Scientific Research Publishing

Open Journal of Social Sciences, 2023, 11, 59-73
https://www.scirp.org/journal/jss
ISSN Online: 2327-5960
ISSN Print: 2327-5952

Household's Ability to Afford Health Insurance Packages in Tanzania

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How to cite this paper: Magaria, B. R., Shauri, N. E., & Masanyiwa, Z. S. (2023). Household's Ability to Afford Health Insurance Packages in Tanzania. *Open Journal of Social Sciences, 11,* 59-73.
https://doi.org/10.4236/jss.2023.114005

Received: March 4, 2023
Accepted: April 9, 2023
Published: April 12, 2023

Abstract

Most developing countries worldwide are striving to provide universal access to quality and affordable health care services. In turn, health insurance has been promoted as one of the ways to ensure universal coverage and financial protection. This study analyzed households' ability to afford health insurance packages in Tanzania. The study used the recent 2017/18 Household Budget Survey income data collected by the National Bureau of Statistics and premiums for health insurance packages provided by the National Health Insurance Fund. Households were categorized into four quartiles based on their income, ranging from households with the lowest income to those with the highest income. The study adopted the SDGs indicator 3.8.2 which suggests that health spending should not go beyond 10% percent of household income as the threshold to examine household ability to afford the insurance packages. It was found that most of the households with low to moderate incomes, which account for three quarters of all households, are required to spend more than the recommended 10% threshold of their incomes in purchasing health insurance packages. This is unlikely to be affordable, thus, subjecting them to catastrophic health spending. Although most of the households in the fourth quartile spend less than 10% of their incomes on insurance packages, this is a relatively small group accounting for only 25% of the households. Thus, health insurance coverage is likely to remain low, especially among poor households. It is recommended that the government should provide subsidies to health insurance schemes in order to extend coverage to the poor who cannot afford health insurance packages to enhance financial protection and health coverage.

Keywords

Health Insurance, Household Income, Affordability, Coverage

1. Introduction

1.1. Background to the Study

Most developing countries worldwide are striving to provide access to quality and affordable health care services to all as progress to reach universal health coverage (Witthayapipopsakul et al., 2019). Universal health coverage means that everyone receives quality health services, when and where they need them without incurring financial hardship (WHO & World Bank, 2021; UN, 2022). At the global level, Sustainable Development Goal number 3 is the guiding framework as it aims to achieve universal health coverage, including financial risk protection (UN, 2022). Apart from other indicators, financing for health care services is considered to be sustaining universal health coverage where affordability and equity to health care services are based on ability to pay and access to services based on need despite individual background characteristics. Indicator 3.8.1 is for universal coverage and indicator 3.8.2 focuses on health expenditures in relation to household budget to identify financial hardship caused by direct health care payments. Taken together, the two indicators are meant to capture service coverage and financial protection dimensions (WHO & World Bank, 2021; UN, 2022). This goal can be achieved if there is an adequate health system that makes health care affordable at all levels (Obikeze et al., 2022).

However, access and utilization of health care services remain a considerable challenge in many developing countries due to financial barriers, particularly among low-income populations. The costs incurred for health services pose income losses as a result of failure to meet other basic needs (Mclntyre et al., 2006). Studies show that households in low-income countries earning less than US$1 per day devote about 53% of their health care expenditures to medicines (Carapinha et al., 2011). Other estimates show that out-of-pocket expenditure of over 15% - 20% of total health expenditure or 40% of household net income of subsistence needs can lead to financial catastrophe (Ho, 2015). According to the United Nations (2022), almost 1 billion people spent more than 10% of their household budget on out-of-pocket health expenses in 2017, and more than half a billion were pushed into extreme poverty due to these out-of-pocket payments. In Nigeria, Obikeze et al. (2022) report that out-of-pocket expenditure accounts for 60% to 70% of the total health expenditure.

Governments and various stakeholders have been debating on reforming health financing mechanisms to accommodate even the poor population (Russel, 1996; Binyaruka & Borghi, 2022). Consequently, many types of national, social, private, and community-based health insurance schemes have emerged and expanded in many developing countries with the aim of improving the availability, accessibility and delivery of quality health services (WHO, 2013; Carapinha et al., 2011; Domapielle, 2014; Amani et al., 2021). Health insurance, which is coverage against the risk of incurring medical and related financial costs, is one of the ways that people in various countries finance their health needs (WHO, 2013; Carapinha et al., 2011; Ho, 2015). Health insurance is intended to reduce finan-

cial burden of purchasing health care by raising and pooling funds to finance health services for a national population, and sharing the risk of unexpected health events (Carapinha et al., 2011; Ho, 2015). According to WHO (2013), health insurance pools both the health risks of the people on one hand, and the contributions of individuals, households, enterprises, and the government on the other. Thus, it protects people against financial and health burden and is a relatively fair method of financing health care.

