

Research Article

Assessment of Public Management on Health Service Delivery in Kenya*Bengat, Kipyegon Joseph¹, Dr. Bernard. K. Nassiuma (PhD)², Prof. Joshua Kwonyike³*^{1,2,3}Department of Development Studies, School of Human Resource Development Moi University Kenya

Abstract: This Research investigated an assessment of public management on health service delivery in Kenya. The objective is to establish the: Contract management, Benchmarking and Quality Service on Health Service Delivery in Kenya. The research adapted Research approach utilized was mixed method approach, design. This research utilized descriptive survey design, target population consisted of Health workers 1,740. Finding For one of good fit, BM and CM had highest NFI = 0.939 and GFI = .993. Results indicate that BM on Health Service Delivery had a strong significant difference ($\beta = 0.78$), Two Null Hypothesis were rejected QS had a weak prediction towards Health Service Delivery. Also BM model demonstrated better fit than CM Model. QS did poorly than the two models (CM & BM) in terms of ratio index < 5 . According to the rule of thumb QS measured poorly. In conclusion Contract management and Benchmarking supported Health Service Delivery. The study recommends further investigation on Quality Service

Keywords: Contract management, Benchmarking (BM), Quality Service(QS), Health Service Delivery(HSD), Analysis of Moment Structures(AMOS) and Structure Equation Modeling(SEM)

BACKGROUND

Public sector reforms in Africa have had mixed results with success in other areas and failures in other areas (Kilelo, 2015). Countries around the world including the less developed countries, which are embarking upon making government work better and cost less follow the broader framework as a strategy of reforms utilize the new public management model (Atrey 2012). The universal administrative reform movements in public management of past years has been driven in large part by use of governments' responses to the fiscal crisis brought by changes in the international economic crises and by the demands for government services and regulations in national political systems. Benchmarking against competitors may also uncover practices that are unworthy of emulation. The success of bench marking depends on employees' understanding the results and consequences of the benchmarking exercise and that they will need to participate in determining the implementation necessary for organizational change (ACCA, 2012). Benchmarking in the public sector is analogous to that in private sector but the motivational forces and obstacles are somewhat different. What informs public sector benchmarking may be the need to fulfill certain mandates of the policy, but private sector may be pushed by the need to raise profits.

Various tools have been identified on how to measure implementation of NPM; among these tools, which are used for quantities assessment of the implementation of NPM, is that of using indicators like benchmarks for measuring program outcomes results and privatization of major programmers (Burden, Herbert & Wright, 1999 cited in Baclija, 2011). Baclija (2011) investigated NPM

implementation in local levels and found that NPM correlates with the number of inhabitants, benchmarks and implementation of NPM, principles and the average GDP per city inhabitants.

The study did not succinctly address the service sector and the peculiar nature when it comes to measuring performance in order to use results for benchmarking. Benchmarking is an important tool of Total Quality Management (TQM). According to Camp (1989) cited in ACCA, (2012) benchmarking is a continuous process of measuring Devolution came to existence and its implementation took place when some counties had better infrastructure already existing. Such counties started implementing devolved operations at a better footage compared to others who had to struggle building infrastructure from the scratch.

Presumably counties that had better infrastructure are expected to be in frontline in performance and health service delivery. Others would then benchmark themselves against standards of similar facilities. Thus, benchmarking aims to identify competitive targets which render the weak points visible and provides a means of addressing this weakness from other perspective. The first step in addressing these objectives was first to examine the frequency of bench marking in selected facilities.

Objectives and Hypotheses

- 1) To analyze the effect of Contract management on Health Service Delivery in Kenya.
- 2) To examine the effect of Benchmarking on Health Service Delivery in Kenya

3) To establish the effect of Quality Service on Health Service Delivery in Kenya

H1: Contract management has significant influence on Health Service Delivery in Kenya.

