Operationalizing universal health coverage in Nigeria through social health insurance

Arnold Ikedichi Okpani^{1,2}, Seye Abimbola^{2,3}

¹London School of Hygiene and Tropical Medicine, London, United Kingdom, ²National Primary Health Care Development Agency, Abuja, Nigeria, ³University of Sydney School of Public Health, Sydney, Australia

ABSTRACT

Nigeria faces challenges that delay progress toward the attainment of the national government's declared goal of universal health coverage (UHC). One such challenge is system-wide inequities resulting from lack of financial protection for the health care needs of the vast majority of Nigerians. Only a small proportion of Nigerians have prepaid health care. In this paper, we draw on existing evidence to suggest steps toward reforming health care financing in Nigeria to achieve UHC through social health insurance. This article sets out to demonstrate that a viable path to UHC through expanding social health insurance exists in Nigeria. We argue that encouraging the states which are semi-autonomous federating units to setup and manage their own insurance schemes presents a unique opportunity for rapidly scaling up prepaid coverage for Nigerians. We show that Nigeria's federal structure which prescribes a sharing of responsibilities for health care among the three tiers of government presents serious challenges for significantly extending social insurance to uncovered groups. We recommend that rather than allowing this governance structure to impair progress toward UHC, it should be leveraged to accelerate the process by supporting the states to establish and manage their own insurance funds while encouraging integration with the National Health Insurance Scheme.

Address for correspondence: Dr. Arnold Ikedichi Okpani, National Primary Health Care Development Agency, Plot 681/682 Port Harcourt Crescent Area 11, Garki, Abuja, Nigeria. E-mail: okpani@yahoo.com

Key words: Health financing, social insurance, universal health coverage

THE NIGERIAN HEALTH SYSTEM

Nigeria is a lower middle-income country with a population of 174 million and a gross domestic product of 522 billion US dollars.¹ Nigeria is a federation of 36 states and a federal capital territory, and there are 774 local government areas (LGAs) across the country. The health care system is largely public sector driven, but there is substantial private sector involvement in the provision of health services. There are more than 34,000 health facilities, 66% of which were owned by the three tiers of government (federal, state, and LGAs).² The secondary and tertiary level health facilities are mostly found in urban areas, whereas rural areas are predominantly served by primary health care (PHC) facilities. The federal government owns many of the tertiary level health facilities which

Access this article online			
Quick Response Code:	Website:		
	www.nigeriamedj.com		
	DOI: 10.4103/0300-1652.170382		

are operated by federal agencies. Each state hosts at least one federal-owned tertiary health facility. Most of the publicly owned secondary health facilities are owned by the states. In recent times, there has been a push toward joint ownership and management of PHC facilities by the states and local governments; the principle of "PHC Under One Roof."³ Private for-profit and private nonprofit health facilities provide primary, secondary, and tertiary care around the country. Preventive health care is largely led by government departments and agencies, but also by nongovernmental organizations. Table 1 presents areas of responsibilities for health care by the different tiers of government.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Okpani AI, Abimbola S. Operationalizing universal health coverage in Nigeria through social health insurance. Niger Med J 2015;56:305-10.

The federal government provides wide ranging support to states and local governments on health program planning and implementation.⁴ Health policy-making and national health care priority setting are the responsibility of the federal government.⁵ The responsibility for setting minimum standards for the training and licensing of health workers also lies with the federal government. Agencies of the Federal Ministry of Health (FMOH) regulate the activities of the different health professional groups and can punish errant practitioners. The FMOH regulates pharmaceuticals and food products through a dedicated agency. The National Health Insurance Scheme (NHIS), an agency of the FMOH, regulates health insurance, as well as accredits Health Maintenance Organizations (HMOs).6 The federal government sets minimum infrastructure and service standards for health facilities, but enforcement is usually done by both federal and state authorities. However, the licensing of each health facility is the responsibility of the state where the facility is located.

