

## HEALTH MANAGEMENT PRACTICES AND HEALTH INSURANCE UPTAKE AMONG LAGOS STATE CIVIL SERVANTS

**\*Olufemi Adebawale ABASS<sup>a</sup>, Omowunmi Qubrat BAKARE<sup>b</sup>, Temidayo Jerry  
OLUBUSADE<sup>c</sup>, Abibat Bukola SHOMUYIWA<sup>d</sup>**

Department of Insurance, Lagos State University, Ojo, Lagos, Nigeria<sup>a,c,d</sup>; Department of  
Community Health and Primary Health Care, Lagos State University, Ojo, Lagos, Nigeria<sup>b</sup>

\*Corresponding author: [olufemi.abass@lasu.edu.ng](mailto:olufemi.abass@lasu.edu.ng)

### Abstract

*Health insurance is a veritable mechanism for managing health-related costs. Despite its benefits, the uptake of health insurance in Lagos State still remains low. The study examined the effect of health management practices on the uptake of health insurance among Lagos State civil servants. A survey research design was adopted. The population was departmentalised into demand (civil servants) and supply (health care providers). The sample size for the demand was three hundred and ninety-nine (399), and the supply was one hundred and ninety (190), using Taro-Yamane sampling sample size determination. Multistage sampling techniques were adopted. Regression analysis was applied to test the hypotheses. The results indicated significant relationships between health insurance literacy, coverage breadth, and service quality, and health insurance utilisation, demand for health insurance, and access to healthcare, respectively. The study concluded that improved health management practices, such as health insurance literacy, coverage breadth, and service quality, would increase health insurance uptake among Lagos State civil servants. Therefore, health providers in Lagos State should add ancillary benefits to health coverage. The government and its agencies should further create awareness on the usefulness and benefits of health insurance plans.*

**Keywords:** Healthcare financing, health insurance literacy, health insurance uptake, service quality

## 1. INTRODUCTION

Human beings are exposed to risks of different natures. Apart from asset damage and pecuniary losses, health risks form a major class of personal loss exposure that has the tendency to plague the wellbeing of people (Edeh & Eze, 2024). In modern societies, adequate financial protection could be sought in order to ensure that the ravages of health issues are managed with a guaranteed and sustainable financial succor (Bakare & Oladipo, 2024; Tobias, 2014). Therefore, health insurance has been found to be a reliable and affordable mechanism to financing costs that are associated with healthcare (Adewale & Olufemi; 2024; Oyegoke et al, 2017). While health insurance has been instrumental in achieving a near-universal coverage in developed economies, developing nations like Nigeria face compounded challenges like limited financial resources, inadequate infrastructure, among others (Awosika & Ayankogbe, 2024). The low uptake, therefore, presents a significant challenge to the Nation's goal of achieving Universal Health Coverage (UHC), a critical component of the Sustainable Development Goals (SDGs) (World Health Organisation, 2023; Oni et al, 2022).

To combat this incidence, most state governments in Nigeria have introduced State Health Insurance Schemes in addition to efforts put in place by the federal government. Presently, about Nineteen (19) states are at various stages of their implementation journey. These schemes typically involve the establishment of a governing agency to oversee the implementation and management of a health insurance scheme. For instance, the Lagos State Health Management Agency (LASHMA) was established to ensure that all residents of Lagos State have access to affordable and high-quality health care.

Despite the laudable efforts of the Lagos State Government to ensure that members of the public have easy access to quality medical services through LASHMA, the uptake of health insurance in the state remains low. Sadly, the low uptake of health insurance plans in Lagos State follows the apathetic disposition of other states in the country. As of 2022, only 5% of healthcare expenditure in Nigeria was paid for using health insurance (NHIS, 2023). In the same vein, a survey by the Lagos Bureau of Statistics revealed that only 11% of household members in the state have their healthcare costs covered by any form of health insurance. This corroborates the rise in mortality rate in 2020, 2021 and 2022, representing 3,034, 3,092, and 8,457 deaths, respectively. This presupposes a 173% rise in deaths reported in Lagos State between 2021 and 2022 (Lagos Bureau of Statistics, 2023).

