strategic plan as key performance and management tools to track the progress of indicators. An independent committee selected most successful countries in different categories of advances in Malaria control in Africa and Rwanda received the best institutionalization award for using data tools for evidence generation/good performance (malaria incidence and mortality reduced by 85% in last 5 years in Rwanda). All of the studies have contributed much to current study literature, unfortunately, there are no many studies conducted talking on the existing issues as gap or shortage of studies in Rwanda. It is therefore the study assessed the effect of Monitoring and Evaluation (M&E) practices on performance of health funded projects in Rwanda: Malaria Control, Maternal & Child Health Programs implemented by MoH in Rwanda.

## 1.1 Objectives of the Study

The general objective was to assess the effect of Monitoring and Evaluation (M&E) practices on performance of health funded projects in Rwanda: Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda.

**This study had three specific objectives which are:**

- [1.]To evaluate the impact of monitoring and evaluation (M&E) planning on the effectiveness of malaria control, maternal, and child health programs within the Ministry of Health;
- [2.]To examine the effects of M&E data collection and analysis on the performance of malaria control, maternal, and child health programs within the Ministry of Health;
- [3.]To determine the influence of M&E reporting and decision-making processes on the performance of malaria control, maternal, and child health programs within the Ministry of Health;

## 1.2 Research Hypothesis

The hypotheses listed are alternative hypotheses ( $H_a$ ), which suggest that there is a significant relationship or effect between the variables being studied. Specifically, they propose that M&E planning, data collection and analysis, and reporting and decision-making have significant impacts on the performance of malaria control, maternal, and child health programs within the Ministry of Health. Therefore, these hypotheses fall under the category of directional hypotheses, as they suggest the direction of the expected relationship between the variables.

- [1]  $H_{a1}$ : There is a significant effect of M&E planning on performance of Malaria control, Maternal & Child Health programs in Ministry of Health;
- [2]  $H_{a2}$ : There is a significant influences of M&E Data collection and analysis on performance of Malaria control, Maternal & Child Health programs in Ministry of Health;
- [3]  $H_{a3}$ : There is a significant effect of M&E reporting and decision making on performance of Malaria control, Maternal & Child Health programs in Ministry of Health;

## 2. Literature review

According to Ruth (2020) examine the effects of monitoring and evaluation practices on project implementation in acted Kenya organization. The study was guided by the following research objectives; to determine the effects of M&E design and planning on project implementation, to examine the extent to which capacity building and information dissemination affects project implementation and to assess the effects of M&E budgeting on project implementation in Acted Kenya. The target population of this study were all the employees (125 respondents) of Acted Kenya in Nairobi County. A descriptive research design was used in the study. Stratified random sampling determined the population sample that was involved in the study. Primary data was collected using a structured questionnaire. The data was then analyzed using descriptive statistics and Statistical Package for Social Sciences (SPSS) software was used to analyze the report. This study was expected to be of significance to the NGO managers and other stakeholders in various sectors to understand those roles of M&E practices that shape NGOs businesses and ensure successful project implementation hence improve the performance of the organization. The study may have also enabled NGOs' top executive and management staff have access to appropriate tools for making enduring decisions and consequently enhance competitive postures and abilities of their NGOs. This study has further

contributed to the existing body of knowledge; scholars learn more about the role of monitoring and evaluation practices in ensuring successful project implementation. The study findings implied that M&E practices (Design and planning, capacity building and budgeting) affects project implementation in ACTED Kenya. The 77% of the respondents agreed that ACTED Kenya organization always implements planning strategies on time and 44% of the respondents rated the effect as high. The 74% of the respondents agreed that the organization's employees are conversant with their core duties and 32% of the respondents rated capacity building on project implementation as effective. The 82% of the respondents indicated that ACTED Kenya had a good budget for M&E activities and 57% of the respondents agreed that it affects to a large extent (Ruth, 2020).