Health care in Nigeria is poorly funded. Government expenditure on health as a percentage of total government expenditure was an average of 7.2% from 2008 to 2012.⁷ In the same period, external resources for health as a percentage of total expenditure were 5.3%. With private prepaid plans as a percentage of private expenditure on health at only 3%, private out-of-pocket expenditure as a percentage of total expenditure on health amounted to nearly 70% in 2012.⁷ National revenues from taxes, crude oil exports and other sources are shared among the three tiers of government and each state determines what proportion of its budget to allocate to health according to its priorities. Most states also hold and allocate local government funds according to state priorities. The NHIS provides health insurance coverage for employees of the federal government. HMOs act as purchasers under the NHIS and pay providers by a mix of capitation and fee-for-service; there is also a 10% coinsurance.⁶ Public sector health facilities are not-for-profit, thus the cost to the user of their services is usually less than those of the private sector, but those services are generally perceived to be of poor quality.^{8,9}

Inefficiencies and inequities in the Nigerian health system

Health care resource allocation in Nigeria is skewed in favor of secondary and tertiary care as against primary care and PHC.^{10,11} A direct consequence is that most people bypass PHC facilities to seek primary care at secondary and tertiary facilities.¹¹ This situation is both inefficient and promotes inequities: The cost of primary care provision at secondary and tertiary level is higher (economically inefficient) and poor people, especially in rural areas, cannot access care because it is either not available or too expensive for them (inequity in access and payment).^{12,13} Distribution of the health workforce in Nigeria is also skewed in favor of secondary and tertiary facilities located in urban areas as incentives for health workers to accept rural postings are often nonexistent or poorly applied.¹⁰ The government does very little to control the geographic location of health facilities by both private and public sector owners leading to allocative inefficiency: Overprovision in some areas while other areas are not covered. The absence of social security for vulnerable groups, regressive taxation,

Responsibility	Tie	Tier of government		Comments
	FG	SG	LG	
Health policy making	***	**	_	Whilst the FG leads, SG participate through the National Council on Health
Regulation				
Price	***	**	—	FG determines salary scales. SG can decide to adopt it or not. User fees are determined separately by FG and SG
Quality	***	*	_	FG sets health workers training curricula, licenses practitioners, facilities, and commodities. SG participates in enforcement
Quantity	**	*	—	FG and SG control location of public sector facilities. There is generally very little control over number of practitioners trained
Resource generation	***	**	*	LG lacks the capacity to invest substantially in human capital development and health infrastructure
Planning, budgeting and resource allocation	***	**	*	A substantial share of the FG health budget is spent in providing support to SG and LG
Service provision				
Primary care	*	**	***	Primary care is provided at all levels, but most of the Primary Health Care responsibilities lie with the LG
Secondary care	**	***	_	Secondary care provision also happens at tertiary level facilities
Tertiary care	***	**	_	Many SG own tertiary level facilities
Monitoring and evaluation	***	**	**	All tiers have established M and E mechanisms

Table 1: A simplified illustration of sharing of health care responsibilities by tiers of government in Nigeria

For the purpose of simplicity, this table does not include the roles played by the private sector and donor organizations. The areas of responsibilities used here are adapted from Mills A, and Ranson M. (eds) 2012. ***Mostly responsible; ***Partly responsible; *Minimally responsible; - – Not responsible; FG – Federal government; SG – State government; LG – Local government

poor planning and targeting of public funding for health, corruption, and lack of coordination across the three tiers of government all contribute to health inequities.

