ASSESSMENT OF USAID/NIGERIA TECHNICAL ASSISTANCE FOR ROUTINE IMMUNIZATION PROGRAM IN BAUCHI AND SOKOTO STATES

July 2018

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Cover Photo: A woman administers a vaccine to an infant in Nigeria. © 2015 eHealth Africa. Courtesy of Photoshare.
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July 2018

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ABSTRACT

This report is an external assessment of the USAID-funded technical assistance (TA) on strengthening routine immunization (RI) programs under a Memorandum of Understanding (MOU) with Bauchi and Sokoto State Governments and the Bill & Melinda Gates and Dangote Foundations. In January-February 2018, an external team assessed the TA provided by the USAID-funded Maternal and Child Survival Program (MCSP)-RI. The team also visited Kaduna and Kano States where RI programming is being developed under a MOU between those States and the Foundations. Multiple qualitative methods were utilized and secondary analyses undertaken for population-based surveys and administrative data to assess changes in key State-level RI outcome indicators. Working collaboratively, key TA approaches used by MCSP included provision of technical advising to oversight structures and technical working groups and assignment of field-based Local Government Area (LGA) consultants to provide TA at the local level. Similarly, collaborative TA was provided by RI partners in Kaduna and Kano but without the use of LGA consultants working specifically on RI service delivery. Areas that need to be strengthened include understanding and addressing barriers to uptake and completion of immunizations and the factors contributing to or causing data quality issues; more use of strategic information for planning and allocation of resources; further development of processes to assure quality services; and development of the continuum of care and prevention systems. The assessment team recommends that USAID invest in specialized TA, giving priority to the development of demand creation strategies, quality assurance/improvement processes, and strategic information systems.
ACKNOWLEDGMENTS

The team would like to acknowledge and thank the governmental and non-governmental partners who are working to strengthen routine immunization (RI) programs for their participation in this assessment. Specifically, we would like to thank: the United States Agency for International Development (USAID) Health, Population and Nutrition team; in particular, the Director, Ms. Heather Smith-Taylor, Dr. Yakubu Cherima, and Dr. Laura McGough for providing program briefs and for their guidance in developing assessment questions and protocol.

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In each State, we also appreciated the time of the State Primary Health Care Development Agency Executive Secretaries and Board Chairmen, the State Emergency Routine Immunization Coordination Center Program Managers Emergency Operation Center Managers, and the Technical Working Group leaders in all four States to review RI program achievements and TA activities.

The Zonal and Local Government Area officials, health facility managers, and RI providers we met also added to our understanding of challenges, the TA provided to them, and improvements to the RI program. The traditional district and ward leaders, traditional barbers, community health workers, and fathers and mothers of children under age two also provided useful information about RI services and improvements.

The team would also like to acknowledge non-MOU partners who contributed to this assessment at national and/or state levels: the U.S. Centers for Disease Control and Prevention (CDC) N-STOP program; the European Union-funded Support Immunization Governance in Nigeria (EU-SIGN) project; the United Nations Children’s Fund (UNICEF); and the World Health Organization (WHO).
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<tbody>
<tr>
<td>AEFI</td>
<td>Adverse events following immunization</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal care</td>
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<tr>
<td>BASECOH</td>
<td>Bauchi State Emirate Council on Health</td>
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<tr>
<td>BCC</td>
<td>Behavior change communication</td>
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<td>BCG</td>
<td>Bacille Calmette-Guerin</td>
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<td>BMGF</td>
<td>Bill &amp; Melinda Gates Foundation</td>
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<td>CCE</td>
<td>Cold chain equipment</td>
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<tr>
<td>CDC</td>
<td>U.S. Centers for Disease Control and Prevention</td>
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<td>CE</td>
<td>Community engagement</td>
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<td>CHAI</td>
<td>Clinton Health Access Initiative</td>
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<td>CHEW</td>
<td>Community Health Extension Worker</td>
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<td>DF</td>
<td>Dangote Foundation</td>
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<tr>
<td>DFID</td>
<td>U.K. Department for International Development</td>
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<tr>
<td>DHIS 2.0</td>
<td>District Health Information System version 2</td>
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<tr>
<td>DHS</td>
<td>Demographic Health Survey</td>
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<tr>
<td>DQA</td>
<td>Data quality assessment</td>
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<tr>
<td>DVD-MT</td>
<td>District Vaccine Data-Management Tool</td>
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<tr>
<td>EOC</td>
<td>Emergency Operations Center</td>
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<tr>
<td>EU-SIGN</td>
<td>European Union-funded Support Immunization Governance in Nigeria</td>
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<tr>
<td>FGD</td>
<td>Focus group discussion</td>
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<td>GH Pro</td>
<td>Global Health Program Cycle Improvement Project</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
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<tr>
<td>HF</td>
<td>Health facility</td>
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<tr>
<td>HHs</td>
<td>Households</td>
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<tr>
<td>HSDF</td>
<td>Health Strategy and Delivery Foundation</td>
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<td>HSS</td>
<td>Health System Strengthening</td>
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<tr>
<td>IC</td>
<td>In-Charge (HF)</td>
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<td>IPC</td>
<td>Interpersonal Communication</td>
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<tr>
<td>IPD</td>
<td>Immunization Plus Day</td>
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<tr>
<td>KII</td>
<td>Key informant interviews</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>LERICC</td>
<td>Local Emergency Routine Immunization Coordination Center</td>
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<tr>
<td>LGA</td>
<td>Local government area</td>
</tr>
<tr>
<td>LQAS</td>
<td>Lot Quality Assurance Sampling</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and child health</td>
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<tr>
<td>MCHIP</td>
<td>Maternal and Child Health Integrated Program</td>
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<tr>
<td>MCSP</td>
<td>Maternal and Child Survival Program</td>
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<td>MICS</td>
<td>Multiple Indicator Cluster Surveys</td>
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<tr>
<td>MNCH2</td>
<td>DFID-funded Maternal, Neonatal, and Child Health Programme</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>N-STOP</td>
<td>CDC N-STOP Project</td>
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<td>NDHS</td>
<td>Nigeria Demographic Health Survey</td>
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<td>NGO</td>
<td>Non-governmental organization</td>
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<td>NICS</td>
<td>National Immunization Coverage Survey</td>
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<td>NPHCDA</td>
<td>National Primary Health Care Development Agency</td>
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<tr>
<td>OCA</td>
<td>Organization capacity assessment</td>
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<tr>
<td>ODK</td>
<td>Open Data Kit</td>
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<tr>
<td>PHC</td>
<td>Primary Health Care</td>
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<tr>
<td>PHCUOR</td>
<td>Primary Health Care Under One Roof</td>
</tr>
<tr>
<td>PRRINN</td>
<td>Norway-funded Partnership for Reviving Routine Immunization in Northern Nigeria</td>
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<tr>
<td>QA</td>
<td>Quality assurance</td>
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<tr>
<td>QI</td>
<td>Quality improvement</td>
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<tr>
<td>REW</td>
<td>Reaching Every Ward</td>
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<tr>
<td>RI</td>
<td>Routine immunization</td>
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<tr>
<td>SERICC</td>
<td>State Emergency Routine Immunization Coordination Center</td>
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<tr>
<td>SM</td>
<td>Social mobilization</td>
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<tr>
<td>SMS</td>
<td>Short message service</td>
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<tr>
<td>SOP</td>
<td>Standard operating procedure</td>
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<tr>
<td>SPHCDA</td>
<td>State Primary Health Care Development Agency</td>
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<tr>
<td>SS</td>
<td>Supportive supervision</td>
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<tr>
<td>TA</td>
<td>Technical assistance</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>TBA</td>
<td>Traditional birth attendant</td>
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<tr>
<td>TSHIP</td>
<td>Targeted States Health Impact Project</td>
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<tr>
<td>TWG</td>
<td>Technical working group</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VCM</td>
<td>Volunteer community mobilizer</td>
</tr>
<tr>
<td>WDC</td>
<td>Ward Development Committee</td>
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<td>WHO</td>
<td>World Health Organization</td>
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EXECUTIVE SUMMARY

The United States Agency for International Development (USAID), in collaboration with the Bill & Melinda Gates Foundation (BMGF) and the Dangote Foundation (DF), is partnering through Memorandum of Understanding (MOU) mechanisms with Bauchi and Sokoto State Governments in Nigeria to improve their routine immunization (RI) programs. USAID is funding the Maternal and Child Survival Program (MCSP)-RI to provide technical assistance (TA) to develop and strengthen RI service delivery, focusing on increased access and utilization; a better prepared workforce; greater community engagement (CE) in promoting RI; and better supportive supervision (SS), monitoring, and data management processes and systems. This TA has been designed and implemented to enhance the monetary investments and TA provided by the two Foundations to strengthen governance, finance, vaccine security and management, accountability, and social mobilization. In four other northern States, including Kaduna and Kano,1 the Foundations have also entered into MOUs to provide both TA and monetary support to the State basket funds.

An external assessment was commissioned by USAID as a learning exercise; the findings will be used to advise future investments and program design.

STUDY QUESTIONS

1. To what extent is USAID’s TA contributing to RI system improvements in Bauchi and Sokoto States? Based on the guiding principles of the MOU, the TA includes the thematic areas of governance/accountability, vaccine security and cold chain, access and utilization of RI services, monitoring and use of data, CE, and RI-related capacity building/training programs.2

2. To what extent is USAID’s support in Bauchi and Sokoto States similar to or different from the support to improve RI systems being provided by other donor partners in the non-USAID TA focus States of Kano and Kaduna?

3. How do RI outcomes in Bauchi and Sokoto compare with Kano and Kaduna?

METHODOLOGY AND LIMITATIONS

Starting in mid-January 2018, a team of external consultants conducted a rapid assessment of RI programming TA in Sokoto, Bauchi, Kano, and Kaduna States, with data collection undertaken within a three-week period. Based on protocol and tools developed with USAID Nigeria, the team used multiple qualitative methods to answer questions 1 and 2, including a desk review of MOU and program documents, key informant interviews (KIIs), observation and review of records during visits to local government areas (LGAs) and health facilities (HFs), consultative meetings, and focus group discussions (FGDs). Program documents and secondary data analysis were reviewed3 and the findings reported in the recent World Health Organization (WHO) Lot Quality Assurance Sampling (LQAS) survey preliminary report.

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1 The other MOU States are Borno and Yobe.
2 The study reviewed MCSP’s provision of TA in each of these MOU thematic areas of the “RI System.” Primarily, the assessment team looked for documented improvements in the thematic areas where MCSP was to focus their TA, namely access and utilization of RI services, SS, and monitoring and use of data, community engagement, and capacity-building and training.
3 Sources included MOU review reports and administrative data from the District Health Information System (DHIS) 2.0, the 2013 Demographic Health Survey (DHS), and 2016-17 Multiple Indicator Cluster Survey (MICS) datasets.
Challenges and/or limitations faced included teasing out the distinct, specific, measurable, and documented MCSP contributions given the collaborative TA approach used by the MOU and other TA partners. Looking at the effectiveness of the TA (e.g., skills transfer, skills application, or system change), unless already measured and documented, was outside the scope of this assessment. Thus, the assessment team primarily relied on asking similar thematic-related questions, analyzing for frequency, and triangulating findings from desk reviews, KIIIs, discussions, and observation. Due to MOU timeframes, population-based survey data were only available for establishing a baseline and comparing subsequent changes in RI outcomes in Bauchi and Kano States. Given concerns the team heard during the assessment about the quality of administrative data from the DHIS 2.0, these data were used with caution to assess the changes in RI systems (i.e., expansion of RI services, immunization coverage, and drop-out rates) in each State. The record-keeping system was not conducive to rapidly gleaning information, thus limiting the review of data using HF immunization registers.

Findings – Question 1. By design, TA to strengthen RI programming in Bauchi and Sokoto States is highly collaborative. MCSP is working alongside State governments, formal MOU partners (BMGF/DF) and their sub-grantees (Solina Health, eHealth, Chigari Foundation), and other partners (U.S. Centers for Disease Control and Prevention [CDC] N-STOP project, United Nations Children’s Fund (UNICEF), and WHO). While not using embedded technical advisors, MCSP has engaged with all levels of the RI program, actively participating on State oversight committees, joining with other RI TA partners to provide technical advising to all of the State technical working groups (TWGs), and providing instruction and coaching to State Primary Health Care Development Agency (SPHCD) State and LGA officials. The efforts of field-based MCSP LGA consultants assigned to each LGA in the States across thematic areas include helping to establish direct funding to HFs, improving data management systems at HFs and the LGA - Primary Health Care (PHC), organizing local RI service microplanning with community involvement, conducting SS visits and providing on-the-job training and coaching for HF RI staff, monitoring vaccine and cold chain management, and orienting traditional leaders and traditional barbers to promote RI.

Government officials at State and LGA level acclaimed the “strong” technical support provided by USAID-funded MCSP state advisors, officers, and LGA consultants working at State, LGA, HF, and community levels. Specific contributions frequently noted by informants included:

1. MCSP TA to initiate the SS concept as the States had previously been using a fault-finding monitoring approach. Officials also expressed their appreciation for MCSP TA to SS TWGs to adapt and roll out national standardized checklists and guidelines.

2. MCSP TA to HFs and LGAs for better planning of RI sessions with financing, facilitating community involvement in the Reaching Every Ward (REW) process, and—though still nascent—the use of planning tools such as a geographic information system (GIS) mapping of settlements.

3. Improved data management capacities; among those highlighted were MCSP’s TA in the areas of data quality assessments; coaching and mentoring at all levels for improved data recording,

Note that there are limitations as the cohorts studied were age 12-23 months at the time of surveys. The baseline timeframe using the NDHS is 2011-2012 and the second reference period using the MICS would have cohorts within the 2014-2016 time period.

Supportive supervision involves working together with staff at HFs to address identified weaknesses or problems. This may include providing on-the-job training, instruction, problem-solving, and/or action planning.
reporting, and analysis of administrative data from the DHIS 2.0; and the introduction of the community-level data registration with line-listing of newborns.

4. MOU partners also noted the work of MCSP LGA consultants to roll out new accountability and monitoring tools (e.g., cold chain maintenance charts and spot checks) and to continually provide instruction and coaching for LGA and HF staff to address lack of skills, deficits or service weakness.

5. MCSP facilitation and support for formal skills-training and on-the-job training for RI providers. MCSP leadership to financially support and facilitate the Basic Guide for RI Providers training was widely praised.

6. MCSP leadership to bring promising practices to the States; for example, use of the community-based newborn registration system. While still in development, this data management system is expected to provide a more reliable denominator for monitoring immunization uptake and data used for tracking unimmunized children.

During field visits to LGAs and HFs, the assessment team observed evidence of the TA being provided by MCSP LGA consultants at HFs in communities and their support for LGA review meetings for RI providers where peer-to-peer learning was fostered.

Specific gaps or weaknesses relating to the collaborative TA as voiced by key informants or observed during visits included:

1. Despite the TA being provided by several TA partners, including MCSP, the quality of the administrative data is still sub-optimal. There is a need for greater understanding of the causal and contributing factors affecting data quality at each level of the data management system, starting with the use of registers and recording practices at HFs.

2. While only a small number of HFs were visited during this assessment, the team noted common problems in their SS logbooks. These included: no defaulter lists, lack of revised micro-plans, and non-functioning cold chain equipment. These appear to be areas where collaborative TA by the MOU and other TA providers is needed to (a) find solutions for these common and/or chronic issues (working closely with State, LGA, and HF managers and relevant TWGs); (b) develop clear standards of practice as needed; and/or (c) ensure that LGA consultants and other SS personnel have the capacity to transfer skills to HF staff or to assist with problem-solving.

