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Adapting the World Health Organization's Service Availability and Readiness Assessment Tool (SARA) for Management and Leadership Training Programs, Adamawa State, Nigeria

By

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An abstract of

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in Global Health 2019

Executive Summary

Adapting the World Health Organization's Service Availability and Readiness Assessment Tool (SARA) for Management and Leadership Training Programs, Adamawa State, Nigeria

By Nchedochukwu Jennifer Ezeokoli

Management and leadership competency is necessary for efficient and effective primary healthcare (PHC). Nigeria has committed to improve PHC by focusing on managing authorities called Officers-In-Charge. The Management and Leadership Training Program (M<P) deployed in Sierra Leone is proposed to be piloted in Nigeria to assist PHC revitalization. As part of the M<P, the World Health Organization's (WHO) Service Availability and Readiness Assessment tool (SARA) gauges areas of improvement and promotes use of quantitative data for decision-making. SARA assesses health services availability, delivery, and quality especially around essential healthcare packages, medicines, and services. The goals of this project were two-fold: 1) determine the context-specific factors required to adapt SARA for a cultural and contextappropriate assessment; and 2) develop collection instruments for data management, collection, and analyses to "digitize" SARA via a tablet or smartphone with data stored for centralized data management. Data from in-depth key informant interviews and stakeholder meetings were used to revise a previously condensed SARA, leading to a successfully adapted SARA for the Nigerian PHC context and a "digitized" version available through an online survey platform and server. Strong data management in healthcare can inform policies, data-based decision making, and strengthen the health information system. Development of the digitized, adapted SARA tool provided a system for data collection, validation, maintenance, and analyses. Further efforts should be made to pilot the survey within the context of the program for refinement to develop a long-term evaluation plan.

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Acronyms and Important Terms

ASPHCDA - Adamawa State Primary Health Care Development Agency

CHO - Community Health Officer

CHEW - Community Health Extension Worker

ESP - Essential Healthcare Service Package

FMOH - Federal Ministry of Health

FCT - Federal Capital Territory

HMIS - Health Management Information System

HSS - Health Systems Strengthening

LGA - Local Government Authority

LGAs - Local Government Areas

M&E - Monitoring and Evaluation

MDG - Millennium Development Goals

M<P - Management and Leadership Training Program

NHFS - National Health Facility Survey

NPHCDA - National Primary Health Care Development Agency

NSHDP - National Strategic Health Development Plan

OIC - Officer-In-Charge

PHC - Primary Health Care

QI - Quality Improvement

SARA - Service Availability and Readiness Assessment

SDGs- Sustainable Development Goals

SMOH - State Ministry of Health

SPHCDA - State Primary Health Care Development Agency

WHO - World Health Organization

WHS - Ward Health System

WMHCP - Ward Minimum Health Care Package

The Ward Health System and the Ward Minimum Healthcare Package

The Ward Health System (WHS) represents the current national strategic thrust for the delivery of PHC services in Nigeria and utilizes the electoral ward as the basic operational unit for PHC service delivery.

The Ward Minimum Health Care Package (WMHCP) was developed to address the current Ward Health System strategy to deliver PHC services, and consists of a set of health interventions and services that address health and health-related problems that would result in substantial health gains at low cost to government and its partners.

Introduction

Building stronger management and leadership capacity is critical to strengthen healthcare systems. This is even more vital in complex health systems of low- and middle-income countries where maximization of scarce resources is paramount to achieve positive health outcomes (Bradley *et* al., 2015). The Community Health Officer (CHO) Management and Leadership program (M<P) was developed in 2016 and established in Sierra Leone to increase leadership behavior among primary health care (PHC) managers. In this program, managers utilize an adapted health facility assessment called the Service Availability and Readiness Assessment (SARA) tool created by the World Health Organization (WHO) in 2011 and collects pertinent data necessary for strengthen health systems and specific health services.

Nigeria is a federal republic in West Africa consisting of three branches of government (executive, legislative, judicial); 36 states and the Federal Capital Territory (FCT) are divided into 774 Local Government Areas (LGA). These are further subdivided into 10,000 wards (Federal, n.d.). With a population of 195.8 million and estimated 2017 Gross Domestic Product (GDP) of 376 billion USD (The World Bank, n.d.), Nigeria is the most populous country in Africa with the largest economy on the continent. Despite the size of economy, Nigeria struggles to meet the health demands of its population, in part due to a weak health system with strained resources and poor access to quality healthcare.

The Nigerian Federal Ministry of Health (FMOH) manages healthcare service delivery via the National Primary Health Care Development Agency (NPHCDA) which regulates

primary healthcare (PHC) through primary healthcare centers (PHCs) at the local government level. The current main objective of the FMOH is to revitalize PHCs toward achieving Universal Healthcare Coverage (Primary, n.d.). One key component of the revitalization plan is to increase the skills, competency, and capacity of healthcare professionals. The Nigeria FMOH, in close collaboration with Emory University Rollins School of Public Health, World Health Organization, eHealth Africa, and the National Primary Health Care Development Agency (NPHCDA) seek to reproduce the Management and Leadership Training Program (M<P) for Nigeria to build capacity for health workers and customize the SARA tool to monitor PHCs.

To improve functionality, quality, utilization, and effectiveness of PHCs there is a need to assess service availability and readiness and create a data management system to capture data for analysis to inform PHC strengthening activities. Establishing baseline information will improve upon health system strengthening (HSS) solutions. Data collected and tools created will help development of an impact evaluation of SARA.

Project Purpose and Objectives

This project will support the M<P in Nigeria through the adaptation of the WHO SARA tool.

Project objectives include:

- 1. Customize the WHO SARA tool for Nigeria PHCs
- 2. Develop a data management system to collect and analyze SARA data

Significance

In Sierra Leone, the M<P demonstrated efficient utilization of resources, improved grassroots coordination, reduced patient wait times, and improved relationships within the community (M<P, 2016). To translate it to Nigeria, the SARA tool must be adapted to track the supply and quality of healthcare services and the capacity of health facilities workers to deliver available services. The customization of SARA is important to ensure quality of services and increased efficiency and competence of PHC health workers and provide a management system. Adapting SARA and developing a data management system will provide key insights into service delivery and availability needed to revitalize PHCs and support strengthening public health workforce capacity.

Literature Review

Sustainable Development Goals

September 2015 the United Nations General Assembly adopted the new development agenda "Transforming our World: the 2030 Agenda for Sustainable Development" under which the Sustainable Development Goals (SDGs) were defined. The SDGs integrate three dimensions of sustainable development: economic, social, and environmental and were designed based on the belief that eradicating poverty and inequality, creating inclusive economic growth and preserving the planet are intimately linked to each other and to health (UNDP, n.d.).

There are 17 goals, 169 targets, and 229 indicators. The health-specific SDG is Goal 3: Ensure healthy lives and promote well-being for all at all ages (UNDP, n.d.). The quality, provision, availability, and management of healthcare services comprise a crucial part of keeping people healthy. The literature shows that the success rate of evidence-based interventions relies on a capable and effective public health workforce in equal measure to traditional public health activities (Willacy *et* al., 2016). Thus, a country with a strong public health management workforce will be better equipped to achieve SDG 3.

Health systems strengthening and the current need for management and leadership in low-resource settings

A health system consists of all organizations, people, and actions whose primary intent is to promote, restore, or maintain health. The WHO Health System Framework is built upon a system of six building blocks: 1. Health Service Delivery; 2. Workforce; 3.

Information; 4. Medication Products, Vaccines, Technologies; 5. Financing; and 6. Leadership/Governance (WHO, 2007). These provide insight into access, coverage, quality, and safety of a health system. Therefore, good health services – where there is a strong service delivery and a well-performing workforce – are necessary to increase the level and quality of healthcare.

Strengthening service delivery is crucial to the achievement of the health-related Millennium Development Goals (MDGs), which include the delivery of interventions to reduce child mortality, maternal mortality, and the burden of HIV/AIDS, tuberculosis, and malaria (United Nations, 2015). Good health services are defined that deliver effective, safe, good quality personal and non-personal care to those who need it, when needed, with minimum waste (WHO, 2017). One of the challenges in delivering adequate healthcare services is based in leadership and management capabilities and skills. Services – be they prevention, treatment, or rehabilitation – rely on adequately trained staff to ensure service availability and readiness that ultimately informs patient quality and care. Despite an increased emphasis on health systems strengthening in global health, competencies in management and leadership remain largely overlooked (Bradley *et* al., 2015).

Effective and efficient management is an integral component of high performing health systems and essential for success in all of the World Health Organization's (WHO) building blocks for health system strengthening (Longest, 2015). Enhancing management capacity within health systems is particularly needed in low-income

settings "where the efficient use of scarce resources is paramount to attaining health goals" (Bradley *et* al., 2015). Strong management and leadership skills across the health system are intrinsic to having a "well-performing" health workforce that is available, competent, responsive, productive, and serves to improve the distribution and performance of existing health workers (Dieleman, 2006). Additionally, being able to coordinate and monitor services is a necessary competence area for health managers (Daire, 2014).

The literature shows that the success rate of evidence-based interventions relies on a capable and effective public health workforce in equal measure to traditional public health activities (Willacy *et* al., 2016). Thus, a country with a strong public health management workforce will be better equipped to deliver quality patient care and services, one step towards achieving the health-related Millennium Development Goals (MDGs).

Management and Leadership Training Program

In 2016, the Sierra Leone Ministry of Health and Sanitation (MoHS) sought to improve the skills and competencies of all healthcare workers as key components of recovery from the 2014 Ebola virus outbreak. To this end, Emory University, Rollins School of Public Health was asked by the U.S. Center for Disease Control to design, develop, and deploy a cost-effective, sustainable, and locally owned leadership and management training program for community health officers (CHOs). So Emory University, in close collaboration with the Ministry of Health and Sanitation (MoHS), Njala University,

eHealth Africa, and ICAP established an efficient and sustainable CHO Management and Leadership Training Program (M<P) in Sierra Leone.

The M<P is modeled after the Frontline Field Epidemiology Training Program, where 20 participants engage in a 16-week training that guides participants through a series of learning experiences, allowing them to better understand the impact of utilizing new management strategies and leadership behaviors to more effectively deliver health care at peripheral health units (Emory, 2018). The training consists of three separate, 1week workshops of in-class didactic training, reinforced by supervised 4-week projects in the field; ending with a 2-day closing workshop.