Studies show that health insurance is a promising means of increasing access to care and protecting households from detrimental economic effects of ill-health, thus, achieving universal health coverage (Carapinha et al., 2011; Domapielle, 2014). Health insurance schemes are designed to provide financial protection in access to health care services through prepayment arrangements (Wagstaff & Doorslaer, 2003; Amani et al., 2021). They are meant to ensure people access health care services without any financial barrier while meeting other basic needs. Most of these insurances target to meet all groups of people in their particular area (Asante et al., 2016). Other alternative financing arrangements such as the cost recovery system have been criticized for causing drastic reduction in access and utilization of health care services (Domapielle, 2014). However, universal health coverage may not necessarily be attained due unaffordability of insurance contributions among poor population, unless subsidies are put in place for that part of population (Kutzin, 2013; Obikeze et al., 2022).

1.2. Research Problem

Lack of affordability is one of the reasons for low membership in health insurance schemes in many developing countries, including Tanzania (Kapologwe et al., 2017; Ndomba & Maluka, 2019; Amani et al., 2021; Obikeze et al., 2022). This means that for health insurance schemes to improve health care coverage, it has to be affordable by providing financial risk protection so that beneficiaries will not incur catastrophic health expenditures. In this context, affordability is concerned with people's ability to pay the insurance premium (Onwujekwe et al., 2012).

Health insurance was introduced in Tanzania in the mid-1990s as a means to redress the ever-increasing expenditures on healthcare costs, and thus to protect the people from catastrophic healthcare expenditures (Mills et al., 2012; Ndomba & Maluka, 2019; Amani et al., 2021). Two health insurance models, the Community Health Fund (CHF) and the National Health Insurance Fund (NHIF) were implemented in 1996 and 2001, respectively. CHF is a voluntary insurance targeting the informal and rural population nationwide whereas NHIF was originally compulsory for the government sector employees, but was expanded in 2013 to cover the informal sector as a voluntary scheme (Kapologwe et al., 2017; Amani et al., 2021).

In 2019, NHIF introduced the new health insurance packages with the aim of expanding health insurance membership and attaining universal health coverage while protecting from financial risks. The new packages allow all people to join the insurance scheme voluntarily particularly people in the informal sector who

were left out before, hence, reducing inequalities among different groups of people in access to health care services (NHIF, 2019). These packages have been categorized into three categories with different costs, types of services provided and number of beneficiaries with different age groups. These packages have Swahili coded names as follows: *Najali Afya*, *Wekeza Afya* and *Timiza Afya* (NHIF, 2019). The amount for household's contribution for the new health packages are presented in **Table 1**. Thus, NHIF is currently both a compulsory and voluntary health insurance scheme targeting the formal and informal sector workers.

Despite these initiatives and changes, health insurance coverage in Tanzania is still low, which exposes many Tanzanians to financial risks due to direct health payments. Recent data show that only 33% of Tanzanians are covered by health insurance, which include 8% by NHIF and 25% by CHF (Binyaruka & Borghi, 2022). However, less has been documented in the academic literature on household capacity to afford the health insurance packages in Tanzania. Most of the studies on health insurance have mainly focused on the determinants and barriers for enrollment in the community health fund (Frumence et al., 2017; Kapologwe et al., 2017) and health insurance responsiveness to the elderly

Table 1. Costs of packages into different categories (TZS).

