Research Implementation Plan Nigeria

How can different stakeholders support and assist the primary health care workforce and successful team functioning in Nigeria?

Background and significance

Primary health care PHC) is the backbone of health systems, and its successful implementation is essential for improving health outcomes.¹ Since Alma Ata in 1978,² the implementation of PHC has improved health outcomes in developed, low- and middle-income countries (LMIC).³⁻⁵ Effective PHC system is essential for achieving the Sustainable Development Goals (SDGs).⁶⁷

- ^{1.} PHC is the cornerstone of the Nigerian health policy and represents the system that provides first point of contact care to most Nigerians with the health system.⁷⁸
- ^{2.} Recent assessment of the Nigerian PHC using the World Bank supported primary health care performance indicators (PHCPI) conceptual framework revealed serious underperformance of the system including low output and comparatively higher morbidity and mortality.⁹ Effective PHC performance is hindered by lack of financial access to services, segmented supply chains, weak infrastructure and poor health workers' performance. Poor health workers' performance include providers' incompetence in handling clinical problems, negative attitude to work and poor supervision.¹⁰

A scoping review of intervention designs and methods that addressed support and performance improvement for PHC workers in LMICs identified a number of approaches including supervision and supportive supervision; mentoring; use of tools and aids; quality improvement methods; and coaching as successful interventions that have improved team functioning and overall performance of the PHC workers and systems.¹⁰ The use of these interventions can be facilitated by different PHC stakeholders including policy makers, health system managers, health workforce organisations, academic institutions and communities. Apart from poorly carried out supervision in the Nigerian PHC system, little is known about the use of such proven interventions⁵ to support and assist PHC workforce and PHC team functioning in Nigeria. This knowledge to practice gap needs to be further explored in the Nigerian PHC system.

It is essential to first assess the views, perceptions and experiences of PHC stakeholders including PHC teams on these proven approaches so as to identify the gaps in knowledge to practice as well as possible barriers to their use. Secondly, evaluate the functional status of PHC teams. Thirdly, bring the information together to construct a common status of PHC stakeholders' perceptions, experiences and expectations with support and assistance to PHC workforce and team functioning in Nigeria. Finally, incorporate such information into a Supportive Supervisory Module (SSM) and deploy the Module to improve the performance of the PHC system.

This Study shall address the research question with the different PHC stakeholders. First, policy makers at the Federal Ministry of Health (FMoH), Parliamentary Health Committee, National Primary Health Care Development Agency (NPHCDA); National Community Health Registration Board; the Nursing and Midwifery Council of Nigeria; State Primary Healthcare Boards (SPHCBs); State Ministry of Health; Local Government Services Commissions. Secondly, training institutions comprising Universities Community Health

officers' Training programmes, and Colleges/Schools of Health Technology. Thirdly, PHC Service delivery units including; Local Government PHC management committees; PHC Health Centre staff and community representatives on PHC Centre Management Committees.

This study is aimed at examining the perceptions and experiences as well as identifying knowledge to practice gaps of PHC stakeholders including PHC teams with the use of PHC workers' performance improvement proven approaches in the Nigeria PHC system. Once these gaps are identified, the perception and support structure will be examined to identify how best to bridge these gaps. The information generated from the perceptions, experiences and knowledge to practice gap, will be incorporated into a Supportive Supervisory Module (SSM) and tested to ascertain its effectiveness in improving PHC team functioning and performance. The final study report is expected to stimulate stakeholders' interest to use the research findings to provide support to PHC workforce and PHC team functioning in Nigeria and contribute to the Country's attainment of the SDGs.

Specific objectives

- 1. To assess perceptions, knowledge to practice gap and examine experiences of PHC stakeholders with the use of proven approaches for support and assistance for PHC workforce and PHC team functioning in Nigeria.
- 2. To incorporate the information generated from perceptions and knowledge to practice gap assessment into a Family Physician led Supportive Supervisory Module (FP-SSM) and test its effectiveness for supportive supervision in Eight PHC centres in two of the 36 States in Nigeria.