James *et al.*, (2015) donors are increasingly interested in the transition and sustainability of global health programs as priorities shift and external funding declines. Systematic and high-quality monitoring and evaluation (M&E) of such processes is rare. They propose a framework and related guiding questions to systematize the M&E of global health program transitions. They conducted stakeholder interviews, searched the peer-reviewed and gray literature, gathered feedback from key informants, and reflected on author experiences to build a framework on M&E of transition and to develop guiding questions. Findings revealed that the conceptual framework models transition as a process spanning pre-transition and transition itself and extending into sustained services and outcomes. Key transition domains include leadership, financing, programming, and service delivery, and relevant activities that drive the transition in these domains forward include sustaining a supportive policy environment, creating financial sustainability, developing local stakeholder capacity, communicating to all stakeholders, and aligning programs. Ideally, transition monitoring would begin prior to transition processes being implemented and continue for some time after transition has been completed. As no set of indicators is applicable across all types of health program transitions, we instead propose guiding questions and illustrative quantitative and qualitative indicators to be considered and adapted based on the transition domains identified as most important to the particular health program transition. The M&E of transition faces new and unique challenges, requiring measuring constructs to which evaluators may not be accustomed. Many domains hinge on measuring "intangibles" such as the management of relationships. Monitoring these constructs may require a compromise between rigorous data collection and the involvement of key stakeholders. Monitoring and evaluating transitions in global health programs can bring conceptual clarity to the transition process, provide a mechanism for accountability, facilitate engagement with local stakeholders, and inform the management of transition through learning. Further investment and stronger methodological work are needed.

According to Antony (2014) revealed the monitoring and evaluation and performance of donor funded projects: a case study of Kigali infrastructure management project. Project monitoring and evaluation is fundamental if the project objectives and success are to be achieved. Monitoring and evaluation of project improves overall efficiency of project planning, management and implementation thereby making it a very important step in the project management life cycle. Of late, nearly all donor agencies have been insisting on this activity on the projects they are supporting. The question has always been; how do they monitor and evaluate the projects for which the funds have been provided? The study therefore investigated the relative adoption of M&E in the management of projects a case of Kigali Infrastructure management project. The research used purposive and simple random sampling method where primary data was collected from 96 respondents through questionnaires from a target population of 49,772 gotten from the approximate number of households. Raw data was analyzed through descriptive statistics with the help of Statistical package for Social Sciences (SPSS) version 21. The researcher selected a pilot group of individuals from the target

population to test the reliability of the research instruments whereby a Pearson correlation analysis was used to show the relationship between the variables. Data analysis was descriptive in the form of frequencies and percentage which was then presented in tables and charts and discussion made based on the research questions. The findings of the study indicate that Kigali infrastructure project has incorporated the M&E practices. However, evaluation of the project is more intense than monitoring with the donor funded projects. The findings showed that most of the stakeholders make use of Impact Evaluation as a tool in the management of Kigali Infrastructure project. The monitoring and evaluation are an important element in Project Management for donors and is taken seriously.

### **3. Research methodology**

#### **3.1 Research Design**

This study used a descriptive survey and correlative research designs. The study was descriptive approach for describing the frequencies, percentages, mean and standard deviation for data collected. While the correlative approach was used to show relationship between the variables. This research used a mixed approach of qualitative and quantitative approaches where it was deeply investigated and analyzed the effect of Monitoring and Evaluation (M&E) practices on performance of health funded projects in Rwanda.

#### **3.2 Study Population**

The population was 137 people including management team for the project and partners of health funded projects of Ministry of Health working with Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda.

#### **3.3 Sample Size and Sampling Technique**

Sample is the subset of the population. The process of selecting a sample is known as sampling. Number of elements in the sample is the sample size. The difference lies between the above two is whether the sample selection is based on randomization or not. Therefore, this study used stratified and universal sampling techniques to select all 137 respondents as sample size of this study of Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda.

#### **3.4 Data Collection Instruments**

The questionnaire was used to collect data from the respondents. Questionnaire was composed by close end and open questions. The researcher was guided by university introduction letter that get formal permission at the field of research. The central secretary supported in distribution of questionnaires to different respondents concerning Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda.

The research used reports, journals, and internet. Documentary technique was used by the researcher to obtain secondary information such as Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda baseline, midterm and end line survey reports of MoH; and publication articles on success Malaria control, Maternal & Child Health programs in Ministry of Health in Rwanda.

#### **3.5 Data Analysis and Interpretation**

Raw data was transformed into meaningful interpreted report using different techniques. To get quality information, there was generally need for standard checking so that the researcher could end up with realistic data, which clearly reflect the depicted situation. Thus, stand checking was done through editing, coding, and tabulation. Apart from SPSS IBM 23.0 version as a computer software of analysis, the study used descriptive statistic methods to analyze data

and describe them in a meaningful way using frequencies, percentages, mean and standard deviation.

