

## Limited health insurance coverage amidst upsurge of non-communicable diseases in Uganda

### Executive Statement

*This brief uses the 2016/17 Uganda National Household Survey (UNHS) and the World Development Indicators (WDI) to show the extent of health insurance coverage for non-communicable diseases (NCDs) such as diabetes, high blood pressure and heart diseases among others. Results indicate that: (i) NCDs affect people of all socio-economic groups; (ii) more Ugandans suffering from NCDs are willing to pay for health insurance, but very few are holders of insurance policies in this regard; (iii) other diseases like malaria are more easily insured compared to NCDs, an indication that the providers of health insurance services are not keen to insure sufferers of NCDs; (iv) there are regional differences in health insurance coverage as well as prevalence of NCDs, with the burden of NCDs more intense in the Bukedi, Busoga and Teso sub-regions, whereas NCDs are least prevalent in Kigezi and Ankole sub-regions and (v) NCDs are likely to erode gains in poverty reduction at household level, because it is equally high among poor households with the least capacity to afford health insurance. We there by, recommend establishing special screening centres for NCDs in public health facilities especially health center II's and III's. This will promote early detection and early treatment hence curbing expensive costs for treating severe and chronic NCDs. Preventive measures need to be emphasized as well. These include regular body exercises and monitored nutrition which all lower the risk of NCDs. We further suggest incorporating and prioritizing NCDs into the proposed national health insurance scheme.*



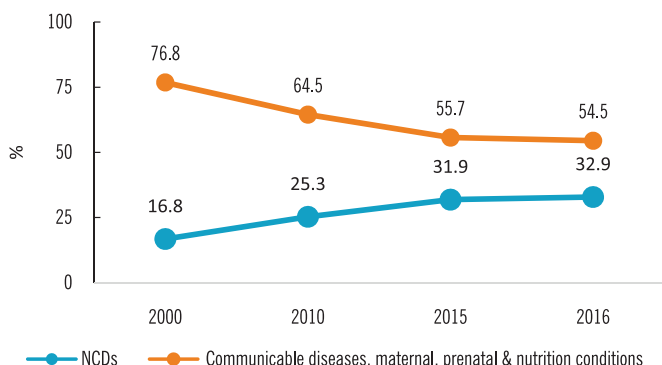
Nurse testing for blood pressure at Kawempe Hospital, Kampala

### Introduction

According to the World Health Organisation (WHO)<sup>1</sup>, non-communicable diseases (NCDs) are by far the leading cause of death in the world, representing 71 percent of all annual deaths. NCDs kill more than 41 million people each year and over 85 percent of all these deaths occur in low and middle-income countries. The four major NCDs (cardiovascular diseases, cancer, chronic respiratory diseases and diabetes) account for 80 percent of all premature deaths. People of all age groups, regions and countries are affected by NCDs with children, adults and the elderly all vulnerable to the risk factors contributing to NCDs.

In Uganda there is an upsurge in NCDs, with their contribution to total deaths rising from 16.8 percent in 2000 to 32.9 percent in 2016 (Figure 1). On the contrary, the contribution of communicable diseases, maternal, prenatal and nutrition conditions to total deaths has been steadily reducing with 76.8 percent in 2000 to 54.5 percent in 2016 (Figure 1).

Figure 1: Cause of deaths in Uganda (2000-2016)



Source: World development indicators (WDI), 2019

NCDs threaten progress towards attainment of SDG3 by 2030<sup>1</sup>. The rapid rise in NCDs threatens poverty reduction initiatives in Uganda, particularly by increasing household costs associated with health care. Health insurance can consolidate the poverty gains since it reduces individuals' out of pocket expenditures *vzon* health<sup>234</sup>, which in turn increases their savings and thus promotes investment in an economy. The uninsured do receive fewer preventive and diagnostic services, tend to be more severely ill when diagnosed, and receive less therapeutic care. Improving health status from fair or poor to very good or excellent increases both work effort and annual earnings by approximately 15 percent to 20 percent<sup>5</sup>.