3. Review of logbooks at the HFs and LGAs found under-documentation of the coaching, instruction, on-the-job training, and action planning provided during SS visits by MCSP LGA SS personnel, CDC N-STOP, and WHO field staff. Bauchi State MCSP is developing new formats to document this information to track, follow up, and verify how well the SS system is working.

4. More attention is needed to develop LGA capacities to: (a) rationalize SS resources of MCSP and other TA providers to address LGAs or HFs with greater need or less capacity; (b) provide coaching and mentoring as needed to build SS/monitoring skills of LGA personnel during joint visits; (c) develop skills of LGA CE focal persons to oversee and coordinate the various community health and outreach workers in tracking and following up children who are
unimmunized or have not returned for scheduled visits; and (d) develop LGA management skills and accountability measures.  

5. More focus is needed on compiling, triangulating, synthesizing, and using strategic information already being gathered. Examples of various existing sources of information about barriers to immunizations include population-based surveys, LQAS surveys conducted by WHO, community surveys conducted by SS visitors, and other special studies by MCSP or other TA providers.

6. Appreciating the current aim of the MOUs and the MCSP role to improve accessibility and availability of RI services, more focus is needed to improve the quality and gender-responsiveness of these services. There are several gender-related factors that may be causing or contributing to this practice, i.e., women not being allowed to go to the clinic, the schedule and location of the clinic may not be suitable for caregivers, or the transfer of this responsibility to children (similar to gender-related assignment of water fetching to children), etc. These are just a few potentially gender related factors to explore. During FGDs, adult caregivers frequently voiced concerns about fevers and crying after immunizations, in particular the PENTA I injection. Such concerns need to be carefully studied, as they may be an important barrier to uptake of immunizations or an important reason for drop-outs after PENTA I.

Findings – Question 2. In the non-USAID focus States of Kano and Kaduna, the assessment team found collaborative TA, similar to the model followed in the USAID-supported Bauchi and Sokoto States, being provided to oversight committees and TWGs to strengthen RI programs. Additional TA providers we met during the assessment included Clinton Health Access Initiative (CHAI), Maternal, Neonatal, and Child Health Programme (MNCH2 – funded by the UK Department for International Development or DFID), European Union-funded Support Immunization Governance in Nigeria (EU-SIGN), and Health Strategy and Delivery Foundation (HSDF). Cross-fertilization of ideas between MOU partners and other partners in their approaches to improving RI was apparent: BMGF/DF consultants brought ideas from the six MOU states and their contractors (e.g., mentoring for data and the incorporation of adult learning processes into skills-training programs). There are indications of extensive sharing and replication of tools and guidelines by or between the MCSP Bauchi and Sokoto State teams. In addition, the TA has built on previous work of DFID and the Norway-funded Partnership for Reviving Routine Immunization in Northern Nigeria (PRRINN) and promising practices from the USAID-funded Targeted States Health Impact Project (TSHIP) and Maternal and Child Health Integrated Program (MCHIP) experiences with community newborn registration processes.

A major programming difference, noted in Kano and Kaduna, as compared to the USAID-focused States, is the shift of the public-private partnership MOUs from vertical RI program to integrated health system strengthening. Unlike the “deep engagement” approach using LGA consultants in Bauchi and Sokoto States, the MOU partners worked less directly with the LGAs and HFs in Kano and Kaduna, placing more demands on CDC N-STOP and WHO field staff to focus on RI in addition to the TA they provide to the LGAs and HFs in disease surveillance and polio/measles eradication.

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6 Procedures that bypass the LGAs were noted, e.g., distributing RI funds directly from State to LGA SS personal bank accounts and directly to health facilities for outreach activities.
A best practice observed in Kano and Kaduna is MNCH2’s use of organization capacity assessments (OCAs) at State and LGA levels – using findings to plan for needed TA, and using the same tools to document system changes.

TA providers in the four States shared key lessons learned, including the importance of (a) high-level State government and MOU partner interaction and involvement from initial assessment through to continual monitoring and critical review of the TA being provided and the progress being made; and (b) TA providers’ constant awareness of the fine line between capacity-filling and capacity-building and manage this as they work with governmental agencies.

Findings – Question 3. MOU review reports, using administrative data from the DHIS 2.0, track the expansion of RI services in all four States. Kano has made remarkable progress, expanding by 40 percent in the last six years. Bauchi State is expected to meet or surpass their targets. Both Sokoto (at 69 percent) and Kaduna (at 71 percent) will need to work hard to meet their targets by the end of 2018.

The 2013 Nigeria Demographic Health Survey (NDHS) and the Nigeria Multiple Indicator Cluster Surveys (MICS) 2016-17 were used to comparatively analyze change in RI outcomes in Bauchi and Kano States. Key findings included: (a) both uptake of Bacille Calmette-Guerin (BCG) and PENTA I increased in both States, but was only statistically significant in Bauchi; (b) Bauchi’s reduction in drop-out rates was not statistically significant (p-value=0.4339), while Kano had a statistically significant increased drop-out rate (p-value<0.0001); and (c) Bauchi findings show a statistically significant increase in full immunization (p-value of 0.0018), while in Kano the full immunization rate fell with weak statistical significance (p-value of 0.0545).

The MICS survey found low immunization card retention in all four States. Kaduna State was performing best (38 percent), Bauchi and Kano were similar (19.7 and 19.6 percent, respectively), and Sokoto was performing poorly as only 5.2 percent of the households with immunized children 12-23 months old had cards. Comparing the 2013 NDHS and 2016 MICS datasets, there was a significant increase in immunization card retention in Kano, while the increase in Bauchi State was not statistically significant.

Analysis of the MICS data found no statistically significant sex differences relating to uptake or drop-out in the four States.

The 2017 LQAS survey findings alert the States and TA partners to LGAs most challenged with low uptake of immunizations and should drive further studies, including the diagnosis of barriers affecting supply and/or demand in the different geographical areas. If a standard methodology is used, LQAS survey trend data will help to inform the LGAs and States on their RI program effectiveness.

Cross-cutting issues. Several cross-cutting issues impact the development and/or utilization of RI services, including:

- The parallel polio and measles immunization campaigns are seen as undermining efforts to create demand for and utilization of regular fixed or outreach RI services and improved immunization card retention.
- The need for national guidance and resources to be more user-centered and efficient. This includes clarifying protocols and standard operating procedures to catch up older unimmunized
children; improving paper-based immunization record systems; and improving on the packaging of vaccines, several of which use mega-dose vials.\(^7\)

- State public health and health care systems are in the midst of reform. The SPHCDA in the four States noted that they face major human resource challenges, including poor management capacities throughout the system, low worker performance, and poor distribution of the workforce. These basic issues affect the design of TA approaches as well as the results, with informants noting the need to find the “right person” to train and the need for good supervision and staff management.

- Governance and accountability issues highlighted during the assessment included challenges to reducing falsification of reports and efforts to develop and expand verification mechanisms; the desire for performance-based awards and sanctions; the need for better coordination of partners providing TA; and the need for evidence-based rationalizing of resources.

- The visits to the four States showed this to be an opportune time to improve RI programming as governments have acknowledged their low immunization rates\(^8\) and demonstrated their commitment to fund and improve their RI programs.

- Among Commissioners for Health, SPHCDA management, and partners there is widespread awareness of the need to sustain and expand RI services, with recognition that focusing on supply alone will not solve the critical public health issue of low child immunization coverage. Demand creation was frequently mentioned as a major unmet need.

**CONCLUSIONS**

Significant achievements have been recognized during the MOU time frames in the four States, including establishment of RI basket funds and direct funding to HFs to conduct outreach RI services; development of harmonized RI plans; improved vaccine delivery system; strengthening of the DHIS 2.0 to collect and report immunization data; and participation of technical advisors to develop TWGs for better collaboration and technical oversight. In Bauchi and Sokoto States, key stakeholders noted that MCSP has effectively contributed to these collaborative efforts and improvements. MCSP TA provided at State, LGA, HF, and community levels has contributed to (a) expansion of RI fixed and outreach services, (b) improved data reporting and analysis skills, (c) a more competent RI workforce, and (d) the introduction of new innovations to engage traditional leaders and workers to register newborns and to promote RI.

In comparing the 2016 MICS and 2013 NDHS datasets, Bauchi State was found to have had more significant positive change in uptake of BCG and PENTA I and full immunization rates as compared to Kano. While these are important findings, they cannot be definitively attributed to TA provided by MOU partners. MOU partners in all four States are encouraged to conduct participatory consultative processes to: (a) retrospectively explore the myriad factors\(^9\) that could have caused or contributed to the negative or positive changes seen when comparing the 2016 NDHS and the 2013 MICS Survey.

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\(^7\) May result in extended waiting times until sufficient clients arrive or contribute to high wastage or missed opportunities.

\(^8\) The 2016 MICS Survey found disturbingly low immunization coverage: 2.2% in Sokoto, 13.9% in Bauchi, 9.5% in Kano, and 24.9% in Kaduna.

\(^9\) Examples of factors include the political situation, level of insecurity, urban versus rural populations, environmental conditions, socio-economical, parallel supplemental vaccine campaigns, availability of staffed facilities, service modalities, and level of support or assistance to delivery of RI or more broadly to community and facility-based child health services.
datasets; (b) explore the analysis of the administrative data from the DHIS 2.0 – looking at the reliability of the data and then for what may have contributed to changes in RI outcomes from 2016-2017; and (c) share this information and lessons learned among the States.

The team noted with appreciation the demand for and efforts being made to gather strategic information, e.g., community registration of newborns, the plans to add new indicators to the DHIS 2.0,10 and the use of GIS mapping of settlements for planning RI and LQAS survey findings and tracking progress in uptake of immunization.

The disparities between LGAs in the States as found by the 2017 LQAS survey are marked and warrant serious exploration. The differences between the administrative and MICS/National Immunization Coverage Survey (NICS) report is driving the need for more reliable population estimates and better denominators to analyze immunization coverage.11

The assessment team also observed the need for TA to help States (a) conduct formative studies for in-depth analysis of barriers and root causes relating to demand for immunization and utilization of PHC services; (b) develop improved immunization record-keeping systems for easier identification of defaulters; and (c) develop appraisal systems to measure service quality, LGA, HF, and personnel performance.

More information is needed to understand population mobility and health care-seeking behaviors12 for planning purposes. The assessment team also noted a need to systematically address the generalized distrust of data, which was noted in discussions with the RI community. This included their questioning of the methodology and findings of the MICS survey as well as the team’s observation of the inappropriate use of LQAS survey results to show improvements in state RI coverage.

The new State Emergency Routine Immunization Coordination Centers (SERICCs) bring passion and leadership for rapid sharing of critical issues and rapid responsiveness to the investigation of deficits and problems, and for addressing performance with sanctions and rewards. While the development of the Local Emergency Routine Immunization Coordination Centers (LERICCs) is still early, this structure is expected to have an even greater impact on streamlining communication channels, finding local solutions to problems, and assuring better access to improved RI services.

There is valuable knowledge to be gained by USAID and Foundation partners as they review together the MOU partnerships; the pros and cons of the collaborative TA approaches and different TA delivery models (including the use of technical advisors, TWGs, and LGA consultants to build capacities at LGA, HF, and community levels); and the lessons learned from moving from a project-driven to a State-led RI program strengthening initiative.

Low immunization rates in these northern States are a critical public health issue and we, the assessment team, applaud USAID, BMGF, DF, their implementing partners, other TA providers and donors, and State governments for their collaborative efforts to improve the supply side of RI programming.

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10 For example, vaccine stock-out and functional health facilities. The expansion indicator as now being tracked by the MOU could be strengthened by measuring the percentage of health facilities providing immunization services in each of the States and how this has changed over time. This measurement will require reliable information about the number of health facilities that are actually functionally meeting the minimal standards for providing RI.

11 During the assessment visit to Kano, State meetings were being held to review various data sources including WHO house-to-house survey data and the community registers in addition to older census data.

12 Preferences for health care may be outside of wards, facility catchment areas, or secondary versus primary care facilities.
RECOMMENDATIONS

USAID is advised to build on the work of MCSP and with MOU partners and continue investing in development of RI services as a major component of child survival programing. There is a need for greater focus on transformative leadership, accountability, and governance at all levels, working directly with personnel from the responsible State and LGA Public Health and Primary Care agencies and public HFs. This will require supporting the delivery of specialized technical advising, which is both focused on and tailored for these government structures to strengthen strategic information systems at State and LGA levels to provide useful data for (a) improved planning, allocation of resources and TA; (b) monitoring of government performance and the availability, accessibility, equity and quality of services; and (c) for evaluation (baseline and interval assessment of program improvements and immunization outcomes). Support for delivery of specialized technical advice is also required to develop and operationalize multi-faceted demand creation strategies to improve uptake, continuation, and completion of recommended immunizations, and caregiver retention of immunization cards. It is also required to build public health and health care management and provider capacities at each level and develop accountability mechanisms, including broader community participation to ensure and/or deliver quality gender-responsive RI services.
INTRODUCTION

ASSESSMENT PURPOSE AND ASSESSMENT QUESTIONS

Purpose of the Assessment
The purpose of this assessment was to determine the effectiveness of U.S. Agency for International Development’s (USAID)-funded technical assistance (TA) to the quadripartite States of Bauchi and Sokoto, Nigeria, comparing how the USAID-funded TA is or was similar or different to TA being provided in tripartite States. The findings will provide insights into the performance of USAID’s TA through the Maternal and Child Survival Program (MCSP) program to strengthen State-level routine immunization (RI) systems. Specifically, the objective was to learn how USAID and implementing partner – MCSP, working with the Bill & Melinda Gates Foundation (BMGF), the Dangote Foundation (DF), their implementing partners and other RI TA partners, contributed to improving RI program and systems as agreed through their Memorandums of Understanding (MOUs), noting changes in processes, systems, and outcomes. The assessment placed special emphasis on studying the TA contribution to the use of data for planning, budgeting, tracking, and quality improvement (QI) and on how gender norms may affect uptake of immunizations and gender-responsiveness of services and community engagement (CE).

Assessment Questions

1. To what extent is USAID’s TA contributing to RI system improvements13 in Bauchi and Sokoto States? Based on the guiding principles of the MOU, the TA includes the thematic areas of governance/accountability, vaccine security and cold chain, access and utilization of RI services, monitoring and use of data, CE, and RI-related capacity building/training programs.
   Areas of inquiry included:
   a) Description of TA being provided by USAID, formal partners, and other donors to these thematic areas
   b) Components and approaches of the USAID-funded TA considered most effective
   c) TA consideration of promoting gender responsiveness to improve RI accessibility and utilization and CE
   d) Gaps in TA

2. To what extent is USAID’s support in Bauchi and Sokoto States similar to or different from the support to improve RI system being provided by other donor partners in the non-USAID TA focus States of Kano and Kaduna?
   Areas of inquiry included:
   a) Review of TA packages to strengthen the RI system related to the thematic areas listed in Question 1 above (governance/accountability, vaccine security/cold chain, service delivery-access and utilization, supportive supervision, monitoring and assessment, and CE).

13 The assessment reviewed MCSP’s provision of TA in each of these MOU thematic areas of the “RI System.” The assessment team primarily focused on documented improvements in the thematic areas where MCSP was to focus their TA, namely access and utilization of RI services, supportive supervision and monitoring and use of data, community engagement, and RI capacity-building and training.
b) If similar or different, what lessons may be learned to inform subsequent USAID programming?

3. How do RI outcomes in Bauchi and Sokoto compare with Kano and Kaduna?
   a) Areas of inquiry to include secondary analysis to explore potential sex difference related to uptake of RI in USAID-supported and non-USAID TA states.
PROJECT BACKGROUND

USAID has invested extensively in the delivery of primary care and child survival measures in Nigeria by funding bilateral programs, including the recent Targeted States Health Impact Project (TSHIP), a USAID program implemented in Bauchi and Sokoto States and ended in 2015; and the global USAID-funded MSCP program, which supports high-impact, health interventions in 24 priority countries, including Nigeria, with the ultimate goal of ending preventable maternal and child deaths within a generation.

