CHECOD CENTRE FOR HEALTH ECONOMICS AND DEVELOPMENT[1]

Economic and Financial Modeling of the Proposed State Health Insurance Schemes (SHIS) in Nigeria

As equitable access to quality health care continues to occupy the policy agendas of state and national government in Nigeria, the single greatest barrier to the health system is the absence of effective institutional arrangements for universal health coverage. The policy makers are saddled with the pressure of how to reconfigure and strengthen the health system to align it with the objectives of UHC, so as to bridge the presently identified gaps and meet the projected health needs of the people of Nigeria over the next decade. Of course, this will require political and financial commitment from the federal as well as state governments through increasing the proportion of government general revenue allocated to health care. Therefore, instituting a system of UHC for Nigeria will require a flexible architecture to deal with inequities in health outcomes, regional and sociocultural diversity, the differential health insurance coverage and health care needs of populations in different locations.

The overall objective of the study is to provide technical support to federal and state governments to undertake economic and financial feasibility assessment and analysis of the proposed State Health Insurance Schemes in Nigeria (SHIS). Specifically, it will model the likely expenditure levels and revenue generation potentials of the proposed SHIS, analyze alternative scenarios for health financing and health insurance, assess the sustainability of the system over a 10-year horizon and, assess the affordability of these options using various streams of resource flows identified in the study. It will also analyze the implications of the options available to states based on their unique characteristics and recommend appropriate initiatives that States might take to expand coverage to people who are now uninsured.

In this exercise, various data collection techniques and sources were employed in estimating the cost and revenues and other financial and economic projections. They include: (i)the primary data from the on-going feasibility study on vulnerable social health insurance scheme in eight states commissioned by NHIS, (ii)the newly commissioned NHA budget and expenditure data collection exercise for 2010 - 2012 currently in progress under the collaborative supervision of NBS and Centre for Health Economics and development but jointly funded by GAVI and FMOH, (iii) the recently concluded community based health insurance schemes across the 36 states and (iv) the 2010 feasibility study of CSO and other social solidarity groups across the country- all commissioned by NHIS. The study team conducted interviews with selected HMO in the states and analyzed relevant state laws and regulations related to health care, health insurance, social protection and human rights. In addition, some public official in several states were interviewed regarding their experience implementing these laws and working with federal agencies.

Findings

Nigeria operates fiscal federalism characterized by extensive intergovernmental fiscal relations and decentralization in the amount of fiscal autonomy and responsibility accorded to subnational

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governments. The federating units are heterogeneous in terms of levels of economic and social developments which raise fundamental questions about varying degree of funding and implementation capacities of states to respond to the establishment of SHIS.

The study presents the costs and revenue implications of insuring the uninsured and the implications of the deficit on total state government revenue and state GDP. In the first scenario, it is assumed that there *will be no government subsidy* for those eligible. The model further assumes that the health facility autonomy increases up to 50% by 2022 with Ministry of Health expenditure declining gradually. The results show that the health insurance fund of the eight states – Rivers, Oyo, Anambra, Sokoto, Benue and Borno - have gaps between health insurance contribution and health insurance spending to insure the uninsured. The results are deficits ranging from approximately 45 billion naira in River to 53 billion naira in Borno. The health insurance spending as a percentage of State GDP varies from 1.25 to 4.09 in 2022 for River and Borno respectively.

In the second scenario, the study presents the projected health insurance spending by the uninsured if fully insured for six states in Nigeria by 2022 with the assumption that government *will provide subsidy* for those eligible. In the model, we assume that 10% of total government revenue is allocated as subsidy to the health insurance contribution to provide assistance to low income employees and full exemption for those who have no ability to pay. This is aimed at making health insurance more affordable for those below minimum wage and accessible for the poorest and unemployed. The results shows that the health insurance fund of the six states – Rivers, Oyo, Anambra, Sokoto, Benue and Borno - have gaps between health insurance contribution and health insurance spending to insure the uninsured. The results are deficits ranging from 20 billion naira in River to 44 billion naira in Borno

The variation in the level of health insurance fund deficit is one of the major policy concerns in sustainability issues of SHIS. While River state will require about 26% of its current health insurance revenue (HIR) to offset the deficit, Borno state will need approximately 128%. Also the deficit as a percentage of the GDP varies from 0.26 to 2.30 in 2022 for River and Borno respectively. This is using economic resources equivalent to 0.26 and 2.31 percent of GDP of the two states in 2022.

The study raises critical questions for analysis. Who is contributing to the program? What is the size of the contribution? What is the size of the expenditure? Who is responsible for the surplus or the shortfall? The model assumes five categories of uninsured - dependants of self-employed/informal sector, self-employed/informal sector, government employees, private sector and other dependants. These population groups are responsible for the health insurance contribution. In River state, the organized private sector with 240,000 enrollees contributed approximately 28 billion naira with estimated health insurance spending of approximately 2.83 billion naira resulting in surplus of about 25 billion naira in the health insurance fund (HIF). The self-employed/informal sector with enrollment of 4.68 million naira contributed 14.03 billion naira with higher health spending of 56 billion naira and a deficit of 42 billion naira.