Aside from the efforts of the government and its agencies, it also behoves insurance and medical practitioners to improve healthcare services (Igodan & Ukaoha, 2012). Though health insurance covers the basic healthcare needs of the participants. However, it remains unclear whether expansion of health insurance coverage will improve users' health status and, by extension, increase the uptake of health insurance in Lagos State, Nigeria. In addition, expansion in coverage breadth may come at a relatively higher cost, which may deter health insurance participants from upgrading their health insurance plan. In this situation, the current plan subscribed to by participants may not include the necessary health services, thereby denying participants access to comprehensive health insurance coverage (Young et al., 2012). Even in situations where the participants can afford various categories of health insurance plans, awareness and level of literacy may pose a serious bottleneck to its utilisation (Handel, 2013).

Therefore, this study evaluates the effect of health management practices on the uptake of health insurance by Lagos State civil servants.

The following hypotheses were tested

- H<sub>01</sub>: There is no significant relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants.
- H<sub>02</sub>: Health insurance coverage breadth does not have a significant relationship with demand for health insurance among Lagos State civil servants.
- H<sub>03</sub>: There is no significant relationship between health providers' service quality and health care access among Lagos State civil servants.

## 2. LITERATURE REVIEW

### 2.1 Conceptual Review

The health care financing system is a means through which funds are gathered from primary and secondary sources, such as out-of-pocket expenses (OOPs), indirect and direct taxes, donor funding, copayments, optional deposits, and compulsory deposits (Benjamin et al, 2017). Therefore, health care finance may be described as the flow of funds from patients to healthcare professionals in return for services (WHO, 2021). It offers enough financial security to ensure that no individual experiences financial hardship as a result of having to utilise medical services (Grant, et al, 2013). While OOPs have been the most common form of health financing, their use has been criticised for their unaffordability and increased catastrophic health expenditures, especially among poor citizens (Galárraga et al., 2010).

Health management practices, according to Valiotis et al (2025), embrace a holistic view of health that recognises the influence of behavioural, social, and environmental determinants. According to Burtis (2021) it encompasses more than just healthcare management; it also incorporates the principles of public health and health policy for a more holistic approach. Key practices of health management include health insurance literacy, health insurance coverage and health insurance service providers' quality (Onwujekwe et al, 2012; Ipinimo et al, 2022; Usar & Akosu, 2021; Mwinuka, 2023; Adekunle & Vincent, 2024; Fadun & Bamgbose, 2024).

Health insurance literacy, according to the University of Maryland Extension and the American Institute for Research (2012), refers to individuals' knowledge, skills, and confidence in seeking and assessing information about health plans. It provides trustworthy and accurate information to support informed decision-making about health insurance participation (Usar & Akosu, 2021). The domains of insurance literacy as proposed by American Institute of Research (2013) include knowledge, information seeking, document literacy and cognitive skills. On the other hand, health insurance coverage breadth is the proportion of respondents enrolled in either private or public health insurance or both (Adekunle & Vincent, 2024).

Service quality refers to the services expected by the customers and the services offered by the service providers (Sunitha & Dhanabakyam, 2008). According to Abass and Oyetayo (2016), it reflects the satisfaction of customers' needs and desires. Major components of quality of services rendered by health insurance providers include renewal notice, flexible premium payment, improved claims system, information about new services and feedback mechanism (Sunitha & Dhanabakyam, 2008).

Health insurance uptake is a health insurance policy and charges levied by a health insurance company for the risk assumed. It refers to the extent to which individuals or businesses purchase insurance policies. It is often measured as a percentage of the eligible population or market that has acquired insurance cover. Drivers of health insurance uptake include employment, financial inclusion, income, health access, education, and the age of the household head (Zheng, 2022; World Bank, 2022; Uguru et al., 2020; Medard et al., 2022; Jasintha et al., 2022; Akokuwebe & Idemudia, 2022).

Health insurance utilisation, according to Mwinuka et al. (2023), refers to the extent to which individuals use health insurance benefits to access healthcare services. Health insurance utilisation may be influenced by types of services used, frequency of use, cost sharing, demographics and barriers to access.