As a field mechanism, USAID entered into a contractual agreement with MCSP to focus on RI in Bauchi and Sokoto States. A partnership was developed with the State Primary Health Care Development Agency (SPHCDA), BMGF, and the DF to strengthen the RI system to increase and sustain RI coverage and reduce childhood illness and death. The quadripartite MOU agreements were signed and work commenced in September 2014 in Bauchi and in late 2015 in Sokoto States. USAID TA was designed to be multi-level and multifaceted and to be highly collaborative and harmonized with other MOU partners. The MOUs stated that USAID will provide “technical support and advice in every ward to all levels of the routine immunization program for effective distribution and delivery of services, including, but not limited to program management and strategy at all levels to service delivery, cold chain and vaccine management, human resources capacity building and skills improvement, effective use of data, community engagement, social mobilization, operations research, and behavior change and communications.”

Private/public partnerships were also developed in four other northern States, whereby BMGF and DF entered into MOUs with Borno, Kaduna, Kano, and Yobe State governments. The MOUs were initiated in 2012 with Kano State Government and in late 2015 with Kaduna State Government to provide financial support and TA to strengthen the RI program.
ASSESSMENT DESIGN, METHODS, AND LIMITATIONS

METHODOLOGY

From January 8 to February 22, 2018, an external team of consultants planned and carried out data collection for the assessment of TA provided to strengthen RI programming in the four States. In addition to Bauchi and Sokoto States, Kaduna and Kano States were selected as both have MOUs between the States and the Foundation partners. The study population included government agencies and personnel who have partnered or benefited from TA provided by MCSP-USAID’s implementing partner, Foundation partners, and other TA partners/projects. Different types of studies and/or analyses were used for each question. For Question 1, the assessment team used a summative assessment of program effectiveness touching on a formative study of gender-related barrier using a TA need/gap analysis. For Question 2, the team used a learning study. For Question 3, the team used a comparative analysis. The development of the assessment protocol was done in close consultation with USAID.

Using a descriptive approach, the assessment methodology included a desk review of key MCSP project documents, State MOUs, harmonized RI plans, and national RI reference materials; key informant interviews (KII) key informant interviews (KII); consultative meetings; focus group discussions (FGDs); and observations.

Case studies were conducted in two randomly selected local government areas (LGAs) each in Bauchi and Sokoto States, and visits were made to one randomly selected LGA and health facility (HF) in both Kano and Kaduna States. A two-stage sampling technique was undertaken for the selection. Stage 1 comprised selection of one or two LGAs per State by simple random sampling. LGAs with security challenges and located more than 100km away from the State capital were excluded from the sampling frame prior to selection. Stage 2 involved the selection of one primary health care (PHC) facility in each LGA by simple random sampling of those providing RI.

The assessment team used standardized tools, including interviews, FGDs, observation guides, and a checklist for observing systems (e.g., cold chain and immunization clinics/sessions).

Field visit activities and interviews were conducted as outlined in the Scope of Work, with the exception of interviewing the Executive Director of National Primary Health Care Development Agency (NPHCDA), the DF representative, United Nations Children’s Fund (UNICEF) Country head or program staff, and the World Health Organization (WHO) State Coordinator in Kano State.
Table 1. Summary of Field Activities

<table>
<thead>
<tr>
<th>Activity and Location</th>
<th>Sokoto</th>
<th>Bauchi</th>
<th>Kano</th>
<th>Kaduna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder KIIs</td>
<td>39</td>
<td>40</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>Consultative Meetings with 6 LGA consultants</td>
<td>1</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>LGAs visited</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Health facilities visited</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Zonal offices visited</td>
<td>N/A</td>
<td>N/A</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RI sessions observed</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FGDs conducted</td>
<td>8</td>
<td>8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Female participant groups</td>
<td>4</td>
<td>4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Male participant groups</td>
<td>4</td>
<td>4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Does not include meetings and discussions with USAID or KIIS done with TA partners at national level. Key stakeholder groups/informants interviewed included formal MOU partners and their sub-contractors; non-formal partners including CDC N-STOP, UNICEF, and WHO; and leaders of Technical Working Groups (TWGs).

The assessment team conducted content and thematic analyses of the qualitative data, triangulating data from various sources, and looked for similarities and differences (e.g., in frequency or perceptions) among the TA approaches, models, and activities within each State, as well as innovative practices. Special focus was placed on verification of reported TA (including TA related to data use) and results.

Secondary analysis of the survey datasets was undertaken using Stata 14.0 MP. The survey datasets included the Nigeria Demographic and Health Survey (NDHS) 2013 and Nigeria Multiple Indicator Cluster Surveys (MICS) 2016/2017. The survey design of these two datasets is complex, involving stratification to gain efficiency, clustering to reduce survey cost, and weighting to obtain population inference. During secondary data analysis, design-based estimation (taking into consideration stratification, clustering, and weighting) was applied to obtain point estimates. The analyses were mainly descriptive and involved percentages and graphs. Also, bivariate analyses were performed by comparing percentages of RI outcomes of interest from NDHS and MICS and sex differences using the survey data. Thus, two-sample tests of proportions were used in assessing statistical significance which generated p-value. Additionally, routine data were analyzed using MS Excel, generating percentages and graphs. State-based Lot Quality Assurance Sampling (LQAS) survey findings were reviewed, and data retrieval using immunization registers at each facility visited was performed.

LIMITATIONS AND CHALLENGES

- As may be seen from the study questions, the assessment was ambitious in scope and coverage, with travel to four States and the assessment of TA relating to multiple thematic areas. To accommodate information needs, careful attention was given to the development of tools for use in the USAID-supported States of Bauchi and Sokoto and adapted to capture learning in Kaduna and Kano. Methods and sampling strategies were selected for greater efficiency and more in-depth information-gathering. Because of time limitations in each State, KIIs were conducted simultaneously, with the teams breaking into pairs or at times conducting interviews individually. While successfully carried out as planned, this resulted in long hours of work as team members completed their notes and participated in daily debriefings and continual analysis.

14 FGDs were used instead of exit interviews for more efficiency; discussions and consultative meetings were held to listen to a larger sample of the field-based LGA consultants than those visited at the two selected LGAs.
Within the MOU partnerships, MCSP was and is expected to provide TA under a collaborative and harmonized approach. A challenge for the assessment team was to tease out distinct, specific, measurable, and documented MCSP TA given the myriad TA partners and collaborative approaches. Looking at the effectiveness of the TA (e.g., skills transfer, skills application, or system change) was outside the scope of this assessment unless already measured and documented. Thus, the assessment team primarily relied on asking similar thematic-related questions, analyzing for frequency, and triangulating findings from desk reviews, KIIIs, discussions, and observation. The assessment team focused on gathering information about TA and documented improvements in the thematic areas where MCSP focused their TA, namely access and utilization of RI services, supportive supervision (SS) monitoring, data management, use of data, CE, and capacity-building and training. To stay within the scope of the assessment, no direct inquiry was made into the effectiveness of TA provided by other MOU partners to strengthen governance (including leadership, financial management, and accountability).

Scheduling appointments was difficult at times due to frequent unavailability of governmental and non-governmental stakeholders. In some of the States visited, stakeholders were not accessible as they were engaged in other RI meetings (e.g., daily State Emergency Routine Immunization Coordination Center [SERICC] meetings, partner planning meetings, Immunization Plus Day [IPD] activities) or out of state for national and/or sub-national meetings. To compensate, team members met with key informants in the evening or met with lower ranking department staff.

In retrospect, while not planned, visits with other non-governmental organizations (NGOs) working on maternal and child health (MCH) issues (e.g., PLAN International, Save the Children, and the Core Group of polio partners) would have been valuable.

Access to quantitative data related to RI posed several challenges. While great effort was made to obtain MICS and National Immunization Coverage Survey (NICS) datasets, in the end, the 2016/2017 NICS datasets were not released for public use.

Quality of District Health Information System version 2 (DHIS 2.0) data: As noted throughout this report, there continue to be concerns about the quality of the administrative data. States are looking for a better denominator (than the current use of census population data). Thus, the assessment analyzed for change in absolute numbers reported rather than percentages.

The format of the immunization registers at HFs are based on national guidance and currently undergoing change. Sokoto and Bauchi are now using immunization registers organized by settlements; this is being rolled out in the other States. Other formats included organization by month of birth and/or sequential listing. There was wide variation in how register books were organized and how records were completed and archived. The record-keeping system was difficult to use for rapid gleaning of information, thus limiting the review of data using immunization registers.

Availability of reliable vaccine stock-out data in each of the States: Until recently, vaccine stock-out data were captured by the District Vaccine Data-Management Tool (DVD-MT), a WHO information system. All four States have now shifted from using the DVD-MT to the DHIS 2.0. The DHIS 2.0 does not yet report on vaccine stock-outs.

Accessibility of special studies: In-depth studies or surveys conducted by State Technical Working Group (TWGs) or partners were not readily available, unlike the MOU review reports that were
easily accessible through MOU partners. The recently released December 2017 LQAS survey preliminary report was accessed with the help of an MOU partner.

- The use of the NDHS and MICS survey datasets for comparing changes in RI outcomes between States was only considered for Bauchi and Kano States. Both States shared similar MOU timeframes whereby the 2013 NDHS data could serve as the baseline and the MICS data set to look at subsequent changes. When interpreting these data, however, it is important to note that the starting point of the projects varied, with the MOUs in Kano State starting in 2012 and in Bauchi State in September 2014.

- Despite the administrative data concerns mentioned above, data from the DHIS 2.0 were used to analyze differences outcomes in all four States including comparing Kaduna and Sokoto States. Interpretation of these differences and changes will necessitate reviewing the reliability of that data.

- Interpretation of differences in change in RI outcomes within and between States is challenging as there are many contextual factors that may be causing or contributing to positive or negative changes. Further inquiry and discussion is needed to understand what was happening to the cohorts studied during the 2013 NDHS and the 2016 MICS in Bauchi and Sokoto States.

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15 Note that there are limitations as the cohorts studied were age 12-23 months at the time of surveys. The baseline timeframe using the NDHS is 2011-2012 and the second reference period using the MICS would have cohorts within the 2014-2016 time period.

16 Examples of such factors include the political situation, level of insecurity, urban versus rural populations, environmental conditions, socio-economical, parallel supplemental vaccine campaigns, availability of staffed facilities, service modalities, and level of support or assistance to delivery of RI or more broadly to community and facility-based child health services.
FINDINGS

FINDINGS: QUESTION 1

To what extent is USAID’s TA contributing to RI system improvements in Bauchi and Sokoto States?

Based on the guiding principles of the MOU, the TA includes thematic areas of governance/accountability, vaccine security and cold chain, access and utilization of RI services, monitoring and use of data, CE, and RI-related capacity building/training programs.

Description of TA being provided by USAID, formal partners, and other donors to these thematic areas

The following table summarizes the TA relating to each thematic area as noted during assessment visits in Bauchi and Sokoto States, review of program and state documents, and KIIs.

Table 2. Technical Assistance by Thematic Area

<table>
<thead>
<tr>
<th>Specific areas of TA</th>
<th>TA Provider/Approaches</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and Accountability</td>
<td>BMGF/DF State consultant and subcontracted Solina Health,17 eHealth Advisors, Chigari Foundation coordinator embedded and/or works out of the Emergency Operation Center (EOC), European Union-funded Support Immunization Governance in Nigeria (EU-SIGN), MCSP State Technical Advisors (STA)</td>
<td>State</td>
</tr>
<tr>
<td>Participation with oversight mechanism; technical advising of TWGs; participation in RI harmonized planning and development of operational plans including design of microplanning processes</td>
<td>MCSP State and Technical Officers in Sokoto (housed in the SPHCD compound), while in Bauchi, work off-site, BMGF/DF consultant, Solina Health, UNICEF, WHO, U.S. Centers for Disease Control and Prevention (CDC) N-STOP Advisors embedded and/or work out of EOC, and EU-SIGN</td>
<td>State</td>
</tr>
<tr>
<td>Finance and accounting: opening of bank accounts and retiring of funds; complementing strengthening of the financial and accountability/risk management systems at the state level</td>
<td>MCSP LGA consultants</td>
<td>HF</td>
</tr>
<tr>
<td>Support and lead in conducting implementation studies and assessments, e.g., training needs assessments, CE assessments, and assessments of potential new facilities for expansion of RI services with information gathered to plan new strategies or for use by TWGs as part of the harmonized planning process</td>
<td>MCSP RI staff and consultants</td>
<td>State</td>
</tr>
</tbody>
</table>

Vaccine Security and Cold Chain Management

17 Solina Health is tasked by the BMGF with supporting higher-level learning documentation in all MOU states.
<table>
<thead>
<tr>
<th>Specific areas of TA</th>
<th>TA Provider/Approaches</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advising procurement at State level, logistic management, development of procedures, and spot checks</td>
<td>BMGF/DF, and eHealth, Solina Health Advisors embedded in EOC, EU-Sign with Logistics TWG (MCSP Officer participating)</td>
<td>State</td>
</tr>
<tr>
<td>Vaccine distribution, accounting, and reporting</td>
<td>eHealth State Coordinator and Officers</td>
<td>State, LGA, HF</td>
</tr>
<tr>
<td>Vaccine security and management (warehousing)</td>
<td>UNICEF Advisor embedded with State Logistics</td>
<td>State</td>
</tr>
<tr>
<td>Conducting spot checks of vaccine system</td>
<td>WHO, CDC N-Stop, and MCSP STOs and LGA consultants. BMGF/DF consultants as part of field visits</td>
<td>LGA</td>
</tr>
<tr>
<td>Monitoring vaccine cold chain and usage and on-the-job-training during SS visits</td>
<td>MCSP LGA consultants, WHO and CDC N-STOP field staff</td>
<td>HF</td>
</tr>
<tr>
<td>Access and Utilization (Service Delivery)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of microplanning processes and standards of practice</td>
<td>MCSP State Technical Advisor and Officers, Solina Health Advisors embedded in EOC, participation on RI working group and SERICC</td>
<td>State</td>
</tr>
<tr>
<td>Assistance with compilation and verification of micro-plans</td>
<td>MCSP LGA consultants, CDC N-STOP field officers, WHO field staff</td>
<td>LGA</td>
</tr>
<tr>
<td>Assistance with microplanning process</td>
<td>MCSP LGA consultants, CDC N-STOP field officers, WHO field staff, and UNICEF LGA facilitators</td>
<td>HF</td>
</tr>
<tr>
<td>Design, piloting, and evaluation of the process, tools, system, and skills for use of GIS mapping for polio campaigns in Bauchi</td>
<td>MCSP leading contracting with eHealth to generate the maps</td>
<td>Selected LGAs</td>
</tr>
<tr>
<td>Reaching underserved or hard-to-reach populations with immunizations</td>
<td>CDC N-STOP assisting with planning and funding for additional staff and transport</td>
<td>HF</td>
</tr>
<tr>
<td>Data Management, Monitoring, and Supportive Supervision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of the DHIS 2.0 system and staff capacities</td>
<td>CDC N-STOP Advisor embedded in SPHCDA; MCSP Monitoring and Evaluation (M&amp;E) Officer</td>
<td>State, LGA</td>
</tr>
<tr>
<td>Coaching, monitoring data quality, reviewing and analyzing data, and assisting with input to the DHIS 2.0</td>
<td>CDC N-STOP field officers, MCSP M&amp;E Officer, LGA advisors, WHO field staff and volunteers, and UNICEF LGA facilitators conduct field visits and support review meetings (all partners with LGA personnel)</td>
<td>State, LGA, and HF</td>
</tr>
<tr>
<td>Monitoring of activities according to plans, defaulter follow-up, availability of resources, and provision of RI services</td>
<td>MSCP LGA consultants, CDC N-STOP, and WHO field personnel conduct SS visits and support review meetings for HF staff</td>
<td>HF</td>
</tr>
<tr>
<td>Review of RI services and peer-to-peer sharing by LGA personnel</td>
<td>MSCP staff with MOU and other TA partners with State TWGs</td>
<td>State</td>
</tr>
</tbody>
</table>

