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## **PERFORMANCE OF THE HEALTH INSURANCE SCHEME IN NIGERIA:**

### **Assessment of the insured, health care providers and health management organizations in Kaduna State, Nigeria**

Promotionsfach: Public Health  
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In recent years, national health insurance schemes (NHIS) started to dominate health care financing and payments in many low and middle income countries (LMICs). The policy implications and implementation process of these schemes demand attention, but performance evaluation of these schemes has been neglected during the transition period of their implementation. As a result, NHIS in LMICs are confronted with policy debates and challenges due to lack of evidence-based studies accompanying the implementation. Thus, sustainability of these NHIS and expansion towards universal coverage in LMICs appear impaired. Regular monitoring and evaluation are fundamental to ensure that initial objectives of health reforms be achieved and empirical appraisals should be an integral part of the reform process to support appropriate and effective midcourse corrections.

This research aims to provide evidence for informed-policy and decision-making that might enhance the performance of health insurance, health financing policy and health care services, in Nigeria. This research is innovative and interdisciplinary at the cross-cutting areas of health systems, health financing, health economics and health policy. To our knowledge, this is the first in-depth investigation that evaluates performance and methodological stance of health insurance in the context of client satisfaction, responsiveness to health care services, coverage inclusion and optimal-resource-use (ORU) in in Nigeria and possibly LMICs. It focuses on three stakeholder-groups including insured-users (IUs), health care providers (HCPs) and health management organizations (Hmos) and their perceived diversity of experiences in the NHIS.

Primary quantitative data were collected according to recommendations of the NHIS regulatory agency through retrospective cross-sectional surveys between 2008 and 2011 in Kaduna State. The explanatory and outcome variables with their measurements were generated from five study objectives involving the three stakeholder groups. In total, 1076 IUs, 466 HCPs staff from 57 accredited health facilities, and 147 Hmos staff were interviewed in person or by questionnaires to cover “client satisfaction”, “responsiveness” and “coverage”, and “ORU” by the HCPs and the Hmos. Responses were analyzed by statistical models including logistic regression for “client satisfaction”, generalized ordered logit regression for “responsiveness”, additive-ordinary least square regression for “coverage”, logistic regression for “providers’ ORU” and Wilcoxon rank-sum tests for “Hmos’ ORU”. These models are standard statistical models in health research.

The most important findings and conclusions that emerged from this dissertation are:

- a) Clients’ satisfaction with the NHIS health care services was low. General knowledge on health insurance and awareness of the scheme’s activities were found to positively affect IUs’

satisfaction with the NHIS. Thus, timely provision of relevant information to the IUs during implementation of health insurance and periodic detection of IUs characteristics that influence their satisfaction can assist in guiding policy and decision-making to detect promising pathways to improve the health insurance scheme.

- b) The assessment of the responsiveness to health care services within the NHIS was found useful to evaluate its implementation. The domains of “autonomy”, “communication and prompt attention” were identified as crucial to improve the responsiveness of healthcare services. Reform strategies should center on these weakly contented domains taking into account those characteristics of IUs which were found to influence their perception of responsiveness.
- c) The coverage of users was found to be distressingly low during NHIS implementation in Kaduna. Also, current legal restrictions to include all immediate dependents of IUs caused disagreement of a significant part of the IUs, and the limited enrolment of their family members is a likely obstacle to expansion of the scheme. The restrictions to limit inclusion of immediate family dependents needs to be revised with good sense of fairness and equity in order to expand effective coverage with realistic strategies by the insurance scheme.
- d) Fee-for-service payment in the provider payment mechanism and claims review in the monitoring mechanism performed weakly according to the HCPs perspectives. Among several HCPs characteristics which significantly influenced ORU, it seems relevant that providers with fewer IUs encountered particular difficulties with reimbursement. The capitation payment per IU should be revised to conform to economic circumstances. Periodic identification of HCPs characteristics that influence ORU can assist in guiding policy and implementation of reforms.
- e) Furthermore, according to the Hmos perspectives, the fee-for-service payment method and regular inspection performed weakly. The limited satisfaction of Hmos with the scheme’s ORU raises concern to create ineffectiveness and hinder implementation. To enable long-term success in scaling up the expansion of the NHIS and to offset high risks, it appears necessary to adapt strategies of provider payment mechanisms and active monitoring mechanisms by the NHIS regulatory agency to the perceived needs of stakeholders.

This dissertation substantiates that investigating the experiences of stakeholders can assist in identifying areas for policy adjustment and reforms during the transition period of NHIS implementation. Although findings from this study are specifically expected to serve as a thrust to steer implementation and policy decision making for NHIS reforms in Kaduna State and hopefully Nigeria at large, they might be considered also for other LMICs. This study may hopefully promote awareness for the need of evidence-informed policy making. The results could assist policy-makers and the regulatory agencies to adequately address the challenges faced by the stakeholders and NHIS scheme. Reform strategies should improve the weakly performing indicators and consider the factors influencing the stakeholders’ experiences with the insurance scheme. Lastly, one of the major achievements of this dissertation is that some evidence from this study has already assisted in aligning evidence-based policy and decision making in improving the implementation of NHIS in Nigeria.

For the research community we hope to contribute to understanding of the performance of health insurance schemes and offer a methodological design. It might be adapted to contexts in other countries for performance evaluation by implementers, policy and decision makers who are responsible to implement health insurance schemes. LMICs might benefit from common or comparable standards for measuring and monitoring performance of health insurance schemes and to guide midcourse policy corrections.