H2: Benchmarking has significant influence on Health Service Delivery in Kenya

H3: Quality Service has significant influence on Health Service Delivery in Kenya

LITERATURE

Various tools have been identified on how to measure implementation of NPM; among these tools, which are used for quantities assessment of the implementation of NPM, is that of using indicators like benchmarks for measuring program outcomes results and privatization of major programmers (Burden, Herbert & Wright, 1999 cited in Baclija, 2011). Baclija (2011) investigated NPM implementation in local levels and found that NPM correlates with the number of inhabitants, benchmarks and implementation of NPM, principles and the average GDP per city inhabitants. The study did not succinctly address the service sector and the peculiar nature when it comes to measuring performance in order to use results for benchmarking.

Benchmarking is an important tool of Total Quality Management (TQM). According to Camp (1989) cited in ACCA, (2012) benchmarking is a continuous process of measuring 60 products, services and practices against the toughest competitors or those companies recognized as industry leaders or best practices that will lead to superior performance. The aim of benchmarking is to identify competitive targets which render the weak points of benchmarking organizations visible and establish means of improvement, thus the basic idea behind benchmarking is not to find out by how much others are doing better-but rather how they make it to do better in certain area. It is a continuous, systematic process of measuring products, services and practices against organizations regarded to be superior with the aim of rectifying any performance 'gaps' It is imperative then county governments that are excelling in specific service delivery have to be used as a basis of performance benchmarks.

Benchmarking against competitors may also uncover practices that are unworthy of emulation. The success of bench marking depends on employees' understanding the results and consequences of the benchmarking exercise and that they will need to participate in determining the implementation necessary for organizational change (ACCA, 2012). Benchmarking in the public sector is analogous to that in private sector but the motivational forces and obstacles are somewhat different. What informs public sector benchmarking may be the need to fulfill certain mandates of the policy, but private sector may be pushed by the need to raise profits.

Benchmarking introduces cooperation in the private sector that, subsequently, motivates competition for market share. In

the public sector, according to the paradigm of 'new public management' benchmarking is supposed to introduce competition into a state apparatus context that is characterized by the cooperation of public sector agencies for the 'collective' public good (Kauzin, Leffler, Klages & Korac-Kakabdse) Sylve & Suzanne, (1995) cited in (Kauzin et al, N.y) pointed out that benchmarking as a family of technique, has three main aspects which are: standard benchmarking, results benchmarking and process benchmarking.

Increasing emphasis on service "quality" standards and "customer resources" Citing Pollitt (2002), Ferdousi & Qiu (2012) argued that the new public management reforms are characterized by improving the public services with focus on efficiency, effectiveness and responsive services which are close to their customers, commitment to continuous quality improvements and the empowerment of staff to innovate. Additionally, responsive service delivery should include the provision for clients' participation, information on the type and quality of services, provision for complaint redress mechanism, establishment of service standards (Quality), openness, accountability and performance reporting mechanism (OECD (1996) cited in Ferdousi & Qiu (2012)

There is a perception that performance in public sector organizations is poorer than in private sector, both in terms of efficiency of and quality of service (ACCA, 2012).

It can be seen then that benchmarking as an efficiency tool is based on the principle of measuring the performance of one organization against the standards of another organization. In public sector benchmarking ,the performance indicators used to focus on cost variables might include items such as labour efficiency or total costs for a particular function as a percentage for income (ACCA, 2012). The quality of service delivery in county governments has to meet set standards for citizens to utilize. The assumption, however is, the organizations and institutions have common operations in terms of resources that can be used as a basis of benchmarking. As noted by ACCA, (2012) benchmarking can be used to defend rather than improve poor performance; in a situation where management focus on explaining why their organizations or institutions is performing poorly. From these, it can be seen that benchmarking carries with it measurement or assessment of identified variables.

METHODOLOGY

Research Paradigm: Adapted was a pragmatism paradigm in examining issues raised in this research. The pragmatic approach to science involves using the method which appears best suited to the research problem and not getting caught in philosophical debate (Morgan, 2007)

Research approach: Employed: was a mixed method approach; that is Quantitative and Qualitative. A mixed approach which involves both quantitative and qualitative data at the same time integrates the two forms of data to best understand a research problem. Quantitative studies provide data that can be expressed in numbers.