18 Evaluation findings still pending.
19 Partners noted that this builds on earlier work by WHO and eHealth to use Geographical Information System (GIS) mapping for planning polio campaigns.
20 Support may include assistance with organization, funding meeting costs, coaching to organize presentations, or assistance with transport costs.
21 CDC N-STOP and WHO field personnel assigned to provide TA in these same thematic areas: though RI is secondary to their main disease surveillance and control objectives and polio eradication and measles campaigns.
<table>
<thead>
<tr>
<th>Specific areas of TA</th>
<th>TA Provider/Approaches</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE strategy development</td>
<td>Chigari Foundation State Coordinator, MCSP CE officer, and UNICEF CE Advisor, Solina Health Advisors, CE/Social Mobilization (SM) TWG, Bauchi State Emirate Council on Health (BASECOH), and the Sultanate Council in Sokoto State</td>
<td>State</td>
</tr>
<tr>
<td>Operationalizing CE strategies/concepts, e.g., community dialogue, new community data management, follow-up, and newborn referral systems (including use of traditional barbers and other community outreach health workers in Bauchi State); included an evaluation of traditional ward leaders managing the community newborn registers</td>
<td>MCSP LGA consultants and UNICEF LGA facilitators and volunteer community mobilizers (VCMs) and others, e.g., PLAN community health workers assisting with RI promotion and tracking and follow-up of defaulters</td>
<td>HF and their Wards</td>
</tr>
<tr>
<td>Development of SMS and robo-messaging to promote and inform RI and services</td>
<td>MCSP sub-contractor Black Swan Tech Ltd.</td>
<td>Selected LGAs</td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of new training programs and adaptation of national training curriculum</td>
<td>MCSP, CDC N-Stop, UNICEF, WHO, BMGF/DF sub-contractors, and Training TWG</td>
<td>State</td>
</tr>
<tr>
<td>With State, lead or co-lead provision of specific formal and cascaded training programs, training of trainers, and provision of inputs (including covering costs as needed)</td>
<td>MCSP, CDC N-STOP, UNICEF, and WHO</td>
<td>State, LGA</td>
</tr>
<tr>
<td>On-the job skills training and coaching as part of SS</td>
<td>MCSP LGA consultants and State technical officers and CDC N-STOP, UNICEF, and WHO local staff</td>
<td>HF</td>
</tr>
<tr>
<td>Follow-up of training for RI providers or community leaders</td>
<td>MCSP LGA consultants conduct SS visits, observation, and coaching; more often conducted individually, but also at times jointly with partners/TWG members</td>
<td>HF</td>
</tr>
</tbody>
</table>

**Key findings and analysis**

- All TA partners described participating in State-level RI Program oversight mechanisms, e.g., RI Working Group, State Immunization Task Force, the new SERICCs, and the thematic group-specific TWGs.
- “Embedding” at State-level or “housing” of advisors at the EOC is common, though not a model adopted by MCSP. MCSP-Sokoto’s office is in the same building as SPHCDA at the State Government Health Compound (where SERICC is also housed). MCSP State Technical Advisors and State Technical Officers regularly move to the EOC as needed for RI Working Group meetings and TWG meetings held at that location. MCSP-Bauchi has an off-site office but has staff assigned to attend meetings at the EOC and to participate in TWG meetings held at the EOC or elsewhere.
- The team noted that several partners are conducting SS using a standardized checklist at the HF level. This checklist is intended to prompt the supportive supervisors to provide on-the-job training and coaching, or to help HF staff plan actions to correct deficits.
• At the community level, MCSP and the Chigari Foundation, contracted by BMGF and UNICEF, are working with traditional leaders in Bauchi State to promote RI and register newborns and, in collaboration with HFs, track and refer unimmunized children and drop-outs to HFs in the communities. In Sokoto State, similar work is being initiated. A program funded by Saving One Million lives, an initiative of the Sokoto State Ministry of Health (MOH), is also utilizing traditional district, village, and ward leaders, traditional barbers, and traditional birth attendants to promote RI. In several LGAs, UNICEF and other NGOs (e.g., PLAN) have VCMs promoting RI as part of their MCH work.

• At the LGA level, MCSP (and often other partners), WHO, CDC N-STOP, and UNICEF participate in LGA review meetings for HF managers and RI providers. These venues are used to review data and other RI activities. Peer-to-peer sharing is encouraged and plans have been developed to address issues that are identified. Performance review meetings with peer-to-peer sharing are also facilitated by MCSP in collaboration with other partners at the State level for LGA personnel.

Components and approaches of the USAID-funded TA considered most effective

MCSP management emphasized that their TA is focused primarily on the thematic areas of access and utilization, SS and monitoring, data management and use, training and capacity building, and CE, though they also mentioned that their work cuts across all thematic areas at the operational level, e.g., strengthening cold chain management. TA approaches include provision of technical advising for harmonized planning and collaborative capacity building of TWGs; development of tools, analysis, and promoting greater use of data for decision-making; and assessments, implementation learning and documentation, provision of training, and informal mentoring (e.g., for State M&E personnel).

A major MCSP TA model is the use of LGA consultants, most of whom are health and immunization practitioners, to build capacities at the LGA and local levels. They provide SS with coaching and on-the-job training to address deficits or weaknesses identified using the SS checklist, follow up on formal training programs, and roll out new tools and guidelines. The LGA supervisors also participate in LGA review meetings where HF activities, reports, and performance are discussed; SS findings are reviewed; and problems are explored. They also follow up on formal training programs and roll out new tools and guidelines. At each of the LGA PHC offices, HFs, and communities visited, the LGA consultant was specified by name and their work noted with appreciation. Non-governmental partners also noted with appreciation the TA being provided by the LGA consultants, although it was mentioned that their skills sets vary: “one may be better at community engagement, another with providing SS to health facilities.”

Key informants (including senior government officials, foundation partners and their sub-contractors, TWGs, and clients at the LGA, HF, and community level) “validated” MCSP collaboration and its important contributions. This included providing technical advising and operational support to the

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“MSCP’s state units have a reputation for ‘being technically sound.’” – Senior Government Official

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In assessing the effectiveness of TA provided by MCSP, the team looked for indications of how skills transfer, skills application, or system change has been documented or recognized.

TWGs, while configured differently at various times in each State, include: Finance, Logistics/Vaccine Management, Monitoring and Evaluation, Data Management, Supportive Supervision, Community Engagement and Social Mobilization, and Training.

Formal-residential, non-residential and/or a cascaded approach, on-the-job training and coaching, peer-to-peer sharing and learning, training of trainers, and follow-up of skills training.
different thematic groups, including oversight structures (RI working group, EOC, SERICC) and active participation and informal leadership for the TWGs (i.e., Vaccine Security/Logistics, Finance, Monitoring and Evaluation, Supportive Supervision and Data Management, Training, and CE/Social Mobilization). Several senior government officials noted that MCSP is credited with much of the progress made in developing better SS, data management, and facilitation of microplanning at the HF level.

Government officials noted that the organization has an “open door” for providing TA. Specific contributions were noted, e.g., analysis and development of reports, review of proposals, setting agendas, and performing special assignments. MCSP has also conducted assessments of HFs to determine their readiness and needs as potential RI service sites upon the request of SPHCDAs in both States. SPHCDA officials and TWG members noted MCSP support for provision of transport or to cover costs (e.g., of trainings) not covered by the RI basket fund.

Within the following thematic areas, specific examples are provided to illustrate some of the MCSP TA contributions where there are indications of effectiveness.

**Governance and Accountability**

According to partners and TWG leaders interviewed, MCSP actively participates in the annual RI harmonized planning process, working closely with RI oversight and TWGs. MCSP staff also described revised program workplans to accommodate changes in the RI Harmonized Plan or to respond to other RI-related activities as requested by the States (e.g., printing of color-coded referral cards).

MCSP TA contributed to the operationalizing of new financial and accounting systems, including the following:

- **MCSP Finance Officers in Bauchi and Sokoto States are providing TA as key members of the Finance Working Group. Governance and accountability issues being addressed include the development of accountability measures, e.g., to track outreach funding and verify if outreach sessions were actually held. New procedures are also being developed to fund LGA personnel directly to pay for their SS visit costs.**

- **For the first time, HFs received outreach funds directly from the State instead of passing through the LGA. While MOU partners DF and Solina Health provided TA to the Finance Working Group to develop financial and accounting tools and systems at the State level, MCSP LGA consultants assisted HFs to open bank accounts. The last MOU review noted that 98 percent of HFs providing RI in Sokoto State and 100 percent of those in Bauchi State were receiving RI funds.**

- **Using guidance and forms developed by the Finance Working Group, with TA from Solina Health advisors, MCSP LGA consultants helped organize trainings at the LGA level and provided ongoing coaching to responsible staff at the HFs to account for the funds received. MCSP LGA consultants reported that they were designated to sign retirement documents to verify outreach sessions financed through the basket fund retirement form. The last MOU review noted that more than 70 percent of the HFs in both States are retiring their funds on time.**
• SPHICDA finance personnel were taught to use QuickBooks Pro by the MCSP Finance Officer in Sokoto State, who continues to mentor the State accountants as they use this improved accounting system.

• While the Local Emergency Routine Immunization Coordination Centers (LERICCs) were not yet operational during the assessment visits, MCSP was providing TA to the LGAs to develop terms of reference.

MCSP also contributed to strengthening vaccine and cold chain management:

• MCSP assisted HFs and LGAs to determine their vaccine needs during the microplanning process and to keep vaccine dashboards up to date.

• In Bauchi State, a checklist for conducting spot checks of the cold chain was developed by MCSP and Solina Health in collaboration with the Vaccine/Logistics TWG and then adopted in Sokoto State.

• MCSP LGA consultants monitor vaccine distribution from equipped (Apex HF) to non-equipped HFs within wards; coach LGAs/HFs to develop and implement a planned preventive maintenance plan for cold chain equipment (CCE); coach LGA cold chain officials to regularly update CCE inventory and breakdown notification protocol; report issues to the LGA at monthly review meetings; and follow up with the MCSP Logistics Technical Officer (a member of the Vaccine/Logistics TWG) to be sure that PHC vaccine cold chain issues are reported.

Access and Utilization

• In collaboration with other partners, MCSP technical officers and LGA consultants provided TA to develop micro-plans using the revised Reaching Every Ward (REW) process. This process, with its emphasis on community involvement in planning, has just been initiated. MOU reviews have noted the improvement in delivery of services by tracking and comparing planned to actual fixed and outreach services provided.

• During visits to HFs, the assessment team often heard about the coaching provided by MCSP in the use of data for revising plans. One RI nurse said that “because of low coverage… we did two more outreach sessions.”

• As a special learning activity, based on previous MOU work in Kano State, MCSP piloted the use of GIS mapping for RI microplanning in collaboration with eHealth in Bauchi State. Study questions included: 1) How can spatial tools be used to integrate multiple data sources for improved population estimates and PHC HF catchment area maps that in turn lead to better targeting of RI services? 2) What are the opportunities and challenges in working with State, LGA, and ward authorities, as well as PHC HFs and communities, to use spatial data to determine PHC HF...
catchment areas and outreach sites? and 3) What is the cost of using spatial tools to improve PHC HF catchment area maps and population estimates? This information is being used to develop processes, systems, tools for building State, LGA, and ward capacity to use GIS for RI.

- Current work is being done by LGA consultants in collaboration with Chigari Foundation and UNICEF in Bauchi and Sokoto States to develop linkages between HFs and community data management systems, which involves line-listing of newborns and tracking systems utilizing traditional leaders and community volunteer workers.

Data Management System

MCSP has brought to the MOU experienced monitoring and evaluation (M&E) teams which, in addition to tracking program indicators and directing operational research activities, are active in building capacity of State and LGA personnel to collect, collate, summarize, and analyze RI data. In Bauchi and Sokoto States, there was widespread appreciation of the TA provided by MCSP in the form of formal and informal training, coaching, and mentoring to government at State level (SPHCDA, M&E, and SERICC), LGA level, and HF level for building capacities to use the DHIS 2.0 and improving the overall data management system. To highlight a few key observations:

- In Sokoto State, the government noted MCSP’s involvement in general training and provision of one-on-one training on DHIS 2.0 to both the SPHCDA and MOH, as well as LGA officers. This involved data entry, running data validation queries, submission of monthly summary forms, addressing data quality issues, and addressing feedback at HF and LGA levels. Specific areas of instruction and coaching included running data validation queries for data error detection, data entry in DHIS 2.0, and downloading of data from the DHIS 2.0 for analysis. In both States, MCSP has used an approach\textsuperscript{25} to directly observe data input. This exercise contributed to identification of knowledge barriers to data entry (i.e., lack of skills, equipment, or modems) and is continuing to promote timeliness and completion of data entry to the DHIS 2.0.

- In both States, the government noted the TA and coaching in the areas of analysis, presentation and reporting, and provision of feedback to the LGA and HF-level officials. In Sokoto State, this included training for the SPHCDA and the Ministry in the use of Microsoft PowerPoint, Word, and Excel.

- TA partners noted the TA (including financial support for data quality assessment [DQA] and capacity building to analyze DQA data) to generate action plans and to provide adequate feedback on findings to improve State data quality issues. In Bauchi State, this led to the development of a checklist to conduct data quality spot checks for use during SS visits.

- MCSP has been involved in mentoring Agency staff, data entry clerks, and LGA staff in data documentation and entry. This included creating a “data room” in Sokoto State.

- MCSP provided TA as well as transport and refreshments for clinic heads and RI providers to meet with LGA staff and partners at the monthly LGA review meetings as needed to supplement

\textsuperscript{25} First used by CDC and CHAI in 2015 in Kano State, where the DHIS RI module was first piloted.
basket funds. These meetings are conducted to carefully review HF data (registers, tally sheets, and summaries) before entering it into DHIS. Administrative data review is a collaborative effort with the LGA Data Working Group.

- DQAs had not been conducted prior to the MOU. On a bi-annual basis, MCSP facilitated data quality self-assessment of randomly selected HFs using a standardized tool that MCSP (working with the State M&E unit) analyzes and uses to compile feedback from State and LGA levels.

- According to the M&E TWG in Sokoto, MCSP was instrumental in adding a data review section to the SS checklist; this was subsequently adopted at the national level. The Bauchi State M&E TWG noted that MCSP assisted in reviewing a workplan for activities; tracking meetings and activities; implementing the workplan; and providing advice on preparing technical reports.

While data quality issues continue, formal partners (including LGA M&E staff visited) and non-formal partners noted that progress has been made in the number of HFs sending data reports and the timeliness and completeness of administrative data.

Supportive Supervision and Monitoring

At the State level, key informants noted that MCSP has been a leader in developing the SS concept and introducing national SS checklists and developing procedures and guidelines. Standardized checklists are being used for State SS to LGAs and for State or LGA SS to HFs. The HF SS checklist includes exit interviews and a community survey. To improve the quality of supervision/monitoring, MCSP developed verification criteria and guidelines for the RI SS checklist, which have now been adopted by Bauchi and Sokoto State TWGs.

