BROOKE SHEARER WORKING PAPER SERIES ACHIEVING UNIVERSAL HEALTH COVERAGE IN NIGERIA ONE STATE AT A TIME

A PUBLIC-PRIVATE PARTNERSHIP COMMUNITY-BASED HEALTH INSURANCE MODEL

EMILY GUSTAFSSON-WRIGHT AND ONNO SCHELLEKENS







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INTRODUCTION

Two years ago, in a rural community in Kwara State, Nigeria, we met Fatima¹ a 62 year old grandmother who was struggling to care for herself and her two granddaughters aged three and nine. The children had been left with Fatima when their parents went to Lagos to look for work. Shortly thereafter, Fatima became ill, leaving her unable to work selling her homemade soybean cakes in the market for an income. She was forced to borrow money from other family members to pay for her medical expenses. When she could no longer borrow money she had to reduce spending on food items for herself and her grandchildren to buy medicine from the local medicine vendor in her village. Fatima, as the majority of poor Nigerians, was not covered by Nigeria's National Health Insurance Scheme (NHIS) because she is not formally employed. She was suffering from severe hypertension, both of her granddaughters were malnourished and the youngest was suffering from malaria when a Hygeia Community Health Care (HCHC) enrollment officer arrived in her community a year later. By enrolling in the HCHC health insurance plan supported by the Dutch Health Insurance Fund (HIF) and implemented by PharmAccess, a nongovernmental organization (NGO),

Fatima was able to receive the care that she and her granddaughter needed in the clinic, which had already been upgraded through the same program. With the appropriate treatment, her health stabilized and soon she was able to get back to work, earn a livelihood and care for her granddaughters.

Fatima's story is not uncommon in Nigeria and many other parts of the developing world. The inability to pay for health care expenses, which forces people to reduce spending on food or other basic needs, and the lack of access to quality care are unfortunately common realities seen by many poor and underprivileged. Falling ill can have devastating and long-lasting consequences especially for poor households, both through income loss and high medical expenditures.² Data suggest that more than 150 million people globally suffer financial catastrophe every year due to out-of-pocket health expenditures.³ Nigeria has among the highest out-of-pocket health spending and poorest health indicators in the world.

Most people would agree with the idea that all individuals should have access to health services and should not face financial hardship as a result of health care costs. Universal health coverage (UHC), the concept that encompasses these goals, has gained wide attention and support in recent years. How to achieve UHC however, is a more complex question with a variety of disparate viewpoints. In this paper, we discuss UHC in the context of Nigeria, a middle-income country that nevertheless is facing enormous health challenges. We discuss the constraints that have prevented Nigeria from attaining UHC to date. We then present promising evidence from large and small-scale insurance interventions in other parts of the developing world. Next, we describe a public-private partnership model of community-based health insurance currently operating in Nigeria and other parts of Africa and show evidence of the program's ability to increase health care utilization, provide financial protection and improve health status in target communities. We contend that UHC in Nigeria can only be achieved by addressing both supply and demand-side constraints simultaneously. The solution must also include building

on existing public and private institutions and informal networks, leveraging existing capital, and empowering clients and local communities. An innovative model such as the one presented here that has been implemented successfully in one Nigerian state, could be replicated in others; tackling this challenge one state at a time, to eventually achieve the goal of access to health care and financial protection for all.

UNIVERSAL HEALTH COVERAGE: WHAT IS IT AND WHO IS BEHIND IT?

The 58th World Health Assembly in 2005 adopted a widely supported resolution encouraging countries to plan a transition to UHC and in 2010, the WHO *World Health Report* focused on alternative financing initiatives for achieving universal coverage.⁴ The organizations supporting UHC include the World Health Organization (WHO), the World Bank, the United States Agency for International

Development (USAID), the Inter-American Development Bank, the Bill and Melinda Gates and the Rockefeller Foundations, among others.⁵ While some argue that the concept of UHC is "old wine in a new bottle", the underlying tenants behind the concept are difficult to argue with and there appears to be a global consensus around this belief.⁶

UHC usually refers to health systems providing both access to health services and financial



Woman having her blood pressure measured in rural Nigeria. Photo credit: Emily Gustafsson-Wright

protection which includes avoiding out-of-pocket payments that reduce the affordability of services, and ideally some compensation for productivity loss due to illness.⁷ A key feature of UHC is that it includes prepayment and that it supports risk pooling, which ensures the spread of risk across time and across individuals. The concept of UHC does not imply a particular health system organization and can include both national health systems (or a National Health Insurance model) which are statefunded and government managed, and systems of Social Health Insurance (SHI) which are generally designed for the working population and financed by payroll taxes collected from employers and employees.8 This model is most beneficial to countries that have a large enrollee base and efficient supervision and administration of funds.9 A third model of risk pooling and prepayment is Community-based Health Insurance (CBHI) often referred to as health insurance for the informal sector or micro-health insurance. CBHI's share three common characteristics: they include not-for-profit prepayment plans, community empowerment, and voluntary membership. 10 Many Sub-Saharan African and Asian countries use the CBHI model because their risk-pooling and saving schemes create a natural platform for the program.¹¹ Such models are smaller in scale and by definition do not aim to achieve coverage of the majority of the population. As we will discuss here, CBHI models may be one piece of the puzzle to achieving UHC.

IMPACTS OF HEALTH INSURANCE IN LOW AND MIDDLE-INCOME COUNTRIES

A broad range of risk-pooling mechanisms or insurance schemes are increasingly being utilized across the developing world to increase access and reduce the financial burden of health. 12 The number of evaluations of such efforts is growing and while findings are mixed, the overall findings on impacts are encouraging. In theory, we expect health insurance to contribute to achievement of UHC because it increases access and utilization by lowering the price of health care. Individuals will have better health if they utilize preventive and curative health care when needed and in a timely manner. 13 We review several studies that evaluate the impacts of programs ranging from NHI and SHI to CBHI on health care utilization and financial protection. We use a broader definition of UHC given the lack of agreement on the specific systems that might be utilized to achieve it and because we argue that a national system may not be the only answer to achieving universal coverage. A systematic review of the impacts of health insurance on health status in low and middle-income countries can be found in Giedion et al. 2013.