## **2.2 Theoretical Review**

This study is anchored on the Andersen Behavioral Model. The theory provides broad insight into understanding healthcare utilisation patterns and factors influencing access to care (Anderson, 1983). The model posits that individuals are more likely to utilise healthcare services when they have a perceived need, when resources are available to overcome barriers, and when predisposing characteristics support healthcare-seeking behaviour (Anderson & Narus, 2011). The theory was developed by Ronald Andersen in the 1960s to explain and predict healthcare utilisation behaviours. The model emphasises the interaction between individual predisposing characteristics, enabling resources, and need factors in determining healthcare utilisation patterns (Anderson, 1983). The Andersen Behavioural Model consists of three main components: predisposing characteristics, enabling resources and need factors. Predisposing characteristics are individual-level factors that exist prior to the experience of illness or injury. These factors shape an individual's propensity to seek healthcare and influence their attitudes, knowledge, and health-related behaviours (Anderson & Srinivasan, 2003). Enabling resources refer to the availability and accessibility of healthcare services and other supportive resources. They include health insurance coverage, income, employment status, proximity to healthcare facilities, transportation, and social support networks. Need factors represent an individual's perceived or evaluated need for healthcare services (Anderson et al., 2006). The need factors consider the availability and adequacy of healthcare services, such as the presence of a primary care provider and specialty care needs.

## **2.3 Empirical Review**

Gabriella and Rita (2017) conducted an investigation on the nexus between health insurance plans and the health status of Mexicans. The study used a gradual rollout across municipalities

between 2002 and 2010 to determine the programme's impacts. Based on the findings, the drop in premature deaths was attributed to Seguro Popular, which drops eighty-four per cent of the gap in the rate of infant mortality between the impoverished and wealthy Mexican communities.

Hamar et al. (2010) evaluated the impact of a proactive chronic care management programme for members of a German insurance society who suffer from chronic disease. The study's objective was to determine if nurse-delivered care calls affected hospital admission rates. Participants covered were covered people with heart disease, diabetes, chronic obstructive pulmonary disease, or coronary artery disease who agreed to take part in the chronic care management program. The study revealed that proactive chronic care management calls can lower hospital admissions for chronically ill German health insurance members.

Hamadu et al (2018) examined the determinants of households' out-of-pocket health maintenance costs in Nigeria. The study scrutinised the determinants of health maintenance costs in the Federal Capital Territory (Abuja), Lagos, Kano and Rivers states in Nigeria. The study used generalised linear models to examine variation in health insurance coverage and out-of-pocket expenditures. The results revealed that family size and income are the significant socio-economic determinants of insurance coverage, while employer, income, regular use of prescription drugs, health insurance coverage, insurance awareness, benefits and policy affordability are causal determinants of health insurance coverage.

Karimo and Micah (2020) examined the interaction of out-of-pocket health expenditure (OOPHE) and Health Insurance (HINS) on healthcare utilisation in Bayelsa State. A logit model was estimated. The results revealed that households with higher capacity to pay (CTP) and people with health insurance are more likely to utilise health care service. Moreover, households with a perceived good health status are less likely to utilise health care, while households with more children below age 15 are more likely to utilise health care. However, the interaction of HINS and OOPHE reduces the likelihood of healthcare utilisation.

### **3. METHODOLOGY**

The study was departmentalised into two (demand side and supply side). The demand side consisted of civil servants in Lagos State who are expected to use the Lagos State health insurance scheme. While the supply side consisted of health care providers and regulators (Lagos State Health Service Commission) in Lagos State. The reason for the departmentalisation was to determine the extent of insurance literacy, the breadth of coverage of the scheme, and the quality of service from the supply side. The demand side explored the extent of utilisation and the impact of the health scheme for civil servants in Lagos State.

#### **Methods from the Demand Side**

The population of the study from the demand side was civil servants of Lagos State Government. As at January 2023, the population was estimated at 125,433 (State Head of Service; 2023), the civil servants are spread over five political structures; Ikorodu, Badagry, Ikeja, Lagos Island and Epe (IBILE). Three Hundred and Ninety-Nine (399) was reached using Taro Yamane's sample size determination. However, twenty five percent was added to the sample size to make up for

questionnaires that were not returned by the respondents making a total sample size of 500. A multi stage sampling technique was adopted (cluster, quota, random, stratified and convience). The study adopted cluster because all the ministries were all represented at Alausa Secretariat, Aluasa, Ikeja as the seat of power in Lagos State. Twenty questionnaires were shared equally among the twenty-six ministries in Lagos State. The respondents were further the stratified into two; Grade 01-06 as junior and Grade 07-17 as senior staff. That is ten questionnaires each for both junior staff and senior staff. Questionnaires were shared based on availability of respondents at a particular time.

