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# Determinants of enrollment and retention of organized members of the informal sector into National Hospital Insurance Fund Nairobi County

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**DETERMINANTS OF ENROLLMENT AND RETENTION OF ORGANIZED  
MEMBERS OF THE INFORMAL SECTOR INTO NATIONAL HOSPITAL  
INSURANCE FUND NAIROBI COUNTY**

**CHRISTINE ARIGA**

**MBA-HCM/93034/16**



A research dissertation submitted in partial fulfillment of the requirements for the award of the  
Degree of Master of Business Administration -Healthcare Management.

**Strathmore Business School**

**JUNE 2018**

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## DECLARATION

This research proposal is my original work and has not been presented for the award of any degree in any university. To my knowledge, the material here has not been previously written or published by another person except use as a reference in the thesis itself.

Signed .....

Date June 2018

Christine Ariga

### Approval

The dissertation has been submitted for examination with my approval as the University Supervisor.

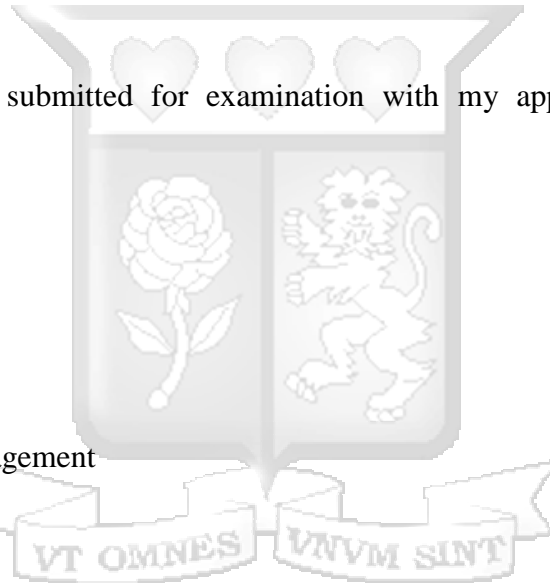
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## ABSTRACT

The global agenda focus is on how countries can adopt context specific initiatives towards realizing Universal Health Coverage as emphasis by the post 2015 development agenda (United Nations, 2015). The Kenya health financing strategy (2017) emphasis on Universal Health Coverage and envisions the National Hospital Insurance Fund (NHIF) as the primary provider of health insurance as the vehicle for delivery of UHC.

The study sought to assess the determinants of enrolment and retention of organized groups of the informal sector into the NHIF Kenya with the aim of contributing to the knowledge on how social health insurance schemes can achieve Universal Health Coverage.

The study target population was the informal sector members of organized groups (Self-help groups) in Kibera constituency Nairobi County. The objectives of the study were; to assess the views of informal sector workers about the improved benefit package, to describe the knowledge of benefit entitlements among organized members of the informal sector in Kibera and to examine access to the entitlements in terms of availability, affordability and accessibility. A descriptive cross-sectional study design was adopted with mixed method approach and sample size of 88 respondents from the study population was interviewed using a semi structured interview guide. Qualitative data were analyzed using content analysis, Quantitative data were entered into the statistical, package for social sciences (SPSS) version 24 and organized for statistical data analysis using descriptive statistics. The findings were summarized and presented using tables, figures and percentages.

The result findings were that the members of the informal sector in Kibera view NHIF membership as essential and would recommend it to potential members. Majority of respondents are aware of 59 % of the NHIF benefit entitlements whereas 41% are not aware. Access of entitlements as a determinant of enrollment was assessed and it was found out that the distance to the accredited facilities was within World Health Organization recommendations and the benefit package was affordable and acceptable however 54% of the respondents stated that the benefits were not available at the chosen health care providers and thus affected utilization of these benefits and their satisfaction with the benefit package. The unmet demand of the benefit package therefore influenced the perception of NHIF and enrollment and retention of the informal sector.

## ACKNOWLEDGEMENT

I am greatly indebted to my supervisor Dr. Vincent Okungu for his steadfast support and commitment to guiding me to completion of this thesis. AND to the healthcare faculty, research office and research assistants and respondents I am grateful.



## DEDICATION

To God Almighty for whom all blessings flow, to my husband Andrew for his overwhelming patience, his advice, his love, because he has always been there through this journey. And to my sons, you made life so much easier by being responsible for your daily endeavors God bless you.



## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>i</b>
<b>ABSTRACT</b> .....	<b>ii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>TABLE OF CONTENTS</b> .....	<b>v</b>
<b>LIST OF TABLES</b> .....	<b>vii</b>
<b>LIST OF FIGURES</b> .....	<b>viii</b>
<b>OPERATIONAL DEFINITION OF TERMS &amp; ACRONYMS</b> .....	<b>ix</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study.....	1
1.2 Problem Statement .....	5
1.3 Main objective.....	6
1.3.1 Specific Objectives .....	6
1.4 Research Questions .....	6
1.5 Significance of the Study .....	6
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>7</b>
2.1 Introduction .....	7
2.2 Universal health Coverage (UHC) .....	7
2.2.1 Universal health coverage cube.....	8
2.2.2 Service coverage.....	9
2.2.3 Cost coverage .....	10
2.2.4 Population coverage .....	10
2.2.5 The status and coverage of the informal sector .....	11
2.3 National Hospital Insurance Fund Kenya .....	12
2.4 Conceptual Framework .....	14
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	<b>16</b>
3.1 Research Design.....	16
3.2 Population and Sampling .....	16
3.2.1 Study setting and population .....	16
3.3 Inclusion and Exclusion Criteria.....	17
3.4 Research Instruments .....	17

3.6 Data management and analysis .....	17
3.7 piloting and pretest .....	17
3.8 Ethical Considerations.....	18
<b>CHAPTER FOUR: RESEARCH FINDINGS .....</b>	<b>19</b>
4.1 Socio demographic Characteristics of Respondents .....	19
4.2 Views of informal sector members about the improved NHIF benefit package.....	21
4.3 Knowledge and understanding of the NHIF benefit entitlement .....	23
4.4 Access to Entitlements by members.....	26
4.5 Affordability.....	27
4.6 Acceptability .....	28
4.7 Conclusion based on the findings.....	28
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>29</b>
5.1 Social Demographic Characteristics .....	29
5.2 Views on NHIF Enhanced Benefits .....	30
5.3 Knowledge and Understanding of Entitlements.....	30
5.4 NHIF Benefit Entitlements Acceptability.....	31
5.5 Conclusion.....	33
5.6 Policy Recommendations.....	33
5.7 Limitations of the Study .....	34
<b>REFERENCES.....</b>	<b>35</b>
<b>APPENDIX.....</b>	<b>38</b>
Appendix I: SWAHILI STUDY TOOL.....	38
Appendix II: Time Frame.....	48
Appendix III: Budget .....	49
Appendix III: CONSENT FORM .....	50

## LIST OF TABLES

Table 4. 1: Socio demographic Characteristics (SDC) of Respondents and NHIF membership .	19
Table 4. 2: Benefit package adequacy is this availability .....	22
Table 4. 3: Knowledge of Entitlements .....	23
Table 4. 4: Availability of entitlements .....	26
Table 4. 5: Affordability of the benefit package.....	27
Table 4. 6: Acceptability.....	28



## LIST OF FIGURES

Figure 2. 1 Universal Coverage Cube.....	9
Figure 2. 2: Conceptual Framework .....	15
Figure 4. 1: Importance of enrolling in the NHIF.....	22
Figure 4. 2: Communicating Entitlement.....	25



## OPERATIONAL DEFINITION OF TERMS & ACRONYMS

**GDP:** Gross Domestic Product

**JUA KALI:** it implies hot sun. These are businesses under temporary shelter or no shelter at all in Kenya. It can also mean someone, an entrepreneur who can a person or an entrepreneur, or who can undeniably fix or nearly do anything upon request

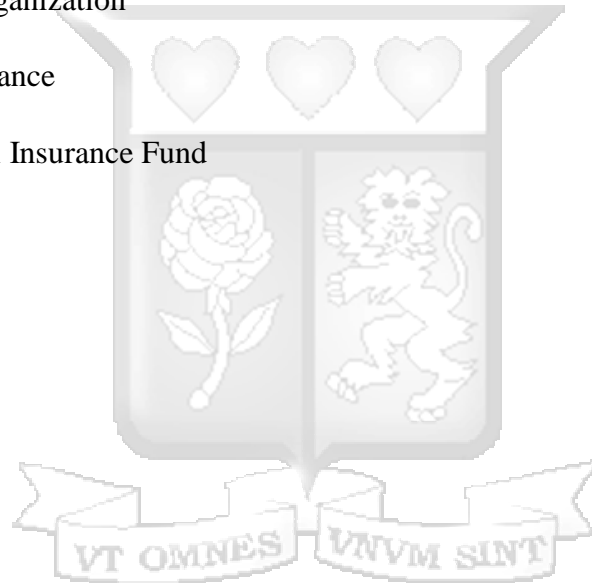
**UHC:** Universal health coverage

**THE:** Total Health Expenditure

**WHO:** World Health Organization

**SHI:** Social Health Insurance

**NHIF:** National Hospital Insurance Fund



## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

There are 150 million people globally who suffer from catastrophic health expenditure each year while a further 100 million are pushed below the poverty line (WHO, 2010), hence the global call for countries to reform their health systems to achieve universal health coverage (UHC). A recent report by WHO, (2015) indicates that globally 400 million people are not able to access essential health services. Therefore, it is envisaged that achieving UHC will deliver a sum of benefits for both individuals and countries regarding health benefits, economic benefits, and political benefits. UHC comprises a full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care (WHO, 2010).

There have been both global and country specific efforts towards the realization of universal health coverage in both developed and developing countries. In 2005 member states of World Health Organization committed to developing health-financing systems that will enable all people to access to services based on their need and not their ability to pay thus protection from financial hardship (WHO, 2010). Recent discussions on UHC such as the 2030 Development Agenda Summit held in 2015 by heads of states and governments, adopted 17 sustainable development goals and 169 targets with a commitment to achieving a global vision of dimensions of economic, social and environmental wellbeing. Sustainable Development Goal No. 3 focuses on health, and it seeks to: ensure healthy lives and promote wellbeing for all at all ages with a health target among others on achieving universal health coverage including financial risk protection and access to quality healthcare services for all (United Nations, 2015).

The need for UHC is anchored on the evidence that payment for services at service care point is a barrier to service use and those who are unable to pay to remain ill while those who pay face financial hardship through catastrophic healthcare costs and may be pushed to impoverishment (Kutzin, 2013). Therefore, achieving UHC has both social, economic and political benefits. As a social component, health benefits are evidenced through improved health indicators, which contribute directly to human development index and economic growth. Also, availability of services gives assurance to the populations that in the event they are ill they can get treatment. The use of services is faced by challenges especially where a person should make direct out of pocket

payments denying the poor, disadvantaged from seeking services since they cannot be able to afford it and impoverishing those who pay to obtain the services (Zaman & Hossain, 2017). Initiatives toward making progress in UHC include the development of prepayment systems to pool resources and move away from Out-of-Pocket (OOP) payments.

