

# National Health Insurance Scheme and Enrollees' Health Care in Federal Capital Territory, Abuja (2012-2023)

APEH PAULINA ELEOJO, Ph.D  
Department of Public Administration,  
University of Abuja  
Email: [paulina.apeh@uniabuja.edu.ng](mailto:paulina.apeh@uniabuja.edu.ng)  
Phone: 08032889487

EMMANUEL OKPANACHI, Ph.D  
Department of Public Administration,  
University of Abuja  
Email: [okpanachiemmanuel255@gmail.com](mailto:okpanachiemmanuel255@gmail.com)  
Phone: 08036025430

PROF CHINELO GRACE NZELIBE  
University of Abuja Business School  
Phone: 08033251697

## ABSTRACT

This paper examines the Impact of National Health Insurance Scheme on Enrollees' Healthcare in Federal Capital Territory (FCT), Abuja. The study used both primary and secondary methods of data collection to obtain non-confidential records of NHIA enrollees in six selected Hospitals in FCT. The primary data was generated through a 5-point Likert scale questionnaire format; administered to 398 enrollees in NHIA Centres in FCT, Abuja. Descriptive and inferential statistical tools of analyses were used for data analysis. Percentages were used to describe the demographic data and research questions while Chi-square was used to test the hypotheses. The findings of the study revealed that NHIA has not significantly impacted on enrollees' healthcare in FCT, Abuja. It was discovered that access to quality and affordable healthcare services among enrollees is constrained by non-realization of the NHIA objectives, inadequate public enlightenment, inadequate satisfaction of healthcare management information system, unavailability of drugs, total exclusion of treatment of certain critical ailments, inadequate sensitization of authorization codes and delay and long awaiting time by enrollees to access healthcare and inadequate institutionalization of total quality management of healthcare facilities. This study recommends that there should be urgent realization of the NHIA objectives towards enrollees healthcare; NHIA Pharmacies in FCT, Abuja should be equipped with drugs to prevent enrollees from buying prescribed drugs from private outlets at exorbitant prices; process of obtaining authorization codes and service forms should be digitalized with effective ICT and decentralized in NHIA Public Hospitals Centres respectively. There should be public enlightenment campaign by government on quality and affordable healthcare. Also, there should be institutionalization of total quality management of healthcare facilities through NHIA Council.

**KEYWORDS:** National Health Insurance Scheme, Healthcare, Enrollees, Hospitals, Public Hospitals

## INTRODUCTION

Healthcare development plans and reforms have been ongoing since 1946 in efforts towards improving access to affordable and quality healthcare for all Nigerians. Some of the reforms undertaken to reposition the health sector for efficient and effective services include the National Immunization Coverage Scheme (NICS), Midwives Service Scheme (MSS), Nigerian Pay for Performance Scheme (NPPS) and National Health Insurance Scheme (NHIA), etc. The National Health Insurance Scheme (NHIA) was introduced in 1999 to ensure easy access to affordable and qualitative healthcare service to enrollees (NHIA Guidelines, October 2012).

After 24 years of implementation, the impacts of the National Health Insurance Authority NHIA still remain a great challenge among enrollees in the Federal Capital Territory, Abuja; due to the following problems:

Firstly, many enrollees in the NHIA still grapple with the problem of understanding the NHIA policies and programmes. There is also a problem of a general lack of awareness of NHIA among the populace, particularly in the informal sector.

Secondly, there is a problem with the implementation of NHIA objectives for easy access to healthcare service delivery due to delays and long waiting times in order to obtain authorization codes, inadequate medical personnel, limited coverage of some ailments by NHIA, lack of some prescribed drugs (out-of-stock syndrome) in NHIA pharmacies.

Thirdly, there are problems with huge medical bills and financial hardship among enrollees in healthcare Centres and experience has shown that good and expensive drugs are not readily available most at times enrollees has to resort to buying drugs outside designated NHIA facilities at exorbitant prices. Also there are problems of inadequate legal framework for a successful NHIA, poor operational funding of healthcare and health insurance Authority, and a lack of political will. In addition, it is a necessity to have an affordable and qualitative healthcare service among NHIA enrollees in Federal Capital, Abuja. In this perspective the study raised the following questions:

- What is the level of awareness of NHIA policies and programmes among enrollees' healthcare in FCT, Abuja?
- What is the level of implementation of NHIA objectives on enrollees' easy access to healthcare services in FCT, Abuja?
- What is the level of reduction of financial hardship on medical bills among NHIA enrollees in FCT, Abuja?

- What is the level of satisfaction by enrollees with NHIA management information system in FCT, Abuja?

### **OBJECTIVES OF THE STUDY**

The general objectives of this study are to examine the level to which NHIA has fulfilled its mandate of providing easy access to affordable and qualitative healthcare service to Nigerians.

The specific objectives of the study are to:

- Determine the level of impact of NHIA policies and programmes awareness among enrollees in FCT, Abuja.
- Verify the level of implementation of NHIA objectives on enrollees' easy access to healthcare services in FCT, Abuja.
- Evaluate the level of reduction of financial hardship on medical bills among NHIA enrollees in FCT, Abuja.
- Appraise the level of satisfaction by enrollees with NHIA management information system in FCT, Abuja.
- Proffer the necessary solution to the rising cost of healthcare services and problems of healthcare service delivery in FCT, Abuja.

