



# Policy Brief

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## Determinants of Rural Households Demand For Micro Health Insurance Plans in Tanzania

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### Executive statement

The objective of this policy brief is to inform the socio economic groups, micro health insurance schemes, and the Ministry of Health to promote increased enrolment of the rural households in the health insurance plans. The increased enrolment of the rural households in the insurance schemes shall enable individuals to minimize out of pocket spending for health services and to overcome inequity in accessing health services, in the episodes of illness. It shall also result in increased income for households to be spent on children's education and investments in the economic activities. The ultimate outcome shall be the reduction of poverty in the rural areas in the country. Currently, micro health insurance schemes have enrolled few members, despite the fact that they provide low price health insurance plans. Overall, at the moment only 15 percent of Tanzanians have health insurance cover.

### Introduction

A large number of rural households cannot access health care services because they are unable to pay for health care services in the episodes of sickness in Tanzania. For example, the household budget survey of 2007 revealed that one third of Tanzanians who were sick did not visit health facilities. One of the reasons was unaffordability of health services.

WHO (2005) advocates equal access to health care services among the populace in developing countries by encouraging households to join health insurance schemes. In Tanzania, opportunities to join health insurance schemes are available. The government and socio economic groups had established micro health insurance schemes. However, only a few households have joined the health insurance schemes. At present, only 15 percent of Tanzanians are members of the health insurance schemes. The consequence has been either

limited access of the rural households to health care services or large out of pocket spending in the episodes of illness.

Households' out of pocket spending for health services is estimated to be 80 per cent of total private spending and 50 percent of total health care expenditure in Tanzania. A large out of pocket spending for health services in the episodes of illness or injury aggravates poverty in the rural areas. The reason is that high out of pocket spending makes poor rural households unable to cover education expenses for their children, leading to inability to augment the human capital and secure gainful employment. It also restricts households' ability to augment the investments in economic activities.

Leaving the issue of low enrolment in the health insurance schemes unattended makes poverty reduction as stipulated by the National Strategy for Growth and Reduction of Poverty (NSGRP), as well as the Millennium Development Goals an uphill task. Thus, this study seeks to examine the impact of the household membership and non-membership in micro health insurance schemes on the utilization of health services in the episodes of illness. In particular, it analyses whether micro health insurance schemes facilitate households' access to health care services or not.

## **Methodology**

The theory of demand for health insurance provides a theoretical framework for this study. The underlying assumption of the theory is that households seeking health services in episode of illness behave rationally. In particular, they seek to overcome disutility associated with being sick and look for protection against catastrophic health spending.

The study uses data from Tanzania Demographic and Health Survey of 2010 to analyse rural household utilization of health services. The optimal sample size for the research was 362 poor and non-poor households. This included 127 who were members of the micro health insurance schemes and 235 non-members.

The matching estimator methods were adopted to analyse data. The methods entail categorising households' data in "treated" and "control" dichotomy conditional on the observed covariates. The dichotomy allows the estimation of the three statistics for the purpose of evaluating the impact of households' membership in the micro health insurance plan on the utilization of health services and protection against catastrophic expenditure shocks in the episodes of illness. The first is Average Treatment Effects (ATE), which was used to compare the outcomes between the treated (members) and control sub group (non-members). The second was Average Treatment Effect of the Treated (ATT). The statistic was used to evaluate the programme impact among the randomly selected members of health insurance schemes. The last one is the Average Treatment Effect on the Control Group (ATC), which measures the impact of extending the insurance to non-members.

## **Results and Findings**

As pointed out before, the objective of this study is to examine the effect of households' membership and non-membership in the micro health insurance schemes on the utilization of health care services and protection against catastrophic health spending, in the episode of illness. In that regard, the comparison of utilization of health care services was done between non-members and members. The main findings from the study with regards to the three statistics, highlighted in the methodology section, are presented below.

Firstly, the results on the comparison on the utilization of health services among the members and non-members of health insurance scheme in the episodes of illness using the statistic ATT, indicated that the introduction of micro health insurance schemes decreased the households utilization of health care services in the episodes of illness among the members compared to non-members. For the poor households the utilization of health services decreased by 13 percentage points while for non-poor, it decreased by 6 percentage point.

Furthermore, the estimated statistic that was used to compares the utilization of health services among the households who are members of health insurance scheme, that is, the ATT, revealed that the utilization of the health care facilities among the poor households who were members of health insurance plans increased by 9 percentage points while for the non-poor households it decreased by 6 percentage points.

The results from estimating the effect of extending the micro health insurance plans to non-members, through the ATC, revealed that the utilization of health services decreased by 25 percentage points for non-poor households who reported to be sick. In contrast, extending the membership of micro health insurance to the poor members increased the utilization of health services by 12 percentage points. Thus, membership in micro health insurance plans enabled poor rural households to access health service, when sick.

In regard to protection against catastrophic health spending, the estimation result revealed that the enrolment of non-members in micro health insurance schemes resulted in the reduction of catastrophic health spending by 6 percentage points among the rural households. Thus, rural households would be able to protect themselves against health risk and catastrophic health spending in the episodes illness or injury by joining in the micro health insurance schemes.

In summary, the main findings are firstly, poor households who are members of health insurance increased the utilization of health care services in the episodes of illness compared to non-poor household members. Therefore, households' membership in the health insurance schemes increased the accessibility to health services among the poor.

Secondly, rural households who were members of health insurance did not realize protection against high health expenditure, when visiting health facilities in the episodes of illness. Thirdly, extending health insurance to non-members who were poor could increase utilization of health care services for the rural households

### **Implications and recommendations**

Doing nothing to the situation of low enrolment of rural households in the micro health insurance schemes could result in adverse outcomes. It shall result in inequality among the rural households in accessing health care services in the episodes of illness. In particular, only the poor households who are members of insurance schemes and those with high incomes shall continue to enjoy access to health services and non-members shall not. Given that non-members who are poor shall have to part up with a large proportion of their income to get health services, they may not afford to increase investment in economic activities and improve income generation capacity. This implies that households may continue to be sick for a long period, be unable to work and continue to be poor or become poor.

On the positive side, increasing the enrolment of rural households, together with the improvement of the delivery of health care services shall reduce the expenditure burden rural households experience when visiting health care facilities, in the episodes of illness and help to improve their welfare.

In this regard, it is recommended that socio-economic groups, micro health insurance schemes and the Ministry of Health promote awareness among the rural households on the benefits of enrolling in micro health insurance schemes, through community meetings and mass media promotions. Increased enrolment shall contribute in not only enabling rural households to access health care services but also to overcome poverty and increase the pooling of premium from a large number of the households. This can help to enhance the funding of the health care system.

Secondly, the government and other owners of modern health care facilities need to ensure adequate medical supplies are always available in order to minimize out of pocket spending for rural households, when they visit hospitals in the episode of illness or injury. Improved service delivery will also motivate non-members households to enrol in micro health insurance schemes and utilize health services. It will also facilitate the pooling of revenue for health care services.

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