Expanding social insurance in Nigeria — the path to universal health coverage

Health insurance arose from the uncertainty and potential for financial ruin of ill health.¹⁴ People tend to be risk averse and are, therefore, willing to forego part of their income to purchase the assurance that they will be protected from catastrophic health expenditure. Health insurance operates on the basis of the willingness of individuals with similar aspirations (protection from the risk of impoverishment by illness) but varying probabilities of ill health to contribute funds (premiums) to a pool. The insurance pool thus spreads the financial risk of ill health among the insured population. The larger the pool, the more sustainable it will be as transaction costs tend to decline and risk is more evenly spread. The benefits of health insurance can be lost if steps are not taken to mitigate causes of insurance market failures such as information asymmetry, moral hazard, cream skimming, and adverse selection by market actors. Health insurance can take the form of private, social, community-based, or tax-based systems.¹⁵ Most countries that have made appreciable progress toward universal health coverage (UHC) implemented some form of government-led health financing reforms.¹⁶ Many of these countries, across all income levels, did so by adopting social health insurance based on the Bismarck model.¹⁷⁻¹⁹

Nigeria has aligned itself with the global push for universal access to quality health care devoid of risk of financial catastrophe.¹⁶ A vital feature of "protection from catastrophic expenditure" is the availability of prepayment for health care costs [Figure 1]. At present, only about 5% of Nigerians have prepaid health care through social and voluntary private insurance.²⁰ Whereas the NHIS and private insurance has gained sufficient traction in providing coverage to federal public sector workers, their families and workers of large private organizations, the large

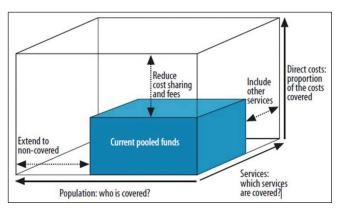


Figure 1: Three-dimensions to consider when moving toward universal coverage WHO 2010

majority of Nigerians are without any form of coverage. This situation has made the aspiration for UHC difficult to attain. State governments have been slow in the uptake of social insurance regulated by NHIS because they feel excluded from the scheme.²¹ Expanding coverage and minimizing out-of-pocket expenditure primarily through greater federal government health care funding is not a realistic proposition given Nigeria's income status, and more important, the autonomy that the constitution gives the states to determine their health care priorities and spending choices.²²

The foregoing presents the rationale for the proposal put forward here for reforming health care financing in Nigeria as a prerequisite for progress toward UHC. We propose a shift away from the federal-led social health insurance scheme toward leveraging the constitutional autonomy enjoyed by the states to extend social insurance coverage to residents of each state.

STATE-LED SOCIAL INSURANCE SCHEME

According to projections from the 2006 census, states in Nigeria range in population from about 2-11 million.²³ Nearly half of the population are in the 15-64 year age range.²⁴ These demographic characteristics present the states with a large pool of people in employment without health insurance. Central to this policy report/recommendation is that states be encouraged to setup and manage their own insurance funds. Specific steps are as follows:

Establishing a state fund

The federal government, through NHIS, should provide technical support to states to setup nonprofit state insurance funds in order to scale up social insurance coverage to public sector workers employed by the states. Support from NHIS will include good actuarial studies and determination of the content of benefit package and cost-effectiveness (including thresholds). The fund should also target the informal sector in a progressive manner through cooperative societies and religious groups.¹⁵ When the scheme is fully operational and adequate sensitization and consultations have been held with the informal sector groups, participation in the scheme can be made a prerequisite for benefitting from other government services. For example, parents may be required to produce evidence of registration with the scheme before their children can be enrolled in schools; or before they can open or continue to operate their bank accounts. When strictly enforced, such tough tactics have proven very effective in Nigeria: This was demonstrated in the recent voter registration exercise and the validation of bank accounts.