Prepayments to an insurance scheme ensure that the pooled funds provide health services for everyone who is covered; the sick and disabled get treatment and rehabilitation services whereas everyone gets promotion and preventive services (WHO, 2010). Prepayment methods include government based insurance schemes, private health financing schemes that include risk-rated private health insurance, employer-based health insurance, enterprise financing schemes and community-based health insurance. Risk rated health insurance are a form of private health insurance and is voluntary based on the contribution of premiums based on risk. In Kenya, it is reported that private health insurance accounts for 9.4% of private health expenditure toward health financing (Okungu et al., 2017).

Employers purchase employer based health insurance for their workers, enterprise financing schemes, on the other hand, are voluntary as the enterprise chooses to provide resources to insure its informal workers and family through compulsory occupational health care. The community-based model is characterized by voluntary enrollment and premiums notes based on; they are executed by communities themselves an example is the Mutuelle de santé (or mutual health organizations) that are most common in West Africa (Tabor 2005).

Though private insurance schemes aid access to services for their members, they have not reduced financial barrier of access since most of the informal sector populations cannot afford the premiums. In Kenya, the main prepayment system is the National Hospital Insurance Fund (NHIF) which was established in 1966 as a government based social insurance scheme. NHIF membership is mandatory for workers employed in the formal sector while open and voluntary for workers in the informal sector and retirees which is stipulated in the NHIF amendment Act. NHIF offers comprehensive cover for its members who seek inpatient care in public and low-cost faith based facilities. Over the years, its strategic focus has been on increasing coverage to members of the informal sector. In 2015, NHIF introduced a significantly improved benefits package to cover

outpatient and outpatient services for members of the informal sector, and this was intended to improve service and population coverage and reduce out of pocket payments with the aim of financial risk protection from catastrophic costs and impoverishment (Health Market Innovations, 2014).

In sub-Saharan Africa countries categorized as Low-and Middle-Income countries (LMIC) have more than 90% of its people who are unable to seek appropriate care and thus suffer the risk of severe illness, early death and financial catastrophe linked to high OOP health expenditures which are especially high among the poorest people (Durairaj, D'Almeida, & Kirigia, 2010) . Most of the population that pays for healthcare OOP are the informal sector. The informal sector population varies from one country to another. According to (Chuma & Maina, 2012) the informal sector does not have a form of health cover through formal employment arrangements. This is people working mainly in small enterprises, in subsistence agriculture, are unemployed or not active economically.

The informal sector members are not always organized into groups thus posing a challenge regarding their enrollment and collection of contributions for an insurance scheme. They are faced with high disease burden (hence, higher need for resources) and low financial capacity or income to address it (Durairaj & Evans, 2010).. The concern for informal workers is that due to their poor working conditions they are prone to health problems. Despite their health risks, they lack or have limited access to healthcare or any form of health insurance. The lack of health insurance among informal workers is associated with large out-of-pocket expenditure leading to loss of income and further impoverishment of this group (Shahrawat & Rao, 2011).

Different countries have documented challenges faced while increasing health insurance coverage among the informal sector workers. An example being Thailand, where slow progress was made towards universal coverage for many years, until the government decided to purchase premiums for informal sector insurance using tax funds (WHO, 2011). Other challenges met by different countries are in poor registration and enrollment of these workers to as social insurance scheme that is attributed to their inability to afford the set premiums.

In Kenya, the sector is known as Jua Kali sector. The primary objective of this sector is a generation of employment and income of persons concerned and is characterized broadly as consisting of

units engaged in the production of goods and services that typically operate at a low level of organization (Osei-Akoto & Adamba, 2011). The sector has little or no division between labor and capital as factors of production and often operate on a small scale. Labor relations are non-existent, and if they exist, they are based on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees (WHO, 2012). The sector has fewer informal workers (especially home-based enterprises), they operate for a shorter period and have poor access to water and electricity, and few sell outside the establishments where the entrepreneurs live (World Bank, 2006). Kenya's informal sector is large and dynamic consisting of about 78% of total workforce (WHO, 2012).

Coverage for the informal sector has been problematic in many LMIC, and it's important to study and understand the challenges that Kenya faces with the informal sector in its quest for UHC. Wamai, (2009) studied the health system in Kenya, analyzing the situation and challenges facing health insurance in Kenya, and concluded that health cost remains the greatest barrier to health care in Kenya. Deloitte, (2011) studied the reciprocal relationship between poverty and health status in Kenya and concluded that 46% of Kenyans live on less than a dollar per day, and this extreme poverty levels among the population have affected negatively on health financing.

Carrin and Krech, (2007) studied the need to create a mechanism to include more workers from the informal sector in health care system in developing countries. They concluded that there is need to emulate countries like Germany, Ghana, and Tanzania in financing a system that will enable provision of health care to the whole citizenry. Hsiao & Shaw (2007) studied the mode of health financing and provision of health care services in developing countries through the public and private sector and concluded that health financing in developing countries has had a predominantly tax funded health system thereby illustrating that the poor bear a large share of the costs since public financing is inadequate to provide all needed services yet social health insurance remains largely underdeveloped.

Efforts toward implementing an initiative for covering the informal sector as a drive towards achieving UHC are met with the challenge of inadequate funding. About 30% of the total health expenditure (THE) in Kenya is funded from out-of-pocket payments including cost-sharing with

the government contributing about 34% of THE (MOH, 2017). The government contribution is considered too low to make improved progress toward UHC. According to Okungu et al. (2017), government funding to the health sector needs to more than double to realize UHC efforts.

## **1.2 Problem Statement**

The NHIF, despite decentralizing services in addition to improving the benefits package reports are that the informal sector members are dropping out and the registration of new members is low. If this trend continues, the progress toward UHC will be limited and more people will experience catastrophic costs and impoverishment. It is through enrollment to a social health insurance scheme such as the NHIF that enables people to access services based on need and not ability to pay. Therefore, the aim of NHIF expanding its services towards the provision of outpatient services in addition to the inpatient package to members of the informal sector was to ensure access to health services including promotion, curative and rehabilitative services without catastrophic costs. However, two years after the launch of the outpatient scheme it has been realized that the uptake is as low as low as less than 12% against the target of 80 % in the year 2015-2016 (NHIF, 2016).

Several reasons that have been expressed by the members of the scheme including not getting the full benefits promised, and therefore members are dissatisfied and are not utilizing the services as it was expected. This has an aftermath effect of members opting out of the scheme and resolving to OOP payments. Studies such as Duran et al., (2014), Bitran, (2014) and Okungu et al., (2015) have focused on the challenges faced in UHC initiatives targeting the informal sector. However, since the launch of improved benefits package by the NHIF, there is no empirical evidence on understanding why enrollment and retention remain low in the informal sector. Lack of this empirical evidence is a limitation towards NHIF devising appropriate measures to improve enrollment and retention. There is need therefore to evaluate views of organized members of the informal sector on the improved benefits package, knowledge on entitlement, and access to benefits.

### **1.3 Main objective**

The main objective of the study was to assess barriers to enrolment and retention of organized groups of the informal sector to the NHIF and add on to the knowledge on how social health insurance schemes can achieve UHC.

#### **1.3.1 Specific Objectives**

1. To assess the views of informal sector workers about the improved benefit package entitlements of the NHIF;
2. To describe the knowledge of benefit entitlements among members of the informal sector
3. To examine access to entitlements by members of the informal sector.

#### **1.4 Research Questions**

1. What are the views of organized members of the informal sector about the NHIF including the currently improved benefits package entitlements?
2. Do members of the informal sector know what their entitlements as members of the NHIF?
3. Are the entitlements accessible (available, affordable and acceptable) to enrolled members of the informal sector?

#### **1.5 Significance of the Study**

The study will contribute to existing knowledge on determinants of enrollment and retention of informal workers to a SHI scheme. On the other hand, the NHIF will be able to understand the determinants of low enrollment and retention in an effort towards improving the implementation of the customer retention strategy (NHIF 2014-2018). Furthermore, the findings will inform policy makers on the packages that are able to meet needs of the informal population in addition to appropriate communication channels to ensure members have knowledge of their entitlements

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The chapter discusses the concept of UHC and why it is important, the financing mechanism in Kenya to achieve UHC and a conceptual framework. Literature in the review was searched using a combination of the following terms UHC, Informal sector, Low-Middle Income Countries and Social Health Insurance. The search engines used were Opera Mini, Maxilla Firefox and Google Chrome. Some of the databases where literature was sourced include the, Google Scholar, Internet Archives, Hinari WHO, World Bank, PubMed and JSTOR.

### **2.2 Universal health Coverage (UHC)**

Universal health coverage (UHC) refers to coverage for all with health services of sufficient quality and financial risk protection (WHO, 2010). Universal health coverage (UHC) can be realized if health financing systems ensure that all people access mix of services that include health promotion, preventive, treatment and rehabilitative services of adequate quality to be effective and that no one suffers financial hardship (WHO, 2010). In 2005-member states of WHO committed to develop health financing systems to enable all people access to services based on the need and not their ability to pay thus protection from financial hardship (WHO,2010). The components of UHC include population coverage, provision of quality essential service coverage and financial coverage.

Even though the concept of UHC is not new, over the last few years its importance and visibility has significantly increased. In 2005 the 58th World Health Assembly adopted a resolution encouraging countries to plan the transition to UHC in their health systems. The current movement to promote UHC has been encouraged by other key actors in the field of global health such as the World Bank, the United Nations Children's Fund (UNICEF), and the United States Agency for International Development, the Inter-American Development Bank, the Rockefeller Foundation, and the Bill and Melinda Gates Foundation. UHC interventions in low- and middle-income

countries to improve access to health care, often have a positive effect on financial protection and in some cases, has positive impact on health status (Bump, 2010).