### Methods from the Supply Side

The population from the supply side consists of 238 health insurance providers in Lagos State.

The 150 sample size determination was obtained through Taro Yamane's sample size determination. 25% was added to the sample size to account for questionnaires not returned by respondents. This brought the sample size to 188. Multistage sampling techniques (stratified and convenience) were used in selecting health insurance providers in Lagos State. The stratification was done along with the total number of accredited health care providers among the Local Government Areas in Lagos State (Table 3.1).

**Table 3.1: Respondents stratification by Number of Health Care Providers in Local Government Areas in Lagos State**

S/N	Local Government Area	Number of Health Care Providers	Sample Size base on Stratification
1.	Agege	16	13
2.	Ajeromi Ifelodun	09	07
3.	Alimosho	49	39
4.	Amuwo-Odofin	03	02
5.	Apapa	07	06
6.	Badagry	08	06
7.	Epe	06	05
8.	Eti-Osa	06	05
9.	Ibeju-Lekki	07	06
10.	Ifako-Ijaiye	18	14
11.	Ikeja	10	08
12.	Ikorodu	20	16
13.	Kosofe	13	10
14.	Lagos-Island	05	04
15.	Mainland	08	06
16.	Mushin	07	06
17.	Ojo	07	06
18.	Oshodi-Isolo	20	16
19.	Shomolu	05	04
20.	Surulere	14	11
		<b>238</b>	<b>190</b>

More importantly, the validity and reliability of the study variables were determined through the application of face validity and Cronbach's Alpha test respectively. Face validity was assessed by handing the research instrument to experts in the field of health insurance. The benchmark is to accept variables for which Cronbach's Alpha is greater than or equal to 0.7. The results of the reliability are therefore presented in the Table 3.2.

**Table 3.2: Summary of Test Coefficient for Validity and Reliability**

Latent Variable		
	Cronbach's Alpha	Remark
Health insurance literacy (HL)	0.729	Good Stand
Health insurance utilisation (HU)	0.734	Good Stand
Health insurance coverage breadth (CB)	0.767	Good Stand
Health providers' service quality (SQ)	0.796	Good Stand
Healthcare access (HA)	0.775	Good Stand

**Source:** Field Survey, 2025, using SPSS

The study adopted simple regression/bivariate regression analysis to test the study hypotheses.

## 4. RESULTS

### 4.1 Descriptive Statistics of Study Variable

**Table 4.1: Descriptive Statistics of Health Insurance Literacy (HL)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
HL1	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.695
HL2	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.610
HL3	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.805
HL4	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.800
HL5	39.1%	28.5%	20.5%	7.4%	4.5%	3.90	.835
Grand Average						3.91	0.749

**Source:** Field Survey (2025)

Table 4.1 shows that the grand mean for risk assessment is 3.91 which indicates that respondents agreed with most of the statements on a high scale as it relates to health insurance literacy with the overall standard deviation of 0.749 which implies that the response were clustered around the mean.

**Table 4.2: Descriptive Statistics of Health Insurance Utilisation (HU)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
HU1	22.8%	33.3%	30.1%	4.5%	9.3%	3.56	.884
HU2	22.8%	33.3%	30.1%	4.5%	9.3%	3.56	.703
HU3	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.828
HU4	22.4%	33.3%	30.4%	4.5%	9.3%	3.55	.731
HU5	39.4%	28.5%	20.2%	7.4%	4.5%	3.91	.789
Grand Average						3.70	0.787

**Source:** Field Survey (2025)

Table 4.2 shows that the grand mean for pre-loss control is 3.70, which indicates that respondents agreed with most of the statements on a large scale as it relates to health insurance utilisation, with the overall standard deviation of 0.787, which implies that the responses were clustered around the mean.