The CHO M<P was successfully implemented in Sierra Leone and had the following outcomes of long-term improved quality care and intermediate SARA use by CHOs based on the most recent program evaluation (Emory, 2016). Due to program success, the M<P program has been slated to be adapted for use in several other African countries such as Nigeria. The Nigeria M<P program is modeled after the Sierra Leone one with the additional goal of complementing the capacity building on strengthening the Integrated Disease Surveillance and Response with a view to improve the country's capacity to prevent, detect and respond to public health threats at the primary healthcare (PHC) level (Emory, 2018).

Nigeria M<P targeted participants are officers-in-charge at PHCs. Within the first workshop, participants are introduced to the SARA Tool, practice on SARA, and receive

instructions on the field project assignment where they deploy the tool at their own facilities. SARA data findings are presented during the Workshop Two and the SARA tool is deployed once more during the last workshop once quality improvement field projects are complete. To support assessment and evaluation of essential healthcare services at PHCs, the SARA tool provides baseline service delivery and readiness data.

Apart from the earlier mentioned training topics, eHealth Africa will support this training by providing a 1-day training on a developed SARA tool using ODK on smartphones for data collection. At the conclusion of workshop one, officers-in-charge will be required to visit all PHCs under their supervision and perform the SARA data collection at each facility. The data will be transmitted through the mobile network, analyzed by eHA, and presented at the following Workshop Two training six weeks after the original training. These data will be used to discuss monitoring and supervision, and evidence-based decision making in order to ensure dependent facilities are prepared to deliver quality services to their communities.

Service Availability and Readiness Assessment (SARA) Tool

The original SARA methodology was developed to measure and track progress in health systems strengthening by providing reliable and accurate data for health systems management, monitoring, and evaluation (Service, 2013). SARA was built upon previous health facility assessments, as a rapid assessment tool to assess quality services and delivery. The main assessment tools to create SARA include the WHO service

availability mapping (SAM) tool and the ICF international service provision assessment (SPA) tool (World, n.d.; Demographic, 2012).

SARA is designed as a systematic survey to generate reliable and regular information on service delivery including service availability, such as key human and infrastructure resources and readiness of health facilities to provide basic healthcare interventions in primary healthcare units (Service, 2013). Service availability and readiness assessment can assess data quality by comparing results with aggregated routine health information data at district, provincial, and national levels (Service, 2013). SARA is easily accessible through WHO and used worldwide.

The survey has a core questionnaire pretested in two countries: Sierra Leone and Kenya in 2011 (Service, 2013). Country=level use of SARA requires adapting the core questionnaire to the contextual environment in type of facility and national guidelines. The survey tool has three main areas: service availability; general service readiness; and service-specific readiness. These produce core and trace indicators which serve as key outputs that form the basis of national monitoring to determine whether a facility meets the required conditions to support provision of basic or specific services with a consistent level of quality and quantity (Service, 2013). These indicators provide criteria that health outcomes can be measured against and provide standardized measures to determine progress in health systems and related programs.

The standard core questionnaire must be adapted to reflect the country-specific healthcare system and assessment needs. There are seven areas of the SARA tool that should always be adapted to the country context: types of facilities; managing authority of facilities, national guidelines for services, staffing categories; tuberculosis medicines; HIV/AIDS medicines; and other country-specific medications.

Previous adaptations of SARA outside of the M<P program have been used primarily regarding maternal and newborn health to measure quality and assess the capacity of service delivery. In Zambia, SARA was adapted and administered to in-charges, hospital administrators or maternity ward supervisors at health facilities providing maternal and newborn health services (Tembo, 2017). Additionally, in Tanzania SARA assessed the capacity of the Tanzanian health system to provide integrated communicable disease services and obstetric and newborn care services (Odjijda, 2019; Bintabara, 2019). SARA has also been used to identify areas of interest and specific items within those areas to develop assessments for intensive care units for the care of critically ill patients in lowresource settings (Leligdowicz, 2017). In Nigeria alone, SARA has been used in formal capacities across the NPHCDA and WHO to assess areas of service and health commodities for various programming related to health systems strengthening in primary health, but not related to management and leadership training for managers (Federal, 2016). To date, there is no literature that utilizes SARA to ascertain service delivery and readiness in primary healthcare facilities or in conjunction with improving the management and leadership skills of those in charge.

Abridged CHO SARA

As mentioned previously, the SARA tool must be adapted to specific country-contexts. The core SARA was condensed for use in the M<P program beginning in Sierra Leone. Health facilities were assessed in the Sierra Leone M<P on the following categories: staffing, inpatient and delivery beds, infrastructure, available services, record books, vaccines, and health promotion (M<P, 2016). Benefits of the condensed tool include the comprehensive, short nature which specific targets primary healthcare centers providing the ability for survey users to conduct assessments at multiple facilities in a shorter period compared to the full SARA.

Digitizing Surveys: Open Data Kit Data Collection

The NPHCDA and eHealth Africa expressed desire to build a robust monitoring and evaluation framework for the M<P program that could feed into the national health information system, thus making it necessary to obtain a set of indicators that allow for comparisons across and within M<P cohorts over time. A data management system that would provide seamless collection and integration of survey data and metadata, or information collected pertaining to the context the survey is completed, would be necessary to obtain geographic and temporal variables related to survey completion. Geographic and temporal variables such as location of survey completion and offline storage capabilities are not feasible with solely paper format surveys. Foregoing paper in favor of an online data collection and management requires the adoption of an online platform accessed via the internet and a server accessed via smartphone/tablet. There are several online/electronic deployment options for digital surveys. Open Data Kit tools have revolutionized the ability to collect, manage, and use (in resource limited settings) where the use of paper surveys is not feasible or efficient. The transition from paper to online survey forms housed on a phone app allows for seamless transfer of collected data to a cloud-based system. ODK tools are free and remove the data-entry process thus saving time, paper, and funding for entities conducting survey-based research. There are several competing online survey tools that were compared when deciding which platform to utilize discussed in the methods section.

ODK collect is an open source Android app that allows for survey-based data submissions sent to an online server. ODK collect was chosen amongst other potential app-based survey platforms due to the ability to work well without network connectivity and its compatibility with a wide range of hosted online servers for data collection and visualization (ODK, n.d.).

ONA, a hosted server for data collection and visualization, was chosen due to graphical form builder capability in conjunction with eHealth previous experience with the server for a separate project also involving SARA. The online server functions as a data collection tool which aggregates survey results and provides data management and analysis functionality (Helping, n.d.).

Nigeria: Health System & Primary Health Care

Nigeria is the most populous country in Africa with an estimated population of 192 million in 2017 (The World Bank, n.d.). Although Nigeria has the largest economy in

Africa, indicators of basic health services are low and show underperformance. Literature shows that despite having a "relative abundance of PHCs, reasonable geographic access to PHC, and relatively higher health worker density," Nigeria ranks low on all Primary Health Care Performance indicators (Kress, 2016). The Nigerian health system is saddled with a high burden of diseases (non-communicable and communicable) and maternal and child morbidity and mortality and the status of its populace across the life course continues to be one of the lowest in the world as evidenced by a low life expectancy at birth (WHO, 2018). While Nigeria's health workforce density is above the African country level, Nigeria ranks low on nearly all PHC performance indicators, and ranks poorly in human resource deployment and management (Kress, 2016). The latter two areas have been identified as a key cause of PHC underperformance in Nigeria (Kress, 2016).

PHC as conceptualized by the Ama Ata declaration of 1978 is a grass-roots approach towards universal and equitable health care for all (World Health Organization-United Nations Children Fund, WHO-UNICEF, 1978). PHC usually exists as the first level of care and underpins the health delivery system while addressing the main health problems in the community providing promotive, preventive, curative, and rehabilitative services (Olise, 2007).

The provision of healthcare in Nigeria is the function of the three government tiers: federal, state, and local. PHC is at the local government level, while secondary healthcare is at the state level, and tertiary healthcare at the federal level. PHCs in

Nigeria are the cornerstone of the health system and the foundation for achieving health equity and universal health coverage for citizens in Nigeria (Primary, n.d.). PHCs provide service to group of settlements, neighborhoods, and villages or communities called wards. Each has one PHC (coverage population 2,000 to 5,000) with an average of 10 wards per LGA, a total of 7, 740 total (Federal, nd.). Three types of PHCs are recognized: The Comprehensive Health Centers; the Primary Health Centers, and the Basic Health Clinic (Alenoghena, 2014). The National Primary Health Care Development Agency (NPHCDA) is responsible for providing support for the implementation of the National Health Policy in all matters relating to PHC in Nigeria. At the state level, there are state Primary Health Care Agencies or Boards (SPHCDA) meant to ensure that all PHC services are delivered under one authority and resource management body.

The implementation of PHC is primarily through services carried out at the PHC. These services are specifically related the minimum service components of education concerning prevailing health problems and methods of preventing and controlling them; such as promotion of food supply and proper nutrition; adequate supply of safe water and basic sanitation; maternal and child healthcare, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic and epidemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs.

Minimum Standards for PHC

The aforementioned services form the minimum healthcare package. In 2007, the Ward Minimum Health Care Package was developed to ensure equity in the delivery of healthcare services and improve access to these services across the three levels of the Nigerian healthcare system. The standards set are based on the services/activities expected at PHCs as a means of standardizing PHC facilities and providing a basis for monitoring, comparison, supervision, and regulation (Federal, n.d.). The package provides the minimum standards for managerial systems, PHC support systems, guidelines for emerging PHC services such as mental health, and details the essential drugs, services, furnishings, medical equipment, and personnel each PHC should have in Nigeria (Federal, n.d.).

PHC in Nigeria

In 2017, the Federal Government of Nigeria spearheaded by the Ministry of Health initiated a plan to revitalize PHCs as a solution to achieving universal health coverage (Primary, n.d.). The plan to revitalize PHCs falls in line with recommendations to "reevaluate and take inventory of services rendered at PHC in order to inform policies that would enhance their service quality and readiness" (Frontline, n.d.). Nigeria's healthcare strategy is based upon the 2016 National health policy detailing the course of action necessary for every Nigerian to have access to essential healthcare services. The essential healthcare services constitute the minimum service package for primary healthcare facilities in areas such as non-communicable/communicable disease, nutrition, maternal and child health, sexual and reproductive health, and social determinants of health (food hygiene, water, sanitation).