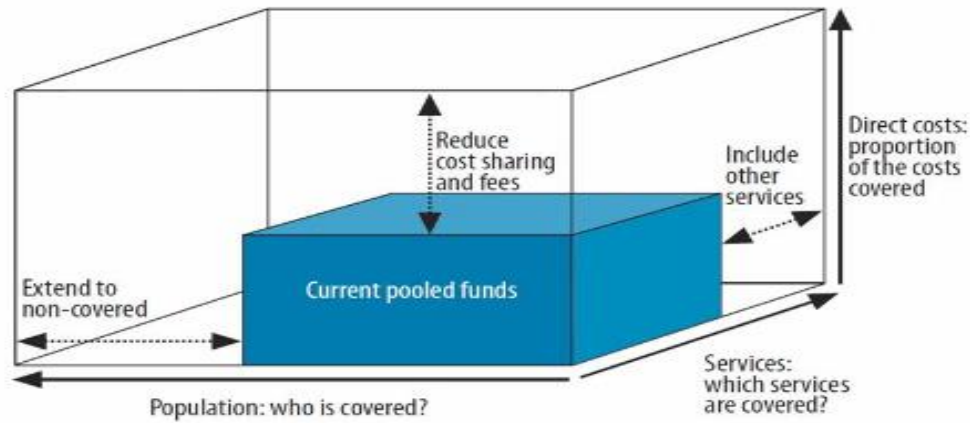
A closer look at UHC schemes and available evidence reveals the following three lessons have implications for both policy and the future of UHC research. First, affordability is key factor in realizing financial protection. Although improving the affordability of services is often achieved by UHC schemes, this does not translate into improvements in access to health care, more holistic approaches to the dimensions of access need to be understood and incorporated in the invention design. Second, UHC efforts should target the poor without leaving out the non-poor that requires that different strategies should be provided to meet the needs of both groups(WHO,2010).

In addition, in extending coverage to the non-poor, it is important to look at how moral hazard may change across income groups. Third, benefits should closely be linked to target populations' needs. Policy makers with a definite budget should manage the tradeoffs between what and how much is covered. In doing so, they should carefully examine the target population's needs by looking at indicators such as population epidemiological profile, major barriers to access, unsatisfied demand and major sources of financial hardship (Savedoff, 2012). The key policy issues to look out for in making progress toward UHC include three elements of coverage: population, cost and service coverage; i.e. the UHC cube.

### **2.2.1 Universal health coverage cube**

Universal health coverage cube (UHC)represents three dimensions, which entail who is covered, which services are covered and proportion of costs that are covered; i.e. (population coverage, service coverage and cost coverage). These dimensions form the axes of the UHC cube. The population axis describes the objectives of having population covered in terms of services whereas the cost coverage relates to financial protection objective and service coverage describes the access of needed and quality services for everyone (Kutzin, 2013).

## 'The universal coverage cube'



Source: The World Health Organisation, 2010



Figure 2. 1 Universal Coverage Cube

### 2.2.2 Service coverage

Universal Health Coverage (UHC) seeks to see that everyone can access quality services that they need at an affordable cost. The services covered should be of sufficient quality and quantity hence UHC initiatives aim to expand coverage especially to the poorest population. The services to be covered include preventive, promotion, treatment, rehabilitative and palliative care services. Service coverage is important in terms of depth and breadth. Depth refers to the range of services that are available to people without exposure to out of pocket or cost sharing whereas breadth is the proportion of population covered that have access to these services and are protected from financial risk (Kutzin, 2000).

Health reforms should be geared toward eliminating gaps in service delivery since the extent of service coverage has limitations and the members may be required to co-pay for the services not covered in their benefit package and incur catastrophic health costs. On the other hand, insured members may not be aware of their entitlements due to information asymmetry and the lack of awareness of the benefit package hinders access of services such that in case of illness members

may not access these services or might pay for them from out of pockets and incur catastrophic health expenditure and eventuality of impoverishment (WHO, 2010).

### **2.2.3 Cost coverage**

Financial protection from catastrophic expenditure and impoverishment is a key agenda under universal health coverage(UHC). Financial risk protection is determined by the proportion of costs individual should pay themselves to cover for health services a situation which may cause them to be impoverished or remain in ill health and unable to work. Health financing system should offer financial protection to its citizens so that they access services when they need them without diverting resources otherwise meant for other uses. Most prepayment systems protect from financial catastrophe though the extent depends on how much is pooled (WHO, 2010). Member's enrollment to a form of insurance enables the financial risk associated with seeking healthcare to be spread in the pool and thus protection from hardship and catastrophic expenditure. However, a considerable proportion of informal sector members have lower ability to pay insurance due to low or irregular pay and demands for other needs (Health Inc Consortium, 2014).

### **2.2.4 Population coverage**

Government initiatives are meant to ensure that the informal sector is protected from out of pocket payment(OOP). These include offering subsidies; for example, the government of Kenya initiatives to UHC include free primary healthcare, free maternity and other programs implemented through NHIF such as Health Insurance Subsidy Program, Older Persons and Severely Disabled Beneficiary Scheme. These targeted initiatives are supposed to enable access to services among the poor and vulnerable groups within the informal sector.

UHC initiatives through SHI seek to increase the pool by ensuring that the population is protected from financial risk of bearing full cost of healthcare. Among factors that may increase enrollment and registration of members to the pool of SHI include in-depth understanding of their benefits and access to the said benefits. According to World Health Organization attainment of the highest possible level of health is a fundamental human right, however, there are well documented

challenges encountered in achieving UHC even among the most advanced economies in Europe (WHO, 2006).

### **2.2.5 The status and coverage of the informal sector**

Based on the study done by the Joint Learning Network on Universal Health Coverage, (2011), self-employment constitutes a greater share of informal employment (outside of agriculture) than wage employment: nearly one third of total non-agricultural employment worldwide and constitutes as much as 53 % of nonagricultural employment in sub-Saharan Africa, 44 % in Latin America, 32 % in Asia and 31 % in North Africa.

National Council for Law Reporting, (2012), indicated that it is estimated that informal businesses accounted for 35-50% of Gross Domestic Product (GDP) in many developing countries such as Kenya; the informal sector is estimated at 34.3% and accounted for 77% of employment statistics. Over 60% of those working in the informal sector are the youth aged between 18-35 years, 50% being women (WHO, 2012). The players in this sector are involved in small businesses, vehicle repair, transport industry, furniture making, metalwork, dressmaking, food and beverage selling, and cloth hawking. This makes it a broad industry with very high level of employment.

Many LMIC have a significant size of the population in poverty or informal employment. As such and given limited tax revenue and fiscal space, the government is unable to adequately subsidize health care for the poor health leading to large OOP payments. In Most of these countries, OOP payments are above the required minimum of 20% of Total Health Expenditure.

The informal sector therefore poses challenges to UHC that are compounded by the current segmented health care systems that are common in LMIC.

In Kenya, efforts to provide coverage to the informal sector include health sector involving social insurance scheme under the NHIF. The NHIF strategic focus 2014-2018 is on expansion of coverage to members of the informal sector and with the roll out of outpatient services to the

informal sector the expectation was that the uptake and utilization of this service would improve and this was an initiative towards realizing universal health coverage (NHIF, 2014). The NHIF is responsible for enrolling and registering all eligible members from the formal and informal sectors (Kotuku & Amata, 2017).

### **2.3 National Hospital Insurance Fund Kenya**

NHIF is the oldest government insurance scheme in Africa and the only public insurance scheme in Kenya. It is a non-profit institution created by an Act of Parliament in 1966 as a department in the Ministry of health. At inception, NHIF was intended to provide accessible health insurance, mandatory for all salaried employees for who work in the public and private sector employment and earning a monthly salary of KES 1,000 and more (NHIF, 2015).

The salaried formal sector workers premium contributions are calculated on a graduated scale based on income, and deducted automatically through payroll whereas for self-employed and other informal sector workers, membership is voluntary and contributions are at a fixed premium rate of 500 Kenya Shillings per month (NHIF, 2016). Overall membership enrollment for formal and informal sector populations has reached 4.5 million people (11% of the Kenyan population) (Abuya & Chuma, 2015). While coverage is high for the formal sector (98%), coverage of the informal sector that accounts for over 80% of Kenya's workforce has proven to be more challenging, and remains low at 16% of the informal sector population (Hornsby, 2013).

The NHIF has undergone several changes over the years to include more benefits, targeting informal sector households and currently the scheme is piloting an outpatient care package for its members (Munge & Chuma, 2017). NHIF begun with offering inpatient coverage to its members both formal and informal sector members, however in 2015, it could roll out comprehensive outpatient coverage to members of the informal sector. Entitlement for a member of voluntary sector is depended on enrollment to NHIF as voluntary member through contributions of monthly premiums of US\$ 5.00 per month and US\$ 60 per annum.

The voluntary members can make their monthly premiums through bank accounts, M-Pesa, USSD systems and an NHIF e-wallet. NHIF purchases services for these members from healthcare

providers. Members are select their preferred outpatient facilities which are capitated for outpatient services (NHIF, 2016). NHIF initiatives towards coverage for members of informal sector include enhanced benefit package, devolved services to the countries, more hospitals are now available in NHIF panel thus improving physical access mobile registration for easy enrollment.

Recently, the NHIF improved its benefit package to improve access, quality and financial protection and thereby attract and retain members of the informal sector into the scheme. However, the enhanced benefit package brought with it an increase in premiums to members of the national scheme from KES 150 to 500 for informal sector members and a minimum of 150 to a maximum of KES 1700 for formal sector members. Membership to the NHIF has remained relatively stable because majority are in the formal membership as at the end of the fiscal year (2016) was 4,169,871. This constitutes 73% of the total enrolled principal members, who are 6,711,643. Active membership in the formal sector was 3,235,417 while that of the informal sector was 934,454 (Wanyama, 2016).

The benefit package describes the total health services that a member receives for the premium contributed. The standard benefit package ensures that services provided are, professional and quality, affordable to the enrolled members and delivered in a way that is culturally acceptable. The NHIF benefit package is drawn from the Kenya essential healthcare package defined by the government. The benefit package covers both curative, preventive and rehabilitative health services. The enhanced benefit package in addition to inpatient services for both salaried formal and informal sector members extended the following outpatient services to the voluntary paying members Consultation, Laboratory, Drug administration and dispensing, radiology examinations, Physiotherapy Rehabilitation service, Renal dialysis services, Family planning and tertiary care services including specialized surgery

The enhanced benefit package expectation of increasing registration and retention of members of the informal sector has not been realized since it is reported that the enrollment and retention is still low. The implementation of voluntary insurance cover to members of the informal sector is not without challenges as these members often have lower ability to pay for contributions, and by them not being in organized grouped there are difficulties in their recruitment, registration and

collection of contributions (Barasa, Mwaura & Rogo, 2017). An evaluation study conducted by International Labor Organization, (2007) indicates that whereas the NHIF has achieved high levels of coverage of the formal sector at almost 100%, coverage of the informal sector remains very low and only accounts for 19% of the total membership of the Fund (WHO, 2011).

