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PAYMENT STRATEGIES ON IMPLEMENTATION OF UNIVERSAL HEALTH COVERAGE: A CASE STUDY OF NATIONAL HOSPITAL INSURANCE FUND-TAITA TAVETA COUNTY IN KENYA

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ABSTRACT

National Hospital Insurance Fund plays an integral part as the driver towards UHC achievement in the country. Nevertheless, there is a need to evaluate effectiveness of its strategies geared to the achievement of UHC. Particularly with reference to efficiency, equity and quality of delivery of healthcare. In this regard, the objectives of the study were to determine the extent to which National Hospital Insurance Fund premium contributions rates, and the effect of capitation rates affects UHC implementation. The study was based on the conventional health insurance theory. Furthermore, the study relied on social exchange theory that espouses the concept of costs and benefits to predict behavior and that individuals chose strategies that helped them to incur low costs while keeping their reward high. The study also reviewed previous studies related to universal health coverage. The study then examined National Hospital Insurance Fund as a case study and its contents mainly: - benefit package and awareness, new premium contribution rates, and capitation. The data was analyzed using both descriptive and inferential statistics. The study established that the government provides a legal framework for ensuring a health care delivery system that is driven by the people while bridging the gap on geographical access by providing for a devolved system of governance. The study concludes that regular disbursements or what is known as capitation would greatly enhance sustainability of Universal Health Coverage. The study recommends an effective monitoring and evaluation systems for faster responses to health service needs so as to entrench universal health coverage.

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INTRODUCTION

The major issue of the study is establishing whether a relationship exists between the current payment strategies and the successful implementation of Universal Health Coverage. UHC essentially refers to providing health care access to needed services of health without acquiring financial hardships for the population(Barasa et al, 2018). It has become a significant world health policy agenda primarily due to the need to provide equitable and quality health care services. It is also a priority because there is need to safeguard populations from depleting costs of health care. The fact that many individuals do not have access to basic services of health care is a key driver of UHC implementation in middle- and low-income nations.

Kenya is committed to attaining UHC by 2022 via the increment of health insurance coverage by the National Hospital Insurance Fund. National Hospital Insurance Fund plays an integral part as the driver towards achievement of UHC in Kenya. Presently, the National Hospital Insurance Fund coverage is 15.8%, which is equivalent to over 80% of the Kenyan population with any health insurance form(Mbau et al, 2020). National Hospital Insurance Fund is generally a state corporation whose main aim is to provide health insurance to its members as well as their dependents (Mbau et al, 2020). Even though National Hospital Insurance Fund is a key driver of UHC, recent developments in the organization have raised concerns about its competency and ability to implement UHC. It has come to the public attention that there are National Hospital Insurance Fund staff, hospitals, employers, and suppliers who have joined forces to corrupt the Fund's systems. For instance, some hospitals have been increasing medical costs and raising fraudulent claims by billing patients for services they did not enjoy. In addition to this, some National Hospital Insurance Fund officials have been involved in the fraudulent abuse of the capitation system. Also, some of the fund's top management officials have been implicated in tender scandals involving huge amounts of public funds. Due to these corruption allegations, the public has lost trust in the Fund's ability to drive UHC.

Given that National Hospital Insurance Fund is a major UHC driver in Kenya, there is need for making the payment strategies effective. In National Hospital Insurance Fund 2018-2022 strategic plan, the organization outlined four priority areas which will steer the organization towards the achievement of UHC. These areas are enhancing financial base, enhance institutional capacity, increase quality health insurance coverage, and stakeholder alliances and partnerships (NHIF, 2018). The organization came up with various strategies, key among them being improving accessibility of benefit package, educating customers on new and existing benefit package, enhance healthcare financing on indigents by the county governments and mainstream application of technology in service delivery. Undoubtedly, these strategies are critical to achieving UHC. Rosenberg and Weintraub (2015) conducted a study on the experiences of Ghana, Thailand, Rwanda and Vietnam in implementing UHC. The findings of the study brought to light that all the four nations agreed that the generation of accountability and political will is integral in UHC attainment. Other strategies that are critical to the successful implementation of UHC were provision of incentives for expansion of care for vulnerable individuals, and adaptation and monitoring of the programme(Rosenberg &Weintraub, 2015). Therefore, it is imperative for National Hospital Insurance Fund to enhance its current strategies and examine what other nations are doing with regards to UHC. In doing so, the Fund wasbetter equipped to implement and monitor the program over time successfully.