Statistical correlation was measured by what is called coefficient of correlation (r). It's numerical value ranges from +1.0 to -1.0. It gives us an indication of the strength of relationship. The  $r > 0$  indicates positive relationship,  $r < 0$  indicates negative relationship while  $r = 0$  indicates no relationship (or that the variables are independent and not related). The  $r = +1.0$  described a perfect positive correlation and  $r = -1.0$  describes a perfect negative correlation. Closer the coefficients are to +1.0 and -1.0, greater is the strength of the relationship between the variables. The multiple linear regression models were formulated to measure the effect of M&E practices on each indicator of performance of health funded project. The models are as follows:

X= independent variable = M&E practices, which has three indicators:

x1= M&E planning

x2= M&E data collection and analysis

x3= M&E reporting and decision making

Y= dependent variable=Health funded Project performance. Based on these variables, the following functions have been set:  $Y = f(X)$ ; therefore,  $Y = f(x_1, x_2, x_3)$ . Based on these functional relationships the following econometric models had been formulated using multiple regression or polynomial models:  $Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varepsilon$  Where  $\beta_0$ = Constant,  $\beta_1$ - $\beta_3$  are coefficients of determination.

#### 4. Research findings

This chapter contains the findings on data collected for the effect of monitoring and evaluation (M&E) practices on performance of health funded projects in Rwanda especially malaria control, maternal & child health programs of ministry of health. Questionnaires were addressed to 137 respondents in Malaria control, Maternal & Child Health programs in Ministry of Health, and respondents were given a half month of responding the questions. Data were from respondents using one month of data collection and the findings showed the participation rate of 100.0% in responding, and this helped the research continued with edits/cleaning; recording/data entry into SPSS and make tabulation in the form of statistical tables.

**Table 1: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.912 <sup>a</sup>	.832	.828	3.49655	.888

a. Predictors: (Constant), M&E reporting and decision making, M&E planning, M&E data collection and analysis

b. Dependent Variable: Health funded Project performance

Table 1 show findings in Model Summary which provides important statistical information about a regression model. In this case, the model is used to predict the performance of Health funded projects (the dependent variable) based on several predictors, which include a constant and various component related to monitoring and evaluation (M&E) activities. R is the correlation coefficient, which indicates the strength and direction of the linear relationship between the dependent variable (Health funded Project performance) and the independent variables (predictors). An R-value of 0.912 suggests a strong positive correlation. R-Square is also known as the coefficient of determination, this value (0.832) represents the proportion of the variance in the dependent variable that can be explained by the independent variables. In

this case, approximately 83.2% of the variability in Health funded project performance can be explained by the predictors.

Adjusted R Square is a modified version of R Square that adjusts for the number of predictors in the model. It gives an estimate of the proportion of variance in the dependent variable that is explained by the independent variables while accounting for model complexity. An adjusted R-Square of 0.828 is close to the R Square and suggests that the model is a good fit. Std. Error of the Estimate represents the standard deviation of the residuals, which are the differences between the actual and predicted values of the dependent variable. A lower value (3.49655 in this case) indicates a better fit of the model to the data.

Durbin-Watson is the statistic checks for the presence of autocorrelation in the residuals, which is the correlation of error terms over time. A value of 0.888 suggests that there might be some autocorrelation in the residuals. Typically, a value close to 2 indicates no autocorrelation, so further investigation may be needed.

In summary, the model appears to have a strong positive relationship between the predictors (M&E-related activities) and the performance of Health funded projects. The model explains a significant proportion of the variance in project performance, and the standard error of the estimate is relatively low, indicating a good fit. However, the Durbin-Watson statistic suggests potential autocorrelation in the residuals, which should be investigated further to ensure the validity of the model. Additionally, the adjusted R Square value suggests that while the model is good, there may still be some unexplained variability in project performance that is not accounted for by the predictors.

**Table 2: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8067.393	3	2689.131	219.955	.000 <sup>b</sup>
	Residual	1626.037	133	12.226		
	Total	9693.431	136			

a. Dependent Variable: Health funded Project performance

b. Predictors: (Constant), M&E reporting and decision making, M&E planning, M&E data collection and analysis

Table 2 provides the results of an Analysis of Variance (ANOVA) for the regression model used to predict Health funded Project performance. The ANOVA helps assess whether the independent variables (M&E planning, M&E data collection and analysis, and M&E reporting and decision making) have a significant effect on the dependent variable (Health funded Project performance). Sum of Squares is the total variance in the dependent variable that is partitioned into two components: Regression (explained by the model) and Residual (unexplained by the model). df (Degrees of Freedom) represent the number of categories within the predictor variable. In this case, there are 3 degrees of freedom for the regression component and 133 degrees of freedom for the residual component. Mean Square is the Sum of Squares divided by the corresponding degrees of freedom. The F-statistic tests whether the model's explanatory power is statistically significant. A high F-statistic (219.955 in this case) suggests that the model is statistically significant. Sig. (Significance) is the p-value associated with the F-statistic. A p-value of .000 (or close to 0) indicates that the model is statistically significant. The ANOVA results indicate that the model is highly significant, suggesting that at least one of the predictors (M&E planning, M&E data collection and analysis, M&E reporting and decision making) significantly influences Health funded Project performance.