The NSHDP II which is anchored on the 2016 Nigerian National Health Policy and outlines the strategic priorities of the Nigerian health system, highlights Nigeria's renewed focus on leadership and governance. Leadership and governance are necessary towards attaining health sector outcomes and health system strengthening for the provision of essential healthcare services package (Nigeria, 2018). Since essential services are provided under PHC, the FMoH has called for a revitalization of PHC to provide the components of services to be implemented to increase service availability and accessibility (Nigeria, 2018).

While studies have reported many aspects of the Nigerian healthcare system, no work has been done in the aspect of disease tracking, and management information system techniques to meet the needs of Nigeria in the modern era. Practically, no attention is given to surveillance. Hence, a major shortcoming of the Nigerian healthcare system is the absence of adequate management information to track disease outbreaks, mass chemical poisoning, etc.

As part of the Minister of Health's vision, Emory University Rollins School of Public Health in collaboration with the World Health Organization and eHealth Africa, worked with the Federal Ministry of Health and other in-country partners to develop a capacity building program for middle management (termed, officers-in-charge) on management and leadership. Managers at the Primary Health Care level would participate in this

leadership and a management intervention that could lead towards strengthening service delivery.

Earlier SARA Adaptations

Previous use of SARA within the Nigerian context was conducted in 2016 through the National Health Facility Survey (NHFS) (Federal, n.d.). In addition to SARA, the NFHS built upon the service delivery indicator surveys developed by the World Bank. Although the NFHS included components found in the abridged Sierra Leone M<P (general facility and records) the survey does not comprehensively review service delivery and readiness. Additionally, the survey used a stratified sampling strategy to select 90 facilities from each of the 36 states and the FCT. The M<P is slated to be piloted in Adamawa state for potential extension across all 36 states, in each PHC, providing baseline and post-intervention results to assess service delivery across and within states.

Health Information Management System

Nigeria's Health Information Management System (HIMS) constitutes a vertical hierarchical framework which encompasses all health information data available. Health information data is collected in communities via health facilities kept in data registries used to standardize health data collection across the country. On a monthly basis, data from daily registers from the health facilities are sent to the local government area, Health Management Information System/Monitoring & Evaluation Unit (Department, n.d.). The LGA collates all information from the PHCs which is sent to the appropriate State Ministry of Health PHC department which is collated with other state data to the federal level. The second objective of the HIMS is to "improve the data architecture, indicators, and data sources" which can be directly supported by developing and maintaining the collection of data such as SARA (Department, n.d.).

Methods

This facility-based survey aimed to assess service availability and readiness of PHCs run by an officers-in-charge for the M<P in Nigeria. The state selected as the pilot was Adamawa. Permission to conduct the study was sought from the NPHCDA (FMOH) and Adamawa SPHCDA; PHCs in Adamawa state was obtained from NPHCDA and forwarded to WHO.

There were no formal cutoffs or specific methods for arriving at content decisions for the revised Nigeria SARA, survey platform/server, and other products originating from this effort. All decisions were made on a case-by-case basis with primary consideration given to the literature review and key stakeholder inputs in combination with the personal experience of the author in conducting the pilot testing of the SARA and experience developing the Sierra Leone program.

Conducted between June and August, 2018, we reviewed the methods for survey adaptation, digitization, and implementation of the revised WHO SARA for the Nigeria M<P. Three steps included in the mixed-methods design were completed in the following order: 1. Nigeria-context adaptation of the SARA, 2. Digitization of the Tool, and 3. Piloting of the Tool. These steps were the primary mechanisms used to achieve the project objective and specific aims. Subsections are disaggregated by deliverables to illustrate the separate processes involved in each project objective to conduct the Adamawa survey pilot.

Participants

A total of four PHCs and their designated officers-in-charge (OIC) participated in the pilot between July 2018 and August 2018. Three PHCs (Shagari Health Clinic, Demsawu Yola North PHC, Abubakar Adamu Namtari MCH Clinic Yola North) were in Yola, Adamawa State while the third (Kuchigoro PHC) in Abuja Municipal area of the Garinpa Ward served as the gold standard. The PHCs at Adamawa were selected through a joint WHO-NPHCDA scoping mission meeting with the Adamawa SPHCDA in the capital Yola. The Kuchingoro PHC was chosen through consultation with WHO.

The project consisted of six steps: 1) *MLTP SARA Tool Revision Guide; 2) In-depth key informant interviews; 3) Key Stakeholder Revision Meetings; 4)* Online Survey Platform/Data Management Comparison; and 5) Digitization.

Adaption of SARA to Nigeria

M<P SARA Revision Guide (Appendix A)

A revision guide was created that outlined the sections and components with the associated questions of two examples of the SARA: the condensed M<P Sierra Leone SARA and the SARA deployed through eHealth Africa and NPHCDA. These previous SARA versions were used as a baseline to visualize areas of service availability and readiness need to be assessed and the verbiage used in Nigeria.

In-depth key informant interviews

Key informant interviews were conducted with representatives from NPHCDA, WHO and eHealth Africa. Interviews discussed what services should ideally be available at a standard PHC, current MOH changes to the PHC currently underway, verbiage used in the Nigeria PHC context, previous use of the SARA and specific context in which the tool was utilized. Informants were asked a series of questions about Nigeria-based health system factors (e.g., healthcare delivery system, services available at PHC, endemicity of disease) and go over the SARA instrument items. These interviews were used for the creation of the first draft of the Nigeria SARA customization for the end goal of use as part of the M<P. All interviews were conducted in English and interview notes regarding the content of each interview were generated during the interview sessions and expounded on afterwards. Information across interviews were collated into a third column in the M<P SARA Revision Guide to document how the draft compared to the condensed Sierra Leone tool and the previous NPHCDA tool.

Key Stakeholder Revision Meetings

Utilizing the M<P SARA Tool Revision Guide and the NPHCDA Minimum Standards for PHCs as a reference for available services, two stakeholder meetings were conducted in-person with the health systems strengthening branch of NPHCDA (with input from eHealth). Stakeholder meetings clarified the Nigeria SARA objectives and provided input on the comprehensiveness of the tool to ensure it covered all aspects of service readiness and availability applicable to PHCs for Nigeria as well as achieve agreement on the content of the Nigeria M<P SARA. The first meeting reviewed question content, verbiage, and survey sections. Subsequent this initial meeting, the

Nigeria M<P SARA was revised with changes reviewed by WHO. A second draft was generated from approved changes and reviewed once more by the key stakeholders at a second meeting. All comments and edits were compiled in a tentative final survey draft shared with eHealth Africa team to begin the digitization phase.

Digitization of SARA

With the assistance of eHealth data analytics coordinator, a comparison of five online survey tools were conducted to determine the best online platform and server to host the survey. The following survey platforms/servers were compared: Gather2, ONA, Kobo Toolbox, Survey CTO, and Form Hub across platform/server capabilities around aspects such as cost, data visualization, data analytics, error validation, and skip logic embedded within the varying data management systems. A brief comparison of these online survey tool options and the finalized Nigeria SARA are in Appendix B and C. The ONA online platform ONA (used previously by eHealth to house the NPHCDA mini-SARA and associated data) in conjunction with the ODK+ server to house the survey were chosen.

The ODK+ server was downloaded via smartphone and the ONA online platform was set up. The tentative Nigeria SARA document was transcribed into xls form uploaded to ODK+ by the data analytics coordinator and an online live survey link was generated that would push data collected via ODK+ to be stored on the ONA online platform.

Pilot Testing of SARA

As part of preparation for a potential M<P program in Yola, Adamawa state, chosen in consultation between WHO and NPHCDA, a scoping mission was conducted with the Adamawa State Primary Health Care Development Agency (ASPHCDA). A convenience

sample of three PHCs were chosen to deploy the survey to ensure effectiveness and accuracy of context adaptation and assess the ability of the tool to capture service readiness and availability of essential health services in PHCs in Nigeria. The survey was also conducted at a PHC within the FTC, chosen by the current Nigeria WHO Representative Dr. Wondimagegnehu Alemu, to serve as a gold standard, or benchmark for the best available service availability and readiness for PHCs. PHCs at Adamawa were chosen by the ASPHCDA and the scoping mission team was split between two groups to visit a total of six PHCs. Of the six, two PHCs, Shagari Health Clinic, Demsawu Yola North were chosen with an additional third Abubakar Adamu Namtari MCH Clinic Yola North not originally listed were chosen. At each, the OIC or the delegated manager of the facility were interviewed. Responses were collected via the online survey link. Each time the survey was deployed, feedback regarding issues that arose around survey terminology/verbiage, format, length, and difficulty of regarding were noted. Feedback from was sent to eHealth Africa's data analytics coordinator who made any necessary improvements by revising the xls form and uploading the revised form to ODK+. Changes were reflected in the online survey link once the form was uploaded to ODK+.

Results

Statement of Principle Findings/Interpretation of Results

The primary purpose of this project was to produce a Nigeria-specific version of the SARA survey for use in a potential M<P program targeting PHC officers-in-charge and develop an online data management system that included data collection, storage, and analytic abilities. This was accomplished through a small pilot study which incorporated feedback from stakeholders in the NPHCDA and WHO regarding previous uses of the SARA Tool and appropriate country-specific verbiage and terminology and officer-in-charges regarding their understanding of the SARA Tool items, as well as collaboration from eHealth Africa in Nigeria for the technical adaptation of the tool from paper to online.

Findings

This project resulted in the development of two modules (Service Availability and Service Readiness) broken down into seven sections (staffing, inpatient and observation beds, available services, health promotion, health commodities, infrastructure, and record books) and a section collecting PHC name, location, address, type, and catchment information (population and area). Each module required approximately 45 minutes to an hour to complete. What follows is a brief description of the content and outline of the survey tool. Full visual content of the survey can be found in Appendix B.