Additionally, National Hospital Insurance Fund should also examine the experience of England's National Health Service and borrow some of its strategies to aid in the attainment of UHC (Friebel et al., 2018). NHS has been around for decades, and it is the main provider of UHC in England. It provides comprehensive benefits to the members. Also, it is free to access the benefits outlined in the NHS package regardless of patient's paying ability. It also has a fixed budget to carry out its operations for quality and cost control(Friebel et al., 2018). This is

critical as increasing healthcare costs has become a challenge due to changingdemographics and an increase in the number of people with chronic conditions. This situation is also similar to Kenya where the elderly and those with chronic illness such as diabetes need healthcare. To control costs, NHS's budget is mostly spent on providers of community services, and it has set national prices covering approximately 0.6% of services (Friebel et al., 2018). Also, NHS employees work under contract to the NHS. These effective measures of cost control are vital to ensure highest investment return. Although there are still issues surrounding NHS, it is evident that the population is satisfied with the strategies of NHS. For instance, mandatory health taxes are not an issue for employers (Friebel et al., 2018). Also, increased funding from the government and the focus to enhance healthcare quality has helped in increasing citizens satisfaction levels. This demonstrates that political willingness, vision, and determination are important to attain an effective UHC system. Therefore, it is crucial for National Hospital Insurance Fund to look at the experience of NHS, which is already a functioning UHC to acquire valuable insights on how to successfully implement UHC.

Despite National Hospital Insurance Fund negative publicity, it is worth noting that the Fund and the government are coming up with initiatives to improve the Fund's image and effectiveness. For instance, a task force consisting of a panel of experts was appointed by the health cabinet secretary with an aim to reform the fund and position it as a strategic purchaser of health services that is more efficient, socially accountable, and transparent. Also, the management of National Hospital Insurance Fund through its strategic plans put more emphasis on strengthening internal controls to curb fraud and misuse of public funds. Theseinitiatives are a critical step towards reforming the Fund to ensure that the implementation of UHC is a success.

Problem Statement

The National Hospital Insurance Fundpayment strategies that have been employed to achieve UHC are yet to be examined in regards totheir ability to encourage efficiency, equity, and quality of delivery of healthcare. In this regard, although the Act of 1998 provides expansion of benefits, reports indicate low contributions which have failed to give the national scheme the fiscal space to provide the intended benefits (Okech&Lelegwe, 2015). In light of this, National Hospital Insurance Fundhas raised the premium contribution rates to cater for increasing healthcare costs and to facilitate expansion of its benefit package(Mbau et al., 2020).Nevertheless; questions regarding adequate information for the general population on the scheme have raised a major challenge. For instance, National Hospital Insurance fund has failed to clearly define its benefit package in a way that the staff can comprehend what they are selling. The national scheme has also not defined the package in a manner that the members can comprehend what they are entitled to and the providers of healthcare can understand what services they are to provide to the members (NHIF, 2015).

Again, even though National Hospital Insurance Fund current initiatives are commended for their positivity, there have been widespread concerns regarding the accreditation process of facilities (Okech&Lelegwe, 2015). Reports demonstrate cases of political interference pervaded by political patronage, with health care facilities lacking fundamental resources such as equipment, human resources, and infrastructure (Okech&Lelegwe, 2015). In light of this, equity in terms of quality health care needs to be examined.

There is need to examine the impact of the revisedpremium rates on afforability among households in the informal sector, those living in marginalized and rural areas, the unemployed, the elderly and those living with disabilities (Mbau et al., 2020). According to Mbau et al. (2020), document reviews indicate that although National Hospital Insurance fund membership had increased from 4 million in 2012 to 6.8 million in 2017, only 0.48% of these members were active contributors. These figures demonstrate that high premium contribution rates make it harder for people to renew their National Hospital Insurance Fund membership. Worse still, many of these facilities were at the time reluctant in admitting patients from under NHIF scheme sighting low capitation by NHIF and delays

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Worse still, many of these facilities were at the time reluctant in admitting patients from under NHIF scheme sighting low capitation by NHIF and delays in payments. Further, there is need to evaluate adequacy of capitation rates for outpatient services as to whether it considers the actual costs of healthcare services since the mandate of NHIF is improving social solidarity and protection. Any delays would render the UHC invalid. To sum up, any inefficiencies by NHIF would exacerbate health equity problems especially those with limited financial resources. This examined efficacy of NHIF payment strategies on implementation of universal health coverage within Taita Taveta County

Objectives of the study

The study was guided by the following specific objectives.

a. To assess the effect of premium contribution rates on implementation of universal health.
b. To determine adequacy of capitation on implementation of universal health among the accredited facilities.