The empirical evidence from various regions mostly supports the theoretical expectations described above. Several evaluations of a national health insurance program in Colombia, for example, find positive impacts on health care utilization. Trujillo et al. (2005) for example measure the subsidized regime component of the program finding the intervention to greatly increase utilization of medical care among poor and previously uninsured individuals.¹⁴ Giedion et al. (2007) measure the impact of the contributory regime component of the same insurance scheme and find that for most of their access and use indicators, health insurance has a positive causal impact on access.¹⁵ In a recent study, King et al. (2009) examine the impact of the randomly assigned Mexican universal health insurance program Seguro Popular. The phased rollout of the program provides an experimental design for a study of a program aimed at reaching 50 million uninsured Mexicans. This study, however, shows Seguro Popular to have no significant impact on the use of medical services but it is important to note that the study is based on a time span of only 10 months. Galarraga et al. (2010) found that in Seguro Popular there was a reduction of catastrophic health expenditures of 49 percent for the experimental evaluation database (the same used by King et al. but using a different method) and 54 percent for the whole country based on a DHS-like survey. In addition, the authors found a reduction of out-of-pocket health expenditures for most types of services.

Findings in Asia are mostly positive. Chen et al. (2007) find that one year after the establishment of Taiwan's National Health Insurance scheme, previously uninsured elderly people increased their use of outpatient care by nearly 28 percent. Previously insured elderly people increased their use by over 13 percent leaving a chance of nearly 15 percent which can be solely attributed to the National Health Insurance scheme. 18 In a study of a national rural health insurance scheme in China, Wagstaff et al. (2007) find that the scheme increased utilization of both inpatient and outpatient care by 20-30 percent but that the scheme had no impact on utilization among the poor. 19 Yip et al. (2008) find that the China health insurance program increased utilization by 70 percent.²⁰ Wagstaff and Moreno-Serra (2007) investigate the impact of the introduction of social health insurance in 14 countries in Central and Eastern Europe and Central Asia and find an increase in acute in-patient admissions.²¹

There are few impact evaluations of health insurance in African countries and those that do exist demonstrate a weaker methodology than the articles reviewed above. One example is Smith and Sulzbach (2008) which examines the impact of health insurance in three African countries. The authors find a correlation between health insurance and use of maternal health services but highlight that the inclusion of maternal health care in the benefits package of the insurance is key.²² In Jutting (2003), the author finds in a study of community-based health insurance in Senegal an increase in utilization of hospitalization services but a failure of the program to address the needs of the poorest of the poor.²³

In addition to impacts on health care utilization, health insurance is expected to provide financial protection because it reduces the financial risk associated with falling ill. Financial risk in the absence of health insurance is egual to the out-of-pocket expenditures because of illness. Additional financial risk includes lost income due to the inability to work. There is little rigorous empirical evidence measuring the impact of health insurance in its ability to provide financial protection. The existing literature examines the impact of health insurance on out-ofpocket expenditures for health care measured in either absolute or in terms relative to income (expenditures are labeled catastrophic if they exceed a certain threshold). King et al. (2009) in their study of the Mexican universal health insurance program Seguro Popular find reductions in the proportion of households that suffer from catastrophic expenditures and a reduction in outof-pocket expenditures for in- and out-patient medical care (though no effect on spending for medication and medical devices).

Wagstaff et al. (2007) find no impact on out-of-pocket health expenditures in rural China which contrasts with Wagstaff and Yu (2007) who find reduced out-of-pocket payments, lower incidence of catastrophic spending and less impoverishment due to health expenditures.²⁴ By contrast, in a later study, Wagstaff and Lindelow (2008) find health insurance in rural China to increase the risk of high and catastrophic spending. The authors define high spending as spending that exceeds a threshold of local average income and catastrophic spending is defined as exceeding a certain percentage of the household's own per capita income.²⁵ This finding contradicts the hypothesis that health insurance always will reduce financial risk. The above mentioned Wagstaff and Moreno-Serra (2007) study of Central and Eastern Europe and Central Asia finds an increase in government spending per capita on health but not in private health spending, while a switch to fee-for-service does increase private health spending. They find negative effects of social health insurance on overall employment levels but positive effects on average gross wages in the informal sector.²⁶

Since it is difficult to measure the impact of improvements in quality per se, and because few insurance interventions explicitly address the supply-side, the literature is unclear about the separate impact of quality improvements of the supply of care versus making health insurance available and affordable.

NIGERIA STRIVES TO ACHIEVE UNIVERSAL HEALTH COVERAGE

Country Overview

Nigeria, with its population of around 162.5 million and a population growth rate of 2.5 percent, is the most populous country in Africa and the 8th most populous country in world.²⁷ The country's tumultuous history is reflected in its abundance of states—beginning with only three states at the time of Nigeria's independence from the United Kingdom in 1960 and now with 36 states and the Federal Capital Territory (FCT), where the capital Abuja is located. This highlights the potential challenges of managing such a heterogeneous country. Nigeria is ranked as one of the fastest growing economies in the world with a growth rate of 6.4 percent in 2007 and 7.4 percent in 2011.28 Nigeria's GDP per capita in PPP adjusted dollars is \$1,500 according to World Bank estimates from 2011. One of the main issues facing the country is balancing oil sector revenues and government spending. Over the last few years, the accrued oil revenues have not led to improvements in the welfare of the majority of the population.