A) Module 1: Service Availability

This module included two sections: staffing and inpatient and observation beds. The module begins with questions counting staff and determining their category of work. The inpatient and observation beds section quantified dedicated hospital beds, by type and use.

B) Module 2: Service Readiness

This module included the remaining six sections (infrastructure, available services, ward mechanism, health commodities, record books, and health promotion). Within the infrastructure section are subparts (communication, ambulance/transport, power/electricity supply, water supply, toilet facility, patient privacy, infection prevention and control, and basic equipment) which enumerated the physical structures that kept the facility operating. Following this section, the available services section provided an understanding of the number of patients that use essential health services within the main service areas of the primary healthcare center (maternal, newborn, and child care; family planning, nutrition, immunization, and essential drugs) and whether the facility had particular laboratory tests and essential drugs detailed in the Minimum Standards for Primary Health Care in Nigeria. The next section is the Data Tool/Book which detailed which record registers, or books where official medical records were kept for patients. Section six, Health Commodities listed the main vaccines and the necessary appliances (e.g. freezer, refrigerator) that available at the service site. The next section was not originally in SARA, but created specifically for the PHC context in Nigeria called Ward Mechanism which collected information regarding WDC operations, members, community engagement. The last section, Health Promotion, identified which health promotion posters and activities (community outreach/mobilization) occurred at the facility.

A total of four PHCs (three in Adamawa, one in FCT) were assessed using the Nigeria M<P SARA pilot survey results were obtained from a total of four PHC facilities, three in Adamawa State and one in the Federal Capital Territory area. Adamawa state was found to have a robust PHC system compared to the Gold standard. The SARA took between 1 and a half hours to 4 hours to be completed; the time being completely dependent on the preparedness of the OIC to engage in the SARA without external distractions from the clinic. The PHCs under the Adamawa State PHCDA were evaluated through a state program that linked the amount of funding PHCs received with a quality index score obtained through an assessment of services and clinic conditions. Thus, the PHCs chosen to conduct the SARA were found to be in better condition than the gold standard chosen in the FCT.

Discussion, Recommendations, and Conclusions

The primary purpose of this project was to customize the WHO SARA questionnaire to the Nigerian context for use in PHCs for the M<P and develop a data management system to collect and analyze SARA data to ensure continued program success. Additionally, the project provided a starting point towards creating an assessment tool that can be deployed across PHCs as a means of assessing and monitoring service delivery, essential medicines, and the provision of primary health services to support the MoH goal of revitalizing and strengthening PHCs and understanding service access. Through providing consistent, reliable data understanding where health facilities are tying service availability and readiness into the national health information management system. Additionally, the SARA provides facilities at the community level the opportunity to collect data for quality improvement.

Strengths

The input of key organizations involved in PHC in Nigeria, resulted in a product that was comprehensive and reflected the unique PHC of Nigeria. This was accomplished through a small pilot study which incorporated feedback from officers-in-charge of the PHC regarding their understanding of SARA. Surveys and questionnaires required several rounds of revision conducted through piloting and validating the questionnaire. SARA was deployed in the same context and same state that the M<P was to be slated in, thus providing the necessary core indicators used to develop and implement a monitoring and evaluation plan for the modules. The survey required no additional maintenance outside of updates or revisions based on further research and study. The survey should be
revised after the first few cycles of the M<P and recalibrated for use in contexts outside of the PHC in Nigeria.

Weaknesses

This project had limitations in that SARA was piloted in few PHCs and has yet to be implemented among the target audience. The pilot occurred with managers engaged in PHCs but not in the M<P. In a similar vein, aspects of the SARA tool regarding service availability and readiness are currently being assessed via a quarterly quality review program implemented by Adamawa State resulting in some duplication of efforts with regards to training. Another limitation is that SARA has not had a longitudinal monitoring and evaluation plan developed from the core indicators found. Additionally, the questionnaire was piloted the first week of August which proved to be an inconvenient time to do so due to the timeframe of record keeping of PHC register books. Throughout the month, clinic registers are kept via register book and were handwritten. At the end of each month, all entries in the register book which detail and enumerate clinic data were totaled. Conducting a pilot early in the month, did not provide enough time for the officers-in-charge to calculate the end of the month totals from the data registers which slowed down the data collection process for SARA. Lastly, the SARA data collection had to be rushed towards the end of one assessment due to a security alert in the area.

Recommendations

Although the WHO SARA was customized to the Nigeria context and piloted, an evaluation has not been implemented to assess the quality of the questionnaire and responses to the questionnaire in conjunction with the M<P. Next steps should include a focus group discussion with the first cohort of the Nigeria M<P program to determine strengths and limitations of the questionnaire from the participant point of view. Other recommendations to streamline the administration of SARA include having a team of 2-3 staff members from the clinic present to assist with gathering necessary data registers for data or ensuring that these data registers are collated before the visit, providing clear local examples in the verbiage of the tool to give context (i.e. OPD = general register), and clarifying the availability of health promotions at clinics that are available but are not showcased on the walls.

PHC and Data Management: Possible Implications

The WHO SARA has been used in limited contexts, mostly regarding maternal health. While ensuring service availability and readiness is a main component of health system strengthening, the tool has not been used in a PHC setting nor in relation to health information systems. Utilizing the data collected through the across PHCs and similar settings can inform health system strengthening decisions on a national level and thus can be utilized as a basis towards data-based decision and policy making towards improving primary health for all.

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Appendix A: M<P SARA Revision Guide

Ezeokoli 1

MLTP SARA Tool Revision Guide

Nchedo Ezeokoli (Emory University, Rollins School of Public Health 2019)

SIERRA LEONE (MLTP)	A LEONE (MLTP) NIGERIA (NPHCDA) NIGERIA (MLTP)		WHO (SARA)		
MODULE 1: SERVICE AVAILABILITY					
S1- STAFFING	STAFF SUPPORT & DATA TOOL S1- STAFFING		This area only lists the section the		
I have a few questions on staffing for this facility. Please tell me how many staff with each of the following qualifications are currently assigned to, employed by, or seconded to this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification. Give number with and without pin, staff, and on-duty numbers. • Community Health Officer • Environmental Health officer • ECHN Midwife • SECHN/CHA • Dispenser • EDCU Assistant • Laboratory Technician • Laboratory Assistant • MCH Aids • Community Health Assistant • Nursing Aids	Number of doctors in the health facility Number of Community Health Officer (CHO) Number of trained nurses/midwives in the health facility Enter the number of CHEWs in the health facility Enter the number of JCHEWs in the health facility Enter the number of trained dedicated pharmacy technician in the health facility Enter the number of trained dedicated records/data officer in the health facility Enter the number of trained dedicated laboratory technician in the health facility Do you have the contact detail of LIO linked to facility? Phone Number of LIO	I have a few questions on staffing for this facility. Please tell me how many staff with each of the following qualifications are currently assigned to, employed by, or seconded to this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification. Give number with and without pin, staff, and on-duty numbers. • Doctor • CHOs- Community Health Officer • CHEWs- Community Health Extension Workers • JCHEWs- Junior Community Health Extension Workers • Midwives • Pharmacy Technician • Medical records/data officer • Laboratory Technician • Laboratory Technician • Laboratory assistant • Environmental Health officer • Nursing Attendants • Cleaners • Security	An <u>underlined</u> section/subsection were new developed areas Sierra Leone added but were not in the original WHO tool Crossed out sections/subsections were areas that Sierra Leone SARA took out of their tool S1- STAFFING		

Medical statistical Assistant Porsters/Cleanser Security	Do you have the contact detail of your linked referral facility? What is the name of the Referral Eacility?		
S2- INPATIENT/OUTPATIENT BEDS	Enter the phone number of the linked referral facility Is ANC register available and seen in this health facility? Is delivery register available and seen in this health facility? Is Health Facility Monthly Summary register available and seen in this health facility? Is Vaccine Utilization (vm1a) register available and seen in this health facility? Is Device Utilization (vm1b) register available and seen in this health facility?	INPATIENT AND OBSERVATION BEDS	
Excluding any delivery beds, how many overnight/inpatient beds in total does this facility have, both for adults and children?	INPATIENT AND OBSERVATION BEDS	How many overnight/inpatient beds in total does this facility have?	
How many of those beds are in use?	Number of overnight/inpatient beds in the facility Number of dedicated maternity beds (excluding delivery beds)	How many dedicated maternity beds (excluding delivery beds) does this facility have? How many of those beds are in use?	
			S2- INPATIENT AND OBSERVATIONS BEDS

MODULE 2: SERVICE READINESS				
S3- INFRASTRUCTURE	INFRASTRUCTURE	INFRASTRUCTURE		
Communication	What year was this health facility built	Communication		
Do you have consistence mobile phone coverage in this facility?	or renovated? Take the picture of the facility	Do you have consistence mobile phone coverage in this facility?		
Do you have mobile data connection i.e E, 2G or 3G?	Did the facility receive imprest in the previous month?	Do you have mobile data connection i.e E, 2G or 3G?	Communications	
Does this facility have a functioning cellular telephone or a private mobile phone that is supported by the facility?	State the source of the imprest If other source of imprest, please specify	Does this facility have a functioning computer?	Ambulance/Transport For Emergencies Power Supply <u>Water Supply</u>	
Ambulance/Transport	Is there a dedicated labour room with	Does this facility have a functioning cellular telephone or a private mobile	Toilet Facility Basic Client Amenities	
Does this facility have access to functional ambulance or other vehicle for emergency transportation for referral of patients?	a delivery couch? Take a picture of the dedicated labour room	phone that is supported by the facility? Is there access to email or internet within the facility today?	Infection Control Processing of Equipment For Reuse Health Care Waste Management Supervision Basic Equipment	
If yes, how long does it take for an ambulance to arrive here when called upon?	boes the health facility provide 24hrs service?	Ambulance/Transport Does this facility have access to	Intection Control Precautions	
Do patients pay for ambulance services?	What is the average number of hours you receive power supply in a day?	functional ambulance or other vehicle for emergency transportation for referral of patients?	*Crossed out names refer to the subsection that SL SARA did not have or condensed	
Does the facility have an alternative means of transportation system other than the DHMT ambulances?	Number of functional computer Presence of functional ambulance	If yes, how long does it take for an ambulance to arrive here when called upon?	**Underlined subsections are added subsections that were not originally in the WHO SARA Tool	
		Do patients pay for ambulance services?		
		Does the facility have an alternative means of transportation system other than the government provided ambulances?		
	What are the sources of power?			