LITERATURE REVIEW

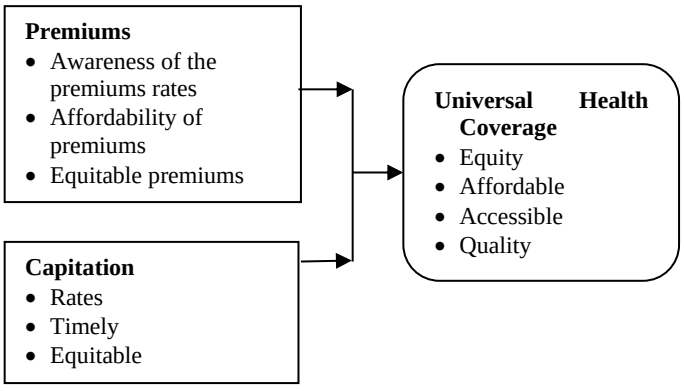
Theoretical Literature

Conventional Health Insurance Theory

In this theory, economists see moral hazard negatively. Moral hazard affects the operation of insurance companies. Those who have health insurance tend to engage in behavior that will not keep their health care spending to a reasonable level (Barati et al., 2018). This is because they are aware that their health insurance will cater for the costs. For instance, when individuals are aware that they do not have to pay out of their pocket when they visit a hospital, they are likely to go too quickly when they show minor symptoms such as a running nose. Likewise, when physicians are aware that insurance is taking care of the bills, there is a possibility that they will administer tests of dubious value.

Conventional health insurance theory views moral hazard negatively because the extra spending on healthcare created by insurance symbolizes a loss of welfare to society since insurance decreases health care cost to zero (Macharia et al, 2020). Consequently, consumers are inclined to buy more health care than they would have at usual price. This depicts that the value of this health care to consumers is less than the market value although the extra care remains expensive to the producer. The theory offers a solution to the issue of moral hazard by imposing deductibles, coinsurance payments, as well as capitations to raise the cost of health care to insured citizens and minimize the inefficient expenditures (Macharia et al., 2020) This theory is relevant to this study because it explains the rationale behind National Hospital Insurance Fund imposing monthly premiums and capitations. It relates to two objectives, namely assessing the influence of premium contribution rates and determining the effects of capitation rates. Both premiums and capitation affect the efficiency of Health insurance. Although National Hospital imposes premiums and capitations to decrease inefficient expenditures, the premiums are too high for some people. Therefore, National Hospital Insurance Fund uptake is low in some population groups. At the same time, healthcare professionals feel the capitation rates are too low, which affects quality care provision. Thus, the theory is relevant as it addresses affordability and accessibility of health insurance.

Conceptual Framework



Premiums indicator

A premium is the amount of money an individual or business pays for an insurance policy. It also represents a liability as the insurer must provide coverage for claims being made against the policy. Premiums indicator is a metric that is used to monitor its performance and efficiency in terms of operational efficiency at the same time ensuring affordability and equitability of such rates.

Capitation

Capitation payments are payments agreed upon in a contract by a health insurance company and a medical provider. The payments are fixed, pre-arranged and pre-disbursed before the services are offered in a manner agreed in the contract.

Empirical Review

Barasa et al. (2018) conducted a study to examine National Hospital Insurance Fund reforms and their lessons and implications for UHC. To obtain information on National Insurance Fund, the study relied on grey literature and peer-reviewed articles. The findings revealed that the increase of National Hospital Insurance Fund premiums is unaffordable to some population groups such as informal sector workers. These findings are consistent with Barasa et al. (2017) who conducted a study to investigate the expectations and experiences of the informal sector with regards to health insurance. The study utilized a qualitative study design and gathered data via 39 interviews. Data was collected in two purposely chosen counties by considering the urbanization and poverty levels. Research participants were drawn from former, current, and prospective members of the informal sector, as well as hospitals contracted by National Hospital Insurance Fund. The findings demonstrate that National Hospital Insurance Fund premium payment method created a barrier to prospective and current beneficiaries. The participants cited unaffordability issues (Barasa et al., 2017).