Poverty incidence has varied but remained high over the past decade. In 2004, the poverty rate was 54.4 percent., it rose to 62.6 percent in 2010 and dropped back down to 54.4 percent in 2011.29 There are great regional disparities, reflected in a contrast between rural areas with a poverty rate of 69.0 percent and 51.2 percent in the urban sector.30 The poorest zones of the country are those in the North while the South East zone has the lowest incidence of poverty. Inequality, as measured by the Gini coefficient, rose steadily since 1985, save for a slight decline in 1992. As of 2011, the total population inequality is back at the only slightly better 1992-levels with a Gini coefficient of 0.397.31 Human development indicators are staggeringly low considering the country's GDP per capita. Nigeria ranks 156th out of 173 countries with data on the Human Development Index (HDI).32

The State of Health in Nigeria

Nigeria's health indicators have either stagnated or worsened during the past decade despite the federal government's efforts to improve healthcare delivery. Life expectancy at 52 years is below the African average, while the numbers on child mortality are astounding — partly because of the country's size. Annually, one million Nigerian children die before the age of five due mostly to neonatal causes followed by malaria and pneumonia. Maternal mortality is 630 per 100,000 live births which is comparable to low-income countries such as Lesotho and Cameroon.³³ An estimated 3.3 million Nigerians are infected with HIV and access to prevention, care and treatment is minimal.³⁴ Nigeria also continues to combat the double burden of both communicable and non-communicable diseases (NCD).

Nigeria's Health System

Nigeria has a federally funded National Health Insurance Scheme (NHIS), designed to facilitate fair financing of health care costs through risk pooling and cost-sharing arrangements for individuals. Since its launch in 2005 the scheme claims to have issued 5 million identity cards, covering about 3 percent of the population.³⁵ Under the National Health Insurance Act 2008, the national health insurance started a rural community-based social health insurance program (RCSHIP) in 2010. The majority of the enrollees, however, are individuals working in the formal sector and the community scheme still leaves large gaps among the poor and informally employed.

Several proposals are currently in the works to expand the reach of NHIS. One such proposal is to make registration mandatory for federal government employees.³⁶ Earlier this year, the creation of a "health fund" collecting an earmarked "health tax" of 2 percent on the value of luxury goods was proposed.³⁷ This fund would be used for the health insurance of specified groups of Nigerian citizens, including: children under five, physically challenged or disabled individuals, senior citizens above 65, prison inmates, pregnant women requiring maternity care, and indigent persons.³⁸ At a broader level, the National Health Bill which was first proposed in 2006 to improve its poor health sector by allocating at least 2 percent of the federal government's revenue to the health sector is still not signed into law.

Constraints to Achieving UHC in Nigeria

The constraints to achieving UHC in Nigeria are numerous and complex. Factors limiting Nigeria's health outcomes are both demand and supply-side including inadequate financing, weak governance and enforcement, inadequate infrastructure and poor service quality, weak governance and enforcement, household poverty and insufficient risk pooling.

Inadequate government financing for health

There are four main sources of public funding for the public (nonfederal) health sector: state governments, local governments, direct allocations from the federal government, and private individuals and organizations, including nongovernmental organizations and international donors in some states. The federal government and some state governments have increased funding to public health care (PHC) over the past decade, with a dramatic increase between 2005 and 2007 where the percent

increase in health sector allocations jumped from 31.4 percent to 86.2 percent.³⁹ Nonetheless, Nigeria spends a mere 5.3 percent of its GDP,) or \$139 (PPP) per capita on health care. This is extremely low, in particular when compared to other African countries such as Burkina Faso (6.7 percent) and the Democratic Republic of Congo (7.9 percent), which have considerably lower GDP per capita. The government contributes only 36.7 percent of the country's total spending on health. In order to achieve effective access and financial protection, the government must begin by making a more serious commitment to spend on health. The absence of institutionalized National Health Accounts (NHA), however, contributes to the challenge of reassessing health spending in the country. Finally, low levels of external health financing reflect an unwillingness to invest in the country. Just 9.2 percent of spending is donor funded, which is very low compared to, for example, Ghana with 16.9 percent, which has a comparable GDP per capita.⁴⁰

Weak governance and enforcement

The existing legislative structure for budget allocations to social sectors as well as weak governance and institutions leads to inefficient spending and lack of trust in the system. State governments in Nigeria have substantial autonomy and exercise considerable authority over the allocation and utilization of their resources. This arrangement constrains the leverage that the federal government has over state and local governments in terms of getting them to invest in the health sector. Therefore, top-down approaches continue to fail to produce improvements in access, financial protection and health indicators. In addition, the public system lacks transparency and enforcement, making it subject to

corruption and lending inadequate medical and administrative capacity to produce services efficiently and of adequate quality. A weak institutional framework leads to high uncertainty and risk and thereby low levels of trust which reduces the willingness of individuals to invest. As a consequence, the willingness to prepay for health care remains low.

Inadequate health infrastructure and poor service quality

Low government spending combined with weak institutions and lack of enforcement lead to inadequate health infrastructure and poor service quality. Due to the unwillingness to invest in health or prepay for health care, predictable revenue flow is unavailable for health providers to improve the supply chain leaving much of the country's health infrastructure in a dismal state. Many health facilities lack access to clean water and a reliable supply of electricity, face shortages of medical equipment, and are missing necessary medications or blood to treat their patients. In addition, there is a deficiency in qualified health professionals in particular in poor communities. Large disparities exist between urban and rural areas and between states due to the variation in remuneration packages for health professionals across states and between federal and state level, health professionals gravitate to better paying federal facilities and states. Private providers mainly operate in urban settings where income levels are the highest. This situation results in a lack of qualified and competent health professionals for individuals who live in poor rural areas that tend to bear a greater disease burden.