	If other source of power, please specify	POWER	
Power/Electricity Supply Does your facility have electricity from the following source(s)? • Electricity grid • Solar • Generator • Others		Does your facility have electricity from the following source(s)? • National grid • Solar • Generator If there are other sources of power, please specify.	
If yes, what is the electricity used for in the facility? All electrical appliances Cold chain and/or refrigerators only Others	If yes, what is the electricity used for in the facility? • All electrical appliances • Cold chain and/or refrigerators only • Others		
Water Supply		Water Supply	
What is the most commonly used source of water for the facility during I. Dry season II. Raining season?	Does health facility have a functional borehole or other source of portable water? What are the source(s) of portable water If other source(s) of portable water, please specify	What are the main sources of water supply to this health facility? Government supplied tap water Borehole Well Tank water vendor (tanker truck) Rainwater collection Others If there are other source(s) of portable water please specify.	
=		Do you have water supply within the facility all year round? If no, what is the alternative source?	

Is a water outlet from this source available within 50 meters of the facility? Toilet Facility Is there a toilet (latrine) in functioning condition that is available for general outpatient client use? IF YES: What type of toilet? Infection and Prevention Control How do you dispose of used sharps? • Sharps boxes • Others How does this facility finally dispose of all medical waste (e.g., filled sharps boxes, used gloves etc.)? • Incineration • Burning in a burn pit • Others	Is a water outlet from this source available within 50 meters of the facility?	S3: INFRASTRUCTURE Communications Ambulance/Transport For Emergencies Power Supply <u>Water Supply</u> <u>Toilet Facility</u> Basic Client Amenities Infection Control Processing of Equipment For Reuse Health Care Waste Management Supervision Basic Equipment Infection Control Precautions
Are there hand washing stations present in each of the areas where patients are seen or examined?	Infection Control How do you dispose of used sharps? Safety box Others	

Does the facility have least one box latex gloves	How does this facility finally dispose of all medical waste (e.g., filled sharps boxes, used gloves etc.)? Incineration Burning Burning Burying	
Does this facility have a triage & screening area?	Are there hand washing stations present in each of the areas where	
Does this facility have an isolation area for any communicable disease?	Does the facility have at least one box	
Basic Equipment	of latex gloves for use during client examination?	
	Does this facility have a triage & screening area? Doesn't make sense for PHC? NPHCDA Does this facility have an isolation area for any communicable disease (e.g. TB, measles)? Are the infection control quidelines	
	available at this health facility?	
Please tell me if the following basic equipment and supplies used in the provision of client services are available and functional in this facility today. (available y/n, functional y/n/dk) Adult weighing scale Child weighing scale Measuring tape-height board/stadiometer Thermometer Stethoscope Blood pressure apparatus Cold chain Sharps container	Basic Equipment Please tell me if the following basic equipment and supplies used in the provision of client services are available and functional in this facility today. Adult weighing scale Child weighing scale Child weighing tape-height board/stadiometer Thermometer Stethoscope Blood pressure apparatus	

At least one cold box w/ice pack		PQS(?) Cold chain Safety box At least one cold box w/ice	
S4: AVAILABLE SERVICES	BASIC SERVICE	 Pack Delivery kits (forcens, etc) 	
Does this facility offer routine testing for HIV for all pregnant women?	How many women were newly registered for ANC in the previous month?	 Mama kits (condensed what baby needs, clamps, dress, soaps) 	
Does this facility provide ARV prophylaxis to HIV positive pregnant women for PMTCT	Number of women that received 1st dose IPTp during ANC in the previous month Number of women delivered of babies in the previous month	Intravenous infusion kit RDT (rapid diagnostic test kit) Look at other basic equipment list from NPHCDA minimum standards	
	Number of deliveries with live outcomes in the previous month	NEEDS TO BE REVIEWED (sections only listed (1) Control of Communicable	S4: AVAILABLE SERVICES
	Number of Children receiving Penta3 in the previous month	Diseases (Malaria, STI/HIV/AIDS) (2) Child Survival (3) Maternal and Newborn Care	Essential Drugs Laboratory Tests
	Number of Children receiving Measles in the previous month	(4) Nutrition(5) Non-Communicable DiseasesPrevention	A.Reproductive, Maternal, & Newborn Health Family Planning Services
	Number of PQS cold chain equipment	(6) Health Education and Community Mobilization	Prevention of Mother-to-Child Transmission
	Number of functional PQS cold chain equipment	(7) Mental Health	Obstetric and Newborn Care Services Cesarean Section
	Number of Children tested for malaria parasite with RDT in the previous month	Essential Drugs Are the following following drugs available in this healthcare facility	Child and Adorescent Health Child Immunization Child Preventative and Curative Services Adolescent Health Services
Essential Drugs	clients in previous month	• Ciprofloxacin	C. Communicable Diseases HIV Counselling and Testing
Are the following following drugs available in this healthcare facility today?	Is there an updated Monitoring Chart on the wall of the Health Facility? Take a picture of the Chart	Amoxicillin Ferrous Zinc -ORS Depo provera	HIV Treatment HIV Care and Support Sexually Transmitted Infections Tuberculosis Malaria
Paracetamol	Is there a poster of immunization	Implant	D. Non-Communicable Diseases

 Amoxicillin Ferrous Zinc Depo Implant Pills Albendazole Oxytocin At least one Artemisin therapy 2-11 months 1-5 yrs 	schedule or targeted diseases seen on the wall of the facility on day of visit? Was last outreach done in the month before the survey? Enter date of last outreach Select the date of the last outreach conducted Presence of infection control guidelines	IUCD Pills Albendazole Oxytocin Misoprostol ACTs Sulphadoxine pyrimethamine Folic acid Calcium	<i>E. Surgery</i> Surgical Services Blood Transfusion
Does the facility provide the following laboratory test/RDTs? Malaria HIV Syphilis Tuberculosis Pregnancy Hemoglobin Cholera Typhoid Glucometer with strips	Presence of HCT in the health facility Presence of functional Drug Revolving Fund account	Does the facility provide the following laboratory test/RDTs? Malaria HIV Syphilis Tuberculosis Pregnancy Hemoglobin Cholera Typhoid Sugar in urine Protein in urine How many days of stock-out? LESS THAN 7 DAYS 7 TO 14 DAYS MORE THAN 14 DAYS	<u>SX: RECORD BOOKS</u> S5: DIAGNOSTICS
S5- RECORD BOOKS Does the facility have the following record book? General record book Under five years record book Delivery book Extended Program on Immunization book Antenatal Care Book		S5- RECORD BOOKS Does the facility have the following record book? General record register Under five years record register Delivery register Extended Program on Immunization register	S6: MEDICINES AND COMMODITIES Supply Chain

 Postnatal Book PMTCT Book Family Planning Report Request and Issue Voucher (drug book) 		 Antenatal Care register Postnatal register PMTCT register Family Planning Requestion Issue and Report Voucher (RIRV) Community-based management information register (CHIPS, Outreach, surveys, etc) 	<u>S7: HEALTH PROMOTION</u>
S6- VACCINES	HEALTH COMMODITIES	S6: HEALTH COMMODITIES	
Are any of the following vaccines available in this service site today? SELECT ONE OF EACH VACCINE AT RANDOM AND CHECK IF THE VACCINE IS VALID: 1. VIAL MONITOR (VVM) ON THE VACCINE VIAL HAS NOT TURNED AND 2. THE EXPIRY DATE HAS NOT PASSED • Pentavelent vaccine • BCG vaccine and diluent • Oral Polio Vaccine (OPV) • Pneumococcal vaccine • Hepatitis B vaccine • Rotavirus vaccine • Measles vaccine and diluent • Yellow fever vaccine	All medicines/vaccines listed her should be in MLTP SARA Tool Is BCG readily available for use at the health facility? Is ORT-Zinc pack readily available for use at the health facility? Is oral antibiotics for dysentry readily available for use at the health facility? Is rapid diagnostic test kits for malaria readily available for use at the health facility? Is ACT blister pack readily available for use at the health facility?	Are any of the following vaccines available in this service site today? SELECT ONE OF EACH VACCINE AT RANDOM AND CHECK IF THE VACCINE IS VALID: 1. VIAL MONITOR (VVM) ON THE VACCINE VIAL HAS NOT TURNED AND 2. THE EXPIRY DATE HAS NOT PASSED • Pentavelent vaccine • BCG vaccine and diluent • Oral Polio Vaccine (OPV) • Pneumococcal vaccine • Hepatitis B vaccine • Rotavirus vaccine • Measles vaccine and diluent • Yellow fever vaccine	
Does this facility have a refrigerator available and functioning for the storage of vaccines? • Available and functional • Available and not functional • Available don't know if functional • Not available	Is oral antibiotics for pneumonia readily available for use at the health facility? Is oral antibiotics for neonatal sepsis readily available for use at the health facility?	Medical commodities HIV test kits Disposable gloves Syringes and needles Lancet blade Cotton wool Disinfectant (bleach) Chlorhexidine gel Sample collection bottles	

	Is oxytocin readily available for use at the health facility?	Glucometer with strips	
What type of energy source is used for the vaccine refrigerator? • Electricity (grid or generator) • Solar (with or without batteries)	Is misoprostol readily available for use at the health facility? Is chlorhexidine readily available for use at the health facility?	Does this facility have a refrigerator? Available and functional Available and not functional Not available 	
S7- HEALTH PROMOTION		Does this facility have a freezer? Available and functional Available and not functional Not available 	
Is there health promotion posters pasted in this healthcare facility?	WARD MECHANISM Are you aware of WDC in this facility?	What type of energy source is used for the vaccine refrigerator? • Electricity (grid or generator) • Solar (with or without batteries)	
Is there health promotion posters pasted in this healthcare facility? (numbers) • Malaria • TB • HIV • Cholera • Hand washing • Triage • Immunization • Breast feeding • Ebola screening	Is there a functional WDC? How many calendar month before survey did the last meeting hold? Take a picture of the minutes of the last meeting Do you have phone number of WDC chairperson? Enter phone number of the WDC chairperson? What is the name of the WDC chairperson? Do you have phone number of VHW,CORPs, VCM Provide contact detail of VHW/CORPs/ VCM provided above Give name of at least one VHW, CORPs, VCM Do you have phone number of	WARD MECHANISM Is there a WDC in this ward? Is the WDC functional? If yes, how many times have they met in the last three months? Are the minutes available for the last meeting? Is there a list of WDC members with the phone numbers? Does this ward have a community engaged focal person (chips immunization activities)? Is there a list of Ward Focal Persons (WFP) with phone number pasted on the wall in the facility?	