Another issue that emanated from the findings was the fact that the premium rates were inequitable because it was a flat rate instead of being income related. Many participants felt that the rate was disproportionate to the levels of income of most of the members of the informal sector. In addition to the flat rate challenge, participants felt that consistent monthly payments were a problem for those with irregular and fluctuating wages. Many advocated for more flexible payment arrangements such as a system that would allow seasonal income earners to make payments when they can manage. Additionally, high default penalties were a notable re-entry barrier (Barasa et al., 2017). Most participants asserted that they defaulted because of financial hardship. Also, to avoid accidental missed payments, the study participants felt that they would prefer an SMS reminder system from National Hospital Insurance Fund to help them remember when to make payments to avoid penalties. Even though National Hospital Insurance Fund introduced a mobile money system of payment to facilitate premium payments convenience, the participants voiced that this payment system was not consistently reliable. Frequently, National Hospital Insurance Fund beneficiaries would pay their premiums via M-Pesa but the payment was not reconciled with the account of the members. As a result, such members would be viewed as payment defaulters and would, in turn, be denied access to health care services. One of the major shortcomings of this study is that it is hard to attain generazability. The logic is that the study was performed on only two counties, which establishes the issue of a representative sample. It is possible that informal sector members from other counties might have different sentiments on National Hospital Insurance Fund premiums.

The findings of Barasa et al. (2017) are similar to those in other countries such as Ghana.Agyepong, Abankwah, Abroso and Chun (2016) performed a study in Ghana to investigate UHC and Ghana's National Health Insurance Scheme. The study used a case study design and data was collected from key informant interviews and focus group discussions. The Volta region was the selected area of study (Agyepong et al., 2016). Snowball and purposive sampling were utilized to choose 35 respondents for interviews from each district in the region. Regarding insurance premiums, the study findings indicate that informal sector members residing in

rural areas found it hard to enroll to the National Health Insurance service since the premiums were unaffordable for them (Agyepong et al., 2016). The challenge of representative sample arises in this study, which might influence the validity and reliability of the study. Nonetheless, there is consistency in the findings of other related studies carried out in different cultures, which addresses the observed weakness. Therefore, it can be concluded that premium payment costs influence public health insurance member retention rates.

RESEARCH METHODOLOGY

This study employed a descriptive research design. In this study, the target population comprised all the 79 National Hospital Insurance Fund accredited hospitals in Taita-Taveta County. These service providers comprised public, private, and faith-based healthcare providers in Taita-Taveta County. Health care providers, in this case, was hospitals or facilities that provide healthcare services. The inclusion criteria was employed of adults between the ages of 18 and 40 years who can speak English and Swahili. Also, they should all be National Hospital Insurance Fund members. The exclusion criteria was children and adolescents under 18 years. Also, those with private health insurance such as AMREF was excluded from participating in the study. For the health care providers, the inclusion criteria was facilities that are National Hospital Insurance Fund accredited and the willingness to participate in the study. The exclusion criteria, on the other hand, was facilities that are not accredited by National Hospital Insurance Fund.

Purposive sampling technique was employed so as to be able to select the four (4) major health facilities within the county (viz: Moi County referral hospital, St. Joseph Shelter of Hope, The River Jordan Medical Centre and Tsavo Comprehensive Medical Clinic) as they handle most of the registered National Hospital Insurance Fund members. The remaining 40 facilities were selected using simple random sampling technique.

Since the population is a finite one, the sample size of health facilities was obtained from the formula as provided by Yamane (1967) to calculate sample size. The researcher targeted three (3) respondents from each sampled health facility who was picked from the administration, finance and the customer service departments. Therefore, the sample of health facilities was 44 and the sample size for the study is 44 multiplied by 3 = 132 (44*3 = 132).

The study utilized primary sources of data. Questionnaires were preferred because they facilitate increased data collection speed. In this study, descriptive and inferential statistics were utilized to analyze data.

DATA ANALYSIS AND DISCUSIONS

The research sample composed of 132respondents, out of all the questionnaires were received back, with nil(0) not returned at all. This translated to 100.0% response rate which was acceptable for data analysis.