This brief provides information on the extent to which NCDs are covered by the existing health insurance schemes in the country. This is in light of the fact that NCDs is an emerging issue both nationally and globally. The brief uses cross sectional data obtained from the most recent UNHS 2016/17 conducted by the Uganda Bureau of Statistics as well as data from world development indicators (WDI).

### NCDs and Health Insurance coverage

Table 1 demystifies the myth that NCDs are diseases for the rich. At national level, results reveal that *one* (1) out of every 20 persons (5.17 percent) has an NCD. Although prevalence is highest among the rich quintile, NCDs are prevalent across all social economic classes (Table 1)<sup>2</sup>. There are visible differences in terms of health insurance coverage in Uganda across populations of different income status. Only 2.36 percent of the poorest Ugandans utilise health insurance compared to 9.46 percent of the richest Ugandans (Table 1). This is consistent with the fact that the rich are more likely to be formally employed and hence likely to utilise insurance as offered by employers. The levels of willingness to pay for health insurance follow the same patterns; rich individuals are more willing to pay for health insurance. This implies that the burden of NCDs is worsened among the poor, thus making them poorer.

1 The third sustainable development goal (SDG 3) aims to achieve universal health coverage, provide access to safe and affordable medicines and vaccines for all.  
 2 The Kruskal-Wallis equality-of-populations rank test proved that NCDs are prevalent across all the Quintiles.

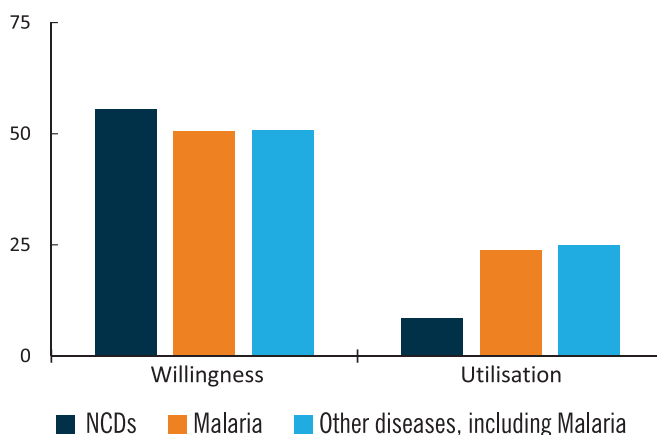
Table 1: Prevalence of NCDs, Utilisation and Willingness to pay for health insurance in Uganda

| Quintile             | NCD prevalence (%) | Utilisation (%) | Willingness (%) |
|----------------------|--------------------|-----------------|-----------------|
| Quintile 1 (Poorest) | 4.19               | 2.36            | 20.27           |
| Quintile 2           | 4.63               | 3.53            | 30.33           |
| Quintile 3 (Middle)  | 5.25               | 3.17            | 36.58           |
| Quintile 4           | 6.05               | 3.67            | 38.59           |
| Quintile 5 (Richest) | 5.59               | 9.46            | 49.65           |
| Uganda               | 5.17               | 5.84            | 40.01           |

Source: Authors' computation based on UNHS 2016/17

The brief further shows that; willingness to pay for NCDs health insurance coverage is not translating into actual utilization (Figure 2). Willingness to pay for coverage against other diseases like malaria translates into relatively more actual utilisation if compared with NCDs. This is an indication that the prevailing health insurance companies tend to shy away from insuring people with NCDs. This is probably due to the exorbitant costs of managing NCDs together with the lengthy treatment spells.