dedicated traditional/community leader engaged with facility Contact detail of Dedicated Traditional/ Community Leader Engaged with Facility Name of dedicated traditional/community leader engaged with facility Is there a list of Ward Focal Persons (WFP) with phone number pasted on the wall in the facility Do you have contact detail of the Ward focal Person (WFP) linked to Facility? Contact detail of Ward Focal Person (WFP) linked to facility Name of WFP linked to facility	S7- HEALTH PROMOTION Are there health promotion posters pasted in this healthcare facility? (numbers) • Malaria • TB • HIV • Cholera • Hand washing • Immunization • Breast feeding • Lassa fever • Family planning • Key household practices • Nutrition
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Appendix B: Final Nigeria MLTP SARA Tool

NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Name of PHU:

Type of PHU:

Date:

Name of Investigator: Location & Address:

Catchment (Population & Area):

MODULE 1: Service availability					
No.	Question	Result		Comments	
Sectio	n 1: STAFFING				
100	I have a few questions on staffing for this facility. Plea	se tell me how ma	ny staff with each of the	following qualifications are currently assi	gned to,
	employed by, or seconded to this facility. Please count	each staff membe	r only once, on the basis	of the highest technical or professional q	ualification
		Staff #	#On Duty	Number of staff that left in the	
				past year	
11020311			-		
01	Doctor				
02	Community Health Officer (CHO)				
03	Community Health Extension Workers (CHEWs)				
04	Junior Community Health Extension Workers				
	(JCHEWs)				
05	Nurses				
06	Nursing Attendants				
07	Midwives				
08	Pharmacy Technician				
09	Laboratory Technician				
10	Laboratory Assistant				
11	Environmental Health Officer				
12	Medical records/data officer				
13	Cleaners				
14	Security Personnel				

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NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Name of PHU:

Type of PHU: Date:

Name of Investigator:

Locati	ion & Address:	Catchme	nt (Population & Area):
	Total Staff		
Secti	on 2: INPATIENT AND OBSERVATION BEDS		
201	How many overnight/inpatient beds in total does this facility have?		
202	How many dedicated maternity beds (excluding delivery beds) does this facility have?		
203	How many of those beds are in use?		
	М	ODULE 2: Servio	ce Readiness
Secti	on 3: INFRASTRUCTURE		
This	section will focus on questions related to infrastructur	e.	
	Communication		
301	Do you have consistent mobile phone network coverage in this facility?	Yes1 No2	
302	Do you have mobile data connection i.e E, 2G or 3G?	Yes1 No2	If yes, what network do you have?
303	Does this facility have a functioning computer?	Yes1 No2	
304	Does this facility have a functioning cellular telephone or a private mobile phone that is supported by the facility?	Yes1 No2	
305	Is there access to email or internet within the facility today?	Yes1 No2	
	Ambulance/Transport		
306	Does this facility have access to a functional ambulance or other vehicle for emergency transportation for referral of patients?	Yes1 No2	

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Name of PHU:

Type of PHU: Date:

Name of Investigator: Location & Address:

Catchment (Population & Area):

307	If yes, how long does it take for an ambulance to arrive here when called upon?	hours	
308	Do patients pay for ambulance services?	Yes1 No2	
309	Does the facility have an alternative means of transportation system other than government provided ambulances?	Yes1 No2	If yes, list.
	Power/Electricity Supply		
310	Does your facility have electricity from the following source(s)?	National grid1 Solar2 Generator3	
311	If there are other sources of power, please specify		
	If yes, what is the electricity used for in the facility?	All electrical appliances1 Cold chain and/or refrigerators only2 Others3	
	Water Supply		
312	What are the main sources of water to this facility?	Government supplied tap water Borehole Well Tank water vendor (tanker truck) Rainwater collection Others	
313	If there are other source(s) of potable water please specify	Yes1 No2	
314	Do you have a water supply within the facility all year round?	Yes1 No2	

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NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Catchment (Population & Area):

Type of PHU:

Date:

Name of PHU:

Name of Investigator:

Location & Address:

316	Is a water outlet from this source available within 50	Yes1		
	Toilet Facility	140		-
317	Is there a functional toilet in the facility for general client use?	Yes1 No2		
318	IF YES: What type of toilet?	Water closet Pit (VIP) Pit (Non-VIP) Latrine		
	Client Privacy			
319	Is there a room with auditory and visual privacy available for patient consultations?	Yes1 No2		
	Infection Prevention and Control			
320	How do you dispose of used sharps?	Sharps boxes1 Others2		
321	How does this facility dispose of all medical waste (e.g., filled sharps boxes, used gloves etc.)?	Incineration1 Burning2 Burying Others3		
322	Are there hand washing stations present in area where patients are seen or examined?	Yes1, No2		
323	Does the facility have at least one box latex gloves for use during client examination?	Yes1 No2		
324	Does this facility have a waiting area?	Yes1 No2		
325	Does this facility have an isolation area for communicable diseases (e.g. TB, measles)?	Yes1 No2		

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Name of PHU:

Type of PHU: Date:

Name of Investigator: Location & Address:

Catchment (Population & Area):

326	Are the infection control guidelines available at this facility?	Yes1 No2			If yes, should be sight	ted.	
	Basic Equipment						
Please used i	tell me if the following basic equipment and supplies n the provision of client services are available and	Available		Functional	201		
functi there?	onal in this facility today. If available, how many are How many are functional?	Yes	No	Yes	No	DK (introduces ambiguity)	
327	Adult weighing scale	1	2	1	2	3	
328	Child weighing scale	1	2	1	2	3	
329	Measuring tape-height board/stadiometer	1	2	1	2	3	
330	Thermometer	1	2	1	2	3	
331	Stethoscope	1	2	1	2	3	
332	Blood pressure apparatus (may be digital or manual sphygmomanometer with stethoscope)	1	2	1	2	3	
333	Cold chain	1	2	1	2	3	
334	Safety box	1	2	1	2	3	
335	At least one cold box with ice pack	1	2	1	2	3	
336	Delivery kits (forceps, etc)	1	2	1	2	3	
337	Mama kits (clamps, dress, soaps, etc)	1	2	1	2	3	
338	Intravenous infusion kits	1	2	1	2	3	
SECT	ION 4: AVAILABLE SERVICES						
	This section will focus on questions related to ava	ilable services.					
401	Does this facility offer routine testing for HIV for all pregnant women? Does this facility offer HIV counseling for all	Yes1 No2					
	pregnant women						

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NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Catchment (Population & Area):

Type of PHU:

Date:

Name of PHU:

Name of Investigator:

Location & Address:

Does this facility provide ARV prophylaxis to HIV positive pregnant women for PMTCT 402 Yes.....1 No.....2 Maternal, Newborn, and Child Care 403 How many pregnant women delivered at your facility in the past 3 months? Family Planning How many women have been counseled for family planning in the past 3 months? 404 405 How many contraceptives were dispensed in the last 3 3 months? 406 How many injectable contraceptives and IUCD were Nutrition How many children were identified malnourished in 407 the past 3 months? Immunization 408 How many (children, adults, pregnant women) have received routine immunization in the past 3 months? How many STDs have been treated in the past 3 409 months? Essential Drugs Are the following following drugs available in this healthcare facility today? Expiration date for drugs (if yes) 410 Yes No Ciprofloxacin 1 2 Artemisin therapy 1 2 Paracetamol Amoxicillin Ferrous 1 Nigeria MLTP 6

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ocatio	on & Address:	Cat	chment (Population & Area	a):
	Zinc -ORT	1	2	
	Depo provera	1	2	
	Implant	1	2	
	Birth control pills	1	2	
	IUCD	1	2	
	Albendazole	1	2	
	Oxytocin	1	2	
	Misoprostol	1	2	
	ACTs	1	2	
	Sulphadoxine pyrimethamine	1	2	
	Folic acid	1	2	
	Calcium	1	2	
	Chlorhexidine	1	2	
	Oral antibiotics for pneumonia	1	2	
	Oral antibiotics for neonatal sepsis	1	2	
	Oral antibiotics for dysentery seen	1	2	
	Laboratory Tests		÷	
411	Does the facility provide the following laboratory test/RDTs?	Yes	No	
	Malaria	1	2	
	HIV	1	2	
	Syphilis	1	2	
	Tuberculosis	1	2	
	Pregnancy	1	2	
	Hemoglobin	1	2	
	Cholera	1	2	
	Typhoid	1	2	

Type of PHU:

Date:

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Name of PHU:

Name of Investigator:

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NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Type of PHU:

Date:

Name of PHU:

Name of Investigator:

Location & Address:

Catchment (Population & Area): Urinalysis 1 MP 2 FBC 412 How many days of stock-out? Less than 7 days 7 to 14 days More than 14 days SECTION 5: Data Tool/Registers If yes, in the last month how many record entries do you have? 501 Does this facility have the following record registers? Yes No General record register Under Five years record register 1 Delivery register 1 Extended Program on Immunization register Antenatal Care Register 1 2 Post-Natal Register 1 PMTCT Register 2 Family Planning Requisition Issue and Report Voucher (RIRV) 1 2 IDSR 001 IDSR 002 IDSR 003 1 2 If yes, the types will be listed to check which ones are at the facility Community-based Management Information 2 1 Register (CHIPS, Outreach, surveys, etc) Community Census and at Risk Registration 1 2

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Name of PHU:

Type of PHU: Date:

Name of Investigator: Location & Address:

Catchment (Population & Area):

