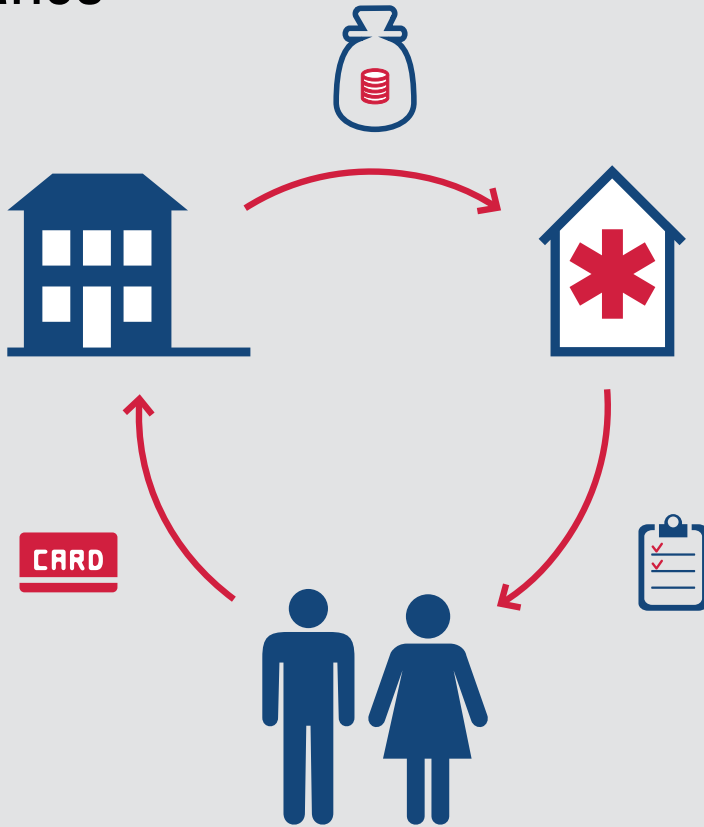


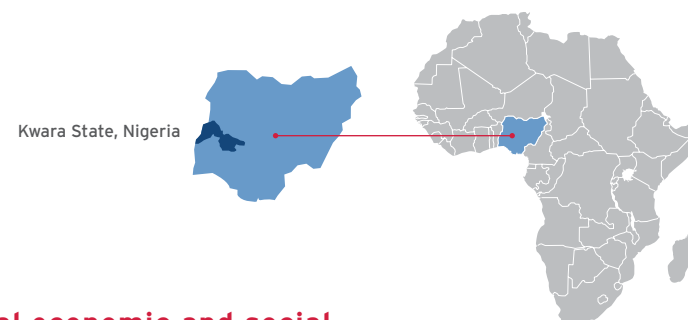
**Health  
Insurance  
Fund**



# The Value of Impact Evaluation

**COMMUNITY HEALTH INSURANCE  
SCHEME IN KWARA STATE, NIGERIA**

# Introduction



**Health is a crucial economic and social asset, particularly for the working low and middle income groups in Africa. These groups have limited access to health care and social protection and suffer higher child and maternal mortality rates and other diseases. Africa carries approximately 25 percent of the total disease burden, yet accounts for less than 1 percent of global health expenditure. African public health systems face daunting challenges to deliver the required capacity and quality care.**

**Rich people benefit more from donor-funded public healthcare than the poor.<sup>1</sup> About 50 percent of the healthcare services in Africa are paid from out-of-pocket, which pushes more than 100 million individuals into poverty.<sup>2</sup> These payments by individuals are not channeled into risk pools, which can help protect them from huge healthcare costs and give the healthcare providers stable income streams and lower their investment risks. The Health Insurance Fund has been set up to build a**

1. Preker A.S. et al. (2005). Spending wisely, buying health services for the poor. World Bank, Washington DC.

2. WHO (2005) Designing health financing systems to reduce catastrophic health expenditure, WHO technical brief for policy-makers Number 2 WHO Geneva.

more sustainable healthcare system and infrastructure to increase access to quality basic health care for currently uninsured groups in Africa. In doing so, it uses and leverages the capacity of the private sector and aims to lower the threshold for investment in private health infrastructure.