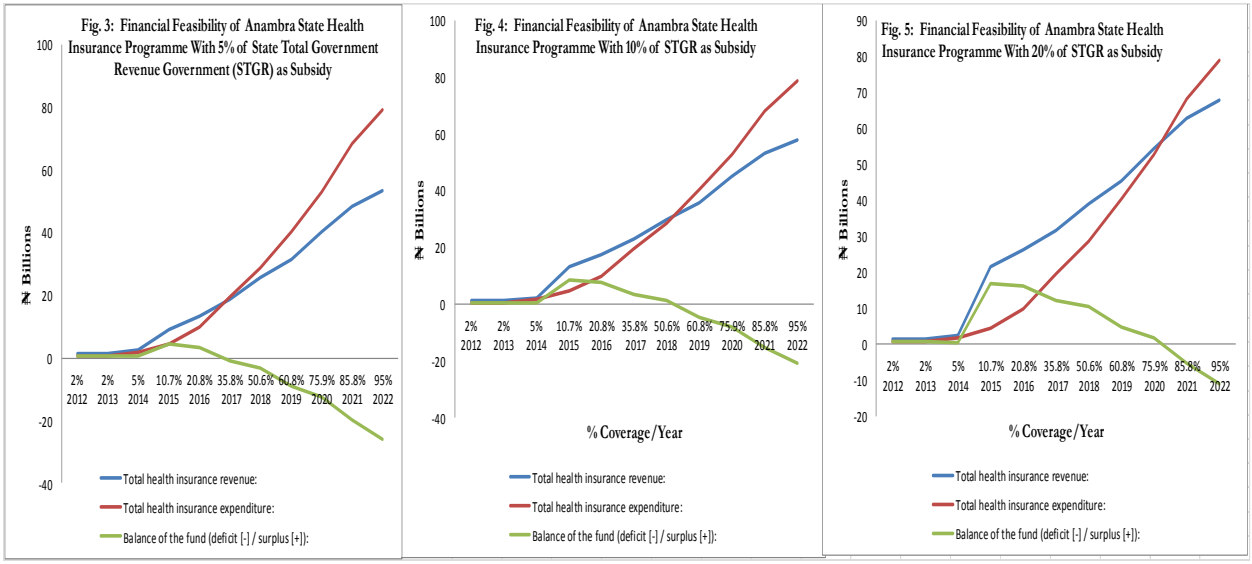
However, the surplus of 29 billion naira from private and government employee contribution will be used in cross subsidization of the informal sector enrollees and other dependants whose contribution is lower than their health insurance spending. The remaining outstanding deficit of 45 billion naira has to be funded as subsidy either through government revenue or as additional contribution from increases in premium of government and private employees. Despite the lower

enrollment in private sector as compared with informal sector, the higher contribution and the surplus from the private sector enrollee are the results of the payment of higher premium compared with low premium of enrollee from informal sector.

Undoubtedly, there will be significant proportion of the current uninsured population that does not have the ability to pay for health insurance coverage of any type. These individuals will not purchase coverage unless they are given full exemption. Within the framework of SHIS, the question, then, is how to design mechanisms such that these individuals will be able to access health care without financial hardship. *Who* should be exempted? *What* is the cost of exemption? *Who* should pay for exemption*? How* much to pay? *What* should be paid for? To ensure equity in coverage, these are part of the core questions that the policy makers may have to address when contemplating the establishment of SHIS. In the study, we assume various thresholds for the population to be exempted over the simulation period in a linear fashion.

How do we address the State Health Insurance Fund Deficit?

Ultimately, states' willingness to expand and sustain health insurance coverage to millions of uninsured will depend on their political, budgetary, economic situations, level of indebtedness and on the availability of federal funds and other resources to help defray the deficit arising from the cost of expansions. However, it is not economically prudent for the state to use unsustainable proportion of its total government revenue given the competing needs from other sectors of the economy. To indicate the magnitude of the predicaments of over using the State total government revenue (STGR), Figure 3,4 and 5 show that at 5%, 10% and 20% utilization thresholds of STGR for subsidy, Anambra state will incur deficit at 35%(late 2061), 55%(2018) and 80%(2022) coverage/year respectively.



One of the options available for underwriting the deficits is to consider the opportunity provided in the NHB for states to benefit from the BHCPF through counterpart arrangement. For any State to qualify for a block grant, such State shall contribute not less than 25 per cent of the total cost of projects. It is important to note that the resource landscape of health financing will undergo a major transformation in the next few months. Firstly the New National health bill has recently been

passed by the Senate and there are indications that it will be signed after its passage by the House of Representatives. Assuming the bill finally becomes an Act, the Basic Health Care Provision Fund (BHCPF) may give the States considerable flexibility to expand coverage through health system development, subsidies and full exemptions to the unemployed, vulnerable group and people whose income is too low to even cover the subsistence needs.

Our findings suggest that the greatest challenge facing policymakers is not finding substantial new sources of revenue to cover the insufficiency in the health insurance fund account, but in combining the diverse funding streams to fund the SHIS. Given multiplicity of stakeholders in the health sector, there is no single approach to expanding health insurance coverage that would sufficiently address the problem or gain the support of all the different healthcare constituencies. Therefore the strategy is to adopt a multi-pronged approach that would pool fund from employers in the private sector, formal sector employers, self-employed in the informal sector, individuals with out-of-pocket spending, other innovative financing and donors who are currently funding various health systems (malaria, immunization, HIV/AIDS etc.).

Lessons from the study provided valuable insights on possible options for establishing health insurance schemes in the states. If policy makers wish to expand insurance coverage for the children, unemployed and elderly and improve affordability of health care for self-employed and low income individuals, the most effective and far reaching approach would be comprehensive health insurance reform that would facilitate the establishment of institutional arrangements for various strands of state health insurance models including state – federal partnership as well as public-private partnership for health insurance coverage. Our analysis found that there are four key options that could be considered: State initiated; multistate collaboration/regional integration; Federal initiated and the Federal-State partnership