Study Design

This study will use mixed research methodology. First, are the qualitative methods (expert interviews, focus group discussion, climate team inventory) to explore and examine experiences and interpret perceptions of PHC stakeholders with the use of proven approaches for support and assistance for PHC workforce and PHC team functioning in Nigeria. Second, is the use of a quasi-experimental design to test the use of a family physician-led Supportive Supervision Module and patient care support to improve PHC team functioning and Provider competency in clinical case management at the PHC centre level.

Targeted Region

The study will be conducted in Nigeria in West-Africa. Nigeria has 186 million people from 250 ethnic groups spread over 36 states and organized into six geopolitical zones.^{11 12} A zone has an average of six states with a state having a population of about 2.5million people.¹³ The study will take place in two states selected as one state from zones in the Northern part and another state from zones in the Southern part of the Country. .The states are Plateau (North-Central) and Oyo (South-West).

Target population

This study will focus on public sector PHC stakeholders and workforce as its target populations. PHC stakeholders will be those whose mandate as prescribed by the Government of Nigeria includes making policies, training or regulations relating to the PHC system. These stakeholders are grouped as top policy-making; training; regulation; service delivery and community representatives (community representatives on PHC Centres management committees), because the roles and experiences within such subgroups will be similar. The PHC workforce are health workforce as defined by the WHO, who are working in the PHC system in Nigeria.¹⁴ PHC teams are health workforce working in PHC centres and in teams as defined by the National Primary Health Care Development Agency (NPHCDA).⁶

Methodology

Procedure

i. To address the first objective, sixteen in-person interviews consisting of four interviews per each category of stakeholders will be conducted comprising Policy-making, training, regulation and community level groups in each of the two states. The most senior persons in rank in each group at the time of interview will be recruited. A total of 32 interviews will be conducted in the 2 states. There will be 7 additional interviews at the Federal Agencies situated at the Federal Capital Territory (FCT) to capture the views and experiences of top level policy-making stakeholders in the country. A focus group discussion (FGD) will be held with LGA-PHC supervisory team (9 persons/team). Six FGDs consisting of 3 in an urban and 3 in a rural based LGAs per State. Six Team Climate Inventory (TCI) exercises will be administered on PHC centres teams (11 persons/team) consisting of 3 urban and 3 rural based PHC centre teams in each of the two States. A total of 12 FGDs and 12 TCIs exercises will be carried out in the Study.

An interview guide (tool) will be developed and used to collect data. The guide will be structured to collect information on views, perceptions, barriers and experiences of the stakeholders with respect to common strategies/interventions for support of PHC workers identified in the scoping review.¹¹ The FGD guide will also address similar issues but tailored to the leadership at LGA/PHC supervisory level.

These qualitative data will be analysed using the thematic analysis method. The responses from these tools will be transcribed verbatim from audio recording. As the health personnel have at least college level English, the interviews will be conducted in English. After familiarity with the data has been achieved, the responses will be coded to summarise the essential messages. Similar responses will be grouped to form themes, initially at the semantic level and subsequently at a latent level to identify and examine underlying ideas. The themes will be reviewed in the context of the objectives while ensuring overlap is avoided. The themes will be defined and a relationship between these will be sought to create a thematic map, leading to a discussion of the findings. The relevant findings will be incorporated into a supportive supervision module for supervision of PHC teams at PHC centres by Family Physicians to address the second objective. A scan of existing supportive supervision tools/module for PHC health workers will be carried out to identify those components that could be incorporated into the adapted Physician-led Supportive supervisory module. The findings will also be disseminated to advocate for support and assistance for PHC workforce.

ii. To address the second objective, the adapted Service Delivery Module from Objective 1 will be pilot-tested and used for supportive supervision (SS) of PHC teams at PHC centres by family physicians. This is new because such a tool does not exit. Six PHC centres will be selected per state and they will be randomly allocated as 4 for intervention and 2 for control in each State. The selection of the PHC centres will strike a balance between urban and rural location. A family medicine training institution shall be identified in each state and a family physician together with trainee residents from the training centre will be selected to provide supportive supervision and patient care support using the Supportive Supervisory Module (SSM) to the intervention PHC centres. The SS visits shall be once every 4 weeks for 52 weeks and its effectiveness will be measured by change in team

functioning (TF) as measured by TCI and providers' competence as measured by Health Sector Service Delivery Indicator module on assessment of providers' knowledge and ability. Information on TF and provider competence will be gathered at the study PHC centres at the beginning of the study, then at 27th week and 52 weeks. The level of TF and the proportion of workers with diagnostic accuracy with an adult and childhood conditions will be compared between the two types of facilities. The acceptability and feasibility of the supervisory tool will be assessed at an FGD session with the team at week 52. The intervention fidelity will be measured using adherence and PHC Centre workers' responsiveness.