Poverty constraints, insufficient risk pooling and burden on private individuals

Nearly two-thirds of Nigerian's live below the poverty line; eighty percent work in the informal sector. As the national health system mostly covers the formally employed only 3 percent of the population is covered by the NHIS. Private prepaid schemes are unreachable for the poor as premiums are unaffordable. With the overburdened public system unable to deliver, people have no option but to pay for health care out-of-pocket. By default, the private health sector has grown rapidly over the past decades and now provides over 65 percent of health care services.41 The health financing system is therefore mainly based on out-of-pocket user-fees; payments are made at the point of service. Beyond the inability to pay for existing expensive health insurance schemes, it is common in poverty stricken environments, that decision-making take place in a much shorter time horizon, with people refraining from saving, investing and buying health insurance. The willingness to prepay for health care is low in an environment of low trust in which people are unsure of benefits from a product or service in the future against a payment today. In Nigeria, prepaid spending or risk-pooling only encompasses 3.1 percent of all private health spending. The remaining private spending consists of out-of-pocket payments. This makes the development of risk pools difficult and creates an environment that is not conducive to private investment. The high share of out-of-pocket expenses is the most expensive, least efficient and least inclusive financing channel. It weighs heavily on households budgets and forces many into poverty due to unpredictable catastrophic health expenditure. In short, the poor are stuck in a vicious cycle for health care as the figure below

shows. Prepayment is low because people do not trust the system and because the quality of the services is low, while a lack of a steady revenue stream discourages providers from investing.

Given this situation, the question is what to do when (i) there is a chronic shortage of funds for universal coverage; (ii) the state does not have the supply chain capacity to deliver the services and enforce risk pools; and (iii) the supply chain is extremely inefficient

AN ALTERNATIVE INSURANCE MODEL

The necessary elements to ensure a functioning health system are: financing (risk pools and prepayment); administrative systems; health care providers such as clinics and hospitals, medication and laboratories; and the client/patient relationship. The demand (financing) side and the supply (delivery) side should be aligned and managed to deliver care to the patient, who will therefore be willing to prepay to ensure the availability of quality services when needed. An alternative model is a *public-private partnership community-based health insurance model* (*PPP-CBHI*). This model has the potential to contribute to the achievement of UHC by addressing many of the constraints described in the previous section. The PPP-CBHI model is based on three main pillars:⁴²

- Building on existing local public and private institutions and informal networks;
- 2. Leveraging existing capital; and
- 3. Empowering local clients and communities.

Demand Supply Financing High out-of-Low quality health care pocket expenses Low efficiency Low **Risk** Low High risk Delivery **Patient** Catastrophic spending No prepayments

Figure 1. The poor are stuck in a vicious cycle for health care

Source: PharmAccess Foundation, 2012

In this model, donor funds can be used to catalyze the development of a more sustainable health system by stimulating investment and risk pooling mechanisms. In this way both the demand and supply-side are addressed.

Building on Existing Local Public and Private Institutions and Informal Networks

In developed countries, public institutions facilitate economic exchange in society by reducing risk and moral hazard. Public and social goods like health care, water, sanitation and education are effectively organized by the state through public or semi-public institutions. However, in low and middle-income countries like Nigeria the limited functioning of the state and its institutions hampers economic development and the rendering of public goods and services. Informal institutions often take the place of public institutions and transactions within those institutions are commonly enforced by social pressure and other social norms. Interventions therefore, that build on existing local and often informal institutions for which there may be greater trust, are more likely to succeed. This can be achieved by, for example, leveraging social capital of communities and their local leaders, and their existing ties with private providers. In this model, groups such as microcredit members, farmers, or market women are targeted to build on the existing social capital present in the group. Also, contributing to the strengthening of formal institutions (e.g. quality standards/accreditation, investment funds for social infrastructure), through involvement of the private sector in the delivery of essential public, semi-public and social goods, is a logical step.

Leveraging Existing Capital

In many developing countries, the private sector is an important provider of health care, including for its poor who pay for these private services largely out-of-pocket. Increasingly, many of the facilitating functions for health care—information, quality certification, technology support, human resources—are also provided by the private sector. This makes the private sector an important partner to reach the primary beneficiaries, namely, low-income groups, and facilitate systemic change in a bottom-up approach. Harnessing the out-of-pocket expenditures into prepaid systems rather than crowding them out with public health funding is another important element of this model. Another important element is the leveraging of donor funding to mobilize private capital.

Empowering Clients and Local Communities

Ownership by and empowerment of clients and the communities they belong to is of crucial importance for the approach to succeed. A client-oriented approach requires knowledge about what clients want and need and what they can afford and are willing to (pre) pay. It implies the importance of delivering good quality care to the clients/patients, which requires building a strong health care supply chain: without good quality supply the willingness to prepay is likely to be low.⁴³

How the Model Works

Based on these three main pillars, a multi-pronged approach for an alternative insurance model was developed by the Health Insurance Fund (HIF), a Dutch foundation set up in 2005 to increase access to quality basic health

care and to provide financial protection through the provision of private community-based health insurance to low-income Africans. On the demand side, existing private resources for health care are used more efficiently to realize solidarity (based on health risk) and protect scheme members from unexpected financial shocks due to ill health. At the same time, the health insurance schemes generate financial resources to build up an efficient supply chain and empower members to insist on high-quality care, creating a snowball effect. People who can pay are induced to pay into risk pools, thereby creating stable health care demand. Improved efficiency in the supply chain lowers costs and raises quality, increasing peoples' willingness to pay. As more people buy health insurance, schemes grow, resulting in larger cross-subsidization, which enhances equity. Through volume effects, the costs and premiums can be further reduced. These schemes do not compete with government programs but complement them. Beneficiaries are involved in determining who has access to the schemes, the design of the benefits package, the level of premiums, and the costs to be covered.

The *supply side* is strengthened through facilitating private investments, both debt and equity capital. Supply-chain upgrading is undertaken through quality-improvement programs with rigorous monitoring and control, preferably in cooperation with international accreditation organizations. Where regulatory capacity of the government is weak, enforcement of quality standards to ensure adequate delivery of care can be a task for the private sector. Output-based contractual agreements provide a good opportunity to do this.

Donor funds are used to subsidize the community-based health insurance schemes' premiums. Disease-specific donor programs such as for HIV/AIDS, malaria, tuberculosis support the insurance schemes through a risk-equalization arrangement built into the programs. These long-term donor commitments are made with the solvency of the insurance funds serving as collateral, which lowers the investment risk and makes investments in the health care supply chain feasible. Limited donor funding is also used to upgrade the supply chain. Finally, donor funding is used as a lever to mobilize additional private capital to scale up the interventions.