### **RESEARCH HYPOTHESES**

This study was guided by the following null hypotheses:

- Impacts of NHIA policies and programmes awareness has no relationship with enrollees' healthcare in FCT, Abuja.
- Implementation of NHIA objectives has not created easy access to healthcare services among enrollees in FCT, Abuja.
- Reduction of financial hardship on medical expenses among enrollees has no relationship with healthcare delivery in FCT, Abuja.
- Satisfaction of the enrollees with their healthcare management information system has no relationship with easy access to healthcare services in FCT, Abuja.

## **CONCEPTUAL REVIEW**

### **Healthcare Policy**

Healthcare policy can be defined as the decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society. Healthcare policy also refers to the policies set on a national level in terms of healthcare, coverage and cost. Sub categories of health policy include public health, global health, healthcare services, health insurance, mental health and pharmaceuticals. Healthcare policy is important because it helps establish guidelines that benefit participants and our healthcare system. Having protocols in place can help prevent human error and poor communications. Examples of healthcare policies include legal and safety regulations by state or protocol regulations regarding how care and medicine are delivered to patients at specific hospitals. The National Health Policy represents the collective will of the governments and people of this country to provide a comprehensive healthcare system in Nigeria. It defines the roles and responsibilities of the three tiers of government without neglecting non-governmental actors. Its long-term goal is to provide adequate access not only to primary and tertiary services but also through a well-functioning referral system.

### **Health Insurance.**

Health insurance can also be defined as a contract between an insurance provider (e.g., an employer or a community organization). The contract can be renewable (e.g., annually, monthly) or life-long in the case of private sector insurance, or may even be mandatory for all citizens. in the case of national health plans. It involves resource mobilization (generation and collection), pooling, allocation, and purchasing (NHIA Handbook, 2016). Aside from that, health insurance is a unique form of insurance where the medical or surgical expenses incurred by the insured are paid for by insurance organizations. Nigeria operates a social health insurance programme through an agency of government called the National Health Insurance Authority (NHIA). Like many other Authority modeled on requiring serious reforms, its coverage has concentrated on federal government employees. Though there has been a current drive to establish state health insurance, health financing in Nigeria has been adjudged low, as less than 5% of the total population has coverage in all its programmes (Uchenna, 2019).

To Usman (2005), the National Health Insurance Authority (NHIA) is a contributory Authority in which the employer and employees (enrollees) contribute to a common fund. Contributions are earning related. In this regard, the percentage contribution is 15 percent of the

contribution to the basic salary. The government paid 10%(percent) while the employees paid 5% (percent) of the basic salary. The government paid 10% (percent) initially. But since January 2007, employees have started paying the total of 15% (percent) alone. A monthly deduction payment is made to the primary health service provider, fees- for services are paid to all secondary health providers, while per-diem (i.e., money paid, for example, to employees on allowance) is paid for hospital bed space, and drugs received at insurance at 10% (percent) charges.

## **NATIONAL HEALTH INSURANCE SCHEME (NHIS) AND ACCESS TO AFFORDABLE HEALTH CARE SERVICES IN NIGERIA**

Accessibility to healthcare in Nigeria remains a problem, with most of the healthcare facilities concentrated in urban areas, far removed from rural areas where the majority of the population lives and where the need is more urgent. Public hospitals are grossly ill-equipped while private hospitals provide cash and carry services; self-medication is on the increase. Governments at all levels provide little support for the health sector.

Although Usman (2005) posits that the mandate of NHIA is very clear. It is to provide healthcare coverage for all Nigerians. It is global, universal healthcare coverage. But in many situations, most Nigerians cannot afford to go to the hospitals, and this is essentially our goal, universal healthcare coverage and to make sure we reduce the cost of healthcare delivery and the services provided to our Nigerians have the qualities they should have (The Leadership, 10/02/2017).

According to Adekola (2018), "the biggest priority in the quest to ensure accessible healthcare for all citizens is to facilitate proper enforcement plans in the overall implementation of the National Health Insurance Authority (NHIA) to include the primary healthcare conception; payment mechanism and global capitation; and drug use and procurement in the authority. Essentially, access to health insurance provides a good proxy for measuring access to healthcare services. The NHIA has been able to enroll up to 5% of Nigerians under the normal sector of health insurance programme (FMOH, 2009). But it is universally acceptable that improved national health insurance indices can only be possible if the healthcare services delivered are acceptable, available, accessible, accountable, and affordable.

In fact, for this to happen, a strengthened and evidence-driven healthcare system must be in place. Hence, the six core functions of the healthcare system are stewardship, governance, Human Resources for Health (HRH), health financing, health management information system (HMIS), and medical technology supply and delivery. Consequently, NHIA needs these platforms to deliver the expected results, (FMOH Annual Bulletin, 2009).