Household Size	Contributors with Age of 18 - 35 Years Old			Contributors with Age of 36 - 59 Years Old			Contributors with Age of 60+ Years Old		
	Najali Afya	Wekeza Afya	Timiza Afya	Najali Afya	Wekeza Afya	Timiza Afya	Najali Afya	Wekeza Afya	Timiza Afya
Individual	192,000	384,000	516,000	224,000	444,000	612,000	360,000	660,000	984,000
Couple	384,000	732,000	996,000	456,000	864,000	1,180,000	684,000	1,284,000	1,908,000
Couple + 1 Child	504,000	924,000	1,272,000	576,000	1,068,000	1,464,000	-	-	-
Couple + 2 Children	612,000	1,160,000	1,536,000	696,000	1,248,000	1,728,000	-	-	-
Couple + 3 Children	720,000	1,284,000	1,788,000	804,000	1,416,000	1,980,000	-	-	-
Couple + 4 Children	816,000	1,452,000	2,028,000	900,000	1,584,000	2,222,000	-	-	-
Individual + 1 Child	312,000	576,000	792,000	360,000	648,000	888,000	-	-	-
Individual + 2 Children	432,000	756,000	1,056,000	468,000	828,000	1,152,000	-	-	-
Individual + 3 Children	540,000	924,000	1,308,000	576,000	996,000	1,404,000	-	-	-
Individual + 4 Children	636,000	1,092,000	1,548,000	672,000	1,164,000	1,644,000	-	-	-

Source: NHIF (2019).

(Amani et al., 2021). Therefore, this study analyzed households' ability to afford health insurance packages provided by the national health insurance scheme.

2. Materials and Methods

This paper is based on a desk research which involved reviewing, collating and analyzing secondary data obtained from the National Health Insurance Fund (NHIF) and National Bureau of Statistics (NBS). Whereas the study used data on costs of health insurance packages from NHIF website, data on household income were obtained from Household Budget Survey (HBS) report of 2017/18 (URT, 2019). These were considered credible and reliable sources because the NBS is a public agency with the mandate to provide official statistics to the government, business community and the public at large. Similarly, the 2017/18 HBS is the latest, which was published one year before the introduction of new NHIF health insurance packages. Thus, these data were considered relevant and reliable for this study. Use of household income was to analyze household ability to afford health insurance packages was considered relevant in the context of this study because as others have argued, part of household income is spent on health care, which depends largely on household's disposable income and conviction that their choice is adequate and affordable (Obikeze et al., 2022). Thus, the distribution and proportion of which may indicate the imposition of health care related financial burdens to households (Ravangard et al., 2021; WHO & World Bank, 2021).

The study involved descriptive analysis of household income obtained from HBS which entailed computation of percentiles. The first stage of this analysis involved categorization of households into four income quartiles, each group comprising of 25%. The first quartile, included households with the lowest income, referred to in this study as the poorest households, whereas the fourth quartile had the highest income, referred to as the richest households. The study adopted the definition used in the SDGs indicator 3.8.2 which specifies that health spending should not go beyond 10% of the household budget, and if it exceeds that rate, it is taken as catastrophic expenditure which results to poverty of the households (WHO & World Bank, 2021). This study used this definition as a ceiling for examining household affordability to pay for new health insurance packages provided by the national health insurance scheme.

Household income data were available on monthly basis, while the designated amount of contribution in health insurance packages are to be paid once per year. Thus, monthly household income was multiplied by 12 to obtain annual income. Thereafter, the percents of household income were computed to determine the proportion of income to be spent to purchase health insurance packages. These percentages were then used to compare between the computed percents of income and the threshold rate of 10% as stated in the SDGs indicator of health expenditure (WHO & World Bank, 2021) so as to determine household affordability of health packages among household quartiles.

3. Results and Discussion

3.1. Household Income

Household income determines the ability to pay for health insurance packages of different categories according capacity and preference (Siegel & Busse, 2018; Ravangard et al., 2021; WHO & World Bank, 2021; Obikeze et al., 2022) because is a major driver of household consumption for food, health and basic needs for members. Household expenditure depends on the income generated by household members; however, many households depend on income generated by the head of the household only (Sender & Smith, 1990; Kamuzora & Mkanta, 2000). Consequently, enabling equal access to healthcare independent of one's socio-economic status is a top priority of any health insurance schemes (Amani et al., 2021; WHO & World Bank, 2021).

In this study, household income was divided into four quartiles that determine the ability of household to pay for different health packages and stipulated age groups. As shown in **Table 2**, the first or lower quartile (Q1) comprised of households with income ranging from TZS 64,000 to 858,554 per year and the average was TZS 564,335. This means that 25% of the households fall in this poorest income group. The second quartile (Q2) covered households with income starting from TZS 858,964 to 1,501,893 per year with an average of TZS 1,156,972. This is the median group which implies that 50% of the households are located below the median income. Income of households in third quartile (Q3) ranged from TZS 1,501,909 to 3009071.4 and the average was TZS 2,129,716. Statistically, this is the upper quartile with 75% of the households located below it. The fourth quartile (Q4) represented households which had income starting from TZS 3,010,188 to 124,948,104 and above, while average income was TZS 8,854,733. This is a small group which occupies only 25% of all households. Previous studies in Tanzania have identified low household income as one of the barriers for enrollment in health insurance schemes (Kapologwe et al., 2017; Ndomba & Maluka, 2019). Thus, the next sub-sections analyse and discuss the implications of these incomes on household ability to afford for health insurance packages.