Descriptive Analysis

Respondents Perception on NHIF Premiums

To obtain information about the premiums, several statements were asked and the respondents required to provide feedback on a likert scale of one (1) to five (5), for 1 being strongly disagree, 2 being disagree, 3 being neither agree nor disagree, 4 being agree and 5 being strongly agree to the statements. On the statement "I am aware of NHIF premium rates" 5.6% of the respondents disagreed to the statement, 23.5% of the respondents neither agreed nor disagreed to the statement, 57.8% of the respondents agreed to the statement whereas 13.1% of the respondents strongly agreed to the statement, with a mean of 3.78 and standard deviation 0.739. On the second statement "NHIF premiums are affordable to all Kenyans?" 19.1% of the respondents neither agreed nor disagreed to the statement, 41.0% of the respondents agreed to the statement while 38.9% of the respondents strongly agreed to the statement, with a mean of 4.21 and standard deviation 0.741. On the statement "NHIF premiums are equitable to all Kenyans.",

Table 1: Frequency distribution of respondents on perception of premiums

Premiums Parameters	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std. Dev.
I am aware of NHIF premium rates	-	5.6	23.5	57.8	13.1	3.78	.739
NHIF premiums are affordable to all Kenyans	-	-	19.1	41.0	38.9	4.21	0.741
NHIF premiums are equitable to all Kenyans?	-	2.8	38.6	32.3	26.3	3.82	.885

Respondents perception on capitation by NHIF

To obtain respondents perception on capitation, three statements were asked and the respondents required to provide feedback on a likert scale of one (1) to five (5), for 1 being strongly disagree, 2 being disagree, 3 being neither agree nor disagree, 4 being agree and 5 being strongly agree to the statements. On the statement "I am aware of NHIF capitation rates" 15.1% strongly disagreed to the statement, 13.9% of the respondents disagreed to the statement, 35.5% of the respondents neither agreed nor disagreed to the statement, 24.7% of the respondents agreed to the statement whereas 10.8% of the respondents strongly agreed to the statement, with a mean of 3.02 and standard deviation 1.195.

On the statement "NHIF capitation is paid on time" 13.5% strongly disagreed to the statement, 8.8% of the respondents disagreed to the statement, 10.8% of the respondents neither agreed nor disagreed to the statement, 43.8% of the respondents agreed to the statement whereas 24.1% of the respondents strongly agreed to the statement, with a mean of 3.54 and standard deviation 1.306. On the statement "NHIF capitation rate is equal across all facilities in the same KEPH level", 5.2% strongly disagreed to the statement, 23.9% of the respondents disagreed to the statement, 19.1% of the respondents neither agreed nor disagreed to the statement, 20.7% of the respondents agreed to the statement whereas 31.1% of the respondents strongly agreed to the statement, with a mean of 3.49 and standard deviation 1.291.

Table 2: Frequency distribution of respondent's perception on capitation by NHIF

Perceptions on capitation	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std. Dev.
I am aware of NHIF capitation rates.	15.1	13.9	35.5	24.7	10.8	3.02	1.195
NHIF capitation is paid on time.	13.5	8.8	10.8	43.8	24.1	3.54	1.306
NHIF capitation rate is equal across all facilities in the same KEPH level?	5.2	23.9	19.1	20.7	31.1	3.49	1.291

Respondents' perceptions on implementation status of universal health coverage

In order to evaluate the implementation status of UHC within the study area, respondents were asked five questions and were required to provide feedback on a likert scale of one (1) to five (5), for 1 being strongly disagree, 2 being disagree, 3 being neither agree nor disagree, 4 being agree and 5 being strongly agree to the statements. On the statement "I am aware of Universal health coverage" 10.4% of the respondents neither agreed nor disagreed to the statement, 64.9% of the respondents agreed to the statement whereas 24.7% of the respondents strongly agreed to the statement, with a mean of 4.14 and standard deviation 0.576.

On the statement "Universal health coverage; (UHC) is equitable", 5.6% strongly disagreed to the statement, 16.7% of the respondents neither agreed nor disagreed to the statement, 57.0% of the respondents agreed to the statement whereas 20.7% of the respondents strongly agreed to the statement, with a mean of 3.87 and standard deviation 0.929. Regarding the statement "Universal health coverage; (UHC) is affordable", 2.0% strongly disagreed to the statement, 13.1% disagreed to the statement 21.5% of the respondents neither agreed nor disagreed to the statement, 49.4% of the respondents agreed to the statement whereas 13.9% of the respondents strongly agreed to the statement, with a mean of 3.60 and standard deviation 0.951.