Design:The research adopted from a thesis descriptive survey design. According to Fraenkel & Wallen, (2006), descriptive survey design collects information from a sample drawn from a predetermined population using a predetermined set of questions. Descriptive Survey design has an advantage in that it draws a sample of the population and then generalizes the finding from the sample to the population (Graziano & Raulin, 2007).

Target Population and Sample size: To examine the state of service delivery in these counties, three counties were selected using purposive technique. These were Kericho, Bomet and Narok counties from these counties a focus was on devolved services in ministry of Health. Kericho county which included: operational health facilities, health workers and employees under administrations, doctors and nurses and clinical officers. Thus the target population for this research was 1,740. The researcher obtained a total, data was obtained from 314 respondents

	Sampled Population	Sample Size
Sample Frame		
Kericho	960	106
Bomet	399	103
Narok	381	105
Total	1740	314

Reliability:The research assessed the Reliability of the instruments was computed using Cronbach’s alpha (KR20) formula (KIM, 2009) which is stated as:

$$\alpha = KR20 = \frac{k(S2 - \sum s2)}{S2(k-1)}$$

Where

k = number of items in the instrument

S2 = variance of all scores

s2 = variance of individual items

Using this formula, the significance level was set at threshold of at least 0.05. The advantage of using Cronbach’s alpha formula of assessing reliability of instrument is that it enabled the researcher to correlate the variables under study

Validity: The validity of instruments is a measure of how well a test measures what it is supposed to measure (Bryman, 2012, Kisilu, 2006). The validity of the instrument is acceptable if it produces 96 consistent data (Frankfort-Nachmias & Nachimias, 2008). To ensure validity, the instruments were developed based on the objectives and the variables of the study.

ANALYSIS

Path analysis is the statistical technique used to examine causal relationships between two or more variables. It involves a set of simultaneous regression equations that theoretically establish the relationship among observed variables in the path model. Path analysis extends the idea of regression modeling and gives the flexibility of quantifying indirect and total causal effects in addition to the direct effect which is also possible in regression analysis (Bollen, 1989). While regression analysis

allows an independent variable to influence an outcome variable only directly. Path analysis however gives more flexibility and predictor variables are allowed to influence the outcome variable directly as well as indirectly through other mediating variables. Path analysis shares the following principles of regression analysis. The statistical analyses were performed using AMOS software. Path analysis was conducted by considering the radial measure as dependent climatic variables and age as independent factors explaining the radial growth.

The chi-square statistic, the normed fit index (NFI), and root mean square error of approximation (RMSEA) were used to estimate model fit. The larger the probability associated with the chi-square, the better the fit of the model to the data (Bolln, 1989; Byrne, 2001). The NFI tests the hypothesized model against a reasonable baseline model and ideally should be 1.0. A RMSEA of < 0.10 is considered a good fit and < 0.05, is very good and lower than 0.01 is considered as beautiful fit (Steiger, 1990). Model validity was assessed using the expected cross validation index (ECVI). Path significance was based on the critical ratio (CR), with a CR > 2 in absolute value considered as significant (Arbuckle, 2006 ; Schumacker and Lomax, 2004)

RESULTS AND DISCUSSIONS

Standardized Regression Coefficient (SRC)

The statistical significance of individual parameter estimates for the paths in the fitted model (**Figure 5.1**) is one of the important criteria to be studied. The significance can be seen by computing the critical values, which are obtained by dividing the parameter estimates by their respective standard errors. The computed critical values together with the corresponding p-values are presented in Table 4.1. The regression weights for two variables were significant with the exception of Quality Service, whose p = .234 , > than P = .005,. The other issue to consider at this stage is the magnitude and direction of the parameter estimates. In this particular model all the Standardized regression weights (Factor Loading) were positive indicating the existence of a positive relationship between radial performances of Health service delivery as a dependent variable.