Moreover, Adewale (2019) stated that "The Sterling Bank's intervention in the health sector became imperative due to the increasing demand for quality healthcare services and the inadequacy of government's intervention in the sector, whereas private sector participation is on the rise across the entire value chain. He further stressed that "the bank's goal is to improve healthcare delivery infrastructure in the country through equipment financing, improved access to medical technology, and also improved health business by providing access and information to practitioners in the sector. These will include technologies such as hospital management systems to improve data collection, analysis, and decision-making, and an inventory management system to keep track of stock.

In addition, the National Health Insurance Authority, Health Maintenance Organization, Lagos State Health Management Agency, and others have demanded the institutionalization of total quality health management in every hospital across the country. According to Nneka (2023), "institutionalizing total quality management in healthcare facilities as a means of improving healthcare delivery," This means that a quality healthcare system was accessible, appropriate, available, affordable, effective, efficient, integrated, safe, and patient-related.

## **THEORETICAL FRAMEWORK**

The theoretical frameworks used for this study are the General system theory by Ludwig Von Bertalanffy (1968); the structural-functionalism theory by Bronislaw Malinowski & Radcliff Brown (1952) and Anderson utilization health theory by Andersen & Ronald (1995). The system theory was first proposed in the 1950 by biologist Ludwig von Bertalanffy and furthered by W. Ross Ashby (1956) in area of cybernetic (communication) study. Also, David Easton (1953) adopted the system theory in the analysis of political behavior. Ludwig Von Bertalanffy (1968) wrote that "system is a complex of interacting elements and that they are open to and interact with their environments. In addition, they can acquire qualitative new properties through emergence,

thus they are in a continual evolution when referring to system. In other words, systems are self-regulating through feedback mechanism.

A system is defined as number of interdependent parts functioning as a whole for some purpose. Hence, there are five components: Inputs, a transformation process, outputs, feedback and the environment. The systems approach is very important in general management (Healthcare management) analysis. Especially four ideas that have had substantial impact of management are the concepts of open system versus closed systems, subsystems, subsystem and interdependencies, synergy and entropy. According to Ludwig Von Bertalanffy there are two basic types of systems: Open systems and closed systems: Open systems interact with their environment. All organizations are open systems, although the degree of interactions may vary. Closed system are not influenced by and do not interact with their environment.

The practical implication or application of the System theory to the impact of the National Health Insurance Authority on enrollees' healthcare in Selected Public Hospitals in the FCT, Abuja, lies heavily on the entire health sector as a 'whole' and the main focus of this system analysis is that the National Health Insurance Authority is a "subsystem" that interacts, integrates, and synergizes with some various parts like the National Health Insurance Authority Council (NHIAC), Health Maintenance Organizations (HMOs), and Health Service Providers (HSPs). In order to fulfill its mandate of providing accessible, affordable, and quality healthcare services to Nigerians, enrollees in the Federal Capital Territory, Abuja

## **METHODOLOGY**

### **Research Design**

The research design for this study is a survey design. It is descriptive in nature. Survey research focuses on people and the opinions, beliefs, attitudes, and feelings of the respondents from the study location on the subject matter under study (Moti, 2008). It is important to get data from target populations through questionnaires, interviews, and observations.

In addition, the survey method entails systematic collection of relevant data and statistical analysis of the data from the population (enrollees) in order to present a clear description of respondents on "Assessment of Impacts of NHIA on enrollees' Healthcare in Selected Public Hospitals in FCT, Abuja" in such a way to test the hypotheses

## POPULATION OF THE STUDY

The population of the study was (105,958), this comprises of the Hospital Senior. Staff enrollees (12,118) and Hospital Jnr. Staff enrollees (93,840) that use six of the NHIA selected Hospitals Centers across the six (6) Area Council in Federal Capital Territory, Abuja; through various accredited Health Maintenance Organizations. (Source: Field survey, October,2023).

## SAMPLE SIZE AND SAMPLING TECHNIQUES

A sample size of 398 respondents was used for the conduct of this research. This figure was obtained from the population of 105,958 of Hospital Snr. staff enrollees and Hospital Jnr. Staff enrollees through the application of Taro Yamane statistical formula of (1964) and stratified random sampling formulae given by university of California at Davis to derive the sample from each stratum of six (6) Area Council in Federal Capital Territory, Abuja as shown below:

Using Taro Yamane formula to get sample size and entire population of study:

$$n = \frac{N}{1+N(e)^2}$$

where: n = sample size

N = population size

e = level of significance

In this study the researcher will choose sample size (398 enrollees) of the study by substituting the above formula as follows:

$$n = \frac{N}{1+N(e)^2}$$

$$N = 105,958$$

$$E = (0.05)^2$$

$$\text{Therefore: } n = \frac{105,958}{1+105,958 (0.05)^2}$$

$$= \frac{105,958}{1+105,958 (0.0025)}$$

$$= \frac{105,958}{1+264.895}$$

$$= \frac{105,958}{265.895}$$

$$n = 398$$

Sample size = 398

### Table 1: Sample Size



**Source:** Field Survey, OCT,2023.

S/N	NHIA Centres & Area Councils	Population	Workings of Sample Size
1.	Abaji General Hospital (Abaji)	1,841	$398/105,958 \times 1,841 = 6.92$
2.	National Hospital (AMAC)	29,826	$398/105,958 \times 29,826 = 112.03$
3.	University of Abuja Teaching Hospital(G/Lada)	34,101	$398/105,958 \times 34,101 = 128.09$
4.	Kuje General Hospital (Kuje)	16,435	$398/105,958 \times 16,435 = 61.73$
5.	Kubwa General Hospital (Bwari)	20,380	$398/105,958 \times 20,380 = 76.55$
6.	Kwali General Hospital (Kwali)	3,375	$398/105,958 \times 3,375 = 12.68$
	TOTAL=	105,958	398