On the statement "Universal health coverage (UHC) is accessible", 5.6% strongly disagreed to the statement, 16.7% of the respondents neither agreed nor disagreed to the statement, 57.0% of the respondents agreed to the statement whereas 20.7% of the respondents strongly agreed to the statement, with a mean of 3.87 and standard deviation 0.929. On the statement "Universal health coverage; (UHC) is of quality", 2.0% strongly disagreed to the statement, 13.1% disagreed to the statement 21.5% of the respondents neither agreed nor disagreed to the statement, 49.4% of the respondents agreed to the statement whereas 13.9% of the respondents strongly agreed to the statement, with a mean of 3.60 and standard deviation 0.951.

Table 3: Frequency distribution of respondent's perceptions on universal health coverage

Perceptions on universal health coverage	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std. Dev.
Awareness	-	-	10.4	64.9	24.7	4.14	0.576
Equitable	5.6	-	16.7	57.0	20.7	3.87	0.929
Affordable	2.0	13.1	21.5	49.4	13.9	3.60	0.951
Accessible	5.6	-	16.7	57.0	20.7	3.87	0.929
Quality	2.0	13.1	21.5	49.4	13.9	3.60	0.951

Inferential Analysis

Inferential statistics was used to test the hypothesis. With inferential statistics, we try to reach conclusions that extend beyond our immediate data alone. For instance, we use inferential statistics to try to infer from the sample data what the population might think. Hypothesis testing (using *P*-values) and point estimation (using confidence intervals) are two concepts of inferential statistics that help in making inference about population from samples. The reason for calculating an inferential statistic is to get a p= value (p = probability). The p value is the probability that the samples are from the same population with

regard to the dependent variable (outcome). (Creswell, 2010)

Correlation Analysis

The results of correlation analysis are as shown in Table 4. The findings indicated that there was strong positive and significant relationship between premiums and implementation of universal health coverage. With a Pearson correlation coefficient r=0.684, p-value <0.05 which was significant at 0.05 level of significance. This implies that premiums and implementation of universal health coverage. There was strong positive and significant relationship between capitation and access to universal health coverage. With a Pearson correlation coefficient r=0.485, p-value <0.01 which was significant at 0.01 level of significance. This implies that increased capitation results in increase of Universal health coverage.

Table 4: Correlation Matrix

		UHC	Premiums	Capitation
Universal Health Coverage	Pearson Correlation	1		
	Sig. (2-tailed)	0		
Premiums	Pearson Correlation	**.684***	1	
	Sig. (2-tailed)	0.036		
Capitation	Pearson Correlation	**.485****	0.023	1
	Sig. (2-tailed)	0	0.805	

**. Correlation is significant at the 0.01 level (2-tailed).

Regression analysis

Regression analysis for the construct premiums

From table 5 (ii), the regression model of X_1 and Y was significant with F(1,125) = 185.527, p-value <0.001), inferring that Premiums was a valid predictor in the model. The coefficient of determination R^2 of 0.427 showed that 42.7% of Universal health coverage; is explained by premiums. The remaining percentage of Universal health coverage; can be explained by other factors not included in the model. The R of 0.653 from table 5 (i) shows there is a moderate positive correlation between Premiums and Universal health coverage.

The Model equation therefore became Y= -5.241E-005 + 0.587 X_1

Where,

Y is Universal health coverage

X_1 is Premiums

The beta coefficient value for Premiums (0.587) meant that for every one (1) unit increase in the dimension of Premiums in state corporations, it leads to 0.587 increase in Universal health coverage; as shown in table 6(iii).

Table 5: Regression analysis findings for the construct premiums

(i) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.653[a]	.427	.425	.44830	.427	185.527	1	125	.000

a. Predictors: (Constant), Premiums

(ii) ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.286	1	37.286	93.215	.000[b]
	Residual	50.042	121	.400		
	Total	87.328	122			

a. Dependent Variable: Universal health coverage; a case study of NHIF-Taita Taveta County Kenya
b. Predictors: (Constant), Premiums

(iii)Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.241E-005	.028		-.002	.999
	Premiums	.587	.043	.653	13.621	.000

Discussion of the findings on relationship between premiums and universal health coverage;

The R-value (correlation coefficient, r = 0.653) indicated that there was a moderate positive correlation between Premiums and Universal health coverage. The p- value<0.001 signified that Premiums was statistically significant at 5% level of significance, implying that Premiums has a positive effect on the universal health coverage.