Revenue collection and pooling

As in the NHIS, the premiums for state public sector workers will be paid in part by the workers and by their employers

(the state government) based on income. The state-led social insurance scheme (SSIS) shall manage the pooled funds. We recommend that states which are willing to join the federal pool managed by NHIS be encouraged to do so while retaining their role as a purchaser in their respective states. Premiums for informal sector workers may be a fixed sum or determined by other assessment mechanisms. In addition to premiums, the state may need to provide additional funding to the scheme through direct budgetary allocation especially in the early days of the SSIS. To ensure risk sharing and minimize adverse selection, all state and local government workers will be required to join the SSIS regardless of their private health insurance status or income level; the same will also apply to informal sector workers as the fund gains wider acceptance. The NHIS has had limited success in rolling out community-based health insurance (CBHI) in Nigeria.²⁵ This is hardly surprising as evidence from other low and middle-income countries suggest that community health insurance schemes often fail for a variety of reasons, including the small size of the risk pools, adverse selection, and their limited benefit packages.^{15,26} In states where CBHIs have already been established, they will be integrated and absorbed into the SSIS.

Purchasing and payment

The SSIS in each state will purchase services from providers based on its predetermined benefit package. SSIS and providers will negotiate and sign contracts. The NHIS shall also need to provide support in the initial stages to the state funds to ensure that information asymmetry does not skew the contracts in favor of providers. Payment for private sector providers shall be by capitation and fee-for-service as obtains in the NHIS. Payment for public sector providers will be by pay-for-performance. Government will continue to pay basic salaries which will be topped up by payments received by the facility from SSIS. We propose that patients have the freedom to choose providers so as to encourage competition and thereby foster quality improvements. To minimize consumer moral hazard, gatekeeping and coinsurance will be introduced.

- Gatekeeping could be in the form of requiring health care consumers to first seek primary care at their chosen facility before they can be referred as needed
- Coinsurance should be introduced to raise additional funding as well as minimize consumer moral hazard. It should, however, be set at between 10% and 20% so as not to become a significant barrier to care, and so that the administrative costs are not too high as well. The NHIS currently sets it at 10% for medications⁶ [Figure 2].

MITIGATING POTENTIAL CHALLENGES

This proposal suggests an approach to health financing reforms in Nigeria that many stakeholders may be unfamiliar with. Its successful implementation, therefore,

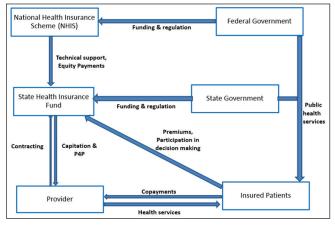


Figure 2: Mapping the proposed social insurance reform Adapted from Mills A, and Ranson M. (eds) 2012

will hinge on creating good understanding of the processes and its merits among all stakeholders at every level. In this section, we address potential risks and criticisms that may impair the acceptability or operationalization of the reforms.

Equity

Concerns may center on the apparent lack of incentives for providers to set up facilities in rural areas (inequity of access). Concerns may also arise regarding the potential exclusion of those unable to pay from the scheme or setting premiums for poorer people (inequity in finance). In addressing these concerns, we put forward the following recommendations:

- The National Health Act 2014 established a basic health fund to be financed by "(a) Federal Government annual grant of not <1% of its Consolidated Revenue Fund; (b) grants by international donor partners; and (c) funds from any other source."²⁷ The act specifies that 50% of the fund shall be administered by NHIS for the provision of "basic minimum of health services to citizens." We recommend that this fund be utilized for subsidy payment to SSIS for the health care consumed by those too poor to afford the premiums or other vulnerable groups. Exclusion from payment may also be applied to specific groups of people
- To encourage providers to setup in underserved rural areas, the capitation paid to private providers domiciled in rural areas shall be set higher than those in urban areas. In addition, the government may also apply tax breaks for them. The government will need to apply appropriate and sufficient incentives to retain public sector health workers in rural areas.