The study adopted simple random and stratified sampling in choosing the respondents. The simple random technique was used because it is a method of selecting a sample from a population so that all members of the population will have equal chances of being selected. And on the other hand, the stratified sampling technique was used because without stratification (classification) of the characteristics opinions of Hospital Senior and Junior Staff enrollees (respondents) may not be adequately represented. Hence, this is also to ensure that enrollees in six Area Councils of the FCT, Abuja, are represented. Again, this will help us avoid bias that may affect the representativeness of the sample and the validity of the study.

### **METHOD OF DATA COLLECTION**

The primary data for this research was collected through questionnaires. The questionnaire was administered to the critical informants or NHIA enrollees (Hospital Snr. & Jnr. Staff enrollees) in NHIA centers across six (6) Selected Public Hospitals in six (6) Area Councils in FCT, Abuja. These are those that have adequate knowledge about the National Health Insurance Authority and the Impact of NHIA on enrollees' healthcare in FCT, Abuja.

The questionnaire was administered to the respondents directly by the researcher. This involves face-to-face interaction with every respondent. In the process, the researcher provided clarifications on areas that some respondents considered obscure. This facilitated great cooperation from the respondents and 100% retrieval of all the questionnaires administered.

The secondary data will be sourced from textbooks, journals, articles, magazines, media, the internet, and other related published and unpublished materials containing information about the study.

## **RESEARCH INSTRUMENT**

For the purposes of this study, a questionnaire was modeled on a Likert scale with responses of strongly agree (SA), agree (A), undecided (U), disagree (D), and strongly disagree (SD).

The five numerical values accessing the rating will be as follows: strongly agree (SA) = 5, agree (A) = 4, undecided (U) = 3, disagree (D) = 2, and strongly disagree (D) = 1. Furthermore, the questionnaire was divided into three sections. Section A dealt with the biographical data of enrollees, which included the year of enrollment and the academic qualification of the enrollees. Section B focused on NHIA healthcare, enrollees' opinions, and information or awareness. Section C contained impacts and challenges of NHIA on enrollees' access to healthcare and questions eliciting answers to hypotheses. In addition, the use of questionnaires is the most suitable for this research since the sample size is large in number (398). This creates enough chances for more enrollees to provide much feedback for reliable analysis.

## **METHOD OF DATA ANALYSIS**

The method of data analysis used in this study was descriptive and inferential statistical analysis. Simple percentage was used for demographic data while inferential statistical tool of analysis of questionnaire was used with Likert-five numeric value rating (scale: strongly agree = 5; agree = 4; undecided = 3; disagree = 2 and strongly disagree = 1). Consequently, the mean of any response less than 3 will be counted as rejected, while any mean score of 3 and above will be seen as falling within the acceptance region. A Chi-square inferential statistical tool was used to test the hypothesis.

In the chi-square test, if the calculated values of the chi-square are greater than the table values at a given level of significance, the null hypotheses will be rejected, automatically accepting the alternate hypothesis, and if the calculated values of the chi-square are less than the table values at a given level of significance, the null hypotheses will be accepted, automatically rejecting the alternate hypothesis. Hence, to ensure a higher level of confidence in our test, a significance level of 0.05 will be used. The chi-square formula is given as:

$$\chi^2 = \left[ \frac{FO - FE}{FE} \right]^2$$

Where: FO = Observed Frequency

FE = The Expected Frequency

E = The sum of the variable

$\chi^2$  = The sign for chi-square

**Table 2: NHIA has not significantly created awareness of healthcare impact among enrollees in F.C.T, Abuja.**

S/N	Options	SA (5)	A (4)	UD (3)	D (2)	SD (1)	Total Score	Mean	Decision
1(a).	Many enrollees are not aware of the opportunity to be treated in any of NHIA Centres nearest in Nigeria in case of emergency .	99 (495)	94 (376)	118 (354)	57 (114)	30 (30)	398 (1,369)	3.439	Agreed
1(b)	Many Nigerians are not aware that unemployed, retirees and orphans can benefit from the NHIA.	94 (470)	97 (388)	105 (315)	60 (120)	42 (42)	398 (1,335)	3.354	Agreed
1(c)	Many Nigerians are not aware that National Health Insurance Authority Bill 2022 covered vulnerable and	98 (490)	96 (384)	108 (324)	53 (106)	43 (43)	398 (1,347)	3.384	Agreed

	indigent people as well.								
1(d)	Many enrollees are aware of where to seek redress in case of service failure.	43 (215)	30 (120)	90 (270)	98 (196)	137 (137)	398 (938)	2.357	Disagreed
1(e)	Many enrollees are not aware that NHIA have not maintained a high standard of healthcare delivery in FCT, Abuja.	95 (475)	98 (392)	122 (366)	41 (82)	44 (44)	398 (1,359)	3.415	Agreed
Sectional Mean								3.189	Agreed