Regression analysis for construct capitation

From table 5 (ii), the regression model of X_2 and Y was significant with F(1,125) = 346.470, p-value <0.001), inferring that capitation was a valid predictor in the model. The Coefficient of determination R^2 of 0.582 showed that 58.2% of Universal health coverage; is explained by capitation. The remaining percentage of Universal health coverage can be explained by other factors not included in the model. The R of 0.763 from table 5(i) shows there is a strong positive relationship between capitation and universal health coverage.The findings revealed that there was positive significant relationship between capitation and universal health coverage.

The results were fitted in the Model $Y= \beta_0 + \beta_2 X_2 + e$

The Model equation therefore became $Y= -5.349E-005 + 0.510\ X_2$

Where,

Y is Universal health coverage

X_2 is Capitation

The beta coefficient value for capitation (0.510) meant that for every one (1) unit increase in the dimension of capitation given to NHIF accredited health service providers, it leads to 0.510 increases in universal health coverage as shown in table 5 (iii).

Table 6: Regression analysis findings for the construct capitation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.763[a]	.582	.580	.38296	.582	346.470	1	125	.000

a. Predictors: (Constant), Capitation

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	50.811	1	50.811	174.010	.000[b]
	Residual	36.517	121	.292		
	Total	87.328	122			

a. Dependent Variable: Universal health coverage;

b. Predictors: (Constant), Capitation

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.349E-005	.024		-.002	.998
	Capitation	.510	.027	.763	18.614	.000

a. Dependent Variable: Universal health coverage;

Discussion of the findings on relationship between capitation and universal health coverage;

The t- statistics for the coefficient of Capitation is 18.614, with p values<0.001. Since the p value of the t-statistics is less than 0.05, it implies that the coefficient of X_2, 0.510 is statistically significant at 5% level of significance. This further confirms that Capitation significantly influences universal health coverage positively.

Conclusions

Form the above findings of the study, premiums capitation, influenced access to universal health coverage; this implies that the revamped NHIF is influencing access to UHC by facilitating contracted health service providers in a timely manner despite the initial challenges the mode of payment is working thereby supporting and end enhancing UHC. The findings contradict a study by Bain and Ebuenyi (2017) who stated that efficient health care system is about pooling risks by definition; every universal health care system is insurance system. In turn, the very nature of insurance implies resource allocation from those in good health towards sick. Therefore, domestic political compact is needed to set up modalities of how the insurance premiums are paid to what extent resource transfers will take place between healthy and sick, but also between generations and between higher and lower income strata in society.

Recommendation

Based on the study findings the following recommendations were made:

1. Kenya's state department for health and the county governments should focus on investments in Universal health care through mobilization of resources to improve county health centre readiness scores so as to achieve equitable access to skilled delivery services across the country.
2. The government should involve every stakeholder in the health sector through training and provision of education on Universal Health Care.
3. The strengthening of policies to ensure improvements in the proportions of people enrolling on civic education for UHC.
4. The study recommends that the government should ensure that the monitoring and evaluation processes are geared to ensure the Universal health coverage process is implemented in the right manner and with the right strategies

Contribution to knowledge

The following are strategic agility practices factors in hotel industry in Kenyan coast counties, Premiums Parameters, Capitation, Joint strategic agility and Capitation. The following are the hotel industry in Kenyan coast counties performance measurement; Business growth, Customer ratings and Profitability. In this study contributed that effective strategic agility practices improves the Universal health coverage; a case study of NHIF-Taita Taveta County Kenya and leads competitive advantage in the market.

Areas for further research

Even though this research provided meaningful results, there were possibilities that all universal health coverage dimensions were not exhausted and hence the need for further research. To begin with, the opportunity for further research in the subject matter exists thus: it would be interesting to compare the findings with lower units of analysis such as the sub-county. The population of the study would be much bigger; a second study is suggested to come up with a standard acceptable utilization levels. This will provide a standard upon which such studies can be replicated.

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