The strength and uniqueness of the health insurance program lies in the extent to which all components of the local healthcare system in Africa are addressed through the close collaboration between Health Insurance Fund (insurance), PharmAccess (implementation), SafeCare (clinical standards and quality improvements), Medical Credit Fund (financing to healthcare providers), Amsterdam Institute for Global Health and Development (impact research) and Investment Fund for Health in Africa (private investments). The complementarity of these initiatives strengthens the efforts towards building an efficient and effective health financing and delivery system.



## The Health Insurance Fund Program in Central Kwara State

Each year, one million children under five die in Nigeria.<sup>1</sup> Maternal deaths in Nigeria account for 10 percent of maternal deaths in the world.<sup>2</sup> Over 3 million individuals live with HIV, the third largest HIV cases in the world. While such health indicators are similar to those of many other sub-Saharan nations, they are surprising given the fact that Nigeria is ranked a middle-income country based on GDP per capita. Besides the tragic loss of life, the financial burden that poor health represents for many Nigerians, and in particular the poor, is enormous. Over 70 percent of health expenditures are private and of those, 90 percent are out-of-pocket. This burden can lead to impoverishment and loss of life. In fact, data suggest that globally, over 150 million people suffer financially every year due to out-of-pocket health expenditures.<sup>3</sup> The loss of life due to inability to afford or access quality health care is immeasurable.

The Health Insurance Fund, PharmAccess and the Nigerian Hygeia Community Health Care recognize the need for affordable quality health care for the poor in Kwara State, a primarily rural agricultural state in western Nigeria. Kwara State is the fourth poorest state of Nigeria and has one of the highest per capita

out-of-pocket health expenditures in the country representing on average nearly one-fifth of household spending.<sup>4</sup> In the summer of 2009, Health Insurance Fund in collaboration with PharmAccess and Hygeia Community Health Care launched a community health insurance program in Central Kwara State. This program is designed to provide affordable health insurance to low-income people and upgrade associated health clinics and hospitals. Both primary and limited secondary healthcare services, including HIV/AIDS, malaria and tuberculosis treatment are covered by the program. Beneficiaries are enrolled on an annual basis and pay a contribution (co-payment) of 300 Naira (USD 2.00) per person per year. The insurance premium is subsidized by the Health Insurance Fund and the Kwara State Government. Worth mentioning is that the success of the program is due partly to the fact that the Kwara State Government has made financial commitment to the Health Insurance Fund and plans to gradually take over the entire premium subsidy.

The financing mechanism provides regular cash flow directly to program hospitals to, among other things, cover the costs of salaries, drugs,

consumables, power supply, and facility maintenance among other things. It ensures that participating healthcare providers (doctors, clinics, hospitals) have a reliable cash flow, so that they can maintain and steadily upgrade the quality of their services. This allows that insured individuals are able to access health care using their subsidized health insurance. The Health Insurance Fund also provides support to Hygeia Community Health Care to improve its administrative capacity.

Currently, approximately 27,000 individuals are enrolled in the insurance scheme in Central Kwara State. The re-enrollment rate in Central Kwara State is 84 percent of the 7,500 farmers and their family (71,000 individuals in total). This re-enrollment compares favorably to other projects within the African context and to international practices in the field of private voluntary health insurance in resource-poor settings. As suggested in the article *Community health insurance in Africa* published by the Tropical Medicine and International Health (2009), the benchmark retention rates (i.e. the number of enrollees continuously renewing) are typically 1-10 percent.

1. 2006, National Bureau of Statistics -MICS

2. World Bank

3. WHO 2008

4. NLSS 2003/2004



## An Impact Evaluation of the Program

In Africa, limited rigorous impact research is done in community health insurance. This can partly be explained by the fact that health insurance in Africa has historically been limited to the wealthy elite. Findings from other regions are mixed but mostly positive (Giedion and Diaz, 2008). The Health Insurance Fund's program in Central Kwara State puts into place a rigorous external evaluation to measure the impacts of the intervention. This effort is being led by the Amsterdam Institute for International Development (AIID), the Amsterdam Institute for Global Health and Development (AIGHD) and the University of Ilorin Teaching Hospital (UIITH) in Nigeria.

The impact evaluation follows a quasi-experimental design methodology based on two population-based household surveys: a baseline survey in 2009 and a follow-up survey in 2011. The baseline and follow-up surveys were implemented on a subset of the population in the area where the program is introduced (treatment area) and in a similar area where the program has yet to be introduced (control area). The evaluation looks at both the effect of the program on the treatment area as a whole and the effect on the individuals who enrolled in the program, i.e. the treated individuals. However, the evaluation does not cover impacts of the program beyond the household such as impacts on providers or on the overall health system.