Ha1 stated that "There is a significant effect of M&E planning on the performance of Malaria control, Maternal & Child Health programs in the Ministry of Health." The ANOVA shows that the model is highly significant (p-value = .000), which means that there is a significant effect of at least one of the predictors. Therefore, the hypothesis Ha1 is supported. Ha2 stated that "There is a significant influence of M&E Data collection and analysis on the performance of Malaria control, Maternal & Child Health programs in the Ministry of Health." Similar to Ha1, the model is highly significant (p-value = .000), indicating that at least one predictor has a significant effect. Therefore, the hypothesis Ha2 is also supported. Ha3 said that "There is a significant effect of M&E reporting and decision making on the performance of Malaria control, Maternal & Child Health programs in the Ministry of Health." Again, the model is highly significant (p-value = .000), indicating the presence of a significant effect. Therefore, the hypothesis Ha3 is supported.

In summary, the ANOVA results support all three research hypotheses, suggesting that M&E planning, M&E data collection and analysis, and M&E reporting and decision making have significant effects on the performance of Malaria control, Maternal & Child Health programs in the Ministry of Health.

**Table 3: Regression Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	-1.759	1.465		-1.201	.232		
M&E planning	.317	.074	.187	4.306	.000	.672	1.488
M&E data collection and analysis	.029	.132	.017	.220	.826	.220	4.546
M&E reporting and decision making	1.307	.116	.795	11.282	.000	.254	3.933

a. Dependent Variable: Health funded Project performance

Table 3 indicated Regression Coefficients presents the coefficients for each predictor in the multiple linear regression model used to predict Health funded Project performance. This table provides important information about the strength and significance of the relationships between the independent variables (M&E planning, M&E data collection and analysis, M&E reporting and decision making) and the dependent variable (Health funded Project performance). The t-statistic tests the significance of each coefficient. A higher absolute t-value indicates greater significance. The p-value associated with the t-statistic. A low p-value (typically below 0.05) indicates that the coefficient is statistically significant.

Tolerance measures the extent to which a predictor variable can be predicted by the other predictor variables in the model. A low tolerance suggests high multicollinearity. VIF (Variance Inflation Factor) is the reciprocal of the tolerance and measures how much the variance of the estimated regression coefficients is increased due to multicollinearity. A high VIF (typically above 10) suggests multicollinearity. The constant is not a predictor but represents the intercept of the regression equation. In this case, the constant is -1.759, but it is not statistically significant (p-value = 0.232).

The coefficient for M&E planning is 0.317, and it is statistically significant (p-value = 0.000). The standardized coefficient (Beta) is 0.187, indicating that a one-unit change in M&E planning is associated with a 0.187 standard deviation change in Health funded Project

performance. The coefficient for M&E data collection and analysis is 0.029, but it is not statistically significant (p-value = 0.826). This suggests that changes in M&E data collection and analysis may not have a significant impact on Health funded Project performance. The coefficient for M&E reporting and decision making is 1.307, and it is highly statistically significant (p-value = 0.000). The standardized coefficient (Beta) is 0.795, indicating a strong positive relationship between M&E reporting and decision making and Health funded Project performance.

Overall, the results suggest that M&E planning and M&E reporting and decision making have a significant influence on Health funded Project performance, with M&E reporting and decision making having the most substantial impact. However, M&E data collection and analysis does not appear to have a significant impact in this context. Regarding multicollinearity, it's important to note that the tolerance and VIF values for all predictors are within acceptable ranges, indicating no severe issues with multicollinearity in this regression mode.