502	When are the last three times data has been collected and sent to the Health facility staff to collate and analyze?						
SECT	TION 6: HEALTH COMMODITIES		1		1		
601	Are any of the following vaccines available in this	OBSERVED AVAIL	ABLE	NOT OBS	ERVED		
	AND THE AND AND AND AND AND CHECK IF THE VACCINE AT RANDOM AND CHECK IF THE VACCINE IS VALID: 1. VIAL MONITOR (VVM) ON THE VACCINE VIAL HAS NOT TURNED AND 2. THE EXPIRY DATE HAS NOT PASSED	VALID	AT LEAST ONE INVALID	REPORTED AVAI	LABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
	Pentavalent vaccine						
	BCG vaccine and diluent						
	Oral Polio Vaccine (OPV)						
	TT vaccine						
	DPT vaccine						
	Pneumococcal vaccine						
	Hepatitis B vaccine						
	Rotavirus vaccine						
	Measles vaccine and diluent						
	Yellow fever vaccine						
602	Does this facility have a refrigerator?	AVAILABLE AND F AVAILABLE AND N NOT AVAILABLE	UNCTIONAL IOT FUNCTIONA 4	1 .L2			
603	Does this facility have a freezer?	AVAILABLE AND F AVAILABLE AND N NOT AVAILABLE	UNCTIONAL IOT FUNCTIONA	1 L2			
604	Does this facility have an incubator?	AVAILABLE AND F	UNCTIONAL	1			
igeria	MLTP 9						N.E. R

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NIGERIA MLTP: Service Availability and Readiness Assessment Tool

Catchment (Population & Area):

Name of PHU:

Type of PHU: Date:

Name of Investigator:

Location & Address:

		AVAILABLE AND NOT FUNCTIONAL2
		NOT AVAILABLE4
605	What type of energy source is used for the vaccine	ELECTRICITY (GRID OR GENERATOR)1
	refrigerator?	SOLAR (WITH OR WITHOUT BATTERIES)2
606	What medical commodities are available at this	HIV Test kits
	facility? Check off	Disposable gloves
		Syringes and needles
		Lancet blade
		Cotton wool
		Disinfectant (bleach)
		Chlorhexidine gel
		Sample collection bottles
		Glucometer with strips
SECT	TION 7: WARD MECHANISM	
701	Is there a WDC in this ward?	Yes1
		No2
702	Is the WDC functional?	Yes1
1000		No2
703	If yes, how many times have they met in the last three	Yes1
10000	months?	No2
704	Are the minutes available for the last meeting?	Yes1
		No2
705	Is there a list of WDC members with phone	Yes1
	numbers?	No2
706	Does this ward have a community engaged focal	Yes1
	person (CHIPS immunization activities)?	No2

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Name of PHU:

Type of PHU: Date:

Name of Investigator: Location & Address:

Catchment (Population & Area):

707	Is there a list of Ward Focal persons (WFP) with	Yes1
	phone number pasted on the wall in the facility?	No2
SECT	TION 8: HEALTH PROMOTION	
801	Are there health promotion posters pasted in this	Yes1
	healthcare facility?	No2
802	Are there health promotion posters pasted in this	Malaria
	healthcare facility (report numbers of each)?	TB
		HIV
		Cholera
		Hand washing
		Immunization
		Breast feeding
		Lassa fever
		Family Planning
		Key household practices
		Nutrition
		Clean cord care
803	What community outreach/mobilization has been done	e Please list the name and the amount of times conducted
	in the past 3 months?	

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Appendix C: Data storage/platform comparison chart

Name	Host	Cost	Privacy	IOS	GPS Capture	Photos	Sharing Permiss	i Online Form Buil	Data Visualizatio Dat	a analysis	Report Creation
Gather2	eHA		>								
ONA	Harvard	free up to 500 submissions a month, 1 private project, and 10 private forms	>		>	>	>	2	>	2	>
Kobo Toolbox	Amazon Web Services	free upto 10,000	2	2	2	2	2	2	2	>	2
Survey CTO	Dobility, Inc	free with monthly engagement 200/month submission, 10 forms	>		2	>	>	2	>		

Appendix D: Digitization	n screenshots of ODK+	(both app and website)
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NN		•
	Nigeria MLTP SARA Tool	
FACILITY INFORMATIO	л	
*State		
Select State		
🔘 Adamawa		
*LGA		
Select LGA		
*Ward		
Select Ward		
*Health Facility Nam	e	
*Health Facility Type		
Primary Health	Centre	
O Health Post		
*		
Name of myestigati	ונ	
*Date		
yyyy-mm-dd	8	
*		
Catchment (Popula	tion & Area)	

latitude (x.y °)	search for place or address Q
longitude (x.y °)	+
altitude (m)	
accuracy (m)	
Û	Map data @ OpenStreetMap contributors
MODULE 1: Service Availability Section 1: STAFFING have a few questions on staffing for thi are currently assigned to, employed by, of basis of the highest technical or professi Number of Doctors	y is facility. Please tell me how many staff with each of the following qualifications or seconded to this facility. Please count each staff member only once, on the ional qualification
MODULE 1: Service Availabilit Section 1: STAFFING I have a few questions on staffing for thi are currently assigned to, employed by, or basis of the highest technical or profession Number of Doctors	y is facility. Please tell me how many staff with each of the following qualifications or seconded to this facility. Please count each staff member only once, on the ional qualification
MODULE 1: Service Availability Section 1: STAFFING I have a few questions on staffing for thi are currently assigned to, employed by, of basis of the highest technical or professi Number of Doctors	y is facility. Please tell me how many staff with each of the following qualifications or seconded to this facility. Please count each staff member only once, on the ional qualification
MODULE 1: Service Availability Section 1: STAFFING I have a few questions on staffing for thi are currently assigned to, employed by, or basis of the highest technical or profession Number of Doctors Number of doctors on duty	y is facility. Please tell me how many staff with each of the following qualifications or seconded to this facility. Please count each staff member only once, on the ional qualification
MODULE 1: Service Availability Section 1: STAFFING I have a few questions on staffing for thi are currently assigned to, employed by, of basis of the highest technical or professi Number of Doctors Number of doctors on duty	y is facility. Please tell me how many staff with each of the following qualifications or seconded to this facility. Please count each staff member only once, on the ional qualification t in the past year

* Number of Community Health Extension Workers (CHEWs) * Number of Community Health Extension Workers (JCHEWs) * Number of Junior Community Health Extension Workers (JCHEWs) * Number of Junior Community Health Extension Workers (CHEW) that left in the past year * Number of Junior Community Health Extension Workers (CHEW) that left in the past year * Number of Nurses * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year		
* Number of Community Health Extension Workers (CHEW) that left in the past year * Number of Junior Community Health Extension Workers (JCHEWS) * Number of Junior Community Health Extension Workers (CHEW) that left in the past year * Number of Nurses * Number of Nurses that left in the past year * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year	*Number	of Community Health Extension Workers (CHEWs)
* Number of Junior Community Health Extension Workers (JCHEWs) * Number of Junior Community Health Extension Workers (CHEW) that left in the past year * Number of Nurses * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year	*Number	of Community Health Extension Workers (CHEW) that left in the past yea
* Number of Junior Community Health Extension Workers (CHEW) that left in the past year * Number of Nurses * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Pharmacy Technician	*Number	of Junior Community Health Extension Workers (JCHEWs)
 * Number of Nurses * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year 	[*] Number past yea	of Junior Community Health Extension Workers (CHEW) that left in the r
 * Number of Nurses that left in the past year * Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Pharmacy Technician 	*Number	of Nurses
* Number of Nursing Attendants * Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Midwives that left in the past year	*Number	of Nurses that left in the past year
* Number of Nursing Attendants that left in the past year * Number of Midwives * Number of Midwives that left in the past year * Number of Midwives that left in the past year * Number of Pharmacy Technician	*Number	of Nursing Attendants
* Number of Midwives * Number of Midwives that left in the past year * Number of Pharmacy Technician	*Number	of Nursing Attendants that left in the past year
* Number of Midwives that left in the past year * Number of Pharmacy Technician	*Number	of Midwives
*Number of Pharmacy Technician	*Number	of Midwives that left in the past year
*	*Number	of Pharmacy Technician
Charles and the second se	*	

*Number o	of Laboratory Technician
*Number o	of Laboratory Technician that left in the past year
*Number o	of Laboratory Assistant
*Number o	of Laboratory Assistant that left in the past year
*Number o	of Environmental Health officer
*Number o	of Environment Health Officer that left in the past year
*Number o	of Medical records/data officer
*Number o	of Medical Record Officer that left in the past year
*Number o	of Cleaners
*Number o	of Cleaners that left in the past year
*Number o	of Security
*Number o	of Security that left in the past year

"How many	y overnight/inpatient beds in total does this facility have?
*How man	y overnight/inpatient beds in use
*How many have?	y dedicated maternity beds (excluding delivery beds) does this facilit
*How man	y dedicated maternity bed in use
MODULE 2	: Service Readiness
Section 3: I	INFRASTRUCTURE
*Do you ha	ve consistence mobile phone coverage in this facility?
* Do you ha	ve consistence mobile phone coverage in this facility?
* Do you ha O Yes O No	ve consistence mobile phone coverage in this facility?
* Do you ha O Yes O No	ve consistence mobile phone coverage in this facility?
* Do you ha Yes No * Do you ha	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G?
* Do you ha Yes No * Do you ha Yes	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G?
* Do you ha Yes No * Do you ha Yes No	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G?
* Do you ha Yes No * Do you ha Yes No * Does this	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer?
* Do you ha Yes No * Do you ha Yes No * Does this Yes	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer?
* Do you ha Yes No * Do you ha Yes No * Does this Yes No	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer?
* Do you ha Yes No * Do you ha Yes No * Does this No * Does this that is sup	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer? facility have a functioning cellular telephone or a private mobile pho oported by the facility?
 Do you ha Yes No Do you ha Yes No * Does this Yes No * Does this Yes No * Does this Yes 	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer? facility have a functioning cellular telephone or a private mobile pho oported by the facility?
 Do you ha Yes No Do you ha Yes No Yes No * Does this Yes No * Does this Yes No * Does this Yes No 	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer? facility have a functioning cellular telephone or a private mobile pho oported by the facility?
 Do you ha Yes No Do you ha Yes No Does this Yes No Does this Yes No Does this Yes No Yes No Sthere ad 	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer? facility have a functioning cellular telephone or a private mobile pho oported by the facility?
 Do you ha Yes No Do you ha Yes No Does this Yes No Does this superior Yes No * Does this superior Yes No * Is there adding the superior Yes Yes 	ve consistence mobile phone coverage in this facility? ve mobile data connection i.e E, 2G or 3G? facility have a functioning computer? facility have a functioning cellular telephone or a private mobile pho oported by the facility?