THE HEALTH INSURANCE FUND PPP-CBHI MODEL IN NIGERIA

In 2006, HIF received a £100 million grant from the Dutch Ministry of Foreign Affairs to launch, together with its implementing partner PharmAccess, community-based insurance programs in four African countries, including Nigeria. In this public-private partnership model of com-

Staffed and stocked pharmacy in Kwara State, Nigeria. Photo Credit: PharmAccess Foundation

munity-based health insurance, donor funds are linked to African health maintenance organizations (HMOs), insurance companies, or third party administrators. These organizations are responsible for the execution of HIF's insurance programs and for contracting a network of public and private providers where scheme members can get their health services. Payment of insurers and providers is performance-based, measured as the medical care delivered and the number of enrollees. Insurers' prices and profit margins are contractually fixed. The insurance package consists of primary and limited secondary care, including treatment for malaria, testing for HIV/Aids and TB. The programs are always complementary to regular public sector health programs. The programs create stable healthcare demand by subsidizing insurance premiums for target groups of African workers that enroll with the HMOs. The program covers groups with at least some income, who must pay part of the (reduced) premium themselves.

HIF's resources are also used to upgrade medical and administrative capacity of the insurers and health providers

contracted under the program. Quality and efficiency are further pursued by strictly enforcing medical and administrative standards through independent audits. This reinforces the output-based approach: payment only takes place if the patient has received treatment that meets the agreed quality requirements. The quality improvement activities of health care providers under the HIF program are formalized and put under the aegis of an independent quality improvement and evaluation body called



Marketing of the Hygeia subsidized health insurance program. Photo credit: Emily Gustafsson-Wright

SafeCare. This organization acts as the custodian of internationally recognized standards covering the spectrum of basic health care for providers in resource-restricted countries. To date, HIF programs have been established for market women in Lagos, Nigeria, farmers in Kwara State, Nigeria, coffee growers in Tanzania and for groups of dairy and tea farmers in Kenya. Currently, a total of 121,000 people are enrolled. The expansion of the program to other African countries is currently under discussion.

THE HEALTH INSURANCE FUND MODEL IN KWARA, NIGERIA

The first HIF program started early 2007 in Nigeria, where the Nigerian health maintenance organization (HMO), Hygeia, was contracted to cover farmers and their families in northern Kwara State, the fourth poorest state in Nigeria. Hygeia has over 20 years of experience in health care in Nigeria, is one of the HMOs executing Nigeria's National Health Insurance Scheme (NHIS) and has a network of over 200 clinics and hospitals throughout

Nigeria of which 12 are in Kwara and around 200,000 paying members throughout the country. Committed support from the state governor, local politicians and religious leaders contributed greatly to the program's implementation. The program gradually expanded to cover other regions in the state and after five years, Kwara State has about 67,000 individuals enrolled in the insurance program.

Beneficiaries are enrolled on an annual basis and the co-premium is 300 NAIRA or approximately \$2 per person per year. 44 Currently, individuals are responsible for about 7 percent of the premium, while the remaining 93 percent is covered by the subsidy of which Kwara State pays about 60 percent. The scheme's beneficiaries do not incur out-of-pocket costs for these services since the clinics are paid directly by the insurance scheme. Through capitation the clinics earn a steady income stream to cover its overhead costs—salaries, drugs, consumables, power supply, and facility maintenance. HIF also provides support to the HMO Hygeia to improve its administrative capacity.



High demand for health care in newly upgraded private health clinic in Kwara, Nigeria. Photo Credit: PharmAccess Foundation.

PROMISING IMPACTS IN KWARA

A recent quasi-experimental study by the Amsterdam Institute of International Development and the Amsterdam Institute for Global Health and Development evaluates the impact of the Hygeia Community Health Care (HCHC) program in Central Kwara State.⁴⁵ The study focuses on the impact of the HCHC among households in the program area on three main outcomes: (1) access and utilization of health care, (2) financial protection, and (3) health status.⁴⁶

After two years of implementation, about 23,000 individuals or about 30 percent of the population had enrolled in the insurance. Two methods are used to measure the program's impacts. In the first, impacts are measured for the entire treatment group—those who enrolled and those who live in the treatment area but did not enroll.⁴⁷ This measurement captures potential "spillover effects" on the uninsured in the treatment area. These individuals may be accessing upgraded participating HCHC clinics despite not being insured. The second method measures the program's impact on those who enrolled in the program relative to those who live in the control area and were not offered the HCHC.⁴⁸

The evaluation demonstrates that the use of health care has increased on average by over 20.5 percentage points for the treatment group. From an average of 22.5 percent of the population in the treatment group that used health care at baseline, this represents an almost doubling of health care consumption. In addition, the program has increased utilization of quality health care as measured by an increase in use of modern health care providers and private health facilities. Non-modern

health care provider use has declined. Second, the findings show HCHC to have significantly decreased outof-pocket health care expenditures. On average, these expenditures have declined by about 1,030 Naira per person per year, representing a 52 percent reduction in health expenditures when including the cost of the insurance premium. Third, it appears that the program has increased awareness about health status. Self-reported health status declined for two of the measures with significant results. It is quite possible that increased access to health care has increased self-knowledge about health leading to a short run decline in self-reported health. Whilst impact of the HCHC program on blood pressure control or anemia in the target population as a whole were not found, preliminary subgroup analyses of respondents with hypertension at baseline suggest a decrease in blood pressure in the treatment communities. Long-term expectations are that increased access to preventive care will improve health status. Overall, after two years since the introduction of the HCHC, considerable positive impact can be attributed to the program.