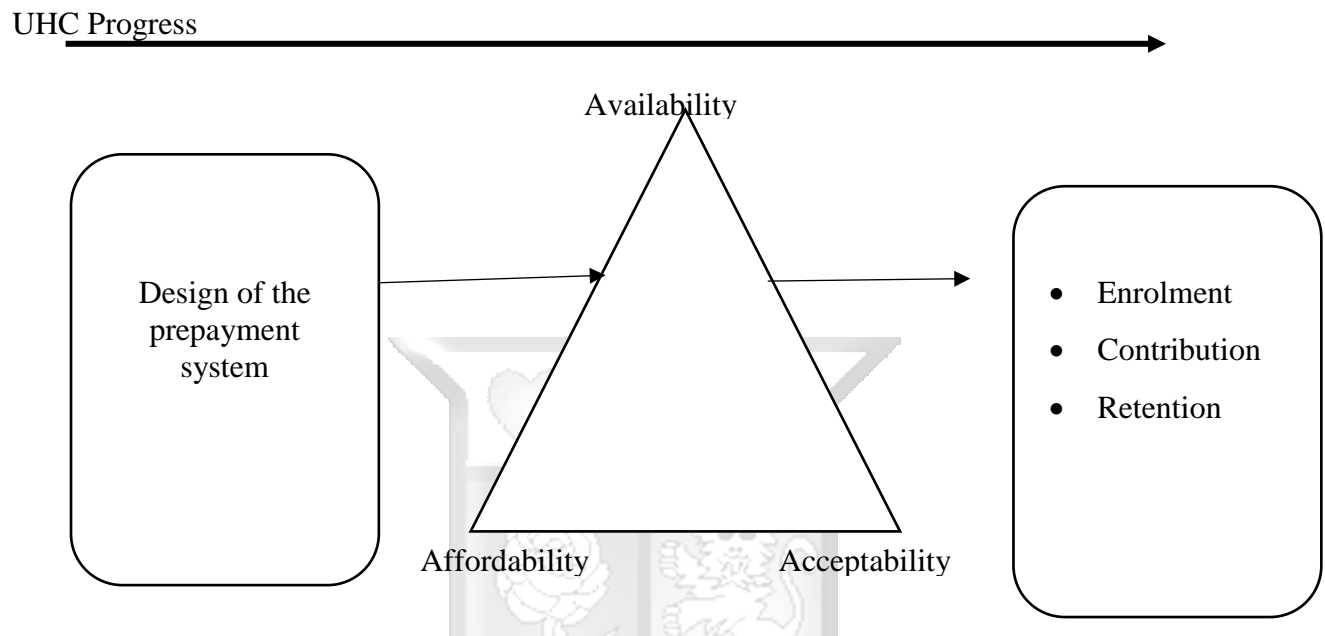
The annual growth for informal sector members has averaged 38% in the last 5 years and 10% for formal sector members. Growth in SHI scheme is largely attributed to the enrollment of informal sector. According to Osei and Adamba (2011) although there could be increases in enrolment in the number of members; there is variation in their level of activity, with high dropout rates being experienced. Inactivity rates are higher among the informal sector members who make voluntary contributions, which becomes apparent when members pay contributions inconsistently in a period. Overall, NHIF estimates 30% of all members are inactive with significantly higher levels of inactivity among the informal sector (WHO, 2011).

## **2.4 Conceptual Framework**

Several researchers have conducted studies on the informal sector knowledge on NHIF benefits across the globe. Most of these studies have indicated that the basic challenges that faces the informal sector enrollment and retention to NHIF benefit scheme is attributed to lack of knowledge about the benefits. The universal health coverage primary objective is making sure that all citizens' benefits from the health care. Understanding how health care benefits are distributed based on need is a significant policy in question.

As presented in this chapter, the uptake of NHIF in the formal sector has almost reached the maximum level and the focus has shifted to the informal sector. Hence there is need to understand the factors that determine the uptake of NHIF by the informal sectors and give recommendations to the implementers of the benefit scheme. A study by Delloite (2011) concluded that NHIF accessibility has an impact on the enrolment because people spend a lot of money travelling from one location to another. However, there is no mention of the impact of accessibility and its level of significance. Namuhisa, (2012) concluded that there is a meaningful relationship between awareness of NHIF benefits and enrolment rates. This was similar to the studies conducted by (Kituku and Amata, (2017), El-Jardali & Hammoud, (2014) and Chuma & Okungu, (2012). These

authors suggest that knowledge and awareness of benefit entitlements can influence enrolment rates. The actual rates of enrolment relative to knowledge and awareness is unclear. Figure 2.2 is an illustration of the conceptual framework.



*Figure 2. 2: Conceptual Framework*

The framework is an adoption of the Access Framework by McIntyre and Theide (2007). Access to health care in this context was described as the empowerment of an individual to use health care and as a multidimensional concept based on the interaction between health care systems and individuals (McIntyre & Theide, 2007).

The dimensions of access include availability, affordability and acceptability. There are number of factors underlying these dimensions. For a social health insurance, arrangement to make progress towards universal health coverage there must be enrollment, regular contributions and retention of members. For the three to exist successfully members must be aware of their entitlements. There needs to be communicated to members effectively so they can be aware of implementation strategies. Importantly, the entitlements should be acceptable, available and adequate to protect from financial hardship. If these were achieved, there would be noteworthy progress toward UHC.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Research Design

A descriptive cross-sectional design was adopted in this study to explain why there are low enrollment and retention of members of the informal sector. According to Mugenda and Mugenda (2003), this method is used in studies that often cover large populations by selecting and studying the sample from the population to discover their characteristics. Most information on the households is collected using this method.

### 3.2 Population and Sampling

#### 3.2.1 Study setting and population

The study setting was in Kibera in Nairobi County. Kibera was selected because it has the most extensive informal sector population in the country as well as consisting of several enterprises that are recognized as informal (Amnesty International, 2009). It is also important to note that individuals conducting business in the informal sector mostly live in the informal settlements. There are 356 organized groups in Kibera sub-county. Because of cost and time considerations the study selected three self-help groups (Mixed Group, Youth Group, and Women Group) to represent the diversity of informal sector groups in Kibera. The selection was also based on the size of the groups so the study settled on the largest of each group.

#### 3.2.2 Sample selection

The study stratified the target population into three self-help groups: one women group, one youth group and one mixed informal sector group. A list of members of each group was obtained from the self-help registration office at Huduma Center. After listing members of each group, a random sample was selected from each group.

The researcher adopted a formula by Yamane (1967) in determining the sample size:

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

Where n is the sample size, N is the population size, and e is the level of precision.

The women group had 100 members, the youth group had 95, and the mixed group had 155 members which gave a population size of 350.

Thus, the sample size is calculated as;

$$n = \frac{350}{1 + 350(0.1^2)}$$

Hence, S

$$n = 88 \text{ for interview}$$

### **3.3 Inclusion and Exclusion Criteria**

All consenting adults (at least 18 years of age), of sound mind and working as part of an organized group in the informal sector were included in the study. The opposite criteria were excluded.

### **3.4 Research Instruments**

The study used semi-structured interviews. Semi-structured interview schedules are flexible and allow interviewer probe on respondent's views, experiences and understand different perspectives; they allow for more data collection in a more natural way as the interviewer can ask more questions as opportunities present (WHO, 2017).

### **3.5 Data Collection**

The study was conducted over a three-week period for 3 days in a week per group aiming at interviewing 10 respondents in a day. There were three research assistants trained on how to conduct a semi-structured interview, establish rapport with respondents and identify any errors and how to handle the complete semi structures interview guides.

### **3.6 Data management and analysis**

Data were cross-checked for accuracy and completeness. Qualitative data were analyzed using content analysis, which was critical in analyzing the participant's views. Quantitative data were organized for analysis using descriptive statistics and presented in summary tables and graphs.

### **3.7 piloting and pretest**

A pilot test was done on the research instrument. The interview guide was used to interview members of a group that was not part of the study and the responses were examined on whether

they measured what was intended to be tested and thereafter adjustments were made. Test-retest reliability method was used to determine consistency of the questions to be administered. This ensured authenticity of results collected and avoided distortion.

### **3.8 Ethical Considerations**

As an ethical process, the ethical clearance was obtained from Strathmore University which issued clearance number SU-IRB 0162/18DRRT. Throughout the data collection period, voluntary participation and confidentiality was highly emphasized.



## CHAPTER FOUR: RESEARCH FINDINGS

### 4.1 Socio demographic Characteristics of Respondents

Table 4.1 presents the socio demographic characteristics of respondents and links these characteristics to their NHIF membership. The response rate 84 out of 88 or (95%) was achieved from the questionnaire.

*Table 4. 1: Socio demographic Characteristics (SDC) of Respondents and NHIF membership*

<i>Characteristics</i>	<i>NHIF member</i>		<i>Not NHIF member</i>	
	<i>No.</i>	<i>(%)</i>	<i>No.</i>	<i>(%)</i>
<i>Gender</i>	Male	34 (40)	11 (12.7)	
	Female	32 (38.2)	8 (9.1)	
<i>Age</i>	18-22 years	3 (3.7)	11 (13)	
	23-27 years	16 (18.5)	8 (9.3)	
	28-32 years	14 (16.7)	0 (0)	
	33 to 37 years	14 (16.7)	0 (0)	
	Above 37 years	17 (20.4)	2 (1.9)	
<i>Occupation</i>	Self-employed	21 (24.5)	11 (13.2)	
	Employed	36 (43.4)	3 (3.8)	
	Other	9 (11.3)	3 (3.8)	
<i>Marital status</i>	Single	14 (17.2)	13 (15.5)	
	Married	46 (55.2)	6 (6.9)	
	Divorced	4 (5.2)	0 (0)	
	Widowed	0 (0)	0 (0)	
<i>Level of education</i>	Primary school	8 (9.6)	3 (3.7)	
	Secondary school	31 (37)	14 (16.7)	
	Mid-level college	19 (22.2)	2 (1.9)	
	University degree	5 (5.6)	2 (1.9)	
<i>Number of children</i>	0 to 2	35 (42.2)	22 (26.7)	

	3 to 5	17 (20)	0(0)
	6 to 8	4 (4.4)	2(2.2)
	Above 8	4(4.4)	0 (0)
	<2000	2(1.9)	6 (7.69)
<i>Income (KES)</i>	2000 to 5000	0 (0)	3(3.9)
	6000 to 9000	10(11.5)	0(0)
	10000 to 13000	11(13.5)	8(9.6)
	Above 13000	44 (51.9)	0(0)
<i>NHIF membership</i>		58(69)	26 (31)

The findings demonstrate the socio demographic characteristics of the participants and their NHIF membership. The study shows that of the total respondents NHIF membership from the sample size was 40% males and about 38% among females, indicating a slightly higher chance of men than women enrolling into the NHIF. Regarding age, the results show that those who were above 37 years had a higher enrolment as compared to those in the age group of 18 to 22 years, which indicates that as one gets older in the informal sector, one is likely to enroll into a health scheme than when one is an adolescent. That could be attributed to the fact that the higher age group had families that prompted them to enroll, i.e. as the table shows, an association can be made between marital status and membership to NHIF. Married people have a higher enrollment rate than unmarried individuals. Higher income was also strongly associated with NHIF enrolment with over 50% of highest earners enrolled compared to none in the lowest income group.