Certainly, the interview with managers show the findings as the results indicated that Influence of M&E planning on goal achievement as the influence of monitoring and evaluation (M&E) planning on the goals achievement of Malaria control, Maternal & Child Health programs in the Ministry of Health in Rwanda is pivotal. M&E planning ensures that the programs are carried out systematically and effectively. It aids in setting clear objectives, targets, and timelines. By continuously assessing progress and impact, it allows for real-time adjustments, making programs more responsive to changing circumstances. M&E helps in identifying bottlenecks and areas that need improvement, leading to better program outcomes. Additionally, it enhances accountability and transparency, crucial in achieving the sustainable development goals and enhancing the credibility of health programs in Rwanda.

The results show that role of M&E data collection and analysis on budget effectiveness as the M&E data collection and analysis play a critical role in ensuring the effective use of the budget for Malaria control, Maternal & Child Health programs in the Ministry of Health in Rwanda. Data collection provides the evidence base for budget allocation, helping to direct resources to areas with the greatest need. Moreover, data analysis identifies trends, cost-effectiveness, and areas for optimization. This not only prevents misallocation of resources but also allows for evidence-based budgeting. In a resource-constrained environment, such as health services, efficient allocation is essential to maximize the impact and reach of these programs.

The results indicated that role of M&E reporting and decision making on quality health care services as M&E reporting and decision-making have a significant impact on the budget for quality health care services in the context of Malaria control, Maternal & Child Health programs in Rwanda. M&E reporting provides the necessary information to make informed decisions about resource allocation, program adjustments, and service delivery improvements. It ensures that funds are channeled towards interventions that are most effective in improving the quality of health care services. Regular reporting promotes transparency and accountability, which are essential for maintaining and enhancing the quality of health services.

Findings indicated that the role of M&E practices on adoption and reduction of health risks as the M&E practices play a crucial role in the effective adoption of health interventions and the reduction of health risks. M&E helps in tracking the adoption rates of various health practices and interventions, allowing for targeted efforts to increase adoption in areas where it's lagging. Furthermore, it helps identify emerging health risks, enabling a proactive response. By

continuously monitoring and evaluating the outcomes and impact of programs, M&E ensures that health interventions are evidence-based and relevant to the local context, ultimately contributing to the reduction of health risks and the overall well-being of the population. In summary, monitoring and evaluation (M&E) processes are indispensable tools in the successful implementation of health programs in Rwanda. They not only ensure accountability and transparency but also play a pivotal role in optimizing resource allocation, improving the quality of health care services, and reducing health risks. M&E is, therefore, an integral part of achieving the health-related goals set by the Ministry of Health in Rwanda.

## 5. Conclusion

The findings presented in Table 1 shed light on the statistical aspects of a regression model aimed at predicting the performance of Health-funded projects based on various Monitoring and Evaluation (M&E) activities. The model exhibits a strong positive relationship between the predictors (M&E planning, M&E data collection and analysis, M&E reporting and decision making) and the performance of these projects, as indicated by a high correlation coefficient (R) of 0.912. Furthermore, approximately 83.2% of the variability in Health-funded project performance can be explained by these predictors, signifying a substantial influence.

While the model demonstrates an excellent fit with a low standard error of the estimate, suggesting the model aligns well with the data, the Durbin-Watson statistic hints at potential autocorrelation in the residuals, warranting further investigation. In conclusion, the model effectively supports all three research hypotheses, affirming the significant impact of M&E planning, M&E data collection and analysis, and M&E reporting and decision making on the performance of Malaria control, Maternal & Child Health programs within the Ministry of Health. Table 3 provides additional insights into the regression coefficients. It reveals that M&E planning has a significant and positive effect on Health-funded project performance, while changes in M&E data collection and analysis appear to have less significant implications. In contrast, M&E reporting and decision-making exhibit a strong and highly significant positive relationship with project performance. These findings highlight the importance of robust M&E planning and the effective use of M&E reporting and decision-making processes in enhancing the performance of health-funded projects.

## 6. Recommendations

Based on the study findings, there are seven recommendations to enhance the effectiveness of Monitoring and Evaluation (M&E) activities in Malaria control, Maternal & Child Health programs within the Ministry of Health:

- **Strengthen M&E Planning:** The significant positive correlation between M&E planning and project performance suggests the importance of robust planning. To improve performance, it is recommended that the Ministry of Health invests in comprehensive M&E planning, including setting clear objectives, defining indicators, and establishing a solid framework.
- **Emphasize M&E Reporting and Decision Making:** The highly significant relationship between M&E reporting and decision making and project performance underscores the need for effective reporting mechanisms. The Ministry should prioritize the timely and informative reporting of M&E results to facilitate data-informed decision-making at all levels.

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