THE SCALE-UP AND SUSTAINABILITY OF THE HIF MODEL IN NIGERIA

The success of the HIF program in Nigeria and the ability of the program to make strides in achieving the country's ultimate goal of UHC ultimately depend on the ability of the program to be scaled up and its long run sustainability. Community support and strong acceptability, capacity building and close cooperation with providers and financial state support for the premium subsidy are key factors to achieve this.⁴⁹

During a visit to Nigeria in May 2011, United Nations Secretary-General Ban Ki-moon spoke about the unique character (public private partnerships) and importance of the HIF program of Kwara State for providing health care access to poor people. Donors such as the World Bank have also contracted HIF to develop and implement community health insurance programs. UNAIDS, in its report AIDS Dependency: Sourcing African Solutions, has described the health initiative in Nigeria as an example of insurance innovations to achieve sustainability and self-reliance among low-income Africans. Additional investments in health also support the expansion of this program. With the financial support of the Dutch Ministry of Foreign Affairs, the PharmAccess Group and the Investment Fund for Health in Africa have been able to mobilize additional resources of £290 million from third party donors, local governments, investors, local banks, private clients and member contributions for the premium to support health care delivery. This is almost eight times the amount that has been invested until now by the Health Insurance Fund alone and is more than the amount that the IFC (International Finance Corporation) invested in health care in Africa between 1997-2007.

The program is currently being developed into a state-wide health insurance scheme. In February 2013, HIF, the Kwara State government and Hygeia signed a memorandum of understanding to expand the program to cover 600,000 people within the next 5 years. The program would then reach 60 percent of the rural population in Kwara State, a significant step towards UHC in Kwara. Under this agreement, the Kwara State government will increasingly contribute to the payment of the premium subsidy for low-income people and investing in health-

care infrastructure. A five-year Health Financing Plan is being devised to transfer the funding of the insurance subsidy to Kwara State. Providers will continue to receive a steady stream of income, encouraging them to invest and deliver quality health care.

Ownership, political will, local leadership, motivation and trust are key success factors for the program. Some of the main lessons learned which can support the scale-up and sustainability of the program are:

- Knowledge of the target population: knowledge about the group/customer behavior and the emphasis on mobilization and marketing are important for the insurance program.
- Subsidies: incentives in the form of subsidies can make coverage affordable and motivate people to participate in the health insurance. Higher enrollment reduces adverse selection.
- Business case for health insurance: insurance providers, administrators and health care providers require considerable technical assistance to expand health coverage to lower income groups. Clear understanding is needed between the partners about mutual benefits, sharing of responsibilities and obligations as well as clarity on partner's starting level of capacity (technical and managerial skills, information systems etc.).
- Availability of data: medical data on the target population and actuarial data on health care utilization
 and costs are vital to accurately determine size and
 cost of health care package and calculate premiums.
- Introduction and monitoring of standards: monitoring is required for efficiency, transparency and the

quality of services which is essential to increase the willingness to prepay for health care. The in-depth operational research being implemented parallel to the implementation has proven to be extremely valuable.

- Design and management of marketing and administrative systems: health insurance for low-income groups is a high-volume low-cost business, which makes it imperative for the local partner to have efficient distribution and administration systems.
- Flexibility in contracts: flexibility is important because circumstances can change at the time of implementation or unforeseen elements in design of the program can make it difficult for the local partner to sustain the program.
- Leveraging and risks reduction: initiatives that use and leverage the capacity of the private sector and aim to lower the threshold for investment in private health infrastructure are critical.
- Public-private partnerships: PPPs promote sharing of risks, stimulate additional private resources and avoid crowding out and foster innovation that can help reduce costs and improve efficiency.

CONCLUSIONS

Most people would agree with the idea that all individuals should have access to health services and should not face financial hardship if they fall ill or are injured. More than 150 million people globally however, suffer financial catastrophe and 100 million fall into poverty due to out-of-pocket health expenditures every year. The call for UHC - health systems providing both access to health services and financial protection -challenges the global

donor community and governments to make efforts toward achieving this goal in the near future.

Nigeria is making efforts to achieve UHC. Nevertheless, a mere 3 percent of the population is currently covered by the country's national health insurance and government spending on health represents only 5.3 percent of GDP. Out-of-pocket payments for health equal over 95 percent of private spending on health and government spending only represents about 37 percent of total health spending. Weak governance and accountability, and inadequate health infrastructure render low levels of trust leading to unwillingness to invest health and minimal risk-pooling. Household poverty and inequality exacerbate this vicious cycle. An expansion of the National Health Insurance Scheme has been proposed through several pieces of legislation. The ability of the program to include large portions of the population beyond the formal sector seems a distant dream however. Alternatives must be considered to attempt to achieve UHC in the most populous country in Africa. Lessons learned from both large and small-scale interventions around the world, and in Nigeria itself, should be considered to begin to tackle this undeniably challenging task.

In countries, such as Nigeria, where the state is failing to provide its citizens with access to affordable quality health care, the solution to achieving UHC may be in risk sharing through private community health plans and private delivery. A public-private partnership community-based health insurance (PPP-CBHI) model could be a stepping stone towards achieving universal health coverage, both in Nigeria and elsewhere. A successful such model is the Dutch Health Insurance Fund's PPP-CBHI

scheme in Kwara State, Nigeria. The program has begun to expand gradually and an evaluation of the scheme shows positive impacts on health care utilization, financial protection and health status. Unprecedented levels of investment in the health sector in this context over a short period of time attributable to the program are also a testament of its potential to contribute to the achievement of UHC.

The true success of the HIF model and the ability of the program to contribute to the goal of achieving UHC in Nigeria depend greatly on the sustainability of the program and the ability to scale it up. In Kwara, the program is developing into a State-wide insurance scheme in the next five years, covering up to 600,000 people in rural areas and the state government will increasingly contribute to the payment of the premium subsidy for low-income people and investing in healthcare infrastructure. Ownership, political will, local leadership, motivation and trust have been identified as key factors for the success of the program.