As the education level increases, the indication from the findings are that enrolment increases probably because of increased awareness about health insurance. For instance, those with secondary level of education (KCSE) had a higher enrolment percentage (37%) as compared to those with primary education (KCPE) (9.6%) whereas although tertiary education had the lowest percentage, this is attributed to the fact that the study was conducted in the informal sector with very limited number of people with high levels of education. The level of education is essential thus the need for NHIF to adopt an appropriate communication channel for improving the awareness among the informal sector.

From the table 4.1, people with fewer children (0 to 2) reported a higher enrolment which some participants explained on the fact that family size influences the level of disposable income.

#### **4.2 Views of informal sector members about the improved NHIF benefit package**

The benefit package was identified in the literature as one of the issues that will enhance or hinder enrolment into the NHIF by members of the informal sector. The study therefore sought the views of informal sector members regarding the improved benefit package. Members were interviewed on the reasons of enrollment and lack of enrollment to the NHIF. The major reasons for enrollment to NHIF were that NHIF offered financial protection from cost implications associated with paying for health care, the benefit package offered and awareness of the NHIF as an insurance and its importance thereof.

Cost was a key reason for enrolment; e.g. response from members who enrolled because NHIF offers financial risk protection indicated that the fund, based on its current benefit package “...*is the cheapest and affordable way of clearing hospital bills.*” A member who used NHIF for outpatient antenatal clinics and delivery said: “*I was advised from Kenyatta National Hospital to take the card during my clinic services, and the time of delivery it came in very handy.*” This indicated that for certain services such as maternity care, the benefit package was comprehensive enough to meet the needs of the beneficiaries. This is emphasized by one participant: “*The NHIF is important because it offers comprehensive cover for the whole family, and there is no exclusion to the type of disease covered....my employer advised me to join the NHIF and incase of any illness the NHIF will pay.*”

Figure 4.1 presents views on how informal sector workers felt about the importance of the NHIF benefit package in their lives.

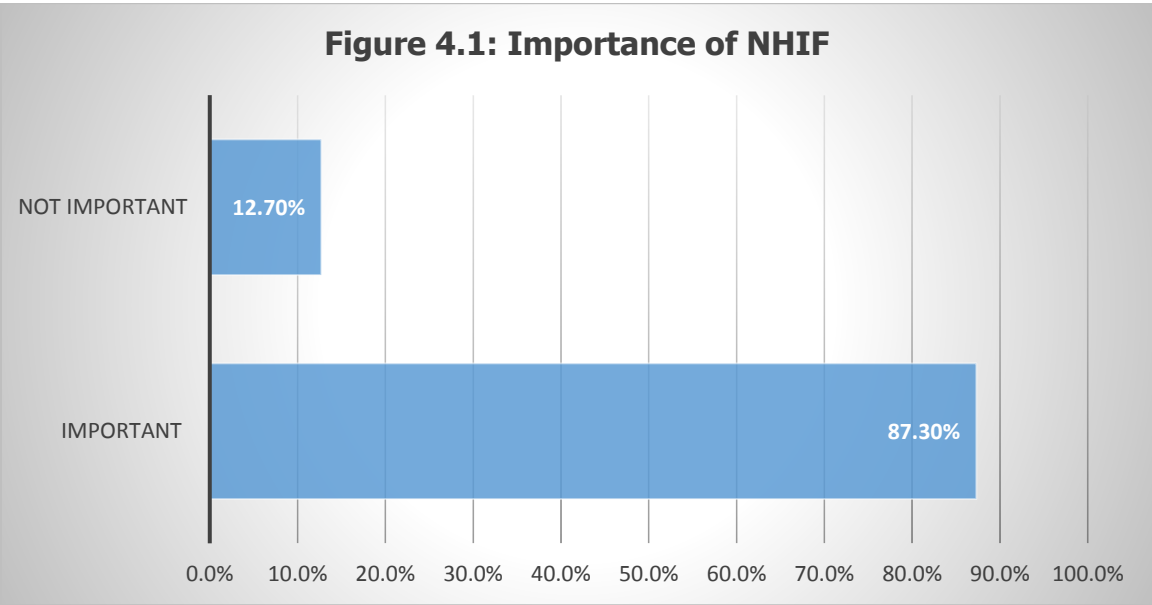


Figure 4. 1: Importance of enrolling in the NHIF

The majority (87.5%) of respondents indicated that NHIF is essential while 12.7% said the NHIF is not important. One of the key reasons raised by most respondents who felt that the NHIF was important is that the burden of paying health costs was shifted to the NHIF. A respondent stated: *“It is important because it helps in payment of hospital charges so one does not need to call for Harambee...”* explaining that *“When you have an NHIF card it acts as a saving in that whenever you are admitted there are minimal challenges in clearance of hospital bills.”*

In many cases observed, the enrollees found the benefit package adequate and that they would recommend it to other people (Table 4.2).

Table 4. 2: Benefit package adequacy is this availability

	Yes	No
Adequacy of benefit package	72 (86.2)	12 (13.8)
Recommendation of benefit package	68(89.5)	8(10.5)

As shown in Table 4.2, 86.2% of the respondents believed that the services are adequate and a higher percentage (about 90%) recommend the benefit package to potential members. Adequacy of services is a motivating factor to NHIF enrolment and retention. However, despite the favorable views on the adequacy the benefit package, enrolment has remained low, suggesting that enrolment and retention is influenced by other factors beyond the benefit package.

The study participants were further asked about improvements that the NHIF should have on the benefit package and its entire operation to improve enrolment and retention of members of the informal sector. One of the issues raised was that the NHIF should improve on awareness creation about the benefit package to encourage enrolment and ensuring that entitlements are available at the point of care. Said one respondent: *“The NHIF should create more awareness on the benefit offered...and ensure that health care providers offer the entitlements.”*

An interesting improvement/reform suggested by participants was that the NHIF should introduce tiered benefit packages, e.g. premium and basic, and price them accordingly so that people can choose what to pay for as a measure of improving enrolment and retention. This is largely among respondents who felt that the benefit package remains unaffordable.

#### **4.3 Knowledge and understanding of the NHIF benefit entitlement**

One of the most critical issues as highlighted in the literature is knowledge of what contributors are entitled to so that beneficiaries are empowered to demand for services that they have paid for. Table 4.3 summarizes the knowledge and understanding of informal sector members of their entitlement in the benefit package.

*Table 4. 3: Knowledge of Entitlements*

<b>Service</b>	<b>Know NO (%)</b>	<b>Don't Know</b>
----------------	------------------------	-------------------

Consultation	54 (64.3)	30 (35.7)
Laboratory services	51(60.9)	33 (39.1)
Pharmacy services	46 (54.5)	38 (45.5)
Renal dialysis	29 (34.7)	55 (65.3)
Family Planning	49(58.8)	35(41.2)
Cancer care	64(76.2)	20(23.8)
Surgical package	53(63.1)	31 (36.9)

On average, respondents have knowledge of 59% of the benefit package services and are not aware of 41% of these services. Members who have knowledge and understanding of the benefit package are mostly likely to seek and utilize the services. On the other 41% of members without knowledge of their entitlements will either delay in seeking treatment to seek these services due to financial constraints or may end up paying out of pocket for the services and suffer catastrophic healthcare costs. Furthermore, without knowledge of entitlements the potential members may not see the importance of enrollment and those already enrolled may opt out of the NHIF.

Lack of knowledge of entitlements is sometimes caused by poor communication of the benefit package by payers. The study therefore asked respondents how they got communication about their NHIF entitlements (Figure 4.2).

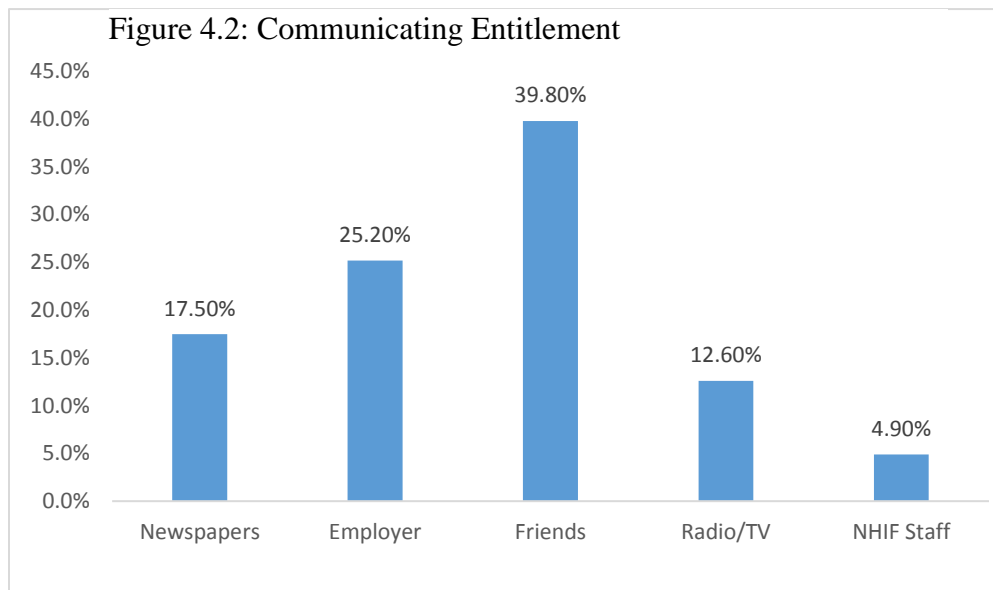


Figure 4. 2: Communicating Entitlement

The communication channel of the benefit entitlement as reported by the respondents was friends at (40%) while the least from their experience was from NHIF staff at (4.9%). However it is noted that friends is not a channel of communication recognised and used by NHIF to reach its members, which implies that 40% of this members are left out by the communication strategies used by NHIF. Of note is that some of the members enrolled because of information they were given on NHIF benefits from friends which they found useful enough to convince them to enroll. Said one respondent: *“It was recommended by friends who had used the services....”* On the flipside, there is a danger of communication by word of mouth could be distorted to raise expectations or discourage enrolment. Hence, there is need for NHIF to aim at ensuring that reliable channels of communication of benefit entitlements for informal groups are put into place. While communication from NHIF staff was the lowest at 4.9%, the reason can be because staff have the least capacity in terms of numbers to reach this population. The respondents however, felt that NHIF staff would be the most reliable channel of communication of entitlements especially if conducted at the organized members of informal sector workstations.

#### 4.4 Access to Entitlements by members

Apart from knowledge of entitlements, actual access to the entitlements among members of the informal sector is critical to enrolment and retention. The study assessed access in terms of service availability, affordability and acceptability. Table 4.4 represents views on availability of entitlements.