Table 2. Household income quartiles in TZS.

Variable	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Income	64,000 - 858,554	858,964 - 1,501,893	1,501,909 - 3009071.4	3,010,188 - 124,948,104+
Average	564,335	1,156,972	2,129,716	8,854,733

Source: URT (2019).

3.2. Household Ability to Afford Insurance Packages

The findings in **Annex 1** show that overall, households in the first quartile have to spend more than more than 10% of their income on health insurance pack-

ages. The proportion of household income to be spent on health insurance packages for contributors in the 18 - 35 age bracket in this quartile ranges from 34% to 91% for households with one member, and is highest for households with six members for *Timiza Afya* package (359%). Contributors with 36 - 59 years have to spend between 39.7% and 393.7% of their incomes on health insurance packages. All health insurance packages are comparatively expensive for households with six members and for couples in the elderly age group. This suggests that based on this income, it is unlikely for households in this poorest quartile to pay for the health insurance packages, indicating that the new health insurance packages are unaffordable for the poor. As others have argued, spending more than 10% of income for health is considered as catastrophic since the household sacrifices a lot of its income which should have been spent to other basic needs, hence lead to financial hardship (Witthayapipopsakul et al., 2019; WHO & World Bank, 2021). In Nigeria, Onwujekwe et al. (2012) found that rural dwellers and very poor people had the highest incidences of catastrophic health expenditures.

The analysis in **Annex 2** shows that in the second quartile, household's income to be spent on health insurance is again more than 10% for all health insurance packages. The smallest proportion is equivalent to 16.6% for a single member in the *Najali Afya* package for age group of contributors between 18 and 35 years, while the highest amount accounts for 70.5% of household income for a couple with four children. The analysis further shows that the lowest proportion of income to be spent on *Wekeza Afya* package is 33.2% for an individual beneficiary and the highest is 125.5% for a couple with four children for contributors between 18 and 35 years. The amount of income to be spent increases as age of contributors increases as reflected by households which have to spend up to 192.1% of their income to purchase *Timiza Afya* package for couples with four children when the age of contributor is 36 - 59 years. For contributors in the age of group of 60 years and above, households have to spend 85% and 164.9% of their income for *Timiza Afya* package for an individual and couples, respectively. This shows most of the households in all age groups are not likely to afford any of these health insurance packages because have to spend more than the 10% threshold of their household income, which could be described as catastrophic health spending (WHO & World Bank, 2021). This also implies that health insurance packages are unlikely to be affordable to households in this quartile, thus, are likely to experience catastrophic health spending (Onwujekwe et al., 2012; WHO & World Bank, 2021).

For households in the third quartile, the findings in **Annex 3** show that household income to be spend on health insurance is 9% for *Najali Afya* package for an individual beneficiary in age group of contributors between 18 and 35 years, which is lower than the 10% threshold. This suggests that the households in this quartile can afford to purchase the *Najali Afya* package for an individual only within that age group. However, even on that that package, these house-

holds cannot afford to purchase the other packages because they have to spend up to 38.3% of their income on other categories of packages for couples with four children for contributors within the age group of 18 - 35 years. To pay for the *Wekeza Afya* package, households have to spend 18% and 68.2% for an individual beneficiary and couple with four children, respectively, if the age of the contributor is 18 - 35 years. Similarly, couples with children for contributors in the age group of 36 - 59 years may incur up to 104.3% to pay for *Timiza Afya* package. Contributors who are 60 years or above, have to spend 16.9% and 32.1% for *Najali Afya*, 31.0% and 60.3% for *Wekeza Afya*, and 46.2% and 89.6% for *Timiza Afya* for individuals and couples, respectively. These proportions are well above the 10% threshold, which is an indication that most of these households may not afford to purchase the health insurance packages.