For a long time, donors and governments have opposed private sector involvement fueled by concerns over profit motives, issues with regulation, and fears of inequity. But increasingly it is recognized that, given the challenges faced in developing countries, health systems cannot do without the private sector. This shift is partly motivated by the expectation of decreasing aid budgets due to the global economic turmoil, but also by recognition of the dual realities of the weakness of public systems and the potentially significant contribution of private resources to health care delivery. The PPP-CBHI model utilizes and leverages the capacity of the private sector and aims to lower the threshold for investment in private health infrastructure. It promotes the sharing of risk, stimulates additional private resources and avoids crowding out. This fosters innovation that can help reduce costs and improve efficiency. Donor funding is used to leverage private capital for the development of both supply (loans to and investments in health care providers and suppliers) of and demand (insurance) for quality health care. While it may seem a contradiction to suggest that a program like the HIF model that targets specific population groups could be the answer to achieving UHC in Nigeria, this strategy may effectively achieve the goal of 100 percent coverage. By focusing on rural populations, the poor or vulnerable, the unemployed, and the informal sector or those who typically are excluded from other forms of health coverage, UHC may in fact gradually be achieved in Nigeria one state at a time.

ENDNOTES

- 1. Name was changed to protect privacy.
- Beegle, K., de Weerdt, J., and Dercon, S. (2008). Adult mortality and consumption growth in the age of HIV/AIDS. Economic Development and Cultural Change, Vol. 56(2), pp. 299-326.; Fox, M. P., Rosen S., Macleod W. B., Wasunna, M., Bii, M., Foglia, G., and Simon, J. L. (2004). The impact of HIV/AIDS on labour productivity in Kenya. Tropical Medicine and International Health, Vol. 9(3), pp. 318-324. ; Gertler, P. and Gruber, J. (2002). Insuring consumption against illness. American Economic Review, Vol. 92(1), pp. 51-70.; Wagstaff, A. (2007). The economic consequences of health shocks: Evidence from Vietnam. Journal of Health Economics, 26, 82-100.; Gustafsson-Wright, E., Janssens, W., and van der Gaag, J. (2010). The inequitable impacts of health shocks on the uninsured in Namibia: The potential for low-cost health insurance schemes to protect the poor. Health Policy and Planning, 26 (2), 142-156.
- 3. WHO. (2008a). *World health statistics, 2008*. Geneva: World Health Organization.
- 4. WHO. (2010). *Health systems financing: The path to universal coverage*. Geneva: World Health Organization.
- Giedion, U., Alfonso, E. A., and Díaz, Y. (2013). The impact of universal coverage schemes in the developing world: A review of the existing evidence. Washington, D.C.: The World Bank. p. 1.
- Wagstaff, A. (2013, February 12). Universal health coverage: Old wine in a new bottle? If so, is that so bad? Retrieved on 19 June 2013 from http://blogs.worldbank.org/developmenttalk/universal-health-coverage-old-wine-in-anew-bottle-if-so-is-that-so-bad.
- Preker, A.S., Lindner, M. E., Chernichovsky, D. and Schellekens, O. (2013). Scaling Up Affordable Health Insurance Staying the Course. Washington D.C.: The World Bank.
- 8. Giedion, U., Alfonso, E. A., and Díaz, Y. (2013). The impact of universal coverage schemes in the developing world: A review of the existing evidence. Washington, D.C.: The World Bank. pp. 2-5.

- Usoroh, E. E. (2012). Achieving universal health coverage in Nigeria: The national health insurance scheme as a tool. Amsterdam: Vrije Universiteit Amsterdam. pp. 16-17.
- Dutta, A., and Hongoro, C. (2013). Scaling up national health insurance in Nigeria: Learning from case studies of India, Colombia, and Thailand. Washington, DC: Futures Group, Health Policy Project. pp. 3-4.
- Usoroh, E. E. (2012). Achieving universal health coverage in Nigeria: The national health insurance scheme as a tool. Amsterdam: Vrije Universiteit Amsterdam. pp. 16-17.
- Giedion, U., and Díaz, B. Y. (2010). Chapter 2: A review of the evidence. In Griffin, C., Escobar, M., and Shaw, R. (Eds.), *Impact of health insurance in low- and middle-income countries* (pp. 13-32). Washington, D.C.: Brookings Institution Press.
- 13. The potential for moral hazard or the overuse of medical care is a view that opponents of subsidized health insurance often hold. In our view however, given the lack of access and other constraints that poor vulnerable households face, the likelihood of demand-side moral hazard seems unlikely. Furthermore, we believe that moral hazard may not necessarily be a negative consequence of the introduction of health insurance in these settings.
- Trujillo, A., Portillo, J. and Vernon, J. (2005). The impact of subsidized health insurance for the poor: Evaluating the Colombian experience using propensity score matching. *International Journal of Health Care Finance and Economics*, 5, 211–239.
- 15. Giedion, U., Alfonso, E. A., and Díaz, B. Y. (2007). *Measuring the impact of mandatory health insurance on access and utilization: The case of the Colombian contributory regime*. Washington, D.C.: The World Bank.
- King, G., Gakidou, E., Imai, K., Lakin, J., Moore, R. T., Nall, C., . . . and Llamas, H. H.. (2009). Public policy for the poor? A randomized assessment of the Mexican universal health insurance programme. *The Lancet, 6736* (09).