Size of risk pool and sustainability

Criticism of the SSIS may arise from the size of each state's pool which might be viewed as small and capable of supporting a very limited benefit package. It may also be suggested that the system might be too complex to operationalize; and that it will be difficult to get the informal sector to adopt the scheme. These issues can be addressed as follows:

- Historically, many national social insurance schemes that began with numerous small pools had over time coalesced into fewer and more robust schemes.¹⁵ We expect the same to happen in Nigeria with the support of the federal government. Earlier in this proposal, we recommended that states wishing to join the federal pool be encouraged to do so. Neighboring states with historic ties may elect to run a joint scheme; this should also be encouraged and supported. The content of the benefit package will be determined by available funds; it will be expanded as the pool grows. The ultimate objective is to make participation in the scheme compulsory for every resident of each state except those covered by the NHIS.
- In setting up their SSIS, states shall benefit from the experience that NHIS has acquired through the years. The cost of training operators in each state and ongoing support in the early days of the scheme should be borne by NHIS. By starting with public sector workers, states will have the opportunity to refine the SSIS before taking on the informal sector. Granting the SSIS autonomy in each state will mitigate political interference and bureaucratic encumbrances.
- With good leadership, continuous engagement with the informal sector, and demonstration of SSIS benefit to public sector workers, the scheme will gain the support of the informal sector. Lagos state has shown that with good governance, it is not impossible to get the informal sector in Nigeria to pay taxes or accept government programs.²⁸

CONCLUSION

This proposal set out to demonstrate that a viable path to UHC through expanding social health insurance exists in Nigeria. We have shown that Nigeria's federal structure which prescribes a sharing of responsibilities for health care among the three tiers of government presents serious challenges for significantly extending social insurance to uncovered groups. We recommend that rather than allowing this governance structure to impair progress toward UHC, it should be leveraged to accelerate the process by supporting the states to establish and manage their own insurance funds while encouraging integration with the NHIS. We recognize that these are far-reaching and complex recommendations; they will take the time to build and operationalize, but we are certain that they represent the most sustainable path to UHC in Nigeria. Good stewardship and strong political commitment are required to see the reforms through.

Acknowledgments

Okpani Arnold Ikedichi is an MSc student at the London School of Hygiene and Tropical Medicine and is a recipient of the Chevening Scholarship of the United Kingdom Foreign and Commonwealth Office (scholar number: NGCV-2014-1608). Abimbola Seye is a Ph.D candidate at the Sydney School of Public Health. The Ph.D is funded by the Rotary Foundation through a Global Grant Scholarship (grant number GG1412096) and by the Sydney Medical School Foundation through a University of Sydney International Scholarship.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

- 1. The World Bank. Nigeria; 2015. Available from: http://www. data.worldbank.org/country/nigeria. [Last accessed on 2015 Mar 10].
- Federal Ministry of Health Nigeria. A Directory of Health Facilities in Nigeria 2011. Abuja: Federal Ministry of Health; 2013.
- Department for International Development, (DFID) UK. Advocacy for Primary Health Care Reform [GB-1-203654]; 2013. Available from: http://www.devtracker.dfid.gov.uk/ projects/GB-1-203654/documents/. [Last accessed on 2015 Mar 10].
- Federal Ministry of Health Nigeria. National Strategic Health Development Plan (NSHDP) 2010-2015. Abuja: Federal Ministry of Health; 2010. Available from: http:// www.health.gov.ng/doc/NSHDP.pdf. [Last accessed on 2015 Mar 11].
- Federal Ministry of Health Nigeria. Harmonized Country Plan of Priority Interventions 2014-2015. Abuja: Federal Ministry of Health; 2014. Available from: http://www.health.gov.ng/ doc/HCPofP%20I.pdf. [Last accessed on 2015 Mar 11].
- 6. National Health Insurance Scheme Nigeria. Operational Guidelines. Abuja: NHIS; 2012.
- World Health Organization. Global Health Observatory Data Repository. WHO; 2015. Available from: http://www.apps. who.int/gho/data/node.country.country-NGA. [Last accessed on 2015 Mar 09].
- Ogunbekun I, Ogunbekun A, Orobaton N. Private health care in Nigeria: Walking the tightrope. Health Policy Plan 1999;14:174-81.
- Uchendu OC, Ilesanmi OS, Olumide AE. Factors influencing the choice of health care providing facility among workers in a local government secretariat in South Western Nigeria. Ann Ib Postgrad Med 2013;11:87-95.
- Abimbola S, Olanipekun T, Igbokwe U, Negin J, Jan S, Martiniuk A, *et al.* How decentralisation influences the retention of Primary Health Care workers in rural Nigeria. Glob Health Action 2015;8:26616.
- Oyedeji R, Abimbola S. How tertiary hospitals can strengthen Primary Health Care in Nigeria. Niger Med J 2014;55: 519-20.
- 12. Atim C, Bhatnagar A. Toward synergy and collaboration to expand the supply of and strengthen Primary Health Care in Nigeria's federal context, with special reference to Ondo State. Washington, DC: World Bank; 2013.
- Mills A, Ranson M. The design of health systems. In: Merson M, Black R, Mills A, editors. Global Health: Diseases, Programs, Systems and Policies. Sudbury, MA: Jones and Bartlett Learning; 2012.
- 14. Folland S, Goodman A, Stano M. Demand and supply for