**Table 4.3: Descriptive Statistics of Health Insurance Coverage Breadth (CB)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
CB1	86.5%	4.5%	9.0%	0.0%	0.0%	4.78	.783
CB2	86.5%	4.5%	9.0%	0.0%	0.0%	4.78	.794
CB3	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.770
CB4	22.4%	33.7%	30.1%	4.5%	9.3%	3.55	.800
CB5	86.9%	4.2%	9.0%	0.0%	0.0%	4.78	.710
Grand Average						4.36	0.771

**Source:** Field Survey (2025)

Table 4.3 shows that the grand mean for post-loss control is 4.36, which indicates that respondents agreed with most of the statements on a large scale as it relates to health insurance coverage breadth, with the overall standard deviation of 0.771, which implies that the responses were clustered around the mean.

**Table 4.4: Descriptive Statistics of Demand for Health Insurance (DH)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
DH1	68.9%	20.2%	10.9%	0.0%	0.0%	4.58	.766
DH2	39.4%	28.5%	20.2%	7.4%	4.5%	3.91	.712
DH3	68.9%	20.2%	10.9%	0.0%	0.0%	4.58	.734
DH4	39.4%	28.5%	20.2%	7.4%	4.5%	3.91	.770
DH5	86.9%	4.2%	9.0%	0.0%	0.0%	4.78	.727
Grand Average						4.35	0.742

**Source:** Field Survey (2025)



Table 4.4 shows that the grand mean for daily operation is 4.35 which indicates that respondents agreed with most of the statements on a high scale as it relates to demand for health insurance with the overall standard deviation of 0.742 which implies that the response were clustered around the mean.

**Table 4.5: Descriptive Statistics of Health Providers' Service Quality (SQ)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
SQ1	22.8%	33.3%	30.1%	4.5%	9.3%	3.56	.884
SQ2	22.8%	33.3%	30.1%	4.5%	9.3%	3.56	.703
SQ3	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.828
SQ4	22.4%	33.3%	30.4%	4.5%	9.3%	3.55	.731
SQ5	39.4%	28.5%	20.2%	7.4%	4.5%	3.91	.789
Grand Average						3.70	0.787

**Source:** Field Survey (2025)

Table 4.5 shows that the grand mean for productivity is 3.70, which indicates that respondents agreed with most of the statements on a large scale as it relates to health providers' service quality, with the overall standard deviation of 0.787, which implies that the responses were clustered around the mean.

**Table 4.6: Descriptive Statistics of Healthcare Access (HA)**

	Level of Agreement					Average	
	SA	A	U	D	SD	Mean	Std Dev
HA1	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.695
HA2	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.610
HA3	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.805
HA4	39.1%	28.8%	20.2%	7.4%	4.5%	3.91	.800
HA5	39.1%	28.5%	20.5%	7.4%	4.5%	3.90	.835
Grand Average						3.91	0.749

**Source:** Field Survey (2025)

Table 4.6 shows that the grand mean for continuity is 3.91, which indicates that respondents agreed with most of the statements on a large scale as it relates to the business healthcare access, with the overall standard deviation of 0.749, which implies that the responses were clustered around the mean.

## 4.2 Test of Relevant Hypotheses

### 4.2.1 Analysis of Research Hypothesis One

H<sub>01</sub>: There is no significant relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants.

**Table 4.7:** Model Summary of the relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants.

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.904 <sup>a</sup>	.818	.816	1.95953	.000

a. Predictors: (Constant), Health Insurance Literacy

#### Coefficients<sup>a</sup>

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.958	.620		3.158	.002
	Health Insurance Literacy	.646	.028	.904	23.218	.000

a. Dependent Variable: Health Insurance Utilisation

**Source:** Researchers' Computation (2025)

Table 4.7 shows that the model results indicate that there is a significant relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants ( $R = 0.904$ ). The model also shows the extent to which health insurance literacy significantly influence health insurance utilisation among Lagos State civil servants. The coefficient of determination ( $\text{Adj } R^2 = 0.816$ ) shows that the health insurance literacy accounts for 81.6% of the increase in health insurance utilisation in Lagos State. This result is statistically significant because the p-value of the result (0.000) is less than 0.01 level of significance used for the study. The research hypothesis was rejected. This implies that there is significant relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants.

$$HU = 1.958 + 0.646HL$$

### 4.2.2 Analysis of Research Hypothesis Two

H<sub>0</sub>: Health Insurance coverage breadth does not have significant relationship on demand for Health insurance among Lagos state civil servants.