**Source:** Field Survey, October 2023

From the above table, the respondents expressed their opinion on whether NHIA has significantly created awareness of healthcare among enrollees in F.C.T, Abuja. The respondents' opinion based on the mean scores of above 3 reveals that the following factors constrained the impacts of NHIA on enrollees' healthcare in F.C.T, Abuja; inadequate awareness of NHIA of the opportunity to be treated in any of the NHIA centers in Nigeria in case of emergency; low public enlightenment on National Health Insurance Authority Bill 2022; inadequate sensitization about where to seek redress in case of NHIA failure; and inadequate high standard of healthcare delivery in FCT, Abuja.

**Table 3: NHIA has not implemented its objectives on enrollees easy access to healthcare service in F.C.T, Abuja.**

S/N	Options	SA (5)	A (4)	UD (3)	D (2)	SD (1)	Total Score	Mea n	Decision
2(a)	NHIA goals and objectives have not been fully implemented towards enrollees' easy access to healthcare services in F.C.T., Abuja.	91 (455)	99 (396)	118 (354)	70 (140)	20 (20)	398 (1,365)	3.429	Agreed
2(b)	NHIA have not covered certain ailments such as cancer, diabetes, kidney disease.	92 (460)	98 (392)	110 (330)	60 (120)	38 (38)	398 (1,340)	3.367	Agreed
2(c)	NHIA have no equitable patronage at all levels of healthcare in F.C.T., Abuja.	34 (170)	49 (196)	80 (240)	98 (196)	137 (137)	398 (939)	2.359	Disagree d
2(d)	NHIA have no coverage for Dental-care among enrollees in FCT, Abuja.	95 (475)	98 (392)	108 (324)	50 (100)	47 (47)	398 (1,338)	3.362	Agreed
2(e)	Drugs prescribed in NHIA approved list are often time not available in NHIA pharmacies.	99 (495)	96 (384)	88 (265)	66 (132)	49 (49)	398 (1,324)	3.327	Agreed
Sectional Mean								3.169	Agreed

**Source:** Field Survey, October 2023

The table above shows the respondents view on whether NHIA has implemented its objectives on enrollees’ easy access to healthcare service in F.C.T, Abuja. The respondents opinion focused on the mean scores of above 3 agrees to the implementation of all NHIA objectives on enrollees easy access to healthcare except equitable patronage at all levels of healthcare that underscored 2.359. This shows that NHIA has not made healthcare facilities that promote equal patronage at all levels of healthcare (primary, secondary and tertiary levels) in F.C.T, Abuja. This means that medical referral wouldn’t have been an option otherwise. The implication of the above table shows that NHIA has not significantly implemented its objective on enrollees’ easy access to healthcare services in F.C.T, Abuja. Thus, the sectional mean - scored of 3.169 falls within the accepted region and this buttressed the fact about this analysis.

**Table 4: NHIA has not significantly reduced financial hardship of huge medical bills among enrollees in F.C.T, Abuja.**

S/N	Options	SA (5)	A (4)	UD (3)	D (2)	SD (1)	Total Score	Mean	Decision
3(a).	NHIA have not reduced healthcare financial hardship of huge medical bills apart from 10% per - diem among enrollees in F.C.T, Abuja.	97 (485)	98 (392)	88 (264)	70 (140)	45 (45)	398 (1,326)	3.332	Agreed
3(b)	NHIA have no coverage for Family planning - commodities including condoms towards enrollees in F.C.T, Abuja.	99 (495)	98 (392)	98 (294)	50 (100)	53 (53)	398 (1,334)	3.352	Agreed
3(c)	NHIA have no free coverage for the	94 (470)	97 (388)	93 (279)	64 (128)	50 (50)	398 (1,315)	3.304	Agreed

	extra spouse and children apart from a spouse and 4 biological children of under 18 year of age among enrollees in FCT, Abuja.								
3(d)	Many Enrollees are not aware that NHIA is cost-saving authority for medical expenses in Nigeria.	96 (480)	94 (376)	87 (261)	77 (154)	44 (44)	398 (1,315)	3.304	Agreed
3(e)	Enrollees do not need of out-of-pocket spending.	99 (495)	96 (384)	88 (264)	85 (170)	30 (30)	398 (1,343)	3.374	Agreed
Sectional Mean								3.333	Agreed

**Source:** Field Survey, October 2023

The table above shows the opinion of the respondents as to whether NHIA has, or has not reduced financial hardship of huge medical bills among enrollees in F.C.T, Abuja. The data presents that the respondents do not agreed to all the factors facilitating reduction of financial hardship of huge medical bills on enrollees' healthcare. These include common impression that NHIA has not positively impacted on enrollees' healthcare in F.C.T, Abuja. This implies that NHIA has not fully impacted the healthcare status of enrollees ,but only limiting the rise in cost of healthcare services to 10% cost of drugs paid by enrollees each time they visited healthcare providers HCPs; and also NHIA has not fully protected families from financial hardship on healthcare through fair-financing (out-of-pocket spending); although there are provisions for free medical-check-up, free maternity care, free immunization care and preventive care, free eye examination and care, the provision of low priced spectacles, free dental care (excluding those on the exclusive list); free surgical procedures, mental healthcare, emergency care, child welfare services.