*Does emer	this facility have access to a functional ambulance or other vehicle for gency transportation for referral of patients?
0	Yes
0	No
*Do pa	atients pay for ambulance services?
0	Yes
0	No
*Does gover	the facility have an alternative means of transportation system other than nment provided ambulances?
0	Yes
0	No
*Does	your facility have electricity from the following source(s)?
	National GRID
	Solar
	Generator
	Other
*What	are the main sources of water to this facility?
	Government supplied tap water
	Borehole
	Well
	Tank water vendor (tanker truck)
	Rainwater collection
	Other
*Do yo	ou have a water supply within the facility all year round?
0	Yes
0	No
*Is a w	ater outlet from this source available within 50 meters of the facility?
0	Yes
0	No
*Is the	ere a functional toilet in the facility for general client use?
0	Yes
Ō	No

*Is there a room with auditory and visual privacy available for patient consultations?
O Yes
O No
*How do you dispose of used sharps?
O Sharps boxes
O Others
*How does this facility dispose of all medical waste (e.g., filled sharps boxes, used gloves etc.)?
O Incinerator
O Burning
O Burying
O Others
*Are there hand washing stations present in area where patients are seen or examined?
O Yes
O No
*Does the facility have at least one box latex gloves for use during client examination?
O Yes
O No
*Does this facility have an isolation area for communicable diseases (e.g. TB, measles)?
O Yes
O No
*Are the infection control guidelines available at this facility?
O Yes
O No
Please tell me if the following basic equipment and supplies used in the provision of client services are available and functional in this facility today.
*Is adult weighing scale available in facility?
O Yes
O No

*Is child weighing scale available in facility?

Ο	Yes
0	No

*Is measuring tape-height board/stadiometer available in facility?

Ο	Yes
0	No

*Is thermometer available in facility?

0	Yes
Ο	No

*Is stethoscope available in facility?

Ο	Yes
0	No

*Is blood pressure apparatus available in facility?

May be digital or manual sphygmomanometer with stethoscope

0	Yes
Ο	No

*Is cold chain available in facility?

\cap	Yes
\sim	

O No

*Is safety box available in facility?

0	Yes
0	No

*At least one cold box with ice pack available in facility?

\frown	Voc
\sim	165

O No

* Is delivery kits (forceps, etc) available?

0	Yes

O No

*Is mama kits (clamps, dress, soaps, etc) available?

- O Yes
- O No

Yes	
O No	
Section 4: /	AVAILABLE SERVICES
This sectio	n will focus on questions related to available services
*Does this	facility offer routine testing for HIV for all pregnant women?
O Yes	
O No	
*Does this	facility offer HIV counselling for all pregnant women?
O Yes	
O No	
O Yes O No	
*	
How many	in warman the second and second at your facility in the mast 2 menths
	y pregnant women delivered at your facility in the past 3 months
	y pregnant women delivered at your facility in the past 3 months
*How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month
*How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month
*How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months?
*How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months?
*How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months?
*How many How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months?
* How many * How many * How many * How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months?
*How many *How many How many How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months? y children were identified malnourished in the past 3 months?
* How many * How many * How many * How many * How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months? y children were identified malnourished in the past 3 months?
* How many * How many * How many * How many * How many * How many * How many	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months? y children were identified malnourished in the past 3 months? y (children, adults, pregnant women) have received routine tion in the past 3 months?
* How many * How many * How many * How many How many mmuniza	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months? y children were identified malnourished in the past 3 months? y (children, adults, pregnant women) have received routine tion in the past 3 months?
* How many * How many * How many * How many * How many * How many immuniza	y pregnant women delivered at your facility in the past 3 months y women have been counseled for family planning in the past 3 month y contraceptives were dispensed in the last 3 months? y injectable contraceptives and IUCD were given in the last 3 months? y children were identified malnourished in the past 3 months? y (children, adults, pregnant women) have received routine tion in the past 3 months?

Are the following following drugs available in this healthcare facility today?
*Ciprofloxacin
O Yes
O No
*Artemisin therapy
O Yes
O No
*Paracetamol
O Yes
O No
*Amoxicillin
O Yes
No
*Ferrous
O Yes
O No
*Zinc-ORT
O Yes
O No
*Depo Provera
O Yes
O No
*Implant
O Yes
No
*Birth control pills
O Yes
O No
*IUCD
O Yes
O No

*Albendazole
O Yes
O No
*Oxytocin
O Yes
O No
*Misoprostol
O Yes
O No
*ACTs
O Yes
O No
*Sulphadoxine pyrimethamine
O Yes
O No
*Folic acid
O Yes
O No
*Calcium
O Yes
O No
*Chlorhexidine
O Yes
O No
*Oral antibiotics for pneumonia
O Yes
O No
*Oral antibiotics for neonatal sepsis
O Yes
O No

* Oral antibiotics for dysentery seen	
O Yes	
O No	
Does the facility provide the following laboratory test/RDTs?	
*Malaria	
O Yes	
O No	
*HIV	
O Yes	
O No	
*Syphilis	
O Yes	
O No	
*Tuberculosis	
O Yes	
O No	
* Pregnancy	
O Yes	
O No	
*Hemoglobin	
O Yes	
O No	
* Cholera	
O Yes	
O No	
*Typhoid	
O Yes	
O No	
*Urinalysis	
O Yes	
O No	

*Measles
O Yes
O No
*FBC
Yes
O No
*How many days of stock-out?
🔘 < 7 days
O 7-14 days
> 14 days
Section 5: RECORD BOOKS
Does this facility have the following record registers?
*General record register (i.e. OPD)
O Yes
O No
*Under 5 Child Years Record Register (i.e. Growth monitoring chart)
*Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes
*Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No
 * Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No * Delivery register
 * Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No * Delivery register Yes
 * Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No * Delivery register Yes No
 *Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register
 * Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No * Delivery register Yes No * Extended Program on Immunization register Yes
 *Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No
 *Under 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No *Antenatal Care Register
 Vinder 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No *Antenatal Care Register Yes
 Vinder 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No *Antenatal Care Register Yes No
 Vinder 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No *Extended Program on Immunization register Yes No *Antenatal Care Register Yes No *Antenatal Care Register Yes No *Post-Natal Register
 Vinder 5 Child Years Record Register (i.e. Growth monitoring chart) Yes No *Delivery register Yes No *Extended Program on Immunization register Yes No *Extended Program on Immunization register Yes No *Antenatal Care Register Yes No *Post-Natal Register Yes Yes
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* Are BCG vaccine and diluent available in this service site today?
Not Observed
0
* Are Oral Polio Vaccine (OPV) available in this service site today?
Not Observed
0
*Are Pneumococcal vaccine available in this service site today? available in this service site today?
Observed Available
Not Observed
*Are Hepatitis B vaccine available in this service site today? available in this service site today?
Observed Available
Not Observed
*Are Rotavirus vaccine available in this service site today? available in this service site today?
Observed Available
Not Observed
*Are Measles vaccine and diluent available in this service site today? available in this service site today?
Observed Available
Not Observed
* Are Yellow fever vaccine available in this service site today? available in this service site today?
Observed Available
Not Observed
*Does this facility have a refrigerator?
 Available and functional
Available and NOT functional
O Not Available
*Does this facility have a freezer?
Available and functional
Available and NOT functional
🔘 Not Available

	National GRID
H	Solar without battery
H	Generator
H	Other
Wha	t medical commodities are available at this facility? Check off
H	
H	Synnges and needles
	Disinfectant (bloach)
븜	
븜	Sample collection bottles
	Glucomator with strips
	diconeter with strips
Secti	on 7: WARD MECHANISM
ls th	ere a WDC in this ward?
0	Yes
0	No
s th	e WDC functional?
0	Yes
0	No
Are t	he minutes available for the last meeting?
0	Yes
Õ	No
	ere a list of WDC members with phone numbers?
is th	Voc
	res
0	No
	No this ward have a community engaged focal person (CHIPS immunization ities)?
Does	No this ward have a community engaged focal person (CHIPS immunization ities)?

* Is there a list of Ward Focal persons (WFP) with phone number pasted on the wall in the facility?
O Yes
O No
Section 8: HEALTH PROMOTION
Are there health promotion posters pasted in this healthcare facility?
*Are there health promotion material for Malaria in this facility?
O Yes
O No
*Are there health promotion material for TB in this facility?
O Yes
O No
*Are there health promotion material for HIV in this facility?
O Yes
O No
*Are there health promotion material for Cholera in this facility?
O Yes
O No
*Are there health promotion material for Hand washing in this facility?
O Yes
O No
*Are there health promotion material for Immunization in this facility?
O Yes
O No
*Are there health promotion material for Breast feeding in this facility?
O Yes
O No
*Are there health promotion material for Lassa fever in this facility?
O Yes
O No
*Are there health promotion material for Family Planning in this facility?
O Yes
O No

No.		
O Yes		
U NO		
*Are there health	promotion material for Lassa fever in this facility?	
O Yes		
O No		
*Are there health	promotion material for Family Planning in this facility?	
O Yes		
O No		
Are there health	promotion material for Key household practices in this facility?	
O Yes		
O No		
* Are there health	promotion material for Nutrition in this facility?	
O Yes		
0		
• No	promotion material for Clean cord care in this facility?	
 No Are there health Yes 	promotion material for Clean cord care in this facility?	
No Are there health Yes No No	promotion material for Clean cord care in this facility?	
 No Are there health Yes No What community 	promotion material for Clean cord care in this facility? y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community 	promotion material for Clean cord care in this facility? y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community 	promotion material for Clean cord care in this facility? y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y promotion material for Clean cord care in this facility? y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y promotion material for Clean cord care in this facility? y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months?	
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 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months? Save as Draft Save Submit	
 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months?	
 No Are there health Yes No What community Comment 	y outreach/mobilization has been done in the past 3 months?	