## Results & conclusion

## Results

The initial evaluation of the Health Insurance Fund program in Central Kwara State provides evidence on the impacts of the program on utilization of health care. Secondly, it provides insight on the effect of the program on out-of-pocket healthcare expenditures for people living in this area. Finally, the survey measures the effect of the program on the health status of the people (self reported and objective measures). In total, 4315 respondents participated in both surveys. The survey involved interviews of both the insured and uninsured population.<sup>1</sup>

1. Note that this impact evaluation does not attempt to measure impacts or externalities of the program beyond the household. For such analysis, see for example Gaag, van der and Stimac (2010).

2. A household is considered to be enrolled in the program if at least one household member is enrolled.

3. The stars in the figures indicate the statistical significance of the obtained results, i.e. the likelihood they did not occur by chance. All results that are marked with at least one star are statistically significant. More stars means higher statistical significance.

4. Where modern includes hospital, clinic, (primary) health centre, or private doctor/nurse/midwife/paramedic, non-modern includes a traditional healer, pharmacist, patent medicine vendor, alternative medicine provider, or religious person.

Since the introduction of the program two years ago, approximately 30 percent of the individuals and 45 percent of the households in treatment area have enrolled in the insurance program.<sup>2</sup> The results demonstrate that in the area where the health insurance program has been introduced (treatment area), the use of health care has increased on average by more than 15 percentage points (see Figure 1).<sup>3</sup> The utilization of health care on average increased with over 70 % in the treatment group after introducing the program

The program also led to an increased utilization of modern<sup>4</sup> healthcare providers. Further, figure 2 shows that in addition the program reduced the utilization of non-modern healthcare among the insured individuals.

The findings also show that as a result of the Health Insurance Fund program, out-of-pocket healthcare expenditures decreased. On average, about 1000 Niara per person per year in both the treatment group and among the insured group. This represents at least a 40% reduction on average in health expenditures when including the costs of the insurance premium.





Finally, the findings suggest that the program has increased awareness about health status among the population in the treatment area. Figures 3 and 4 show that both in the treatment area as a whole and among the insured individuals self-reported health significantly declined. The increase in the share of individuals that reported having a chronic disease may seem alarming. However, increased access to health care can increase awareness about one's own health status, leading to a decline in self-reported health. For the long term, expectations are that increased

access to preventive care will improve health status. The objective measures of health show a significant decline in the prevalence of hypertension among insured individuals.

Adherence to hypertension drugs can indeed lower one's blood pressure within six months. Additional research will examine the impacts of the program more extensively with the purpose of guiding Health Insurance Fund and PharmAccess in implementing successful programs in Nigeria and other countries.