**Table 5: The NHIA has not satisfied enrollees on easy access to healthcare management information system in F.C.T, Abuja.**

S/N	Options	SA (5)	A (4)	UD (3)	D (2)	SD (1)	Total Score	Mean	Decision
4(a).	NHIA have not provided information about qualified and experienced medical personnel that are always available in NHIA-centers in F.C.T, Abuja.	93 (465)	97 (388)	98 (294)	65 (130)	45 (45)	398 (1,322)	3.322	Agreed
4(b)	NHIA have provided information about efficient and effective management system in healthcare services in F.C.T, Abuja.	50 (250)	66 (264)	48 (144)	97 (194)	137 (137)	398 (989)	2.486	Disagreed
4(c)	NHIA have not provided information about free surgical consumable such as nose-mask, plaster of paris (pop), hand gloves, cotton wools, syringe and	96 (480)	98 (392)	97 (291)	67 (134)	40 (40)	398 (1,337)	3.359	Agreed



	needle, methylated spirit etc. are readily available in NHIA centers in F.C.T, Abuja.								
4(d)	NHIA have not provided information about free medical check-up and consultation with specialists, such as physicians, pediatricians, obstetricians, gynecologist, general surgeons, orthopedic psychiatrists, ophthalmologists physiotherapists to all enrollees in FCT, Abuja.	94 (470)	99 (396)	87 (261)	68 (136)	50 (50)	398 (1,313)	3.331	Agreed
4(e)	NHIA have not provided information about eye examination and care; and the provision of low prices spectacles but excluding contact	92 (460)	96 (384)	78 (234)	62 (124)	80 (80)	398 (1,282)	3.221	Agreed

	lenses in FCT, Abuja.								
Sectional Mean								3.144	Agreed

**Source:** Field Survey, October 2023

The table above indicates the opinion of the respondents as to whether management information system is satisfactory by the enrollees in F.C.T, Abuja. The respondents opinion based on the mean scores of above 3 shows that the respondents agreed to all factors that would have supported easy access to good management information system of healthcare by enrollees in F.C.T, Abuja, except the mean score of 2.485 that shows that the NHIA have provided information about efficiency and effectiveness of healthcare management system falls below the acceptance region. The implication of the above table is that there is no satisfaction by NHIA enrollees on easy access to management information system in F.C.T, Abuja. Therefore, the sectional mean (3.144) falls within the accepted region.

**TEST OF HYPOTHESES**

The hypotheses are tested using the chi-square statistical tool. The formula for chi-square is:

$$\chi^2 = \sum \left[ \frac{f_o - f_e}{f_e} \right]^2$$

The degree of freedom is given as (r-1)(c-1) while the level of significance is stated at 0.05%.

Ho: NHIA has not created awareness of healthcare impact on Enrollees easy access to affordable and qualitative healthcare service in F.C.T, Abuja.

**Table 6: Contingency table for hypothesis one**

<b>Respondents Category</b>	<b>Hospital Jnr. Staff Enrollees</b>	<b>Hospital Snr. Staff Enrollees</b>	<b>Total</b>
Agree	86	83	169
Disagree	130	99	229
<b>Total</b>	<b>216</b>	<b>182</b>	<b>398</b>

**Source:** Field Survey, Oct. 2023

**Table 7: Chi-Square Calculated Table for Hypothesis One**

<b>FO</b>	<b>FE</b>	<b>FO-FE</b>	<b><math>(FO - FE)^2</math></b>	<b><math>\left[\frac{FO - FE}{FE}\right]^2</math></b>
86	91.72	-5.72	32.72	0.36
130	124.28	5.72	32.72	0.26
83	77.28	5.72	32.72	0.42
99	104.72	5.72	32.72	0.31
<b>Total</b>			$x^2$	<b>1.18</b>

Source: Field Survey, October 2023

The degree of freedom (fd) is  $(2 - 1) (2 - 1) = 1 \times 1 = 1$

**Decision:**

Accept the null hypothesis, meaning that NHIA has created awareness of healthcare impact among NHIA enrollees to easy access to affordable and qualitative healthcare service in F.C.T, Abuja.

**Hypothesis Two**

Ho: NHIA has implemented its Objectives on Enrollees’ easy access to affordable and qualitative healthcare service in F.C.T, Abuja.