MCSP LGA immunization consultants provide TA at the operational level. In Sokoto State, one is assigned to each LGA; in Bauchi, some LGAs have two or more consultants assigned due to a high number of RI HFs in the LGA. As noted earlier, most are health practitioners; all bring experience working in former non-governmental development programs or in LGA or State positions. During field visits, HF staff verified reports of MCSP LGA consultants providing coaching and on-the-job training to develop and revise micro-plans using available data at LGA and HF levels; to conduct SS using the standardized state checklist; and (during visits) to provide coaching and on-the-job training for providers. In both States, RI providers mentioned that MCSP followed up RI training to provide additional instruction as needed. Verification of coaching and on-the-job training was possible in Bauchi, where logbooks are being introduced to document TA provided during SS visits. RI providers mentioned receiving coaching and instruction from LGA consultants in several areas, including: improving injection techniques (e.g., administration of the Bacille Calmette-Guerin [BCG] vaccine), record-keeping, vaccine

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26 Supportive supervision involves working together with staff at HFs to address identified weaknesses or problems. This may include providing on-the-job training, instruction, problem-solving, and/or action planning.
management (conducting spot checks, needle safety, and used needle disposal), and client take-home instructions using the “Six Fingers” messages.27

Other TA that was highlighted included:

- In Bauchi, MCSP has been leading development of a new four-level rating or classification system with respect to access and utilization of immunization data, e.g., uptake (BCG) and drop-out PENTA 1-PENTA 3. Those HFs that are in the fourth category (i.e., low uptake and high drop-out) will be targeted with more intense SS by MCSP or other partner field staff.

- In both States, MCSP provides TA (and refreshments) at monthly review meetings, where LGA Immunization, Cold Chain, and M&E Officers meet with State officials and other TA partners. During the data review meetings, MCSP contributes by highlighting SS findings, helping to plan concrete actions to address issues, and revising estimates for setting targets.

- MCSP, in collaboration with other partners, provides support and technical advising during LGA review meetings for HF managers and RI providers, where a peer-to-peer approach is used. At these venues, HF staff share their activities, their administrative data, and performance.

**Community Engagement, Behavior Change, and Social Mobilization**

- MCSP, based on the promising practice implemented during the Maternal and Child Health Integrated Program (MCHIP) program, introduced the concept of community registration systems in both States and the involvement of traditional barbers in promoting RI. The concept was further developed in collaboration with DF and Chigari Foundation and in consultation with the CE TWG to engage the traditional leadership system in listing newborns with the help of traditional barbers and traditional birth attendants (TBAs). Both of these cadres interact with caregivers of newborns: the TBAs who assist with birthing and the traditional barbers who perform newborn hair shaving. These lists are then taken regularly by the traditional ward leader to the HF for reconciliation to check whether children are being immunized. In Bauchi State, MCSP is orienting traditional barbers or other community volunteers to follow up with children not immunized or defaulters. While the “community data system” is still nascent and under-developed, State governments hope it will lead to better enumeration of the targeted population and tracking processes.

- MCSP, with SPHCDA, provides orientation for the traditional leaders of the CE strategy and promotion of RI, working with BASECOH and the Sultanate Council in Sokoto. MCSP supported the printing of the color-coded referral cards in Bauchi State.

- MCSP contracted with Black Swan Tech Ltd. to do short message service (SMS) and robo-messaging to make reminder calls ahead of the scheduled immunizations sessions. This is still in pilot stage.

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27 The Six Fingers messages are: 1) Explain what vaccine(s) are to be given and what they are for (in a clear way the mother understands); 2) Tell them the number of visits the child will need; 3) Explain about possible side effects and how to treat them; 4) Tell the date of the next immunization; 5) Bring the child for immunization even if he/she is ill; 6) Advise to take good care of the immunization cards and always bring it to the service point.
• Tasked with developing the CE/SM strategy in Sokoto, MCSP conducted an assessment of community structures and explored the “likes” and “dislikes” of the targeted population relating to immunization services. Work by MCSP with the CE TWG continues and a single State strategy has yet to be finalized. The state governments and TA partners hold differing views, e.g., on the use of the ward development committees, the community volunteers to invest in, the financial incentivizing of volunteers, and the inclusion of other social mobilization (SM) processes and methods. In Bauchi State, the 2016 CE strategy is now being revised.

Training

• In collaboration with the Training TWG, MCSP conducted a training needs assessment and subsequently led several training programs. Several partners also noted the MCSP’s contributions to training costs, including refreshments and printing of tools/teaching materials.

• In both States, many informants noted the technical advising to the Training TWG, which included the introduction of adult learning principles and improved organization – such as reducing the number of participants for greater interaction, limiting the classroom time spent per day in training, and piloting new training programs to allow for modification if needed.

• Many partners highlighted the MCSP-led “Basic Guide for RI Providers” training (see text box, this page).

Basic Guide for RI Providers in Bauchi and Sokoto States

When resources were not available as expected to conduct the Basic Guide for RI Providers training per the RI Harmonized Plan, MCSP was identified to provide both technical and logistic (100 percent of the logistics) facilitation in collaboration with partners (WHO, CDC, UNICEF, and MOU partners). This training program illustrates several key principles: 1) based on identified needs; 2) State-led process; 3) use of national curriculum adapted with State Training TWG; 4) development of master trainers; 5) interactive, uses adult learning principles; 6) more competency-based, for example, demonstration of competency to administer intradermal injections (BCG); 7) non-residential-classes; and 8) provision of follow-up with ongoing coaching and mentoring by MCSP immunization officers and LGA consultants. The training TWG voiced great appreciation for the scope and coverage of this training program. In Sokoto State, according to the governmental head of the training TWG, “97 percent coverage of RI providers completed the training program.” In Bauchi State, 1,121 providers were trained in 2017 with plans to cover all LGAs in 2018.

TA consideration of promoting gender responsiveness to improve RI accessibility and utilization and CE

The assessment team reviewed available documents to look at the program’s awareness of gender-related needs, programmatic gender strategies, and/or MCSP guidance to promote gender-responsive services. Additional information about gender-related issues, needs, and practices was gathered during KIs, consultative meetings with LGA consultants, FGDs with male and female caregivers and community workers, and observation at health facilities.

Key observations

1. There were indications that MCSP, government, and partner program staff have some level of awareness of gender and how gender issues potentially affect utilization of immunizations. Specific findings included:
The 2016-2017 MICS Survey noted that more than 50 percent of children are being immunized at secondary clinics. An experienced program staff member noted that this is not a surprise as it is known that women like to get their preventive health services at an urban location where they can also take care of their market needs.

UNICEF community mobilizers at one site, all of whom are female, noted they have worked to address resistance to using local PHC services as mothers think there are more and perhaps better services at secondary facilities. “We get them to try the RI and antenatal care (ANC) services at this clinic and now they like it.”

The practice of children bringing children for immunizations is not uncommon, according to several key informants (and noted by assessment team when visiting RI sessions in both Sokoto and Bauchi States). Most service providers and several program staff recognize that this is not an optimal practice, but noted “it is most important that the children are getting their shots.” There was less awareness of this practice being a critical quality of care issue as adult caregivers are not there to receive information about the vaccines being given, instructions about treating fever, the importance of retaining cards, the schedule for the next visits, or to ask questions. No informants noted that this is potentially contributing to defaulting (i.e., children not coming back for their next schedule of immunizations).

Factors causing/contributing to this practice heard most frequently by the assessment team during interviews with a variety of informants include: husband not allowing the wife to visit the clinic alone (most informants thought this related to cultural norms), mother too busy, or mother is ill.

Male and female caregivers, community workers, RI providers, and program staff noted that the fear of fever following vaccination is a major barrier. Several, including the LGA consultants met in Bauchi State, also noted that this is a reason that children do not return for their PENTA II immunization.

At one RI session, an assessment team member observed an interaction between the nurse and the community workers, RI young adolescent bringing the infant. When asked, the providers, and program staff adolescent stated that the mother was ill. The nurse then asked, “How old are you?” and “Do you go to school?” The adolescent said she did not know her age and had not been to school. (This interaction took place in a room full of mothers and pregnant women.) Later, a staff person informed the assessment team member that the young caregiver and child are from outside the ward, “so we have no way to follow up; our VCMs are only working in this ward.”

No evidence was found that a comprehensive in-depth analysis of gender-related or other barriers (to uptake or continuation of immunizations or to immunization services) had been conducted in Bauchi or Sokoto States.

The 2015 MCSP Community Partnership Assessment summary touched on barriers heard in discussions with Ward Development Committees (WDCs) and women interviewed in Sokoto: “Incorrect knowledge as to the preventive role of routine immunization. There is general knowledge about the polio vaccine, which some mothers might think is the same with RI, hence, there is no need to visit an HF for further immunization; anti-immunization information about serious side effects is related to immunization resistance or hesitancy. The findings indicate that those who resist immunization do so based on rumor, incorrect

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28 Another factor driving these perceptions may be that mothers are delivering at secondary health facilities.
information, safety concerns (mild side effects), and fear of local population control by NGOs sponsored by Western nations.” The assessment also noted service-related barriers in talking with women: “Services include far distance to the health facility and long waiting time. Travel condition and access road to health facility are probable major concerns regarding distance. There is not much importance attached to child health card [which is] sometimes perceived [as] a prospective documentation of bills [to be paid].” Additionally, the assessment noted women’s “dislikes (which included facility-based services and poor attendance or tardiness of staff) and “likes” (which included RI being a “social gathering”).

- In late 2017, MCSP, in collaboration with WHO conducted an assessment of Missed Opportunity for Vaccination29 (MOV) in Sokoto State (only a preliminary PowerPoint report was available as the final report is pending NPHCDA approval). The major reason for not immunizing was found to be: “parents’ negative beliefs related to vaccination.” Service-related reasons included: the general hospital offers immunization only once a week and therefore a large cohort of children under age one are often turned away/missed. The preliminary report highlighted waiting times as barriers: “mothers come, but some are put off due to long waiting time” and “some health facilities practice the batching system, where they wait for a number of children before opening a vial, e.g., BCG.”

- The SS checklist prompts the field staff to ask about reasons for being partially or not immunized and caregiver suggestions for improvement are gathered during community household surveys (component of SS visits), but little evidence was found of these data being compiled30 or of triangulation with barriers as found with LQAS surveys31 and population surveys.

3. Gender-related barriers were heard or noted during the assessment

- Mothers with infants under age 2 and female community workers participating in FGDs expressed their dissatisfaction with services, citing long waiting time (“they wait until many people are there to start immunizations”), rude attitudes of health workers towards mothers, male RI providers (preference for female health workers was expressed), hard-to-reach facilities, costly transport, relocated and do not yet know about services, and lack of incentives (e.g., insecticide-treated bed nets). The team explored the issue of waiting for a group to gather before starting the immunization session with several key informants; they acknowledged that it may be happening because of the multi-dose vials and nurses not wanting to waste vaccines. They also noted that services may start late at facilities not equipped with CCE as staff may be out collecting the vaccines.32

- Fathers with infants under age 2 and the male traditional barbers met during the assessment noted the following service-related barriers: financial constraints (the transport fare needed

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29 MOV defined as any visit to a HF by a child (or adult) who is eligible for vaccination (unvaccinated, partially vaccinated, or not up-to-date, and free of contraindications to vaccination), which does not result in the person receiving all the vaccine doses for which he or she is eligible.

30 The SS database created by eHealth in Kano may be compiling these, but no reports were provided for our review.

31 The preliminary December 2017 RI LQAS report included a graph of the reasons given for why children age 0-11 months were partially or not appropriately immunized for age. The graph was not easy to read and lacked specificity, e.g., “other” was the largest category of reasons.

32 As pointed out by reviewers, another reason may be that nurses are waiting for sufficient numbers to start education sessions. Whatever the reason, this delay in starting immunization services was highlighted as a barrier by several FGD participants.
to access children, the cost of treating the child for Adverse Event Following Immunization (AEFI), fear that there will not be vaccines, and poor attitudes of staff – “so they don’t go back.” During one FGD, several men noted that they would prefer that female children or old women from their household or VCMs take their infants for immunizations rather than their wives. (This was not further probed during the FGD.)

- During visits to HFs, the assessment noted that staffing and infrastructure factors may pose barriers or may contribute to dissatisfaction with services. Perhaps most important is the issue of available space and staff or other communication channels to inform and instruct mothers about the vaccines and how to treat fever or other adverse events following immunization (AEFIs).

4. With a few exceptions, there was little evidence of strategies or specific procedures to address gender-related issues.

- No written MCSP gender strategies were noted.

- The CE strategies developed by MCSP working in collaboration with the Chigari Foundation and the Bauchi and Sokoto CE TWGs recognize the importance of male involvement. Traditional and religious leaders, as influencers, are utilized to promote vaccines as they interact with fathers (recognized for their role in household decision-making).

- A WHO in-depth immunization study conducted in Sokoto State noted the importance of having females do the community surveys: “It’s only a woman who can enter into the house/compound and talk with the mother/caretaker.”

- Program staff noted that the national REW guidelines encourage involving women groups in the microplanning process. The only gender-related guidance was noted in the “Planning Sessions” module: to “avoid too many children per session as this leads to overcrowding and long waiting time for the mothers.”

- The assessment team did not note any policies/procedures at the HFs to address children bringing children for immunization or for following up with a visit or call to the mother to provide instructions, including for treatment of fever and future appointments. The only strategy noted was in talking with UNICEF-supported VCMs (all of whom were female): “If the mothers are too busy or ill, we bring their babies to the clinics for RI.”

- In the PowerPoint presentation of the MOV findings, MCSP noted a need for: (a) awareness creation and sensitization of mothers and health workers, e.g., ANC nurses on implications of MOV and on need to get children up-to-date with vaccination; (b) sensitization and involvement of fathers and religious leaders in childhood immunization; and (c) more specific to service delivery, the need for vaccines in smaller vial sizes, more frequent vaccination sessions, and improved follow-up systems. The MCSP action plan included working on referral systems, promoting daily RI services in general hospitals and busy PHCs, improving supply and referral systems, improving CE and linkages, and building staffing capacities.

- No behavior change communication (BCC) materials or other health educational channels were noted for mothers as they wait. Hand-made posters with the “Six Fingers” instructions in local languages were noted in the RI service areas at several HFs.

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33 Note: The evaluation of the TSHIP project (integrated USAID-funded MCH program) preceding MCSP noted: “Future health projects should have gender strategies and work plans integrated into project design.”
Partners (governmental and non-governmental) interviewed also offered ideas for improving services or demand: “We are thinking of giving soap to increase demand for services,” giving paracetamol to families (either on-site or to take home), and “staff need to talk nicer to mothers.” The MCSP Community Engagement Assessment also recommended incentives, such as baby gifts, which also promote health upon completion of immunizations. There were no indications that mothers or fathers had been asked about their preferred incentives.

Further discussion of assessment findings as they relate to barriers to vaccines and RI services is available in Annex VI. Further Discussion on Barriers to Immunization.

**TA Gaps or Areas to Strengthen**

**Governance and Accountability**

1. Little evidence was found relating to how strategic information is used by the government, partners, and the TWGs to prioritize and allocate resources to strengthen RI programming and services.

2. The current MCSP operational model in Sokoto is to assign one LGA consultant to one LGA. As described or observed, there is considerable variation between LGAs. These include a variation in number of HFs, geographical size and distances between facilities, road transport system conditions, differences in local HFs and staff capacities, immunization rates, level of CE, and health care-seeking behaviors. Bauchi MCSP told the team that they are now working to allocate more resources to HFs that are found to be performing poorly (e.g., with poor immunization uptake and/or coverage based on administrative data).

3. The recent assignment of partner personnel at the LGA level which was reported in both States provides an opportunity for MCSP to provide more focused TA to their assigned HFs during the last year of the project.

4. No systematic process was noted for measuring capacities of State, LGA PHC management and RI-related staff or HFs, and/or for tailoring TA accordingly.

5. Little was heard about the work by MCSP or MOU partners to build accountability and governance capacities at the LGA level. The assessment team did hear about new policies/procedures for the State to distribute SS travel funds to LGA SS personnel rather than passing funds through the LGA PHC management unit.