**Table 4.8: Model Summary of the relationship between health insurance coverage breadth and demand for Health insurance among Lagos State civil servants**  
**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.602 <sup>a</sup>	.363	.357	3.66629	.000

a. Predictors: (Constant), Risk assessment

**Coefficients<sup>a</sup>**

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.108	1.331		3.839	.000
	Health Insurance Coverage Breadth	.466	.056	.602	8.262	.000

a. Dependent Variable: Demand for Health Insurance

**Source:** Researcher's Computation (2025)

Table 4.8 shows that the model summary indicates a moderate positive relationship between health insurance coverage breadth and health insurance utilisation ( $R = 0.602$ ). The model further shows the extent to which the breadth of health insurance coverage explains the increase in demand for health insurance. The coefficient of determination ( $\text{Adj } R^2 = 0.357$ ) indicates that health insurance coverage breadth explains 35.7% of the increase in demand for health insurance. This result is statistically significant because the p-value of the result (0.000) is less than 0.01 level of significance used for the study. Therefore, the research hypothesis was rejected. This implies that health insurance coverage breadth affects demand for health insurance in Lagos State.

$$DH = 1.958 + 0.466CB$$

#### 4.2.3 Analysis of Research Hypothesis Three

**H<sub>0</sub>:** There is no significant relationship between health providers' service quality and healthcare access among Lagos state civil servants.

**Table 4.9: Model Summary of the relationship between health providers' service quality and healthcare access among Lagos state civil servants.****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.881 <sup>a</sup>	.777	.775	2.17083	.000

a. Predictors: (Constant), Health Providers' Service quality

**Coefficients<sup>a</sup>**

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.159	.741		1.563	.021
	Health Providers' Service Quality	.768	.038	.881	20.421	.000

a. Dependent Variable: Healthcare Access

**Source:** Researcher's Computation (2025)

Table 4.9 indicates that there is a significant relationship between health providers' service quality and healthcare access among Lagos state civil servants ( $R = 0.881$ ). The model also shows the extent to which health providers' service quality influence healthcare access among Lagos state civil servants. The coefficient of determination ( $\text{Adj } R^2 = 0.775$ ) shows that the health providers' service quality accounts for 77.5% of the increase in healthcare access. This result is statistically significant because the p-value of the result (0.000) is less than 0.01 level of significance used for the study. The research hypothesis was rejected. This implies that health providers' service quality significantly effects healthcare access among Lagos state civil servants.

$$HA = 1.958 + 0.768SQ$$

**4.3 Discussion of Findings**

The first finding of the study revealed that there is significant positive relationship between health insurance literacy and health insurance utilisation among Lagos State civil servants. This result implies that, as civil servants in Lagos state tend to be well informed about the usage, benefits and importance of health insurance, they tend to subscribe to government health insurance scheme even when they are not compelled to do so. This result aligns with the findings of Yagi *et al.* (2021) and Mestres *et al.* (2018) who showed that higher health insurance literacy is generally associated with greater utilisation of primary and preventive care and less avoidance of care due to low literacy.

The second finding revealed that Health Insurance coverage breadth has significant relationship on demand for Health insurance among Lagos state civil servants. These findings show that broadness

of health insurance coverage would most likely determine how people would subscribe to it. This is the case for Lagos State Civil Servants. Lagos State Civil servants were influenced to take up health insurance due to various health risks covered in the health policy. This implies that the staff in question sensed a significant difference in coverage provided by Lagos State Health Insurance Scheme compared to that of other health providers. The result of the study is in line with that of Barasa et al. (2017) who noted that greater coverage levels and awareness relate to higher uptake.

The third finding showed that there is significant relationship between health providers' service quality and healthcare access among Lagos state civil servants. This finding show how important health providers' service quality is to all financial services including insurance services. The finding revealed that health providers' service quality encouraged Lagos State Civil servants to continually access health services. This finding relates to those of Awosika and Ayankogbe (2024) who found a significant positive relationship between health providers' service quality and health insurance utilisation in Nigeria.