**Using Table 8: Contingency table for hypothesis two**

<b>Respondents Category</b>	<b>Hospital Jnr. Staff Enrollees</b>	<b>Hospital Snr. Staff Enrollees</b>	<b>Total</b>
Agree	91	54	145
Disagree	125	128	253
<b>Total</b>	<b>216</b>	<b>182</b>	<b>398</b>

Source: Field Survey, Oct. 2023

**Table 9: Chi-Square Calculated Table for Hypothesis Two**

<b>FO</b>	<b>FE</b>	<b>FO-FE</b>	<b><math>(FO - FE)^2</math></b>	<b><math>\left[\frac{FO - FE}{FE}\right]^2</math></b>
91	78.69	12.31	151.54	1.93
125	137.31	-12.31	151.54	1.10
54	66.31	-12.31	151.54	2.29

128	115.69	12.31	151.54	1.31
<b>Total</b>			$x^2$	<b>6.63</b>

Source: Field Survey, October 2023

The degree of freedom (fd) is  $(2 - 1)(2 - 1) = 1 \times 1 = 1$

**Decision:**

From the above table, the value of Chi-Square computer  $\chi^2_c = (6.63)$  is greater the value of the Chi-Square table  $\chi^2_t = (3.841)$ . We therefore reject the null hypothesis, and accept alternate hypothesis; meaning NHIA has not implemented its objectives on Enrollees easy access to affordable and qualitative healthcare service in FCT, Abuja.

**Hypothesis Three**

Ho: NHIA has not limits the rise in the cost of healthcare service in F.C.T, Abuja.

Using Table 10: Contingency table for hypothesis three

Respondents Category	Hospital Jnr. Staff	Hospital snr. Staff	Total
Agree	91	83	174
Disagree	125	99	224
<b>Total</b>	<b>216</b>	<b>182</b>	<b>398</b>

Source: Field Survey, Oct. 2023

**Table 11: Chi-Square Calculated Table for Hypothesis Three**

FO	FE	FO-FE	$(FO - FE)^2$	$\left[\frac{FO - FE}{FE}\right]^2$
91	94.43	-3.43	11.76	0.12
125	121.57	3.43	11.76	0.09
83	79.57	-3.43	11.76	0.15
99	102.43	-3.43	11.76	0.15
<b>Total</b>			$x^2$	<b>0.6</b>

Source: Field Survey, October 2023

**Decision:**

From the above table, the value of Chi-Square computer  $\chi^2_c = (0.6)$  is lesser than the value of the Chi-Square table  $\chi^2_t = (3.841)$ . We therefore accept the null hypothesis and reject alternate

hypothesis; meaning that NHIA has not limits the rise in that cost of healthcare service among enrollees in F.C.T, Abuja.

**Hypothesis Four**

Ho: Enrollees satisfaction with easy access to management information system provided by NHIA has not significantly increased efficiency and effectiveness of healthcare delivery in F.C.T, Abuja.

**Table 12: The following contingency table for hypothesis four**

Respondents Category	Hospital Jnr. Staff Enrollees	Hospital Snr.Staff Enrollees	Total
Agree	84	82	166
Disagree	132	100	232
<b>Total</b>	<b>216</b>	<b>182</b>	<b>398</b>

Source: Field Survey, Oct. 2023

**Table 13: Chi-Square Calculated Tablefor hypothesis four**

FO	FE	FO-FE	$(FO - FE)^2$	$\left[\frac{FO - FE}{FE}\right]^2$
84	90.09	-6.09	37.1	0.41
132	125.91	6.09	37.1	0.29
82	75.91	6.09	37.1	0.49
100	106.09	-6.09	37.1	0.35
<b>Total</b>			$x^2$	<b>1.54</b>

Source: Field Survey, October 2023

From the above table, the value of Chi-Square computer  $\chi^2_c = (1.54)$  is lesser than the value of the Chi-Square table  $\chi^2_t = (3.841)$ .

**Decision:** We therefore accept the null hypothesis and reject the alternate hypothesis; meaning that enrollees satisfaction with easy access to management information system provided by NHIA has not significantly increase efficiency and effectiveness of healthcare delivery in F.C.T, Abuja.

**DISCUSSION OF FINDINGS**

The study revealed that NHIA has not significantly impacted or fulfilled its mandate of providing easy access to affordable and qualitative healthcare services among enrollees in F.C.T, Abuja. This

finding agrees with Usman (2005), who posited that the mandate of NHIA is very clear. It is to provide healthcare coverage for all Nigerians in line with universal healthcare coverage.

The next finding analyzed the four hypotheses; the four hypotheses stated were tested, and the result from hypothesis one showed that  $(\chi^2_c)$  calculated = 1.18 is lesser than  $(\chi^2_t)$  table value = 3.841, which means that the null hypothesis was accepted, meaning the NHIA has not impacted or fulfilled its mandate of providing easy access to affordable and qualitative healthcare service to NHIA enrollees in F.C.T, A The second hypothesis indicated that  $\chi^2_c$  calculated = 6.63 is greater than  $\chi^2_t$  table value = 3.841. Therefore, it was concluded that the alternate hypothesis be accepted, meaning that adequate public awareness (enlightenment) of the affordable and qualitative healthcare provided by NHIA has not increased the enrollee's easy access to healthcare service in F.C.T, Abuja.

Again, hypothesis three revealed that  $\chi^2_c$  calculated = 0.6 is lesser than  $\chi^2_t$  table value = 3.841, which means that the null hypothesis was accepted, meaning the NHIA has not limited the rise in the cost of healthcare service in F.C.T, Abuja.