The standardized regression coefficients are 0.39 (bench marking).p=.001,0.28 (contract management), p =.020 while 0.22 (Quality Service), p =.234 .This suggests that the two variables (Bench marking) and contract management had strong contribution on Health service delivery. It is also estimated that the three predictors of Health service delivery explain (72%) of its variance. In other words, the error variance of radius is approximately 22.2% of the variance of Health service delivery itself. Furthermore results show that R² = 72.indicating that collective contribution of the construct were able to explain (72%) on Health service delivery. As well as there is positive correlation between variable. According this study, the author attest that its essential that Benchmarking posted FL= 0.39 this means the employees are able work with trust, privacy and involved team building

(Limberg al et., 2012).Because the extent to which a person believes that utilizing a particular method or technique would enhance his or her routine responsibility (Davis ,1993).



Figure 5.1 Health service delivery Model

COVARIANCE

This section examines the covariance with un-standardized coefficient obtained AMOS between independent variables (benchmarking, contract management, Quality Service) and dependent variable (Health service delivery). **Figure 5.2** posted mean, variance, covariance and factor loading, but in this section focus on only covariance and factor loading. Therefore the result demonstrates that the benchmarking pasted FL=0.78 into Health service delivery that is highest value. contract management FI= 0.72, Quality Service 0.59 which is the lowest value into Health service delivery. However all the variables have positive contribution into Health service delivery and high values basically raise by benchmarking as the leading contributor for Health service delivery.

Also results (Figure 5.2) demonstrated the covariance for (BM-CM) had a covariance at strong path of 0.12 to Health service delivery, same as it covariance (CM-QS) yield the value of 0.72, while (BM-QS) had a covariant of 0.59 to Health service delivery. Similar studies by Kelly 1998, Lynn, (1998) cited in Bao et al., (2012) which observed that in the public sector, utility is contested and decided politically, and that one of the chief functions of government is to collect the values of the community and create integrated responses to these values across increasing fragmented government systems where values are in conflict.



Figure 5.2 Unstandardised Covariance Health Service Delivery Model

HYPOTHESIS TEST

Results (**Table 5.3**) indicate that Contract management has no significant influence on Health Service Delivery *had* (sig 0.00) hence a strong significant difference with factor loading ($\beta= 0.72$), $P < 0.05$ the study Rejected Null Hypothesis and alternate was accepted. Results indicate that Benchmarking has no significant influence on Health Service Delivery *had* (sig 0.00), hence a strong significant difference with factor loading ($\beta= 0.78$), $P < 0.05$ this study Rejected Null Hypothesis and alternate was accepted. Results indicate that Quality Service has no significant influence on Health Service Delivery *had* (sig 0.22) such indicated a no significant difference with factor loading ($\beta= .59$), results indicate a weak prediction towards Health Service Delivery the study Rejected Null Hypothesis and alternate was accepted. The findings here agree with those of Ayee, (2001) and Muller & Dunn, (2006) cited in Gilas, (2014) who posited that the problems significant of Benchmarking partly from the fulfillment in terms of Health Service Delivery . Contract management was seen contributed to the success of Health Service Delivery reforms in Africa. The managers observed that a lot needs to be done in training stake holders; mostly the political class and health professionals on the independent role they play in health service delivery. In doing so the managers observed that the gap between different perspectives would be removed.

Table 5.3: Overall results for null Hypotheses: Contract management, Benchmarking & Quality Service

(H0)	Null Hypotheses	Results at $p < 0.05$
H0 ₁	Contract management has no significant influence on Health Service Delivery in Kenya.	CM(sig 0.00 strong), $\beta= 0.72$, since $P < 0.05$ Rejected Null Hypothesis
H0 ₂	Benchmarking has no significant influence on Health Service Delivery in Kenya	BM (sig0.00-strong) $P < 0.05$ Rejected Null Hypothesis; Age(sig 0.001), $\beta= 0.78$ since $P < 0.05$ Rejected Null Hypothesis
H0 ₃	Quality Service has no significant influence on Health Service Delivery in Kenya	QS (sig 0.22 not significant), $\beta= .59$, $P > 0.05$ Accepted Null Hypothesis