6. Better performance indicators (e.g., data quality indices, service performance indicators, and appraisal processes) are needed. Performance criteria being developed now focus on results (e.g., immunization uptake and drop-out rates) rather than how well services are delivered.

**Vaccine Security and Cold Chain Management**

1. Informants raised issues of chronic and/or inadequate cold chain during the assessment: non-functioning solar refrigerators (e.g., “we report this and are told that there is a plan for repairs and “the repaired solar fridges only function for another six months”); vaccines being delivered that are in a late stage; and concerns about sufficiency of the cold chain for outreach clinics (number of boxes and if adequate temperature can be maintained). This latter concern was raised by a traditional district leader. A Vaccines/Logistics TWG member noted that the solar CCE can only produce two ice packs every 24 hours.
Data Management

1. More compilation is needed of the known factors causing or contributing to poor data quality or falsification practices throughout the system. Additional information is likely needed, starting with direct observation of the recording of immunizations using the registers.\(^{34}\)

2. No mechanisms were noted for easy identification of defaulters so that they can be tracked, i.e., ticker boxes. The purpose of the new three-part child immunization card with one part filed with the ward traditional leader is not clear.\(^{35}\)

3. Need for State- and LGA-level data use plans was mentioned by key informants.

Supportive Supervision and Monitoring

1. Lack of coordination: Observation of log books and discussions with LGAs and partners found that an HF could have multiple SS visits by several entities in a month and no visits in other months. Several key informants noted that hard-to-reach HFs are underserved with SS.

2. Missed opportunities for mentoring LGA staff: Conceptually, SS visits are to be carried out as a joint operation with government workers and other partners in order to have the right mix of skills sets and as an opportunity for coaching and mentoring government staff assigned to SS. Operationally, this approach varied according to informants; review of SS logbooks in Bauchi and Sokoto States found individual visits by MCSP or other government and partners to be common. LGAs visited in both States have recently developed plans for assigning specific HFs to one “supportive supervisor.” This may be an LGA staff person and/or the MCSP LGA consultant or other partner field worker. While this will help to address the coordination issue, it raises questions about how the quality of the SS is assured (i.e., making sure all the assigned supervisors have the necessary skills) and also conflicts with MCSP plans for more mentoring of LGA personnel to build their SS skills.

3. Need for improved quality assurance (QA) of both the technical and supportive nature of the SS: Criteria noted for selection of new SS at the State or LGA levels included “training in RI SS or evidence of previous RI SS/training or experience” with no mention of relevant technical or management experience or expertise.

4. Need to scale up documentation of TA provided for service improvement during or in follow-up to the SS visits: The SS checklists and logbooks in Sokoto only have space to note key findings or recommended action points but the logbook in Bauchi does have a column to document actions provided on the day of visits and actions for follow-up. There were indications of TA being provided by MCSP and other SS visitors, though they were not well-detailed. MCSP has plans to roll-out a more detailed description of TA provided to HFs in 2018.

\(^{34}\) Visiting only a small number of facilities, the team noted that register formats varied; register books are difficult to organize into sections with no use of tabs for easy access to specific sections; use of white-out and crossed out entries; and gaps in a child’s records (“they got the other immunizations at another place”). The team did not find gaps specific to “PENTA II.” No tickler boxes were noted.

\(^{35}\) The new child immunization cards observed (but yet to be rolled out) are three-part. Government and program staff noted that one part would remain in the clinic (ticker box), one would be for the parent, and one would go to the traditional ward head who is to maintain the community data system. This needs a critical review, including how will these be filed, updated, and used; there is a risk of adding even greater recording (register, three-part immunization card, tally sheet, and summary sheet) and filing burdens on RI providers.
5. Need for improved communication channels for supportive supervisors or monitors to report in real time critical issues (noted during visits, observation, or review of verbal or written reports) to the responsible bodies at HF, LGA, or State levels, with procedures for follow-up. WHO and CDC reported that their field staff are using Open Data Kit (ODK) with the checklists uploaded for recording and electronic reporting (to national offices). MCSP Bauchi noted use of LGA SS logbooks to report SS to HF findings. LGA consultants noted that in addition to discussing problems at LGA review meetings, they also take problems to MCSP advisors who take them to the relevant TWGs.

6. The assessment team observed (and also noted in discussions with LGA consultants) common problems recorded in the SS logbooks, such as no defaulter lists, lack of revised micro-plans, and non-functioning CCE. It was not clear how these problems are further assessed or prioritized or how the strategies or plans for focused TA or follow-up is provided.

7. The PHC coordinator at one LGA visited in Sokoto State raised concerns about the financing and sustainability of SS, particularly in harder-to-reach facilities. In Bauchi and Sokoto States, MCSP report that they often have requests to help with transport (and per diem costs).

Access and Utilization and Community Engagement

1. It was not clear which of the TWGs is (or should be) responsible for technical oversight of quality of services. No initiatives or strategies were noted to act on the 2015 MCSP assessment findings of service-related barriers to immunizations.

2. Need for BCC to reinforce the value of immunizations, encouraging outreach workers to “pull” (promoting the value of immunizations and the child health services) and to address parent concerns about minor AEFIs (primarily fever) and how these can be managed. Further discussion of vaccine-related concerns heard during FGDs and interviews is provided in Annex VI. Further Discussion on Barriers to Immunization.

3. Need for further development of community-based registration, RI promotion, and tracking and referral systems. In particular, a need to develop coordination of the various community workers (those incentivized and those non-incentivized) to perform RI promotion, mobilize targeted communities, provide follow-up, and/or help with tracking and referral. More focus is needed on sustainability of tracking and cross-referring processes and the role of the new CE focal personnel and consensus on use of other oversight structures, e.g., ward development

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36 ODK being used by CDC N-STOP and WHO for SS visit reporting, though these “real-time” reports are sent to Abuja offices.

37 In both States, it was noted that MCSP has plans to strengthen standard operating procedures for the recording of SS findings and actions taken with needed documentation provided at the HF and LGA level.

38 “Pull” versus “push”: the team noted with appreciation the power of traditional leaders as influencers, but also on occasion heard that “people in the rural area will do whatever the traditional leaders tell them to do.”

39 Field visits found much variation in how (type of format) the traditional ward leaders were equipped with notebooks or registers to record newborns. A challenge heard from CE personnel is that ward leaders may not be literate so depend on others or their children to keep the records. Volunteers noted the burden of transport costs and the extra work to follow defaulters.

40 Systems developed under previous projects (e.g., TSHIP), including the use of referral forms, have not been sustained.
Training

1. More systematic analysis of SS and monitoring of findings is needed to identify chronic problems caused by lack of knowledge, skills (e.g., lack of interpersonal communication skills), or resources, and should be used to plan capacity building accordingly.

2. Various informants noted that better targeting and selection of the “right” personnel to train is needed, as well as more follow-up sessions to assess if they have been able to apply new skills.

3. Informants mentioned that trainings, such as the Basic Guide for RI Providers, need to be certified.

4. Need for development of low cost resources for continued cascaded RI skills training programs given the expansion of RI services, high attrition, and new personnel, e.g., Community Health Extension Workers (CHEWs).

5. Need for further development of human resources databases linked to training databases and to respond to a request for assistance in Sokoto State to set up a library to archive training materials at the State level so that knowledge and resources are not lost.

6. Training and mentoring at the HF and LGA level to compile, analyze, triangulate, and interpret strategic data (e.g., GIS mapping, LQAS surveys/community surveys, or community registration data) for decision-making at all levels.

The assessment team noted limited visibility with minimal branding (MCSP and USAID). In discussions about this observation, informants noted that due to the collaborative nature of the TA, the MOU focuses on State-ownership and partner philosophies: “We all contribute; no one can do this alone.”

FINDINGS: QUESTION 2

To what extent is USAID’s support in Bauchi and Sokoto States similar or different from the support to improve RI system being provided by other donor partners in the non-USAID TA focus states of Kano and Kaduna?

TA Providers – Similarities and Differences

The same TA organizations, with the exception of MCSP, as found in Bauchi and Sokoto States, are providing TA to support and strengthen the RI program and related governmental health systems in Kaduna and Kano States. The BMGF and DF have been partnering with the State, providing funds to the RI basket fund as well as multi-system-focused TA through their State Consultant and sub-grantees (Solina Health and Chigari Foundations). In Kano, the Clinton Health Access Initiative (CHAI), a major partner funded by BMGF/DF, worked extensively to improve RI programming from 2014 to 2016. Currently, its scope has broadened to include strengthening SPHCD systems (contract continues to 2019). In Kaduna and Kano, the BMGF/DF-supported TA includes participatory development of the harmonized RI plan, vaccine logistics by eHealth (their work is primarily with polio eradication initiatives), accountability tools, guidelines, and involvement in monitoring processes and progress, as well as tracking the use of basket funds.

Other partners include: (1) CDC N-STOP, which provides RI-related TA, is improving access for underserved populations, State, and LGA M&E Departments, and is establishing the DHIS 2.0 system; (2) WHO, which, in addition to other disease prevention and control interventions, oversees polio campaigns, leads special immunization studies, and provides TA to improve access and utilization to RI services and embedded technical advisors at the State level, including logistics support in Kaduna; and (3) UNICEF, which provides an embedded technical advisor for logistics in Kano and TA from State to
community levels in the area of SM, health education, and BCC; UNICEF also financially supports the MCH-focused VCMs. As in Sokoto and Bauchi, these partners work collaboratively with the State oversight committees, RI Working Group, SERICC, and the TWGs. CDC N-STOP and WHO have field staff working at the LGA level and providing SS to HFs in addition to their surveillance and disease investigation work. Unlike the “deep engagement” approach using LGA consultants in Bauchi and Sokoto states, the MOU partners worked less directly with LGAs and HFs in Kano and Kaduna. Partners reported that this required CDC N-STOP and WHO field staff to place more emphasis on RI as they provide disease surveillance and polio/measles eradication-focused TA to LGAs and HFs.

A major programming difference, as compared to the USAID focused States, noted in Kano and Kaduna, is the shift from providing TA for RI as a vertical program, to RI being integrated with child health as part of broader PHC programming. The current MOU between the two Foundations and the States focuses on building capacities of the SPHCDA to provide the minimum package of essential MCH services, including improved delivery of RI. The large British Department for International Development (DFID)-funded Maternal, Neonatal, and Child Health Programme (MNCH2) project is an Integrated Health MOU partner in Kano. This is an integrated health program that builds on DFID’s extensive RI work and is providing MCH-focused TA at the State and LGA levels. MNCH2 brings to the Kaduna and Kano States a large array of advisors with specific technical expertise, including in strategic planning, advocacy, LGA system development and capacity-building, and demand creation.

**TA Approaches – Similarities and Differences**

Similar to Bauchi and Sokoto, a collaborative TA approach is utilized with MOU partners participating with RI oversight mechanisms, including the current SERICC, contributing to the harmonized planning process and providing TA to the various TWGs.

The team noted a significant difference in Kano State where the health system is organized into zones; here, rather than working directly with the LGAs, CHAI mentored the zonal offices and staff to provide SS, conduct data reviews, and provide formal and informal training and oversight. This approach necessitated strong collaboration with CDC N-STOP and WHO personnel in the field to assist with SS, on-the-job training, and coaching. MNCH2 works directly with LGAs and selected health facilities as part of the integrated health programming.

The review of past TA and current work by partners highlighted several different approaches or models and are presented below by thematic area:

**Governance and Accountability**

The MNCH2 advisors noted collaboration with the primary health care board (SPHCDB) and the Honorable Commissioner for Health, including current advocacy platforms to ensure that reforms are made eligible for federal funding. Quarterly briefings are held with the senior managers on budget and implementation using routine and survey data.

For the annual operation planning processes, MNCH2 engaged short-term consultants to gather strategic information, conduct situation analysis, conduct data analysis (DHIS 2.0), and report on findings of special studies and surveys. These data are used for informed decision-making by State and LGA

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41 In Kano, both organizations were noted when reviewing SS logbooks at the two facilities visited. In Kaduna, the facility visited had not had an SS logbook since mid-2017. The format of the logbooks was similar to that seen in Sokoto, so documentation of on-the-job training or coaching provided by the CDC/WHO field staff is not documented.
Managers. MNCH2 also uses short-term consultants to assist LGA PHC management with their planning processes. MNCH2 LGA staff and consultant advisors also assist with the formation of an LGA steering committee whose role is to provide oversight and engage in resource mobilization for the LGA.

Solina Health shared the standard operating procedures (SOPs) for the newly revised microplanning process (which uses the REW approach) that they developed after a multi-state consultative process with partners including MCSP. These SOPs were used during the 2018 planning process in Kano; partners noted that the processes are challenging and leadership and planning capacities need to be strengthened.

**Data Management**

After the MOU was signed in Kano, CHAI recognized a lack of computer skills and capacities; they facilitated computer training along with the purchase of computers for zonal and LGA immunization and M&E staff. As the DHIS 2.0 was just being introduced, LGA M&E staff were invited to locations where the internet connections were good; CHAI and zonal supervisors mentored immunization and M&E staff to input data using the direct observation approach. Additionally, peer-to-peer sharing and learning by LGA personnel was encouraged at regular zonal data and program review meetings. Low-performing LGAs were identified to receive additional attention by zonal mentors.

The assessment team did not ascertain the level of data review that continues at the zonal level, hearing more about activities of the “data control” room (Kano and Kaduna) and “health data consultative committees” where quarterly data from the LGA are reviewed by State M&E officers and State-level partners. Zonal immunization personnel noted that they provide TA and participate at LGA-level review meetings. An innovative approach has been to facilitate peer-to-peer review, whereby RI service providers were asked to share their registers with each other and review and provide feedback to their colleagues. This served as a coaching and learning session on data quality.

In Kano State, partners (including the Health Strategy and Delivery Foundation), sit with data managers and M&E officers at the State-level “data control room” on a monthly basis to use a computer app that notes discrepancies; the app flags data discrepancy issues and outliers. The concerned LGAs and HFs are then contacted, allowing time for correction before the database is locked by the Federal MOH. A DHIS manager noted significant improvement in reporting: “We used to correct data in 50 HFs before, but now [it is] reduced to about 7-8 facilities.”

CDC N-STOP in both Kano and Kaduna are mentoring State staff to take over DHIS 2.0 management in 2018.

In Kano, an electronic logistics system has been installed and there are plans to link its reports to the DHIS 2.0. The team noted great interest in determining more accurate denominators for analyzing immunization coverage. During field visits, the team noted that the States continue to emphasize zonal oversight and accountability. In Kano, for example, SERICC called zonal heads and officials from their

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42 For example, there “[m]ay be incongruences between # of children seen, # immunized, and # of vaccines utilized.”
LGAs to review the enumeration data (census, IPD, household survey data, and the line-listing data).

**Supportive Supervision and Monitoring**

Innovative technology was introduced using android phones with free airtime (provided by Kano Connect) to send real-time RI SS reports to zonal offices. In both States, eHealth, funded through the basket fund, is working to develop an SS database that will analyze SS reports sent by ODK through Kano Connect, synthesize findings and prepare reports for SS TWGs, which are to then be disseminated to zone and LGA immunization personnel. Samples report were not made available to the team.

The RI SS checklist in Kano is currently under review by Solina Health and CHAI: one State official said they “want more emphasis on quality.” Integrated SS checklists are used by government teams and other donor partners conducting visits to MNCH2-supported HFs.

**Service Delivery and Community Engagement**

The DFID-funded health programs in Kaduna and Kano have a long history of engaging community members, often influential leaders, to sit on HF committees. These committees advise on management and support health clinics by mobilizing resources and promoting services in the community.