Also, hypothesis four showed that  $\chi^2_c$  calculated = 1.54 is lesser than  $\chi^2_t$  table value = 3.841. Therefore, it was concluded that the alternate hypothesis be rejected. Meaning that the enrollees are not satisfied with the management information system provided by NHIA, it has not significantly increased efficiency and effectiveness of healthcare delivery in F.C.T, Abuja.

## CONCLUSION

The study was designed to investigate and access the impact of the National Health Insurance Authority on enrollees' healthcare in the Federal Capital Territory, Abuja. The need for this inquiry was prompted by the general poor state of Nigeria's health system as well as high dependence on government meager funding of healthcare in the period of rising cost of medical bills and very poor integration of private health facilities in the nation's healthcare system, which prompted the introduction of the National Health Insurance Authority (NHIA). The introduction of the Authority was predicated on the need to have a healthy citizenry in line with the basic principles of the World Health Organization. The NHIA also sought to provide accessible, affordable, and qualitative healthcare for all enrollees in Nigeria through a public-private partnership arrangement.

The study revealed that NHIA has not impacted or fulfilled its mandate of providing easy access to affordable and qualitative healthcare service among enrollees in F.C.T, Abuja, because

implementation of NHIA in F.C.T, Abuja is limited by costly price lists, unavailability of listed drugs, or out-of-stock syndrome in NHIA pharmacies. Exclusion of treatment of certain ailments or sickness, issues of delay and long waiting time to access healthcare; delay or inadequate sensitization of authorization codes by HMOs, adequate public enlightenment about NHIA healthcare service, and inadequate institutionalization of total quality management of healthcare facilities by NHIA.

## RECOMMENDATIONS

Based on the findings and conclusion of the research, the following recommendations are made:

- **Urgent realization of the NHIA objectives:** since the study discovered that NHIA has not covered the informal sector of the population; many Nigerians are still paying out-of-pocket for medical expenses. It is recommended that the NHIA should pursue the amendment of its enabling law that will make health insurance mandatory and seek innovative financial mechanisms to improve funding, expand coverage (especially for the vulnerable and indigent), and improve the benefit package.
- **Availability of drugs and review of pricelist in NHIA pharmacies:** To do away with the unavailability of drugs or out-of-stock syndrome and costly pricelist in F.C.T., Abuja, there should be concerted efforts in ensuring necessary drugs are acquired for use on enrollees whenever they need them; also, NHIA should urgently review its drugs price list and benefit package in recognition of current economic realities in the health sector.
- **Inclusion of treatment of critical sickness in NHIA:** To review the total exclusion treatment of critical ailments or sickness; it is recommended that the exclusion list for diseases covered be reviewed in view of emerging health challenges. These should include cancer, diabetes, kidney diseases, tuberculosis, mammoplasty surgery, pediatric-congenital abnormalities, and family planning commodities (including condoms).
- **Operational efficiency in NHIA:** Based on the finding that there are delays and long waiting times by enrollees to access healthcare, delay or lack of sensitization of authorization codes; and non-release of enrollees' registers to HCPs, HMOs, and NHIA, respectively. It is recommended that there should be a deployment of effective ICT by all stakeholders to enhance operational efficiency. The insurance ecosystem should also be pursued as a matter of priority. Again, there should be increased transparency in the

operation of HCPs, HMOs, and NHIA. Also, toll-free lines should be provided by NHIA and HMOs to facilitate engagement with enrollees and obtain feedback from them.

- **Institutionalization of total quality management of healthcare facilities in NHIA:** To overcome the inadequate institutionalization of total quality management of healthcare facilities in NHIA, it is recommended that NHIA management embark on a re-branding agenda focusing on the value system, re-orientation, engendering transparency and accountability, and acceleration towards Universal Health Coverage (UHC).

## REFERENCES

- Adekola, S. (2018). "Community pharmacists advocate urgent reforms in health insurance". The Guardian Newspaper, Thursday, July 19, 2018.
- Alubo, S.O. (2012). Class issue of accessing medical care in Nigeria. The Sun Newspaper, October 2, 2012.
- Federal Ministry of Health (2004), Health Sector Reform Programme(FMOH, September 2004).
- Federal Ministry of Health (2009).Strengthening National Health System, Abuja: Federal Ministry of Health Annual Bulletin, 2009.
- Moti, U.G. (2008). "Research Methodology in the social and management science". Kaduna: Joyce Graphic Printers and Publisher Company.
- NHIA (2012). "The main classification of NHIA Health care service programmes and organizational structure in Nigeria". Operational guidelines, revised October, 2012.
- NHIA (2016). "Tertiary Institutions Social Health Insurance Programme (TISHIP). Implementation vManual January 2016).
- NHIA (2022). "Organizational Content of National Health Insurance Authority"
- Obasi, I.N. (2008). 'Research Methodology in political science". Enugu: Academic printing press.
- WHO (2018). "Result based financing". [www.who.org](http://www.who.org). (Accessed, January 5, 2022).
- WHO (World Health Organization) 2010.Health system financing the path to Universal Health Coverage.
- WHO (World Health Organization). 2007. World Health Report 2007: A safer future. Global Public Health security in the 21<sup>st</sup> century. Geneva.