Overall, the first three quartiles comprise of 75% of households, which have lowest to moderate incomes. Out-of-pocket spending to access health care services is likely to be heavily concentrated to these quartiles (Siegel & Busse, 2018; Spaan et al., 2012). The study findings show that most of the households in these quartiles are unlikely to afford the insurance packages because contribution premiums exceed the 10% threshold. This indicates a high possibility of catastrophic health expenditure which is likely to posse financial risks (Ravangard et al., 2021; WHO & World Bank, 2021). Whereas the expansion of NHIF packages to include a wide range of contributors, including those in the informal sector aimed at expanding health insurance coverage, attaining universal health coverage and protecting households from financial risks, these objectives are unlikely to be achieved.

Indeed, as Domapielle (2014) posits, social health insurance schemes have from the onset been restricted to formal sector workers and their dependents. Even when open to all, the contribution of for the informal sector is generally flat rate, not based on ability to pay and as such who cannot the premium are likely to be excluded. In Cyprus, Kontemeniotis & Theodorou (2020) show that household inability to pay for health insurances is associated with poverty and income inequalities prevailing in the country. In Mtwara Tanzania, Ndomba & Maluka (2019) found that low income was frequently mentioned as the main reason for low enrollment in the CHF scheme in the region. This has negative impact on household capacity to meet other basic needs because a large amount of income is spent on health care services, thus, reducing spending on other basic needs such as food consumption, education and production means (Nguyen et al., 2012; Thomson et al., 2019).

Results in **Annex 4** show that most of the households in the fourth quartile can afford most of the health insurance packages because they comparatively higher incomes. All household categories in this quartile can spend less than 10% of their income to purchase the *Najali Afya* package for contributors within age group of 18 - 35 years. This shows that these households can afford the *Najali Afya* packages and therefore are more likely to be covered in health insurance through this package. The cost for purchasing the *Wekeza Afya* package for

contributors in the 18 - 35 years age bracket is equivalent to 4.3% and 8.3% of household income for individuals and couples, respectively. Households in this quartile with one and two children can spend 6.5% and 8.5% of their income, respectively. This shows that most of the households in this quartile can afford the *Najali Afya* and *Wekeza Afya* packages and therefore are more likely to be covered in health insurance through these packages.

With regard to *Timiza Afya* package, the analysis shows that contributors in the age group of 18 - 35 years are required to spend 5.8% and 8.9% of their income for individuals and individuals with one child, respectively. Other remaining categories of households are required to spend more than 10 percent of their income on *Timiza Afya* package. For contributors in the age group of 36 to 59 years, most of the households in the fourth quartile can purchase the *Najali Afya* package at less than 10% of their income, which is below the threshold. A more or less similar situation can be observed for the *Wekeza Afya* package, where most of the households are likely to spend less than 10% of their income, ranging from 5% for an individual beneficiary to 9.8% percent for a couple. *Timiza Afya* package is also more likely to be affordable for contributors between 36 and 59 years spending 6.9% and 10% of their income for individuals and individuals with one child, respectively. Contributors with 60 or more years are capable of affording the *Najali Afya* and *Wekeza Afya* packages by spending below 10% of their household income which is acceptable and does not affect the capacity to afford other basic needs. This mirrors an earlier observation by Thomson et al. (2019) that in this quartile catastrophic spending is very low, and health care needs are met to beneficiaries suggesting that affordability of health services, including those offered through insurance packages is very high.

4. Conclusion and Recommendations

This study analyzed households' ability to afford health insurance packages using household income. The key conclusion emerging from the analysis is that most of the households with low to moderate incomes, which account for three quarters of all households, are required to spend more than the 10% threshold of their incomes in purchasing health insurance packages. This is unlikely to be affordable, thus, subjecting them to catastrophic health spending. Whereas most of the households in the fourth quartile spend less than 10% of their incomes on purchasing insurance packages, this is a relatively small group accounting for only 25% of the households. Thus, health insurance coverage is likely to remain low especially among the poor households. The study recommends that the government should provide subsidies to health insurance schemes in order to extend coverage to the poor who cannot afford health insurance packages to enhance financial protection and health coverage. There is also a need to review health insurance packages and establish a single comprehensive health insurance package which can accommodate all groups of people so ensure to promote equality in access to quality health care services.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Annex 1: Health Insurance Packages (TZS) and First Quartile Household Income for Purchase of Packages (%) per Year