In Kaduna State, a Primary Health Care Coordinator shared the new microplanning process, noting community involvement. In addition to LGA staff, ward focal persons, and HF staff, participants included ward and district traditional heads, community-based organizations, women, and youth groups. At ward level, personnel explained that the GIS maps showing settlements and population estimates were used for planning outreach clinics.

The Chigari Foundation is headquartered in Kano and is working in both Kano and Kaduna States. Here, too, there are signs of cross-fertilization, bringing in concepts introduced by MCSP in Bauchi State to develop community-based line-listing of newborns and tracking and RI referral systems utilizing traditional barbers and birth attendants. Based on the preliminary findings of the MCSP/Chigari Foundation pilot in Bauchi State, which showed disparities between the community and HF data, a new monitoring activity is being developed. This mandates that ward leaders and RI providers from the ward HFs meet weekly at the home of the district traditional leader. The purpose of these meetings is to verify that the line-listing and reconciliation are happening, discrepancies are reduced, and information is being used to track and to immunize.

MNCH2 uses multiple approaches to promote MCH (including RI). Advisors noted the success of collaborating with civil society, especially women’s development organizations and Islamic schools for women. They utilize young “mentors” trained to facilitate dialogue and to provide health education as they meet with small groups of young women or new mothers. In addition, in Kaduna State, they work with Save the Children, Rotary Core group, and the National Union of Road Transport Workers to promote CE activities.
Capacity-Building and Training

MNCH2 uses the best practice of conducting organization capacity assessments (OCAs) at the State, zonal, and LGA levels using a facilitated process and self-administered assessment tool; it covers the thematic areas of governance, leadership and partnership, planning and budgeting, M&E, health data management systems, service delivery, logistics, and resource mobilization. Findings are used as a baseline and for joint (Government and MNCH2) prioritizing and planning of the necessary TA and capacity-building.

Formal RI training is provided by MNCH2 as part of their integrated MCH training. With formal skill-training, they hire trainers from pre-service institutions. Kaduna and Kano State Officials told the team that WHO is providing funding and will lead the Basic Guide for RI Providers training planned for this year.

Challenges

The majority of challenges or gaps that the assessment team heard or observed in Kaduna and Kano were similar to those found in Bauchi and Sokoto States. A partner providing TA to strengthen the data management system also noted challenges with obtaining immunization (and other) data from secondary HFIs and from the private sector. As he noted, the LGA M&E staff “who are often CHEWs” feel intimidated going to these facilities to critically review their reports.

Lessons Learned

MOU Partners shared lessons learned, several of which were heard in all four States.

TA Approaches and Models

- TWGs provide an important venue for promoting collaboration and sharing of ideas, particularly when there are myriad agencies or organizations providing TA. There is consensus on the use of the TWG model as advisory bodies that are led by senior personnel from the relevant government unit or department.

- Collaborative TA (both formal and informal) must be well thought out and planned before implementation to ensure clear roles and sufficient input. For example, proven technical expertise and resources, with procedures to ensure accountability of stakeholders and staff, are essential to delivering programs effectively and efficiently. There must be respect for each other’s specific contributions and good indicators for evaluating the collaboration and the products. Communication should be clear and documentation processes spelled out in agreements.

- The optimal level of engagement in operations and service delivery (e.g., embedded staff and/or LGA consultants) is debatable and must be driven by contextual factors within each State. There is a fine line between capacity-filling and capacity-building; TA providers need to be constantly aware of and manage this as they work with governmental agencies.

- Technical advisors must be well-acquainted with or from the region, “otherwise we spend so much time instructing them,” as one government official said.

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43 In Kano, MNCH2 noted that OCA findings are disseminated to the larger partner population. It was not clear if these are used as part of collaborative planning or efforts.
• Step-by-step SOPs and guidelines are important as training tools and to ensure consistency and QA.
• Review of data quality must be done at all levels. An important lesson that was emphasized is the continuation of data quality checks at the facility level: checking registers against tally sheets, duplicate monthly summary forms, and also the number of antigens reported as given against the vaccine logs. “If only track summaries and review aggregated data [are carried out], may miss identifying fabricated data to cover the misuse of vaccines,” e.g., selling, dumping – or as heard in one State – “people give to their animals.” Providing prompt feedback to service providers helps to improve data recording.

Partnering with Government and Community

• To design health system strengthening TA, rather than starting from ground zero, requires a solid understanding of government structures and functions. Perhaps revitalization rather than new construction is needed.
• Moving to community involvement in localized planning, as per REW guidelines, is a complex development approach; globally, this has been found to be effective but will take time and considerable investment.
• Regular high-level interactions with State Government officials and traditional leadership is critical from the beginning and throughout the MOU timeframe as this fosters ownership and their commitment of RI Funds and other resources after the MOU and Foundation financial support has ended. Working closely with SPHCA implementation is essential for building and sustaining capacities, although it might slow down implementation.
• Strong accountability of all immunization stakeholders and partners is essential to delivering effective and efficient program strengthening.
• A fund tracking process with appropriate indicators is critical to ensuring financial accountability.

FINDINGS: QUESTION 3

How do RI outcomes in Bauchi and Sokoto compare with Kano and Kaduna?44

Key RI outcome indicators selected for this review included: expansion of services, immunization uptake (BCG and PENTA 1), drop-out rates (PENTA 1-3), full immunization rates, appropriately immunized for age, and card retention practices.45

Expansion of RI Services

Under the MOUs, targets have been set for expanding RI services and expansion is tracked annually using DHIS 2.0 data. The following table shows the progress which has been made.

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44 The assessment team was asked to compare Kano and Bauchi States immunization outcomes (2014) where there has been a longer MOU history, and also Kaduna and Sokoto states, where the MOU was more recent.

45 Vaccine stock-out was not included in this study, as the availability of data for stock-out of all antigens varied and was not available in some states. The system for reporting stock-out data is in flux, changing from the WHO DVD-MT to the DHIS 2.0. Sokoto State data were readily available and officials were proud to show a sharp decrease in stock-outs in 2017, ranging from 47 percent (of one or more antigens) in January to 7 percent (of one or more antigens) in December.
Table 3. Expansion of RI Services (DHIS)

<table>
<thead>
<tr>
<th>State</th>
<th>MOU initiated</th>
<th>Baseline</th>
<th>Target</th>
<th>End of 2017</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kano</td>
<td>2012</td>
<td>857</td>
<td>1,066</td>
<td>1,216</td>
<td>41.9% in about six years</td>
</tr>
<tr>
<td>Bauchi</td>
<td>2014</td>
<td>841</td>
<td>1,077</td>
<td>987</td>
<td>17.4% in about four years</td>
</tr>
<tr>
<td>Kaduna</td>
<td>2015</td>
<td>1,099</td>
<td>1,603</td>
<td>1,142*</td>
<td>4% in about three years</td>
</tr>
<tr>
<td>Sokoto</td>
<td>2015</td>
<td>487</td>
<td>760</td>
<td>524</td>
<td>7.6% in about three years</td>
</tr>
</tbody>
</table>

* Eight facilities less than the year before; a key informant noted health facilities are being renovated.

Kano State has made remarkable progress in surpassing its targets. Although Bauchi State had not met its target by the end of 2017, the State is expected to also have lessons to share as it has met 91 percent of the target and will likely meet or surpass this by the end of 2018. Both Sokoto (at 69 percent) and Kaduna (at 71 percent) will need to work hard to meet their targets by the end of 2018.

The MOUs in the four States also tracked change in planned versus actual fixed and outreach services using data from the DHIS 2.0. All four States are reporting improvements. By the end of 2017, Kano and Kaduna States reported that 100 percent of planned fixed and outreach sessions were conducted. Sokoto State reported 99 percent fixed/98 percent outreach and Bauchi 96 percent fixed/93 percent outreach. The assessment team views these results cautiously given the concerns expressed about the quality of administrative data.46

Immunization Uptake (BCG)

As the graph below illustrates, the MICS survey found uptake of BCG continues to be much higher in Kaduna than the other States. In comparing the change in BCG uptake using the 2013 DHS and the 2016-17 MICS datasets, both Bauchi and Kano States experienced a statistically significant increase in BCG uptake.

Figure 1. Percentage of BCG Vaccination in the Selected States

Source: NDHS 2013 and MICS 2016

46 An indication that these data may be unreliable is that State Finance TWG members reported that the Finance Department is calling clients to verify that outreach RI sessions were held as reported by health facilities.
All the States, except Sokoto, had a reduced number of children receiving BCG from 2016 to 2017, based on DHIS 2.0 data (Figure 2).

**Figure 2. Uptake of BCG by States**

![Graph showing BCG uptake by States 2016 vs 2017](image)

Source: DHIS 2.0

**Immunization Uptake (PENTA 1)**

In Bauchi State, there was a significant increase in PENTA 1 uptake comparing 2013 NDHS and 2016-17 MICS datasets with a p-value of 0.0088. The increase in Kano was not statistically significant.

**Figure 3. Percentage of PENTA 1 Vaccination in the Selected States**

![Graph showing Penta 1 vaccination percentage](image)

Source: NDHS 2013 and MICS 2016

Review of 2016 and 2017 administrative data DHIS 2.0 (Figure 4), found a decrease in the number of children receiving PENTA 1 in both Bauchi and Kano while increases were reported in Kaduna and Sokoto States.
Drop-out Rates (PENTA 1-3)

2013 NDHS and 2016 MICS survey data comparing drop-out among children 12-23 months (Figure 5) show only Bauchi had a reduced drop-out rate, though it was not statistically significant. From a historical perspective (comparing 2016 MICS with the 2013 DHS), the remaining three States had increases in drop-out rates; these were statistically significant in Sokoto and Kano.

Using the administrative data below (Figure 6), the reduction of drop-outs was reported in each of the four States. Kaduna had the most extensive reduction in drop-outs. Kaduna continues to outperform the other States.
Figure 6. Percentage of Drop-out Rate in the Four States

Source: DHIS 2.0

Full Immunization Rates

The 2016 MICS Survey found disturbingly low immunization coverage in all four States: Sokoto (2.2 percent), Bauchi (13.9 percent), Kano (9.5 percent), and Kaduna (24.9 percent).

Figure 7, below, shows the comparison of “full immunization” rates among children 12-23 months for Bauchi and Kano using the 2013 NDHS and 2016 MICS datasets. In Bauchi State, findings show a significant increase in full immunization in Bauchi with a p-value of 0.0018. In Kano, the full immunization rate fell (p-value of 0.0545). From a historical perspective (DHS 2013), with the 2016-17 MICS dataset, Kaduna has shown a troubling decrease in full immunization rates with a p-value of 0.0069. There was no significant change in Sokoto State.

Figure 7. Percentage of Full Immunization in the Selected States

Source: NDHS 2013 and MICS 2016
Comparisons of 2016 and 2017 administrative data from the DHIS 2.0 (Figure 8) showed an increase in the number of the fully immunized children in the four states from 2016 to 2017. Bauchi increased numbers by 17 percent while Kano increased by 10 percent. Sokoto reported a larger increase (15 percent) in the number of fully immunized children, whereas Kaduna only had a 5 percent increase in the number of children fully immunized.

**Figure 8. Number of Fully Immunized Children in the Four States**

Source: DHIS 2.0

**Sex Differences Related to Immunization**

Using the 2013 NDHS dataset, males were noted to have had better uptake of BCG than females in Bauchi State; this was statistically significant with a p-value of 0.0338. In the other three States, females had better uptake of BCG than males, but this difference was not statistically significant.

Analysis of the MICS data set found no statistically significant sex differences with uptake of BCG or PENTA I; sex differences with drop-outs were also not statistically significant.

**Appropriately Immunized by Age**

Based on LQA survey data (December 2017), the proportions of children age 0-11 months appropriately immunized for age, using card and history, showed Bauchi at 39 percent, Sokoto at 26 percent, Kaduna at 41 percent, and Kano at 39 percent. Given the LQA methodology, this does not show coverage, but does provide valuable strategic information, pointing out the differences between states and between state LGAs (as sampled). As an example, seven of the 22 LGAs sampled in Sokoto had three percent or less children appropriately immunized for age. With subsequent LQA surveys, trend data can be used by States and LGAs to track progress.

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47 Not published at the time of the assessment; the preliminary report was obtained through an MOU partner.
Immunization Card Retention

The MICS survey found low immunization card retention. Kaduna State was performing best (38 percent), Bauchi and Kano were similar (19.7 and 19.6 percent, respectively), and Sokoto was performing poorly with only 5.2 percent of immunized children 12-23 months having cards. The comparison of 2013 NDHS and 2016 MICS data found that there was a significant increase in vaccination card retention in Kano while the increase in Bauchi State was not statistically significant.

The LQAS surveys (December 2017) findings also showed the proportion of children (0-11 months) with cards by States. Findings indicate that card retention may be improving in the four States: Kaduna (67 percent), Bauchi (66 percent), Kano (61 percent), and Sokoto (58 percent).
CROSS-CUTTING ISSUES

With the release of the 2017 MICS/NICS survey, all four States have recognized their critically low child immunization coverage rates. They have realized that administrative immunization data do not give reliable coverage information at the State level. All are struggling for better enumeration so as to have a more valid and reliable denominator for analyzing immunization coverage. Following national direction, the old system of setting monthly targets based on estimated population divided by 12 months is being discontinued; how targets will be established at the local level in the future is not clear.

In the past six or more months, there has been new RI leadership with the creation of SERICC, shifting the focus of State Immunization Officers and the EOC on polio and measles campaigns. With the SERICCs, the team was told of daily meetings with mandatory attendance of partners. The leadership is placing a strong emphasis on action and accountability and, in several States, there was observable fervor for investigating issues and for awarding or sanctioning of staff, HFs, or LGAs. At the LGA level, LERICCs are being planned but had not been operationalized during the assessment.

RI programs continue to be overshadowed by emergency-minded initiatives focused on eradicating polio and measles. With the Immunization Plus Days, these vaccines are provided house-to-house or at special community sessions. A child may receive multiple doses of vaccine as part of the eradication measures. The polio campaign uses a blanket immunization strategy; immunizations given are not documented on child health cards nor captured on immunization records at the local PHC or LGA. The team heard of practices to pressure non-compliant families, e.g., blocking unimmunized children from attending school. Incentives are used, (e.g., sweets or milk for the households and payment for mobilization to community committees and volunteers). These features result in mixed messages, with the RI program promoting card retention and use of the PHC fixed or outreach clinics and voluntersim without financial incentives. Several informants noted parents demanding prevention measures for the diseases they most fear, e.g., insecticide-treated bed nets to prevent malaria. On a more positive note, there are signs of integration. Several partners noted that where there are Immunization Plus Day health camps (fixed points), additional antigens (except for BCG) are being provided and recorded.

Approved nationally, lengthy RI SS checklists are being utilized. The SS TWGs in all four States are exploring ways to track the SS visits and better summarize key findings. The community surveys conducted as part of the SS appeared to lack defined methodology, such as scientifically valid sampling technique and weighting, survey design-based analysis, and data use.

Several service delivery issues were raised in discussions with the RI community or observation of the sessions. These included: (1) lack of understanding of policies or misconceptions about how to catch up older unimmunized children (a critical issue as low immunization coverage has existed for years) or whether to use the registers to transcribe previous immunizations that were given elsewhere; (2) the need for more user-centered paper record-keeping systems and use of a tickler box or other mechanism for easier tracking; (3) the need to stabilize register formats and tools, noted by several officials as a means to reduce the costs of orientation and printing; (4) improved vaccine packaging.