Table 4. 4: Availability of entitlements

	Frequency	Percent
Yes	38	45.8
No	46	54.2
Total	84	100.0

The majority (54.2%) felt that the services were not available while about 46% of respondents stated that the NHIF services were available. The members were interviewed on the reasons for not receiving the services and some of the reasons were either unavailable laboratory tests or diagnostic facilities. Besides, respondents also complained of being required to pay out-of-pocket for services they felt should have been free at the point of care. Absence or lateness of health workers including nurses, clinical officers, doctors and specialists was a common theme and which acted as an important barrier in the access to entitlements. Said a respondent: *“The hospital could not perform the entire test so I had to move to a private facility to have the test done and I paid out-of-pocket.”* Other respondents indicated that they could not access services because their cards *“...did not have enough money compared to the cost of treatment...”*. This however, should not be the case because once one is a paid-up member they are entitled to the full benefit package but could point back to lack of knowledge about their entitlements.

Unavailability of services causes delay in treatment and out of pocket payments. The actions taken when services were unavailable included moving to other facilities providing the services they needed. Others could not proceed with treatment as they were not prepared to make additional payments and those who opted to pay had to reallocate the funds otherwise planned for other needs. Some of the respondents stated that they raised complaints with the NHIF about unavailability of

services but these were never addressed. Said a respondent: *“I complained to the NHIF but they said I have to continue with the facility until it reaches the right time to change.... which is usually after a period of one year.”*

#### 4.5 Affordability

To understand the affordability of the benefit package, the study assessed informal sector views of monthly contribution rates. These are presented in Table 4.5. One can only access the benefit package with consistent up-to-date payments.

Table 4. 5: Affordability of the benefit package

		No.	Percent
<b>Contribution</b>	Adequate	18	32.7
	Average	25	45.5
	High	12	21.8
<b>Defaulting</b>	Often	10	17.9
	Occasionally	9	16.1
	Not at All	37	66.1

From the table, about 78% of the respondents felt that the monthly contribution of about US\$ 5.00 was adequate or average and so were likely to be consistent with their contributions. This is more-or-less consistent with the percentage (about 66%) that reported never defaulting at all. The percentage that indicated that the premiums are high (22%) was also consistent with the proportion that reported frequently defaulting on monthly contributions (about 18%).

Among respondents the benefit package found unaffordable at a monthly fee of about US\$5.00 largely due to their irregular income. Said a respondent: *“At the moment I find it hard to contribute the premium because of the kind of job I do. I am required to pay KES 500 per month but there are months when my sales don’t go well and I have to first meet my daily needs, then it becomes difficult to consistently contribute that kind of money to the NHIF.”* Other affordability issues

emerging from the study included additional charges such as consultation fees, scanning, laboratory, and drugs. The members reported they had paid additional charges ranging between KES 2000 and KES 30000 for consultation, laboratory, specialized tests and drugs.

#### 4.6 Acceptability

Acceptability was assessed using different parameters as shown in the Table 4.6

*Table 4. 6: Acceptability*

Elements	Yes	No	Don't Know
	No. (%)	No. (%)	No. (%)
Received well	67 (79.2)	9 (10.4)	9 (10.4)
Providers were patient	66 (78.33)	11 (13.33)	7 (8.3)
Respectful	51 (60.8)	12 (13.7)	21 (25.5)
Diagnosis effectiveness	70(83.33)	4 (4.2)	10(12.5)
Little Time taken	38 (45.1)	40(47.1)	6(7.8)

Overall, acceptability scores were significantly high except for waiting time which nearly half of the respondents found to be unacceptable. However, a substantial number still find access to their NHIF entitlements unacceptable which calls for improvements.

#### 4.7 Conclusion based on the findings

While socio-demographic factors such as age, education and income level can influence enrollment into the NHIF, it is important to consider empowering the beneficiaries to know about their entitlements so that they can demand for them at the facility without incurring extra costs. Besides, the services should be accessible at the point of care to be effective.

## CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Social Demographic Characteristics

In this study, social demographic factors such as age, gender, income, marital status, education level, the number of children per household, and income influence enrolment of the informal workers in Kibera to the NHIF. Similar findings have been reported by Kinyua, (2013) who indicated that most people who enrolled to the NHIF were aged above 35 years and Kituku and Amata, (2017) who also reported that age was one of the key determinants of enrolment to the NHIF among members of a welfare society in Kenya. The insurance of informal sector workers aged above 35 years is critical as this means that these families can seek health services when needed and as a result protected from catastrophic costs associated with paying for healthcare.

Higher income was also strongly associated with NHIF enrolment with over 50% of highest earners enrolled compared to none in the lowest income group. This contradicts the findings by Kinyua, (2013) who found out that those people who earn less are most likely to enroll to JBHL as compared to those who earn more and Ndung'u, (2015) who found that majority of respondents who have enrolled to NHIF earn between KES 1000 to 5000 per month. Kotor, (2017) further revealed that most of the respondents reported that they did not have enough money to pay the premiums. Hence, the more the income, the higher chances of enrolment and retention. Based on this, a conclusion can be made that those individuals who earn more can easily set aside funds for monthly premiums as they can afford some disposable income.

Apart from income, increase in education level concurrently increases enrollment to the NHIF. This can be attributed to the fact that increase in education led to increased awareness about health insurance. These findings resonate with the conclusions of a study conducted by Mhere (2013) in South Africa and Ndung'u, (2015) in a similar study in Kenya which showed that the level of education was a determinant to the enrollment into NHIF among a welfare group in Kenya. Another socio demographic characteristic assessed was that enrollment to the NHIF was highest among members who had less than two children (42.7%). Therefore, lower enrolment of larger households implies that more individuals may not be able to access healthcare and may be spending more on out of pocket payments thus increasing their chances of falling further into poverty. Other than the socio demographic characteristics of the respondents their views on

improved benefit entitlements, knowledge of benefit package and access to the benefit entitlement was assessed and its impact on enrollment and retention is discussed below.

## **5.2 Views on NHIF Enhanced Benefits**

The respondent's views on the NHIF enhanced benefit entitlements was based on the cost implications, benefit package and awareness of entitlements. The views were that NHIF offers financial risk protection from catastrophic health care costs and of importance was that the benefit package offered comprehensive coverage and that awareness of entitlements was important in influencing their enrollment to the NHIF. A similar study by Kotoh, (2017) in Ghana demonstrated numerous factors that influence enrollment and what was evident as a reason for enrolling was majorly due to financial risk protection, positive healthcare provider relations and patient interactions.

Regarding the views given on what NHIF should improve on to motivate potential members to enroll and retain existing members, respondents felt that; the benefit package was adequate and would recommend it to potential members however there was need for the NHIF to make improvements in terms of creating awareness of the benefit entitlements, ensuring that healthcare providers avail the promised benefits and make consideration towards developing a tiered benefit package that would meet the needs of the different groups of the informal sector.

## **5.3 Knowledge and Understanding of Entitlements**

The findings demonstrated that there was a level of knowledge of the benefit package at 59% while the 41% who lacked knowledge of their entitlements, delayed seeking treatment, paid out of pocket for the services and potentially could suffer catastrophic healthcare expenses. Other long-term consequences were that debilitating effects of the illness affected the productivity of this group. Knowledge of entitlements is a key determinant to enrollment and retention to NHIF as supported by a study by Owusu et al., (2013) that stated that high health insurance enrolment was attributed to citizen channels of communication and knowledge. Also, Kipaseyia, (2016) indicate that low literacy levels and lack of awareness about benefits influenced enrollment among pastoralist of Kajiado county, Kenya.

The communication channel used to inform members of their benefit entitlements plays a significant role in influencing the enrollment of new members and retention of existing members as shown in this study that 40% of respondents became aware about the NHIF benefit entitlements from friends which is not a means of communication recognized by NHIF neither is it an adequate communication strategy. Friends may not be equipped with all information needed on the benefit entitlements and thus critical knowledge may be left out which otherwise would have made influence on enrollment and consistency in membership to the NHIF. Barasa and Mwaura (2017) reported that the NHIF did not communicate adequately to its members and prospective members on available benefits and how these benefits could be accessed in a study in two counties in Kenya. It is therefore important for the NHIF to review the communication strategies in place and customise them to meet the needs of the different groups of the informal sector .

#### **5.4 NHIF Benefit Entitlements Acceptability**

The study demonstrated three dimensions to access of entitlements: availability, affordability, and acceptability. These dimensions are interrelated and are of significance to enrollment and retention of members. Availability denotes that the services are reachable whether the physical existence of resources transport, health facilities, health professionals, and services. The findings show that 54% of respondents stated that the NHIF services were not available 45.8% said that the services were available. Availability of services in right place and time influences utilization and further satisfaction of members

The respondents gave some reasons for not receiving the services such as absence of requested services, additional charges for medicines and lack of diagnostic facilities. There were also delays in seeking treatment because of the transition process from one facility to another and additional costs charged for utilization of services. Therefore, some members had lost trust in the health systems and confidence in the benefit package. Lack of access to the stated benefits is a reason why some potential members did not find enrollment attractive while existing ones may not renew their membership and therefore the need to ensure that the accredited healthcare providers deliver and comply to agreed quantity and quality services.

On the other hand affordability of premiums has been a persistent issue and the assumption has been that low enrollment of informal sector workers is a result of unaffordable premiums which is not always the situation, this is because other than premiums contributions factors such as additional charges involved in seeking health care such as transport costs ,purchase of medicines or payment for laboratory procedures and other diagnostic procedures influences the affordability of the benefit package .Additionally awareness of the benefit package influences utilization and that lack of awareness of the availability of this benefit meant that the members did not access and therefore not utilize the benefits .

As an element of access, acceptability of benefit package was assessed and it was established that the different parameters of acceptability were in good standing at 70% this was derived from questions on whether respondents were received well, health care providers were patient, respectful and the diagnosis was communicated efficiently among other parameters. Nevertheless there is need for the NHIF to address the unacceptable percentage to ensure smooth implementation of benefit package and utilization of the same.

It is eminent that the health care provider's behaviors have a positive impact on customers confidence hence making the scheme attractive to prospective customers. The health care providers conduct influences the customer's morale therefore might be the reason for high enrolment and retention. On the contrary Boateng and Awunyor-Vitor, (2013) reported that respondents had a negative perception about the quality of health care and in turn the health care provider's attitude profoundly affected the respondent's decision to enroll to health care insurance. This means that after an individual has enrolled into the NHIF, the decision to continue paying for the premium is based on the quality of health care provided.

The physical access to NHIF's accredited hospitals was not adequate and accordingly the policy makers should be cognizant that increasing network of facilities should be concurrently done with ensuring that entitlements to their members are available and designed to meet the population needs. This is one reason why despite the expansion of NHIF networks still enrollment has not reached optimal rate and retention is low as most members are not active contributors to the scheme.