Age Group	Contributors with Age of 18 - 35 Years Old						Contributors with Age of 36 - 59 Years Old						Contributors with Age of 60+ Years Old					
Packages	Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya	
HH Size	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income
Individual	192,000	34.0	384,000	68.0	516,000	91.4	224,000	39.7	444,000	78.7	612,000	108.4	360,000	63.79	660,000	117.0	984,000	174.4
Couple	384,000	68.0	732,000	129.7	996,000	176.5	456,000	80.8	864,000	153.1	1,180,000	209.1	684,000	121.2	1,284,000	227.5	1,908,000	338.1
Couple + 1 Child	504,000	89.3	924,000	163.7	1,272,000	225.4	576,000	102.1	1,068,000	189.2	1,464,000	259.4	-	-	-	-	-	-
Couple + 2 Children	612,000	108.4	1,160,000	205.6	1,536,000	272.2	696,000	123.3	1,248,000	221.1	1,728,000	306.2	-	-	-	-	-	-
Couple + 3 Children	720,000	127.6	1,284,000	227.5	1,788,000	316.8	804,000	142.5	1,416,000	250.9	1,980,000	350.9	-	-	-	-	-	-
Couple + 4 Children	816,000	144.6	1,452,000	257.3	2,028,000	359.4	900,000	159.5	1,584,000	280.7	2,222,000	393.7	-	-	-	-	-	-
Individual + 1 Child	312,000	55.3	576,000	102.1	792,000	140.3	360,000	63.8	648,000	114.8	888,000	157.4	-	-	-	-	-	-
Individual + 2 Children	432,000	76.6	756,000	134.0	1,056,000	187.1	468,000	82.9	828,000	146.7	1,152,000	204.1	-	-	-	-	-	-
Individual + 3 Children	540,000	95.7	924,000	163.7	1,308,000	231.8	576,000	102.1	996,000	176.5	1,404,000	248.8	-	-	-	-	-	-
Individual + 4 Children	636,000	112.7	1,092,000	193.5	1,548,000	274.3	672,000	119.1	1,164,000	206.3	1,644,000	291.3	-	-	-	-	-	-

Annex 2: New Health Insurance Packages (TZS) and Second Quartile Household Income for Purchase of Packages (%) per Year

Age Group	Contributors with Age of 18 - 35 Years Old						Contributors with Age of 36 - 59 Years Old						Contributors with Age of 60+ Years Old					
Packages	Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya	
HH Size	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income
Individual	192,000	16.6	384,000	33.2	516,000	44.6	224,000	19.4	444,000	38.4	612,000	52.9	360,000	31.1	660,000	57.0	984,000	85.0
Couple	384,000	33.2	732,000	63.3	996,000	86.1	456,000	39.4	864,000	74.7	1,180,000	102.0	684,000	59.1	1,284,000	111.0	1,908,000	164.9
Couple + 1 Child	504,000	43.6	924,000	79.9	1,272,000	109.9	576,000	49.8	1,068,000	92.3	1,464,000	126.5	-	-	-	-	-	-
Couple + 2 Children	612,000	52.9	1,160,000	100.3	1,536,000	132.8	696,000	60.2	1,248,000	107.9	1,728,000	149.4	-	-	-	-	-	-
Couple + 3 Children	720,000	62.2	1,284,000	111.0	1,788,000	154.5	804,000	69.5	1,416,000	122.4	1,980,000	171.1	-	-	-	-	-	-
Couple + 4 Children	816,000	70.5	1,452,000	125.5	2,028,000	175.3	900,000	77.8	1,584,000	136.9	2,222,000	192.1	-	-	-	-	-	-
Individual + 1 Child	312,000	27.0	576,000	49.8	792,000	68.5	360,000	31.1	648,000	56.0	888,000	76.8	-	-	-	-	-	-

Continued

Individual + 2 Children	432,000	37.3	756,000	65.3	1,056,000	91.3	468,000	40.5	828,000	71.6	1,152,000	99.6	-	-	-	-	-	-
Individual + 3 Children	540,000	46.7	924,000	79.9	1,308,000	113.1	576,000	49.8	996,000	86.1	1,404,000	121.4	-	-	-	-	-	-
Individual 4 Children	636,000	55.0	1,092,000	94.4	1,548,000	133.8	672,000	58.1	1,164,000	100.6	1,644,000	142.1	-	-	-	-	-	-

Annex 3: New Health Insurance Packages (TZS) and Third Quartile Household Income for Purchase of Packages (%) per Year