Teams and Ethical consideration

The team leader with the two co-leads will constitute the Central Coordinating Team (CCT) and will be responsible for the overall implementation of the study including supervision of sites as shown below under team members. The CCT shall obtain ethical clearance and permission to conduct the study from relevant agencies. Interviewees will grant taped-recorded oral consents during interview sessions. Participants for both TCI and FGDs will sign a written consent after perusing an informed consent.

Tentative research team members

The study will be carried out by 2 State teams consisting of 2 researchers and 2 research assistants. The researchers already have responsibilities with tertiary and secondary health care facilities that have been mandated to oversee a PHC and will have support to supervise these PHCs. There will be a 3rd team of two researchers for the National level. There will be a CCT of 3 researchers comprising the Team Leader and 2 Co-leads as shown below.

- 1. Dr Aboi JK Madaki; MBBS; MA-HMPP; FWACP; University of Jos. Chair_SOFPON Practice Based Research Network. Team leader. Email: wankarani62@gmail.com.
- 2. Dr Akin Moses_MBBS; FMCGP; FWACP; Department of Family Medicine, National Hospital, Abuja. Email: <u>lawakmoses@yahoo.com</u>
- 3. Dr Irabor Achiaka _MBBS; MSc Devt Psych; FWACP; Family Physician trainer. University College Hospital, Ibadan, Oyo State. <u>achiaka@yahoo.com</u>.

Overview of the workplan

First Year: 1st *quarter* Constitute the Study Coordinating Team, 4 State teams and 1 Federal Capital Territory (FCT) team. Identify and designate a Survey Coordinating Office. Notify study states, LGAs and PHC centres. Assemble survey tools and orientate the zonal teams on the use of survey instruments. Pilot test the instruments.

 2^{nd} quarter Secure National ethical clearance and permission from states selected for the study. Carry out pre-study visitation to selected sites to assess readiness to participate in the study. Produce and deploy survey instruments. Produce a study sites visitation schedule. $3^{rd} - 4^{th}$ quarters_ Mobilise study teams to sites and conduct first phase of the study.

Second Year: 1^{st} quarter Analyse results of first objectives and produce reports targeting different levels of stakeholders. Also incorporate relevant finding into a supportive supervision module. 2^{nd} quarter Disseminate research findings through workshops at the National Level and through appropriate Zonal level fora. Produce a manuscript for publications at a peer-reviewed journal. Pilot-test the use of supportive supervisory module.

Third Year: 2^{rd} *quarter Second Year* to 2^{rd} *quarter Third year*. Commence and complete intervention study using the adapted supportive supervisory module to conduct visits to PHC centres. 3^{rd} - 4^{th} *quarters* analyse and disseminate results through a National Workshop to

stakeholders. Mount advocacy to relevant agencies (NPHCDA; SPHCBs; FMoH; Faculties of Family Medicine) for the incorporation of the strategy into the PHC system.

Barriers to implementation

- 1. *Security challenges* Addressing insecurity in States with frequent episodes of farmersherdsmen clashes, kidnapping and Boko Haram attacks is essential for the success of the study. Caution be exercise and high risk LGAs will be avoided at the selection level.
- 2. *Absenteeism* Absence from work by LGA workers is high and may affect the schedule of research activities. However, the teams shall start scheduling of visits early enough to secure timely appointments and keep the study on track.
- 3. *Lack of essential supplies* such as drugs and basic clinic equipment will affect improvement in providers' clinical competence. Selection of PHC centres will also consider availability of basic clinic equipment and availability of drugs.
- 4. *Lack of cooperation from PHC clinic staff* may impede the realisation of the objectives of the interventional arm of the study. Efforts will be made to educate all parties on the potential of this supervisory strategy and carry everybody along.