health insurance. The Economics of Health and Health Care. 7th ed., Ch. 8. New Jersey: Prentice Hall; 2013.

- Gottret P, Schieber G. Risk pooling mechanisms. Health Financing Revisited. Washington, DC: World Bank; 2006. p. 103-16.
- World Health Organization. The World Health Report: Health Systems Financing – The Path to Universal Coverage. Geneva: World Health Organization; 2010.
- Atun R, Aydin S, Chakraborty S, Sümer S, Aran M, Gürol I, et al. Universal health coverage in Turkey: Enhancement of equity. Lancet 2013;382:65-99.
- Atun R, de Andrade LO, Almeida G, Cotlear D, Dmytraczenko T, Frenz P, *et al.* Health-system reform and universal health coverage in Latin America. Lancet 2015;385: 1230-47.
- Damrongplasit K, Melnick G. Funding, Coverage, and Access Under Thailand's Universal Health Insurance Program: An Update After Ten Years. Applied Health Economics and Health Policy; January 8, 2015.
- Onwujekwe O, Hanson K, Uzochukwu B. Examining inequities in incidence of catastrophic health expenditures on different healthcare services and health facilities in Nigeria. PLoS One 2012;7:e40811.
- Onoka C, Hanson K, Hanefeld J. Towards Universal Coverage: A Policy Analysis of the Development of the National Health Insurance Scheme in Nigeria. Health Policy and Planning;

October 21, 2014.

- 22. Onoka CA, Onwujekwe OE, Uzochukwu BS, Ezumah NN. Promoting universal financial protection: Constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria. Health Res Policy Syst 2013;11:20.
- Geohive. Nigeria: General Information, Administrative Units; 2011. Available from: http://www.geohive.com/cntry/ nigeria.aspx. [Last accessed on 2015 Mar 19].
- Central Intelligence Agency. The World Fact Book. Africa, Nigeria: CIA; 2014. Available from: https://www.cia.gov/ library/publications/the-world-factbook/geos/ni.html. [Last accessed on 2015 Aug 11; Last accessed on 2015 Mar 10].
- 25. Odeyemi IA. Community-based health insurance programmes and the National Health Insurance Scheme of Nigeria: Challenges to uptake and integration. Int J Equity Health 2014;13:20.
- De Allegri M, Sauerborn R, Kouyaté B, Flessa S. Community health insurance in sub-Saharan Africa: What operational difficulties hamper its successful development? Trop Med Int Health 2009;14:586-96.
- Nigeria National Assembly. National Health Act. 2014th ed. Abuja: National Assembly of the Federal Republic of Nigeria; 2014.
- Akintoye IR, Tashie GA. The Effect of Tax Compliance on Economic Growth and Development in Nigeria, West-Africa. Br J Arts Soc Sci 2013;II: p. 222.