## **5.5 Conclusion**

Universal health coverage is envisioned to ensure that whole population have access to promotive preventive, curative and rehabilitative health care at a cost that is affordable and does not discriminate against the ability to pay. Health insurance plays a crucial role in the road towards realizing UHC through pooling of risk from contributions of its beneficiaries and ensuring that there are no differences in seeking healthcare based on socioeconomic status. However, primary concern is that in Kenya enrollment to health insurance is voluntary by members of the informal sector. Undeniably, is the fact that the members of the informal sector do not have comprehensive knowledge and understanding of the benefits offered. Therefore, may not access these benefits or pay for the out of pocket and thus the need for the key players such as NHIF to ensure the needs of the se populations are considered in designing of the benefits package and purchase these services from healthcare providers. According to the findings, the study concludes that the determinants of enrollment and retention to NHIF are multi-dimensional. Social demographic factors such as age, gender, occupation, marital status, education level and several children influence the enrolment of the informal workers in Kibera to NHIF. Correspondingly, the study revealed that awareness, understanding of entitlements informs enrollment and utilization of benefits, and the role of the communication channel cannot be denied therefore the need to adopt channels that are targeted to this population group. Access of entitlements should be addressed wholesomely in the sense that gaps in the path of seeking health care should be considered and measures put in place to ensure that the dimensions work simultaneously to ensure out that needs of beneficiaries are met.

## **5.6 Policy Recommendations**

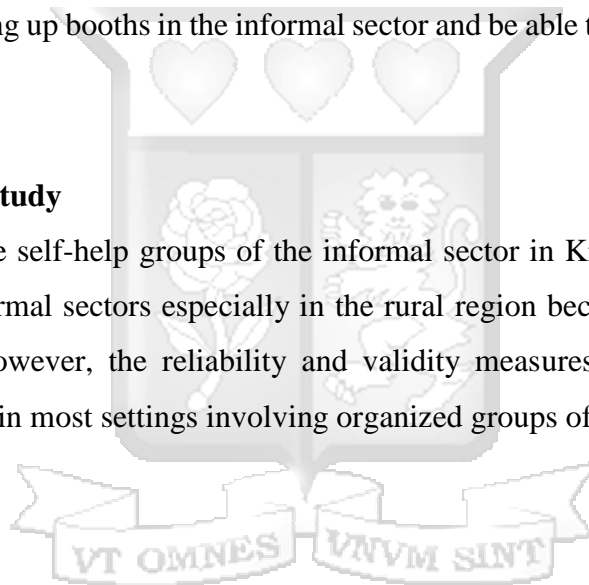
The study recommendation to NHIF is to ensure involvement of the informal sector members in design of the scheme in terms of premiums to be contributed and benefit package that best meets their needs. Further, the study advocates that the amount of premium should be reduced principally for the informal sector workers. There is a need for a policy to make the NHIF increase the uptake to take advantage of economies of scale, to provide the people with an accessible, affordable, and reliable health insurance. The study further recommends that the government should consider co-funding the premium so that the medical scheme can be affordable to both the informal sector and the wider public.

The administration of the scheme by NHIF in ensuring that healthcare providers provide quality health services in ensuring the dimensions of access such as ensuring availability of health workers, medicines, and diagnostic facilities needed to offer comprehensive services is key since fragmentation of services leads to indirect costs which in turn cause delay in service utilization and cause members to be dissatisfied.

Lastly, NHIF needs to review the communication strategies and that appropriate channels to the sector to be put in place. NHIF staff as a communication channel was recommended as the most appropriate channel of communication of the benefits entitlements. As an example, the NHIF should contemplate putting up booths in the informal sector and be able to educate and enroll these members.

### **5.7 Limitations of the Study**

This study involved three self-help groups of the informal sector in Kibera and this may not be generalized to other informal sectors especially in the rural region because of the differences in socioeconomic status. However, the reliability and validity measures taken have ensured the application of the results in most settings involving organized groups of the informal sector.



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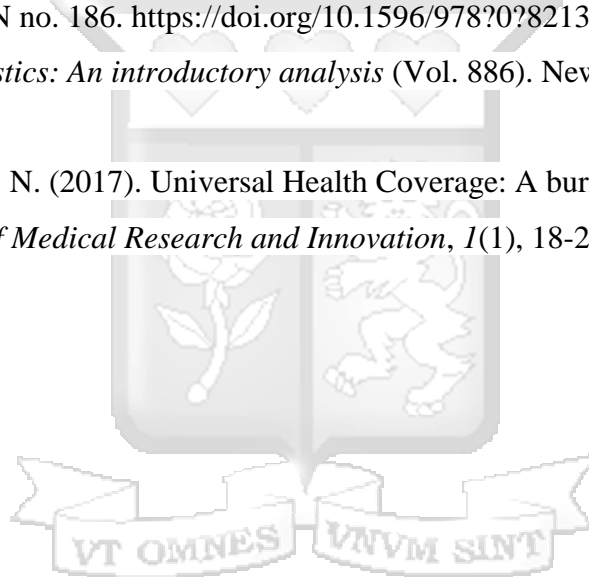
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## APPENDIX

### Appendix I: SWAHILI STUDY TOOL

#### SECTION I: Demographic Information

1. Jina lako ni nani?

.....

2. Unamika mingapi?

Miaka 18 hadi 22 [ ]

Miaka 23 hadi 27 [ ]

Miaka 28 hadi 32 years [ ]

Miaka 33 hadi 37 [ ]

Miaka 37 na Zaidi [ ]

3. Jinsia yako ni gani?

Mume [ ]

Mke [ ]

4. Unafanya kazi gani?

biashara [ ]

ajiriwa [ ]

nyingine..... (tafadhali fafanua)

5. Hali ya ndo

Hujaoa/olewa [ ]

Umeoa/olewa [ ]

Divorced [ ]

mjane [ ]

6. Kiwango cha juu cha elimu?

KCSE [ ]

Cheti [ ]

Diploma [ ]

Shahada [ ]

Shahada ya kwanza [ ]



7. Una watoto wangapi?

watoto 0-2 [ ]

watoto 3-5 [ ]

watoto 6-8 [ ]

watoto 8 na zaido [ ]

8. Je unamapato ya kiwango kipi kwa mwezi?

Shilingi 0-2000 [ ]

Shilingi 2000-5000 [ ]

Shilingi 6000-9000 [ ]

Shilingi 10000- 13000 [ ]

Shilingi 13000 na zaidi [ ]

**Sehamu II: UJUZI NA MTAZAMO WA NHIF**

9. Je wewe ni mwanachama wa NHIF?

Ndio [ ]

La [ ]

10. Kama ndio ni jambo gani lililokusababisha wewe ubaki mwanachama wa NHIF?

.....  
.....  
.....

11. Kama la umewahi kuwa mwanachama wa NHIF?

Ndio [ ]

La [ ]

12. Kama ndio ni sababu gani kuu ya kuacha uana chama wako?

.....

.....  
.....

13. Kama la umeshawahi sikia habari kuhusu NHIF?

Ndio [ ]

La [ ]

14. Kama ndio je sababu za kutokuwa mwanachama ni nini?

.....  
.....

15. Je unafikiria NHIF ni muhimu?

Ndio [ ]

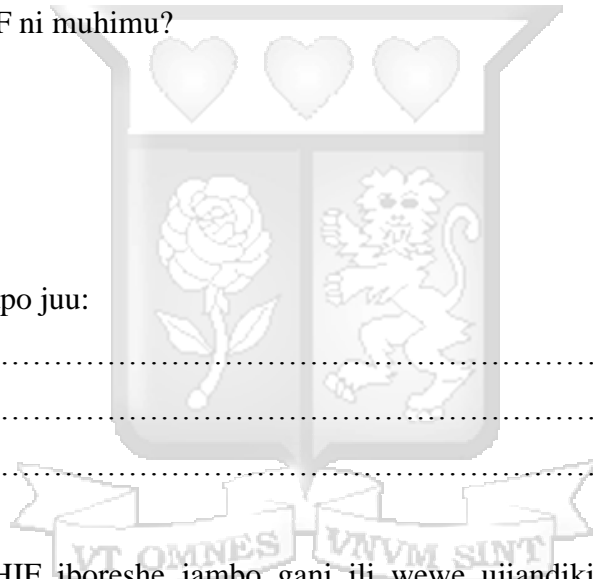
La [ ]

16. Eleza jibu lako hapo juu:

.....  
.....  
.....

17. Je ungependa NHIF iboreshe jambo gani ili wewe ujiandikishe ama uendelee kuwa mwanachama wa NHIF?

.....  
.....  
.....  
.....  
.....  
.....



**SECTION III: KNOWLEDGE AND UNDERSTANDING OF NHIF BENEFIT ENTITLEMENT**

18. Je unajua ni huduma gani zinazoniwa na NHIF na wanachama wake?

Ndio [ ]

La [ ]

19. Kama ndio unaweza urodhesha huduma zote unazofikiwa zinasimumwa na NHIF?



.....

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.....

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.....

.....

20. Je ulijuaje huduma hizi za NHIF?

.....

.....

.....

21. Je mbinu za mawasiliona zilizotumika kueneza habari za NHIF

Zilikuwa sahihi na zakutosha?

Ndio [ ]

La [ ]

22. Je huduma hizi zinatoshleza mahitaji zako?

Ndio [ ]

La [ ]

23. Je nini kinahitaji kuboreshwa katika faida hii?



.....  
.....  
.....  
.....

24. Ushawahi kusikia habari za NHIF super cover?

Ndio [ ]

La [ ]

25. Kama ndio maoni yako ni yapi?

.....  
.....  
.....

26. Je unajua masharti ambayo unafaa kujua lili uweze kutumia kadi ya NHIF isipokuwa malipo ya mwezi?

.....  
.....

27. Je ni nini maoni yako kuhusu masharti ya kupata faida zilizofaniiswa na NHIF?

.....  
.....

28. Je engependekaza huduma za NHIF kwa familia na marafiki ambao si wanachama?

Ndio [ ]

La [ ]

29. Kama la toa sababu

.....  
.....  
.....

30. Je ni watu wangapi katika familia wanafaidi kutokana na huduma za NHIF?

.....  
.....  
.....

31. Kwa mani yako ni huduma zipi za NHIF zinakufadi?

.....  
.....  
.....  
.....

**SECTION IV: ACCESS TO ENTITLEMENTS AND UTILIZATION OF SERVICES**

32. Ushawahi kutumia huduma za NHIF?

Ndio [ ]

La [ ]

(If LA, Explain why Lat)

33. Kama ndio ni hutuma gani ulihitaji?

34. Je nini mahatarajio yako kwa huduma hizi?

35. (Je ulipata huduma zote ulizohitaji?