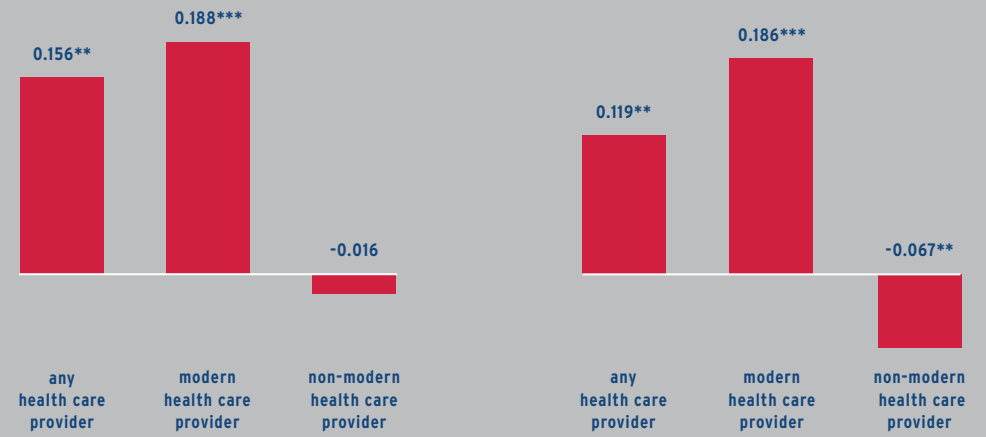


Figure 1: Health care utilization - entire treatment area

Figure 2: Health care utilization - insured individuals

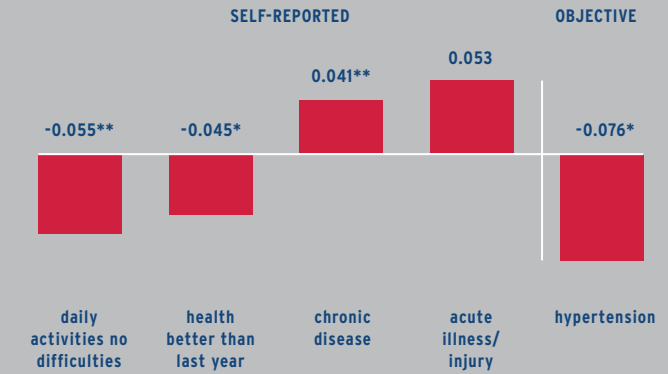


Figure 3: Health status - entire treatment area

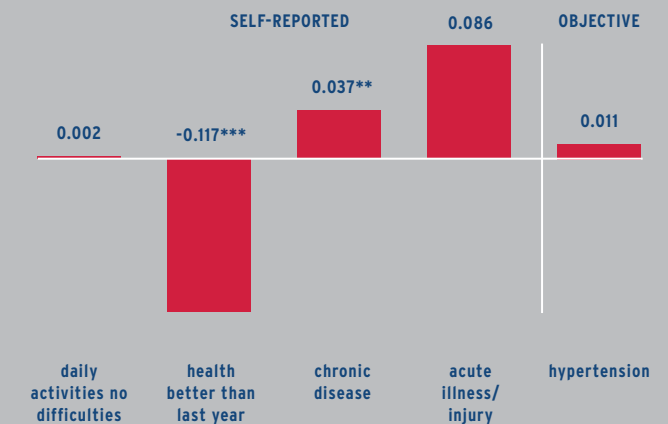


Figure 4: Health status - insured individuals

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001  
Source: Calculations based on Kwara Central, Nigeria Survey 2009 and 2011



## Conclusion

The impact evaluation has contributed to building evidence on the impact of the Health Insurance Fund program. Positive effects are visible for utilization overall and for utilization of quality healthcare services. Simultaneously awareness of health status has improved and there is some improvement in objective health measures. The engagement of a wide range of stakeholders at grassroots, regional and national levels has contributed to the commitment of Kwara State Government. The success of the program is being recognized

both locally and internationally. The Health Insurance Fund program and Hygeia Community Health Care are mentioned in the Nigerian Government's national strategic development plan 2010-2015 as an example of community based health insurance scheme. In addition, a recent publication of the UNAIDS, *AIDS Dependency: sourcing African solutions*, describes the Health Insurance Fund program as an example of insurance innovations to achieve sustainability and self-reliance among low-income Africans.

### References

- AIID, AIGHD and UITH (2012) A Short-term Impact Evaluation of the Health Insurance Fund Program in Central Kwara State, Nigeria. Amsterdam: Amsterdam Institute for International Development, Amsterdam Institute for Global Health and Development and University of Ilorin Teaching Hospital
- Giedion, U. and Diaz, Y. (2008) The Impact of Insurance in the Developing World: a Review of the Existing Evidence. *Mimeo*. Washington, DC: Brookings Institution
- Nigeria Living Standards Survey (2003/2004), Federal Republic of Nigeria, Federal Office of Statistics, Abuja, Nigeria
- UNDP (2011) Human Development Report 2011: A Better Future for All. New York: United Nations Development Programme
- WHO (2008) The World Health Report 2008, Primary Health Care: Now more than ever. Geneva: World Health Organization
- World Bank
- 2006, National Bureau of Statistics -MICS

### Colofon

This research has been made possible due to the financial support of our committed donor, the Dutch Ministry of Foreign Affairs, and the excellent cooperation with Hygeia Community Health Care and the Kwara State Government.



PharmAccess Foundation  
Trinity Building C  
Pietersbergweg 17  
1105 BM Amsterdam  
the Netherlands  
+31 (0)20 566 71 58  
info@pharmaccess.org  
www.pharmaccess.org

Graphic design:  
studio Saïid & Smale

Printing:  
Puntgaaf drukwerk

November 2012

### Our Group of Organizations

PharmAccess  
FOUNDATION

Health  
Insurance  
Fund



Safe Care  
BASIC HEALTHCARE STANDARDS



Health  
Insurance  
Fund

[www.hifund.org](http://www.hifund.org)