MODEL FIT

Contract management had $X^2 = 98.12$, $df = 31$, whose χ^2/df was 3.17 (as indicated in **Table 5.4**). Research show that the relative chi-square should be in the 2:1 or 3:1 range for an acceptable model; others say 2 or less such reflects good fit or acceptable fit for a given model (Carmines & McIver, 1981).Goodness of Fit Indices on overall Contract management model was fit for Health Service Delivery since it met required standards. χ^2/df yielded 3.17 which was good fit but weak since it was closer to 5, *CFI* had 0.990 which signified a good fit since < 0.9 , *NFI* posted 0.939 this yielded very good results ,*RMR* had 0.012 this below above 0.02, therefore it did satisfy rule of thumb and *RMSEA* .Benchmarking had $X^2 = 88.88$, $df = 16.17$, whose χ^2/df was 2.12(as indicated in **Table 5.4**),this model demonstrated better fit than Contract management .This study therefore proves

that, Contract management model had desirable properties, while Quality Service did perform poorer than the two models (its $\chi^2/df = 6.13$ its ration index was above 5, comparing its indices were lower than the threshold .According to the rule of thumb it measured poorly

Table 5.4 Goodness of Fit Indices Results

Fit Indices	Contract management Model	Benchmarking Model	Quality Service Model
Chi-Square (X^2)	98.12	88.99	99.14
Df	31	42	16.17
χ^2/df	3.17	2.12	6.13
CFI	0.990	0.980	0.71
NFI	0.939	0.992	0.88
GFI	0.911	0.993	0.79
RMR	0.012	0.062	0.040
RMSEA	0.019	0.013	0.37

DISCUSSIONS

The study used Standardized Regression Coefficient, to establish the effect of Contract management reforms in the management of public funds in Kenya. The method was chosen since it is more precise and accurate since Health Service Delivery of events in a carefully planned way (Babbie, 2004). The research design was both quantitative and qualitative with the aim of determining the relationship between the aspects of PFMR (independent variables) and effectiveness of management of public funds (dependent variables).Contract management, Benchmarking and Quality Service on Health Service Delivery.

These findings support those of Kelly 1998, Lynn, (1998) cited in Bao et al, (2012) which observed that in the public sector, utility is contested and decided politically, and that one of the chief functions of government is to collect the values of the community and create integrated responses to these values across increasing fragmented government systems where values are in conflict. These decisions are done through policy formulation and implementation; which, as already pointed out is a political process.

Research by HSD(1998), which conducted studies on only a relatively weak (although significant indicated that Quality Service had effect on utilization of Health Service Delivery variables such as in the hospital laboratory tests, and surgery procedures, whereas Benchmarking have no significant effect on any of the utilization of Health Service Delivery considered in the model. Health Service Delivery affect most other variables, such as Contract management in particular, the number of Standard Regression coefficients were posted as: 0.127, 0.245, and 0.193, which were lower as expected .Results for Benchmarking and Quality Service a pattern similar to that of this study.

CONCLUSION

The other issue to consider at this stage is the magnitude and direction of the parameter estimates. In this particular model all the Standardized regression weights (Factor Loading) were positive indicating the existence of a positive relationship between radial performances of Health service delivery as a dependent variable. However all the variables have positive contribution into Health service delivery and high premium on global-platform as the leading contributor for Health service delivery .Also results demonstrated the covariance for example global-platform correlate at strong path of 0.23 to wireless connection, same as it correlate end user knowledge that yield the lowest path of 0.06, while end user knowledge correlate 0.12 to wireless connection.

Results indicate that Benchmarking on Health Service Delivery had a strong significant difference with factor loading ($\beta= 0.78$) this study Rejected Null Hypothesis and alternate was accepted. Quality Service a no significant difference with a weak prediction towards Health Service Delivery the study Rejected Null Hypothesis and alternate was accepted. Benchmarking model demonstrated better fit than Contract management .Hence Contract management model had desirable properties,while Quality Service did poorly than the two models its ratio index was above 5, comparing its indices were lower than the threshold .According to the rule of thumb it measured poorly

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