Ndio [ ]

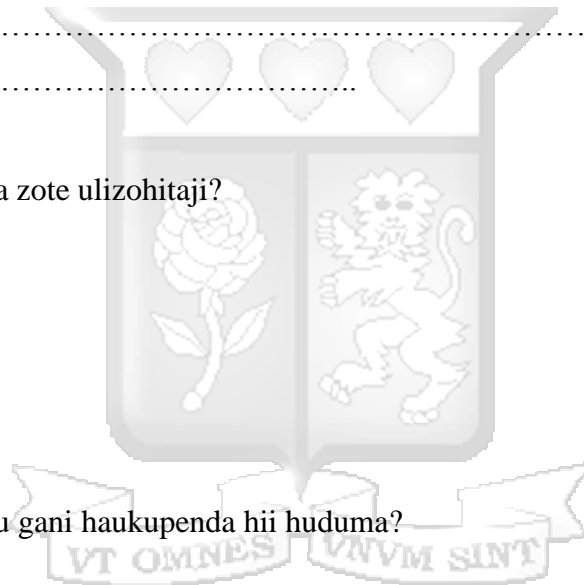
La [ ]

36. Kama la ni sababu gani haukipenda hii huduma?

37. Ulifanya nini ulipokosa huduma uliyokuwa unahitaji?

38. Je kituo unachokitumia kiko ndani ya umbali wa kilometa 5?

Ndio [ ]



La [ ]

Kama la ulikuwa vigumu kufika katika hiki kituo?

Ndio [ ]

La [ ]

39. Je ulizingatia nini ulipochagua hiki kituo?

.....

.....

40. Je ilibidi ungoje kwa mda mrefu kupokea huduma?

Ndio [ ]

La [ ]

41. Je unafikiri kituo hicho kina kiwango mchanganyiko sahihi wa wafanyakazi wa afya?

Ndio [ ]

La [ ]

42. Kama wafanyakazi gani Zaidi ungependa kuona katika kituo hiki?

.....

.....

43. Je wadhani wafanyakazi wa huduma ya afya amehitimu kufanya kazi ya afya?

Ndio [ ]

La [ ]

44. Je ulilipa gharama ya ziada kwa huduma uliokuwa unatafuta?

.....  
.....

45. Kama ndio ulilipa liwango gani?

.....  
.....

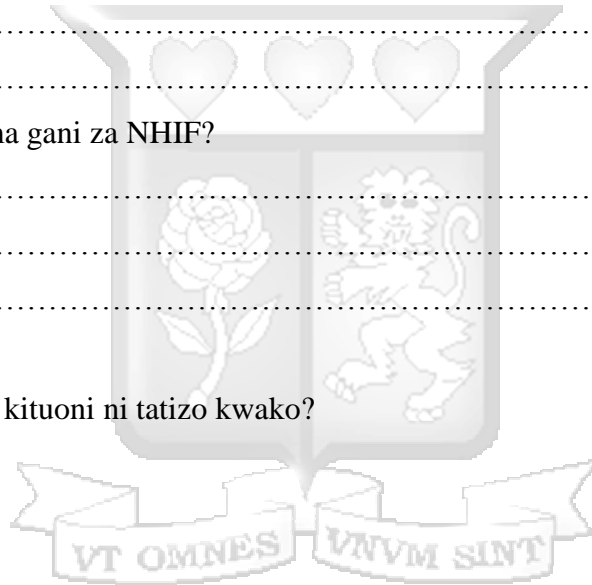
46. Je unalipia huduma gani za NHIF?

.....  
.....  
.....

47. Je nauli ya kufika kituoni ni tatizo kwako?

Ndio [ ]

La [ ]



48. Je ni nini wazo lako juu ya malipo ya Ksh 500 kila mwezi?

.....  
.....  
.....

**ACCEPTABILITY**

49. Je ulipokelewa vizuri katika hiki kituo?

Ndio [ ]

La [ ]

50. Je wafanyakazi wa afya walikuwa na heshima?

Ndio [ ]

La [ ]

51. Je ugonjwa wako ulielezwa kikamilifu?

Ndio [ ]

La [ ]

52. Je hiki kituo ambacho ungependekeza mwanachama mwingine wa NHIF?

Ndio [ ]

La [ ]



53. Kama la ni sababu gani kuu za kutopenda hii huduma?

.....

.....

.....

.....

.....

## Appendix II: Time Frame

Activity	3rd to 12th Jan 2018	15th to 31st Jan. 2018	1 <sup>st</sup> to 9 <sup>th</sup> February	5 <sup>th</sup> to 9 <sup>th</sup> March	3rd to 13th Apr. 2018	18th May 2018
Proposal Writing						
Submission of proposal						
Proposal defense						
Correction of errors						
Data Collection						
Data Analysis						
Project Defense						
Correction of Errors and Submission of Project						

### Appendix III: Budget

ITEM	UNIT COST	QUANTITY	TOTAL COST
<b>HUMAN RESOURCE</b>			
Research assistants allowance (2)	500	$4 \times 2 \times 500$	4,000
<b>( a) Pre-testing of questionnaire</b>			
Research assistants (2)	500	$2 \times 2 \times 500$	2,000
Principal researcher (1)	1,000	$2 \times 1 \times 1000$	2,000
Data collection			
<b>Sub-total</b>			<b>8,000</b>
<b>MATERIALS AND SUPPLIES</b>			
Biro pens (1 dozen)	180	$180 \times 1$	180
Pencil (1 dozen)	60	$60 \times 1$	60
Rubbers(3)	10	$10 \times 3$	30
Folders( 3)	100	$100 \times 3$	300
File books(3)	65	$65 \times 3$	195
Stapler and staples	600	600	600
<b>Sub-total</b>			<b>1,365</b>
<b>PROPOSAL AND PROJECT</b>			
Proposal printing ( 50 pages)	35	$50 \times 35$	1,750
Photocopying 5 copies(250 pages)	3	$250 \times 3$	750
Photocopying of Semi Structured Interview Guide	3	$192 \times 3 \times 5$	2,880
Data analysis assistant			10000
Typing and printing of final copy	35	$60 \times 35$	2,100
Photocopying final copy (5 copies)	3	$60 \times 3 \times 5$	900
Refreshments -water	900	900	27000
Binding of final report(5 copies)	700	$700 \times 5$	3,500
<b>Sub-total</b>			
<b>GRAND TOTAL</b>			<b>58,245</b>

## **Appendix III: CONSENT FORM**

### **DETERMINANTS OF ENROLLMENT AND RETENTION OF ORGANIZED MEMBERS OF THE INFORMAL SECTOR INTO NATIONAL HOSPITAL INSURANCE FUND IN NAIROBI COUNTY**

#### **SECTION 1: INFORMATION SHEET**

**Investigator: CHRISTINE ARIGA**

**Institutional affiliation: STRATHMORE BUSINESS SCHOOL**

#### **SECTION 2: INFORMATION SHEET THE STUDY**

**2.1: The study is carried out to assess the member's views on NHIF enhanced benefits. Knowledge and understanding of the benefits and access of this benefit**

**2.2: Do I have to take part?**

No.

- Taking part in this study is entirely voluntary and optional.

-If you are willing to take part, you will be asked your views in an interview guided session to on **determinants** of enrollment and retention of organized members of the informal sector into national hospital insurance fund in Nairobi county

-please note that you are free to decline to take part in the study at any time without giving any reasons.

**2.3: Who is eligible to take part in this study?**

Both male and females of the age of 18 years and above

-Those willing to participate in the study

**2.4: Who is not eligible to take part in this study?**

- Persons under the age of 18 years
- Those unwilling to participate in the study

**2.5: What will taking part in this study involve for me?**

Signing of consent form and meeting the criteria above

You will be approached and requested to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form and then taken through a questionnaire by the interviewer.

**2.6: Are there any risks or dangers in taking part in this study?**

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express permission.

**2.7: Are there any benefits of taking part in this study?**

The information and recommendations will be shared with the NHIF, and possible strategies implemented to address the gaps pointed out or implement recommendations given

**2.8: What will happen to me if I refuse to take part in this study?**

Participation in this study is voluntary. Even if you decide to take part at first but later change your mind, you are free to withdraw at any time without explanation.

**2.9: Who will have access to my information during this research?**

Only the people who are closely concerned with this study will have access to your information.

All your information will be kept confidential.

And storage of complete interview guides will be in closed cabinet

**2.10: Who can I contact in case I have further questions?**

**If you want to ask someone independent anything about this research, please contact:**

You can contact me, [Christine Ariga ], at SBS, or by e-mail ([christineariga@gmail.com](mailto:christineariga@gmail.com)), or by phone (0702122874). You can also contact my supervisor, [Dr. Vincent Okungu], at the Strathmore Business School, Nairobi, or by e-mail ([vokungu@strathmore.edu](mailto:vokungu@strathmore.edu)). The Secretary– Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email [ethicsreview@strathmore.edu](mailto:ethicsreview@strathmore.edu) Tel number: +254 703 034 375. I have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

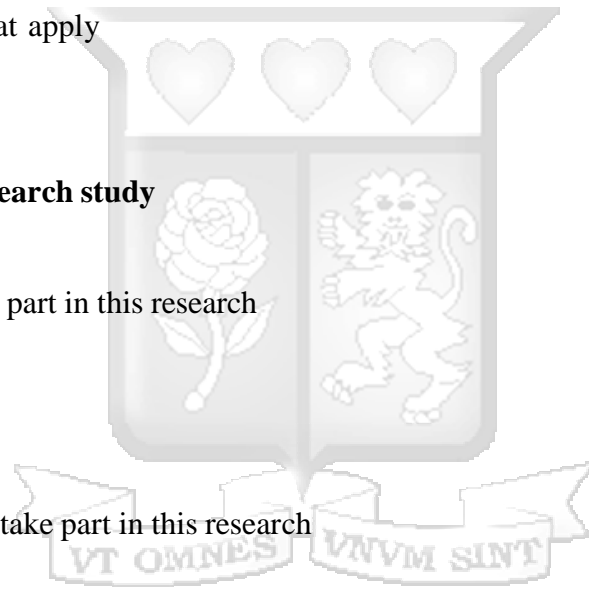
**Participation in the research study**

I AGREE to take part in this research

NOT AGREE to take part in this research

**Storage of information on the completed questionnaire**

I AGREE to have my completed questionnaire stored for future data analysis



NOT AGREE to have my completed questionnaire stored for future data analysis

**Participant's** **Signature:** **Date:** \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

\_\_\_\_\_

*DD / MM / YEAR*

**Participant's** **Name:** **Time:** \_\_\_\_\_/\_\_\_\_

\_\_\_\_\_

*(Please print name)*

*HR / MN*

I, \_\_\_\_\_ (Name of person taking consent) certify that I have followed the SOP for this study and have explained the study information to the study participant named above and that she has understood the nature and the purpose of the study and consents to the participation in the study. She has been given opportunity to ask questions which have been answered satisfactorily.

**Investigator's** **Signature:** **Date:** \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

\_\_\_\_\_

*DD / MM / YEAR*

Investigator's Name: \_\_\_\_\_

Time: \_\_\_\_\_ / \_\_\_\_\_