Figure 2: Willingness to pay and actual insurance coverage by disease (%)



Source: Authors' computation based on UNHS 2016/17

### Regional Spread of NCDs and Health Insurance

The burden of NCDs is more intense in Bukedi (7.77%), Busoga (7.49%) and Teso (7.35%) and least intense in the Kigezi (2.3%) and Ankole (2.78%) sub-regions of Uganda (Table 2). It is worth noting that the poverty levels are worst in the three sub-regions of Karamoja, Bukedi and Busoga (Table 2). Implying that the burden of NCDs in Bukedi and Busoga is likely to aggravate the poverty levels. The figures in Table 2 also imply that, the Ministry of Health should consider a regional outlook in its NCDs management programs, with relatively more resources and palliative efforts targeting the most

Table 2: NCDs, health insurance and poverty levels in Uganda

| Sub-region | NCD prevalence (%) | Utilisation (%) | Willingness (%) | Poverty (%) |
|------------|--------------------|-----------------|-----------------|-------------|
| Kampala    | 5.33               | 11.64           | 45.63           | 2.58        |
| Central1   | 4.96               | 5.54            | 36.48           | 8.96        |
| Central2   | 5.46               | 2.94            | 48.78           | 11.03       |
| Busoga     | 7.49               | 9.68            | 65.86           | 37.48       |
| Bukedi     | 7.77               | 5.97            | 37.57           | 43.68       |
| Bugishu    | 3.44               | 6.85            | 62.34           | 34.50       |
| Teso       | 7.35               | 4.93            | 54.27           | 25.07       |
| Karamoja   | 3.73               | 11.02           | 51.43           | 60.18       |
| Lango      | 7.32               | 10.56           | 42.42           | 15.64       |
| Acholi     | 3.96               | 7.69            | 12.70           | 33.40       |
| West Nile  | 3.64               | 1.87            | 23.93           | 34.91       |
| Bunyoro    | 4.87               | 4.01            | 35.05           | 17.26       |
| Tooro      | 4.48               | 4.44            | 38.39           | 11.10       |
| Ankole     | 2.78               | 2.78            | 40.63           | 6.81        |
| Kigezi     | 2.30               | 7.95            | 23.77           | 12.16       |
| Uganda     | 5.17               | 5.84            | 40.01           | 21.42       |

Source: Authors' computation based on UNHS 2016/17

vulnerable parts of the East (Bukedi, Busoga and Teso) and North (Lango).

In every 10 individuals from Karamoja, 6 are poor whereas about only 1 individual is poor in every 10 individuals from Kampala, Ankole and Central sub-regions. About 4 individuals are poor in every 10 individuals from both the Bukedi and Busoga sub-regions. Worth to note is that Bukedi and Busoga exhibit less health insurance utilisation which is combined with the highest prevalence of NCDs (Table 2). This re-affirms the need to prioritize the most vulnerable sub-regions in order to prevent the poor from becoming poorer.



Blood pressure screening

## Conclusion

Considering the fact that Uganda has inadequate health insurance coverage, it is unlikely to provide universal access to essential NCD interventions. Therefore, NCD management interventions are very essential in Uganda's context with priority given to the most vulnerable individuals and regions. The management of NCDs includes detecting, screening and treating these diseases as well as providing palliative care for the people in most need. Strengthening early detection and timely treatment can reduce the need for more expensive treatment. The government needs to establish special detection and screening centres at health center II's and III's across the country with priority given to the eastern and northern regions. Preventive measures need to be emphasized as well, such as regular body exercises and nutrition habits that can lower the risk of NCDs. We further recommend urgent implementation of the proposed national health insurance scheme which will reduce on the out of pocket expenditures on health among households, and NCDs should be fully incorporated in the framework of the proposed scheme so as to realize fully the benefits of insuring the vulnerable groups in Uganda.

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## Endnotes

- 1 WHO (2018). “Non-communicable diseases-key facts”. <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases> , 1st June, 2018.
- 2 Kimani et.al. (2012). “Determinants for Participation in a Public Health Insurance Program among Residents of Urban Slums in Nairobi, Kenya: Results from a Cross-Sectional Survey”. BMC Health Services Research, 12-66.
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