## 5. CONCLUSION

The findings of the study generally revealed the essence of the health insurance scheme for Lagos State Civil Servants. The findings showed that Lagos State Civil Servants have a strong and positive culture towards subscribing to health insurance plans. Although this could be directly or indirectly related to the cost-benefit analysis done by the civil servants, engendering the notion that they can enjoy quality health services at a lower cost. It can therefore be concluded that health services provided to Lagos State Civil Servants significantly meets their expectation, thus influencing their perception about health insurance coverage.

## 6. RECOMMENDATIONS

From the findings above, the study provides the following recommendations:

1. Lagos State Government Health Insurance Providers should regularly conduct a survey on various vital coverages to be added to health insurance plans. This aligns with the belief that risks generally evolve; new health risks may emerge and Lagos State Civil Servants would need to be adequately covered.
2. In order to encourage staff to take up health insurance, other ancillary benefits should be added to health insurance coverage.
3. The government and its agencies should further create awareness and education on the usefulness and benefits of subscribing to health insurance plans.
4. The Lagos State government should also ensure that the provider network is expanded to give people the opportunity to assess health insurance coverages in various locations

## REFERENCES

- Abass, O. A., & Oyetayo, Y. A. (2016). Service quality measurement and demand for insurance: an empirical study from Nigerian insurance industry. *The Management & Marketing Journal, University of Craiova, Romania* 14 (02): 321-335.
- Adekunle, A. O., & Vincent, O. A. (2024). Health insurance literacy and demand for health insurance in developing economies. *Journal of Health Economics and Policy*, 19(1), 77–93.
- Adewale, A. A., & Olufemi, T. O. (2024). Health insurance coverage and access to healthcare services in Southwest Nigeria. *Nigerian Journal of Health Policy and Management*, 18(1), 66–82.
- Akokuwebe, M. E., & Idemudia, E. S. (2022). Health insurance coverage and access to healthcare in sub-Saharan Africa. *Social Science & Medicine*, 301, 114944.
- Anderson, J. C. (1983). The Architecture of Cognition. Harvard Business School, *Division of Research*.
- Anderson, J. C., & Narus, J. A. (2011). *Business Market Management: Understanding, Creating, and Delivering Value*. Pearson.
- Anderson, J. C., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & Marketing*, 20(2), 123-138.
- Anderson, J. C., Narus, J. A., & Rossum, W. V. (2006). Customer value propositions in business markets. *Harvard Business Review*, 84(3), 90-99.
- Awosika, A. O., & Ayankogbe, O. O. (2024). Service quality and utilisation of health insurance services in Nigeria. *West African Journal of Medicine*, 41(2), 134–143.
- Bakare, A. S., & Oladipo, O. A. (2024). Determinants of demand for health insurance in Nigeria. *Journal of Insurance and Risk Management*, 9(2), 22–38.
- Benjamin D. S., Atul A. G., & Katherine B. (2017). Health Insurance Coverage and Health — What the Recent Evidence Tells Us Benjamin D. *The New England Journal of Medicine*
- Burtis, A. T., Howell, S. M., Taylor, M. K. Mapping the literature of health care management: an update. Retrieved from doi.org/10.5195/jmla.2021.1121
- Edeh, C. E., & Eze, P. U. (2024). Health insurance enrolment and healthcare utilisation among households in Nigeria. *African Journal of Health Economics*, 13(1), 45–61.
- Fadun, O. S., & Bamgbose, O. S. (2024). Universal Health Coverage and Improved Healthcare Security of Informal Economy Workers: Community Health Insurance Scheme Option in Nigeria. *Journal of Business Strategies and Policies*, 1(1), 48-64.
- Gabriella, C & Rita, G. (2017). Who benefits from free health insurance: Evidence from Mexico, IFS Working Papers, No. W17/26, Institute for Fiscal Studies (IFS), London