- Galarraga, O., Sosa-Rubi, S. G., Salinas-Rodriguez, A., and Sesma-Vazquez, S. (2010). Health insurance for the poor: Impact on catastrophic and out-of-pocket health expenditures in Mexico. *European Journal of Health Economics*, 11 (5), 437-447.
- Chen, L., Yip, W., Chang, M., Lin, H., Lee, S., Chiu, Y., and Lin, Y. (2007). The effects of Taiwan's national health insurance on access and health status of the elderly. *Health Economics* 16, 223-42.
- Wagstaff, A., Lindelow, M., Junc, G., Ling, X., and Juncheng, Q. (2007). Extending health insurance to the rural population: An impact evaluation of China's new cooperative medical scheme. World Bank Impact Evaluation Series No. 12.
- 20. Yip, W., and Hsiao, W. (2008). The impact of rural mutual health care on access to care: Evaluation of a social experiment in rural China. Harvard School of Public Health.
- Wagstaff, A., and Moreno-Serra, R. (2007). Europe and central Asia's great post-communist social health insurance experiment: Impacts on health sector and labor market outcomes. World Bank Policy Research Working Paper 4371. Washington, D.C.
- Smith, K., and Sulzbach, S. (2008). Community-based health insurance and access to maternal health services: Evidence from three West African countries. Social Science and Medicine, 66, 2460-2473.
- Jutting, J. (2003). Do community-based health insurance schemes improve poor people's access to health care? Evidence from rural Senegal. World Development, 32 (2), 273-288.
- Wagstaff, A., and Yu, S. (2007). Do health sector reforms have their intended impacts? The World Bank's Health VIII project in Gansu province, China. *Journal of Health Eco*nomics, 26, 505–535.
- Wagstaff, A., and Lindelow, M. (2008). Can insurance increase financial risk?: The curious case of health insurance in China. *Journal of Health Economics*, 27 (4), 990-1005.

- Some additional studies which examine the relationship between health insurance and financial protection include Trivedi (2003), Wagstaff and Pradhan (2005), Asfaw and Jutting (2007).
- The World Bank. (2011). Nigeria population total. Retrieved on 17 June 2013 from http://data.worldbank.org/country/nigeria; United Nations Statistics Division. (2010). Nigeria: Country profile. Retrieved on 17 June 2013 from http://data.un.org/CountryProfile.aspx?crName=Nigeria.
- The World Databank: World Development Indicators. (2011). Retrieved on 17 June 2013 from http://databank. worldbank.org/data/views/reports/tableview.aspx?is-shared=true&ispopular=series&pid=1.
- 29. The World Bank PovCalNet. (2011). *Nigeria summary report*. Retrieved on 17 June 2013 from http://iresearch. worldbank.org/PovcalNet/index.htm?2.
- The World Databank: Poverty and Inequality Database.
 (2010). Retrieved on 17 June 2013 from http://databank. worldbank.org/data/views/reports/tableview.aspx.
- 31. The World Databank: Poverty and Inequality Database. (2011). Retrieved on 17 June 2013 from http://databank. worldbank.org/data/views/reports/tableview.aspx.
- 32. UNDP. (2011). *Human development report 2011: Sustainability and equity: A better future for all.* New York: United Nations Development Programme.
- The World Databank. (2010). Maternal mortality ratio (modeled estimate, per 100,000 live births). Retrieved on 17 June 2013 from http://data.worldbank.org/indicator/ SH.STA.MMRT.
- 34. The World Databank: Health Nutrition and Population Statistics. (2010). *Adults (age 15+) and children (0-14 years) with HIV*. Retrieved on 17 June 2013 from http://databank.worldbank.org/data/views/reports/tableview.aspx.
- 35. National Health Insurance Scheme (NHIS). Retrieved on 14 June 2013 from http://nhis.gov.ng/index.php?option=com_content&view=article&id=47:welcome-note-from-executive-secretary&catid=34:home.

- Dutta, A., and Hongoro, C. (2013). Scaling up national health insurance in Nigeria: Learning from case studies of India, Colombia, and Thailand. Washington, DC: Futures Group, Health Policy Project. p. 1.
- 37. Ibid.
- 38. Ibid.
- The World Health Organization. (2009). WHO country cooperation strategy 2008-2013: Nigeria. Republic of Congo: World Health Organization, 2009. p. 8.
- 40. WHO. (2011). Global health observatory data repository. Retrieved on 19 June 2013 from http://apps.who.int/gho/data/node.main.75?lang=en.
- 41. FMoH. (2009a). *Nigeria demographic health survey 2008*. Federal Ministry of Health and ORC Macro.
- 42. Entire section refers to: Schellekens, O. P., van der Gaag, J., Lindner, M. E., and de Groot, J. (2013). Chapter 20: New development paradigm. In Preker, A. S., Lindner, M. L., Chernichovsky, D., and Schellekens, O. P. (Eds.), Scaling up affordable health insurance: Staying the course (pp. 539-557). Washington, D.C.: The World Bank.
- 43. Carrin, G. (2003). Community-based health insurance schemes in developing countries: Facts, problems and perspectives. Discussion Paper No. 1. Geneva: World Health Organization; Perker, A. S., Harding, A., and Travis, P. (2000)."Make or Buy" Decisions in the production of health care goods and services: New services from Institutional economics and organizational theory. Bulletin of

- World Health Organization, 78 (6), 791-802.; Litvack, J., and Bodart, C. (1993). User fees plus quality equals improved access to health care: Results of a field experiment in Cameroon. Social Science and Medicine, 37 (3), 369-83.
- 44. 1 USD = 156 Nigerian Naira www.xe.com January 13, 2013.
- 45. Gustafsson-Wright, E., Tanović, Z., van der Gaag, J. (2013) The impact of private subsidized health insurance and clinic upgrades on health care utilization and financial protection in rural Nigeri. Amsterdam: Amsterdam Institute for International Development.; Hendriks, M., Wit, F., Akande, T., Kramer, B., Osagbemi, G. K., Tanović, Z., . . . Gustafsson-Wright. (2013). The impact of subsidized health insurance on hypertension in rural Nigeria:a population-based study. Amsterdam: Amsterdam Institute for Global Health and Development.
- 46. Based on two population-based household surveys in Kwara Central: a baseline survey in 2009 and a follow-up survey in 2011.
- 47. Using the difference-in-differences method.
- 48. Using propensity score matching methods.
- 49. This section draws from Health Insurance Fund. (2012). Development Agenda Health Insurance Fund. Amsterdam: The Health Insurance Fund.
- 50. WHO. (2008a). *World health statistics, 2008*. Geneva: World Health Organization.

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