Age Group	Contributors with Age of 18 - 35 Years Old						Contributors with Age of 36 - 59 Years Old						Contributors with Age of 60+ Years Old					
Package	Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya	
HH Size	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income
Individual	192,000	9.0	384,000	18.0	516,000	24.2	224,000	10.5	444,000	20.8	612,000	28.7	360,000	16.9	660,000	31.0	984,000	46.2
Couple	384,000	18.0	732,000	34.4	996,000	46.8	456,000	21.4	864,000	40.6	1,180,000	55.4	684,000	32.1	1,284,000	60.3	1,908,000	89.6
Couple + 1 Child	504,000	23.7	924,000	43.4	1,272,000	59.7	576,000	27.0	1,068,000	50.1	1,464,000	68.7	-	-	-	-	-	-
Couple + 2 Children	612,000	28.7	1,160,000	54.5	1,536,000	72.1	696,000	32.7	1,248,000	58.6	1,728,000	81.1	-	-	-	-	-	-
Couple + 3 Children	720,000	33.8	1,284,000	60.3	1,788,000	84.0	804,000	37.8	1,416,000	66.5	1,980,000	93.0	-	-	-	-	-	-
Couple + 4 Children	816,000	38.3	1,452,000	68.2	2,028,000	95.2	900,000	42.3	1,584,000	74.4	2,222,000	104.3	-	-	-	-	-	-
Individual + 1 Child	312,000	14.6	576,000	27.0	792,000	37.2	360,000	16.9	648,000	30.4	888,000	41.7	-	-	-	-	-	-
Individual + 2 Children	432,000	20.3	756,000	35.5	1,056,000	49.6	468,000	22.0	828,000	38.9	1,152,000	54.1	-	-	-	-	-	-
Individual + 3 Children	540,000	25.4	924,000	43.4	1,308,000	61.4	576,000	27.0	996,000	46.8	1,404,000	65.9	-	-	-	-	-	-
Individual + 4 Children	636,000	29.9	1,092,000	51.3	1,548,000	72.7	672,000	31.6	1,164,000	54.7	1,644,000	77.2	-	-	-	-	-	-

Annex 4: New Health Insurance Packages (TZS) and Fourth Quartile Household Income for Purchase of Packages (%) per Year

Age Group	Contributors with Age of 18 - 35 Years Old						Contributors with Age of 36 - 59 Years Old						Contributors with Age of 60+ Years Old					
Package	Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya		Najali Afya		Wekeza Afya		Timiza Afya	
HH Size	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH I come	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income	Package (TZS)	% of HH Income
Individual	192,000	2.2	384,000	4.3	516,000	5.8	224,000	2.5	444,000	5.0	612,000	6.9	360,000	4.1	660,000	5.0	984,000	6.9
Couple	384,000	4.3	732,000	8.3	996,000	11.2	456,000	5.1	864,000	9.8	1,180,000	13.3	684,000	7.7	1,284,000	9.8	1,908,000	13.3

Continued

Couple + 1 Child	504,000	5.7	924,000	10.4	1,272,000	14.4	576,000	6.5	1,068,000	12.1	1,464,000	16.5	-	-	-	-	-	-
Couple + 2 Children	612,000	6.9	1,160,000	13.1	1,536,000	17.3	696,000	7.9	1,248,000	14.1	1,728,000	19.5	-	-	-	-	-	-
Couple + 3 Children	720,000	8.1	1,284,000	14.5	1,788,000	20.2	804,000	9.1	1,416,000	16.0	1,980,000	22.4	-	-	-	-	-	-
Couple + 4 Children	816,000	9.2	1,452,000	16.4	2,028,000	22.9	900,000	10.2	1,584,000	17.9	2,222,000	25.1	-	-	-	-	-	-
Individual + 1 Child	312,000	3.5	576,000	6.5	792,000	8.9	360,000	4.1	648,000	7.3	888,000	10.0	-	-	-	-	-	-
Individual + 2 Children	432,000	4.9	756,000	8.5	1,056,000	11.9	468,000	5.3	828,000	9.4	1,152,000	13.0	-	-	-	-	-	-
Individual + 3 Children	540,000	6.1	924,000	10.4	1,308,000	14.8	576,000	6.5	996,000	11.2	1,404,000	15.9	-	-	-	-	-	-
Individual + 4 Children	636,000	7.2	1,092,000	12.3	1,548,000	17.5	672,000	7.6	1,164,000	13.1	1,644,000	18.6	-	-	-	-	-	-