- Galárraga, O., Sosa-Rubí, S. G., Salinas-Rodríguez, A., & Sesma-Vázquez, S. (2010). Health insurance for the poor: Impact on catastrophic and out-of-pocket health expenditures in Mexico. *European Journal of Health Economics*, 11(5), 437–447.
- Grant, M., Pinto, D & Vera-Hernández, M. (2013). Risk Protection, Service Use, and Health Outcomes under Colombia's Health Insurance Program for the Poor. *American Economic Journal: Applied Economics*, 5(4), 61–91.
- Hamadu, D., Adeleke, I., & Oghojafor, B. (2018). Determinants of household out-of-pocket health maintenance costs in Nigeria. *Journal of Science Research Development*, 18(1), 25-36.
- Hamar, B, Wells, A, Gandy, W, Haaf, A, Coberley, C, Pope, J.E & Rula, EY (2010). The Impact of a Proactive Chronic Care Management Program on Hospital Admission Rates in a German Health Insurance Society.
- Handel, B. (2013). Adverse selection and inertia in health insurance markets: When nudging hurts. *American Economic Review*, 10(3), 2643–2682.
- Igodan E. C. & Ukaoha K. C. (2012). Toward a distributable database framework for the National Health Insurance Scheme. *Journal of Mathematics and Technology*, 3(1), 2078-0257.
- Jasintha, M., Mtei, G., & Borghi, J. (2022). *Insurance benefit packages and utilisation of health services. Health Policy and Planning*, 37(8), 1012–1024.
- Karimo, T. M., & Micah, G. H. (2020). Out-of-pocket health expenditure, health insurance and health care utilisation in Nigeria. *International Journal of Humanities and Social Science Invention*, 8(1), 2319-7714.
- Lagos Bureau of Statistics. (2023). *Health insurance coverage and healthcare access in Lagos State*. Lagos: LBS.
- Medard, M., Borghi, J., & Mtei, G. (2022). Health insurance coverage and healthcare access in low-income settings. *BMC Health Services Research*, 22, 912.
- Mestres, A.J., Casasnovas, GL, Castell, J.V. (2018). The deadly effects of losing health insurance
- Mwinuka, L. (2023). Health insurance literacy and utilisation of health services in Tanzania. *International Journal of Health Economics and Management*, 23(3), 317–334.
- Mwinuka, L., Borghi, J., & Mtei, G. (2023). Health insurance schemes and access to healthcare in Tanzania. *Health Systems & Reform*, 9(1), e2154873.
- National Health Insurance Authority (NHIA). (2023). *National health insurance coverage and utilisation report*. Abuja: NHIA.
- Oni, T., Fadare, O., & Salami, B. (2022). Health insurance literacy and utilisation of healthcare services in Nigeria. *BMC Health Services Research*, 22, 1184.
- Oyegoke, T.O., Ikono, R.N. & Soriyan, H.A. (2017). An Integrated Health Management System for National Health Insurance Scheme in Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*. 8(1),

- Tobias, P. (2014). The Effects of Mexico's Seguro Popular Health Insurance on Infant Mortality: An Estimation with Selection on the Outcome Variable. *World Development*, 475 –486.
- Uguru, N. P., Onwujekwe, O. E., & Uzochukwu, B. S. (2020). Health insurance coverage and financial protection in Nigeria. *Health Policy and Planning*, 35(9), 1093–1102.
- Usar, O. O., & Akosu, A. (2021). Health insurance participation and access to healthcare services in Nigeria. *International Journal of Social Economics*, 48(7), 1012–1028.
- Valiotis, G., Buttigieg, S. C., Cicchetti, A., Dang, R., Jamshed, N., Jevtic, M., Margheri, F. (2025). Defining health management: A conceptual foundation for excellence through efficiency, sustainability, and equity. *The International Journal of Health Planning and Management*, 1-6.
- World Bank. (2022). *Universal health coverage: Progress and challenges*. Washington, DC: World Bank.
- World Health Organization and the International Bank for Reconstruction and Development/The World Bank (2019). *Global monitoring report on financial protection in health*
- Young M. C., Jung M. H., Eun H. B., Jung A. K., Soo J. Y. & Seong W. K. (2012). Performance Analysis of Hospital Information System of the National Health Insurance Corporation Ilsan Hospital. *Healthcare Research Information* 18(3), 208-214
- Zheng, Y. (2022). Health insurance coverage and healthcare utilisation: Evidence from developing countries. *Journal of Health Economics*, 82, 102585.