Dissemination of results

Results addressing the 1st objective of the study shall be disseminated in the 1st quarter of the second year to stakeholders at a National Workshop. This workshop will educate policy makers on the finding of study and advocate for the implementation of its recommendations. Reports will be prepared in an easy to digest form and distributed to stakeholders. Results addressing the 2nd objective will be disseminated in the 3rd – 4th quarters of the 3rd year at a National Workshop. High level advocacy visits to the relevant agencies will be carried out to advocate for funding for broader testing and the final Country-wide implementation of the results. The ultimate will be to get Family Physicians to lead supervision of PHC teams at the PHC centre level with funding from the government for such integration.

References

- 3. Friedberg MW, Hussey PS, Schneider EC. Primary care: a critical review of the evidence on quality and costs of health care. Health Aff (Millwood) 2010; 29(5):766-772.
- 4. Macinko J, Starfield B, Shi L. The contribution of Primary care systems to health outcomes within organization for Economic Cooperation and Development (OECD) countries, 1970-1998. Health Serv Res 2003; 38(3): 831-865
- 5. Macinko J, Starfied B, Erinosho T. The Impact of Primary Healthcare on population health in low and middle-income countries. J Amb Care Manage 2009;32(2): 150-171.
- 6. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low and middle-income countries: a critical review of major primary care initiatives. Soc Sci Med 2010; 70(6): 904-911.
- 7. Balabanova D, Mills A, Conteh L, Akkazieva B, Banteyerga H, Dash U et al. Good health at low cost 25 years on: lessons for the future of health system strengthening. The Lancet 2013;381 (9883):2118-2133.
- Pettigrew LM, De Maeseneer J, Anderson M-IP, Essuman A. Kidd MR, Haines A. Primary Health Care and the Sustainable Development Goals. The Lancet 2015; 386(10009)2119-2121.
- 9. National Primary Health Care Development Agency: Minimum Standards for Primary Health Care in Nigeria. <u>https://medbox.org>download</u>. Accessed 11-May 2018.

- 10. The World Bank. Primary Health Care Performance Indicators (PHCPI). 2015. http://phcperformaceinitiative.org/ accessed 9 May 2018.
- Kress DH, Su Y, Wang H. Assessment of Primary Health Care System in Nigeria: Using the Primary Health Care Performance Indicator Conceptual Framework. Health System & Reform 2016; 2(4): 302-318. <u>https://doi.org/10.1080/23288604.2016.1234861</u>. Accessed 10 May 2018.
- Adogu PO 2014; Egenti BN, Ubajaka C, Onwasigwe C, Nnebue CC. Utilisation of Maternal Health Services in Urban and Rural Communities in Anambra State, Nigeria. 2014; Nig J Med 23: 61-69.
- Vasan A, Mabey DC, Chaudhri S, Epstein HAB, Lawn SD. Support and Performance improvement for primary health care workers in Low and Middle-income countries: a scoping review of intervention design and methods. Health Policy and Planning 2017; 32: 437-452.
- 14. Nigeria National Population Commission and ORC Macro. National Demographic and Household Survey 2004. <u>https://www.prb.org>thenewsthenigeria/</u> accessed 11 May 2018.
- 15. Nigeria Fact Sheet. <u>Https://photos.state.gov.>nga>pdfs</u>. Accessed 14 May 2018.
- Nigeria Population 2016. <u>https://Worldpopulationreview.com>countries</u>. Accessed 10-May 2018.
- 17. World Health Organization (WHO). Health Systems: Health Workforce. WHO: Geneva, 2015.
- 18. Strasser R, Kam SM, Regalado SM. Rural Health Care Access and Policy in Developing Countries. Annual Rev Public Health 2016; 37:395-412.
- 19. Reid S, Mash B. African Primary Care Research: Qualitative interviewing in primary care. Afr J Prm Health Care Fam Med 2014; 6(1), Art. #632, 6 pages. http://dx.doi.org/10.4102/phcfm.v6i1.632.