48 The 2016-17 MICS Survey found disturbingly low immunization coverage: 2.2% in Sokoto, 13.9% in Bauchi, 9.5% in Kano, and 24.9% in Kaduna.
49 The RI Checklist list has 66 boxes to tick, plus the format requires four exit interviews and 10 household visits, conducted by one person or more, in Kano and Kaduna, the Integrated SS has 189 boxes and requires interviews with management, as well as a clinicians-team approach.
noting the mega dose-vials, which are likely contributing to high vaccine wastage, missed opportunities, and the risk of using multi-dose yellow fever ampules; (5) review of QA procedures to ensure adequate functioning of the cold chain when drawing from apex facilities or providing outreach clinics; and (6) better tools to guide RI providers in calculating the return visit (e.g., interval between the services of immunizations). Unavailability or no easy access to handwashing or water and soap for cleansing injection sites was observed at the facilities/sessions visited. Several government officials or practitioners noted the provision of paracetamol (with take-home instructions) as part of immunization services.

The CE strategies in all four States depend heavily on working with the traditional leadership system. Traditional ward leaders are being asked to register all newborns and to oversee the tracking of unimmunized and under-immunized children. Risks to this system were noted by the assessment team, including: lack of standardized registers, illiteracy, complaints of added workload, and the need for transport allowances (to travel to the HF to reconcile records). Traditional barbers and birth attendants are being asked to promote RI, to refer using colored referral cards, and to follow up with these households. Frequently, the team heard the desire for compensation/incentives. Community health volunteers, who are incentivized through donor-funded programs, are also helping to promote and track. There is a lack of consensus about working through the WDCs, as incentives (like the ones received through the polio eradication campaigns) are expected.

While partners noted serious data falsification discovered in past years, most believe that this issue is being controlled with the end of census-based immunization targets (which is thought to be a contributing factor), introduction of checks and balances (e.g., calling clients to confirm that they received RI at outreach sessions, procedures to return used vaccine vials), and the data review processes at each level (including the reconciliation of line-listing by ward leaders with the HFs). Yet, during a visit to one State, investigations were being undertaken to understand the observed “seeding” of child immunization cards (all with similar immunization data) before a household survey was conducted. With this as well as other incidents of falsification, a major question that arises is “Why?” Why falsify? What is driving this behavior? Accountability concerns were significant enough that State SS visits to LGAs were suspended for several months, with current efforts by MCSP and other partners to develop methods to validate the SS checklist and to verify the quality of the visit. The new form requires the SS personnel to: (a) list action points from the last visit; (b) list on-the-job training or coaching conducted; (c) document provision of feedback to LGA personnel responsible for feedback; (d) list datasets observed; and (e) for all involved in the visit, sign the form.

All of the States are in the midst of major health care reforms, e.g., Primary Health Care Under One Roof (PHCUOR). With this reform, senior SPHCDA management noted challenges with managing and funding the workforce. Concerns were expressed about high attrition, poor distribution of professional staff (“70 percent are in the urban areas”), the large number of staff without “credentials,” and poor attitudes, attendance, and performance. As noted by several senior officials, staffing and infrastructure challenges contribute to geographical disparities in access and equity to health services, including to RI. The four States share major human resource challenges, including financing the workforce, ensuring appropriate certification and skills, and distribution of workers to serve rural populations, particularly to deliver health services to rural populations. During visits to HFs, the team noted that RI services, including record-keeping, were being provided by only one staff person. Several reports and comments from key informants noted that there are often too many competing activities, which contributes to poor record-keeping and data quality.

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50 For example, the multi-dose BCG vials (which may contain 10 or 20 doses) must be discarded at the end of the session.
CONCLUSIONS

The findings of this assessment illustrate how USAID TA is supporting the monetary investments and TA provided by other partners. They also illustrate the progress made to improve state capacities and basket funds and direct funding to HFIs to conduct outreach RI services, develop harmonized RI plans, develop TWGs for better collaboration and technical oversight, expand RI fixed and outreach services, better prepare skilled RI providers, stabilize vaccine delivery, develop the data management system, and develop new innovations to engage communities in promoting RI.

Question One – Effectiveness of MCSP TA. This assessment noted the wide scope and coverage of the MCSP TA. Key government and partner stakeholders voiced great appreciation of MCSP’s responsive and strong technical capacities. Most highly acclaimed by the government are MCSP’s contributions to (a) building data management skills at all levels, (b) introducing SS tools and processes, and (c) facilitating and supporting skills training for RI providers working at governmental PHC facilities. Partners, too, echoed State and LGA government officials in their appreciation of the field-based MCSP LGA consultants assigned to each LGA in the States. These consultants help establish direct funding to health facilities, improve data management, organize local planning with community involvement, provide on-the-job training and coaching for HF RI staff, monitor vaccine and cold chain management, and engage with traditional leaders and traditional barbers to promote RI at LGA and HF levels.

This assessment was not able to definitively measure the effectiveness or extent to which MCSP TA has contributed to skills transfer and system change given a) the highly collaborative nature of the TA being provided with BMGF, DF, and other TA partners, including CDC N-STOP, WHO and UNICEF; b) the lack of good documentation of the technical advising to the TWGs and government staff by MCSP staff and that provided by LGA consultants to HFIs, communities, and LGA PHCs; and c) the lack of good baseline data and subsequent assessments/evaluations.

Areas needing to be improved that are specific to MCSP TA were noted. A few are highlighted below. First, appreciating the current aim of the MOUs and the MCSP role to improve accessibility and availability of RI services, more focus is needed to improve the quality and gender-responsiveness of these services. The practice of older children bringing their younger siblings for immunizations was reported by key informants and also observed by the assessment team. More information is needed to understand “why” this is happening. No protocols or procedures were noted on how to prevent or manage this practice. During FGDs, both mothers and fathers frequently voiced concerns about fevers and crying after immunizations, in particular PENTA 1. Such concerns need to be carefully studied, as they may be an important barrier to uptake of immunizations or an important reason for drop-outs after the PENTA 1 injection. Other highlighted areas where improvement is needed include improved mechanisms for easier identification of defaulters (e.g., tickler boxes) and the need to further develop the system for community-based newborn registration and tracking system, including coordination of various cadres of community health workers.

Operationally, MCSP TA could be strengthened by (a) addressing the under-documentation of coaching, on-the-job training, and action planning as part of the SS visits; (b) the use of organizational capacity assessments with findings used to tailor TA according to identified need and to measure changes in skills transfer or system change prior to training, e.g., the anticipated mid-management training program; (c) rationalizing LGA consultants and technical advising to HFIs and LGAs with poorest performance or needs; (d) conducting an internal review to ensure that LGA consultants have sufficient skills sets to...
address common, acute, or chronic issues related to planning and service delivery and that they are
building capacities of government personnel, i.e., LGA SS personnel versus “filling capacity”; and (e) to
follow up on the needs of government for strengthening staff development and training capacities.

There are areas where collaborative TA efforts are needed. First, despite the TA being provided by
several TA partners, including MCSP, the quality of the administrative data is still sub-optimal. There is a
need for greater understanding of the causal and contributing factors affecting data quality at each level
of the data management system. Secondly, there is under-documentation of the coaching, instruction,
on-the-job training, and action planning provided during SS visits by MCSP and others (such as CDC N-
STOP, and WHO). Third, more attention is needed to developing management and coordination
systems to (a) rationalize SS resources of MCSP and other TA providers for greater efficiency;
(b) provide more focused and targeted TA to build supportive supervision/monitoring skills of LGA and
State personnel and for greater accountability; and (c) manage and coordinate the various community
health and outreach workers in tracking and following up children who are unimmunized or have not
returned for scheduled visits. Fourth, more focus is needed on compiling, triangulating, synthesizing, and
using strategic information already being gathered. As an example, there are various sources of
information about barriers to immunizations, including the population-based surveys, the LQAs
conducted by WHO, the community surveys conducted by SS visitors, and other special studies by
MCSP or other TA providers. Finally, while only a small number of facilities were visited during this
assessment, the team noted common problems recorded in the SS logbooks of facilities, including a lack
of defaulter lists and revised micro-plans and the existence of non-functioning CCE. MCSP is encouraged
to review and find solutions for these common and/or chronic issues working with their collaborating
TA partners and State, LGA, and HF managers.

**Question 2 – TA similarities/differences in non-USAID focus States.** In the non-USAID focus
States of Kano and Kaduna, the assessment team found similar collaboration working through oversight
committees and TWGs to strengthen RI programs. Cross-fertilization of ideas between MOU partners
and other partners in their approaches to improving RI was apparent. BMGF/DF consultants have played
a role in bringing ideas from the six MOU states and their sub-grantees, including CHAI’s mentoring for
data and the incorporation of adult learning processes into skills-training programs. There are
indications of extensive sharing and replication of tools and guidelines between the MCSP Bauchi and
Sokoto State teams. In addition, the TA has built on promising practices from USAID-funded projects,
such as TSHIP and MCHIP experiences with community newborn registration processes. A major
programming difference between the USAID focus and non-focus States is the shift of the public-private
partnership MOUs from a vertical RI program to integrated health system strengthening. Approaches
have differed with more attention to building capacities of zonal personnel to provide TA in Kano and
dependence on CDC N-STOP and WHO to provide supportive supervision to HFIs rather than
providing additional TA, i.e., the MCSP model of assigning RI focused consultants to each LGA. A best
practice observed in Kano and Kaduna is MNCH2’s use of OCAs at State and LGA levels with findings
used to plan for needed TA and using the same tools to document system changes.

There are several lessons learned. First, the importance of high-level State government involvement is
critical from initial assessment to continual monitoring and critical review of the TA; system
development requires working at each level. A second lesson learned is that taking a total system
strengthening approach is particularly true in the context of improving the quality of administrative data.
Third, there is a fine line between capacity-filling and capacity-building: TA providers need to be
constantly aware and manage this as they work with governmental agencies.
**Question 3 – Differences in RI outcomes between the four States.** The assessment team encountered challenges in reviewing changes in uptake, drop-out, and full immunization data. The assessment team was challenged by lack of good quality data in all four States during the MOU time frame. Administrative data were readily available at each of the States. In looking at the process indicators tracked by the MOUs, administrative data from the DHIS 2.0 showed that all States show expansion of facilities providing RI. Kano, with a 40 percent expansion, has surpassed the 2018 target and Bauchi is on track to reach its expansion target. Sokoto and Kaduna States will need to step up their pace this year to meet their expansion targets. The utilization of immunization services along with the expansion is not being tracked.

Higher quality data from the large population-based surveys (the 2013 NDHS and the 2016 MICS Survey) were available for secondary analysis. The MICS survey found, as had the NDHS, that all four States have critically low immunization coverage. This was a wake-up call to the States dependent on their administrative data and analysis, which showed higher immunization rates.

The use of the DHIS and MICS datasets to compare change in RI outcomes was only considered for Bauchi and Kano States given the MOU timeframes. With this, it was noted that a) both Bauchi and Kano States have improved their uptake indicators (analyzing both BCG and PENTA 1) but this change was only statistically significant in Bauchi; b) Bauchi State had a statistically significant increase in full immunization coverage, while full immunization fell in Kano (p-value of 0.0545); and c) drop-out rates were reduced in Bauchi but higher in Kano (though it is critical to point out that neither of these changes were statistically significant).

The assessment team encourages further interpretation of these analyses, including looking closely at what was happening during the NDHS and the MICS study timeframes. In addition to the work to expand and supply RI services, there are myriad contextual factors that may have contributed to positive or negative RI outcomes.

The analysis of the administrative data comparing 2016 with 2017 calls for further exploration of the quality of the data and interpretation of changes noted in the four states.

No statistically significant sex differences were found with the analysis of the MICS dataset. Analysis of the NDHS found that male children were more likely to be vaccinated with BCG. This was unexpected, as our desk review did not find research reporting sex differences with childhood immunization in Nigeria and this was not noted by mothers, fathers, community workers during FGDs, or in interviews with program staff. Further analysis of the NICS dataset is advised when it is available.

The MICS survey found low card retention in the four States; concern was expressed by several key informants that this may have contributed to survey findings, i.e., that immunization coverage may actually be higher than reported. The recent LQAs suggest that card retention may be improving in the four States, although there is wide variation between LGAs.

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51 Note that the cohorts studied were age 12-23 months at the time of surveys. The baseline then would be 2011-2012 and the second reference period using the MICS would have cohorts within the 2014-2016 time period.

52 Examples of factors include political, level of insecurity, urban versus rural populations, environmental conditions, socio-economic, parallel supplemental vaccine campaigns, availability of staffed facilities, service modalities, level of support or assistance to delivery of RI or more broadly to community and facility-based child health services.
The 2017 LQAS survey findings are valuable as they alert the States and TA partners to LGAs most challenged with low uptake of immunizations and should drive further studies, including the diagnosing of barriers affecting supply and/or demand. If standard methodology is used, the trend data will help to inform TA providers, LGAs, and States Government Agencies on their progress to improve RI programming.

The assessment team noted with appreciation the demand for and efforts being made to gather more and better strategic information, e.g., community registration with line-listing of newborns; plans to add additional new indicators to the DHIS 2.0; the use of GIS mapping of settlements for planning RI and LQAS survey findings for tracking progress in uptake of immunization. The differences between the administrative and MICS/NICS report is driving the need for more reliable population estimates and better denominators to analyze immunization coverage. Areas that are underdeveloped include systems to (a) track and respond to vaccine stockouts and wastage, (b) rationalize and allocate human and equipment resources, and (c) measure service quality and performance. More information is also needed to understand population mobility and health care-seeking behaviors. The assessment team also noted a generalized distrust of data among the RI community, which questioned the methodology and findings of the MICS survey and use of LQA survey results to show improvements in RI coverage.

Cross-cutting issues affect the accessibility and quality of RI services. Several worthy of note are:

1. The parallel polio and measles immunization campaigns are seen as undermining efforts to create demand for and increase utilization of regular fixed or outreach RI services and improved immunization card retention.

2. There is a need for national resources, including guidelines, formats, and supplies to be more user-centered and efficient. This includes clarifying protocols and SOPs to catch up older unimmunized children or to transcribe immunizations received elsewhere; refining paper-based record-keeping systems for easy retrieval and use of vaccine records for tracking defaulters; and packaging vaccines (several of which are mega-dose vials) to reduce waste, missed opportunities, and long waiting times as nurses wait for arrival of sufficient children needing specific vaccines.

3. SPHCDAs in the four States are in the midst of PHCUOR reform and face major human resource for health challenges, including management and other personnel in positions lacking appropriate qualifications or commitment, low worker performance, high attrition, and poor distribution of the workforce. This situation drives the need for continual staff development. Given the dynamic situation, there is need to keep abreast of government functions, roles, and responsibilities at each level and to build their capacities as needs are identified. The introduction of the new CE focal persons and development of LERICCs will warrant re-focusing TA to develop their capacities. These basic issues affect the design of TA approaches as well as the results, with informants noting the need for the “right person” to train and the need for

53 For example, related to vaccine stockouts and functional health facilities. The expansion indicator as now being tracked by the MOU could be strengthened by measuring the percentage of health facilities providing immunization services in each of the States and how this has changed over time. This measurement will require reliable information about the number of health facilities that are actually functional and meet the minimal standards for providing RI.

54 During the assessment visit to Kano, State meetings were being held to review various data sources, including WHO house-to-house survey data and community registers as well as old census data.

55 Seeking care out of catchment, need for more information about where people want to go (for services).
good supervision and staff management. A minimal standard for staffing to provide quality and gender-responsive care and to keep good records must be assured.

4. Governance and accountability issues highlighted during the assessment included: the need to reduce falsification of reports and data with verification mechanisms; the desire for performance-based awards and sanctions; better coordination of partners providing TA; and improved rationalizing of resources. The assessment team noted with some reservation the MOU approach whereby partners are primarily working through the TWGs versus directly with responsible government structures and personnel and that financial procedures and accountability measures are being developed which bypass LGA PHC management.56

In spite of the many challenges, the assessment team observed this to be an opportune time to improve RI programming as state governments acknowledge their low immunization rates and have made a commitment to fund and improve RI services. The SERICCs bring passion and leadership for rapid sharing of critical issues, for more rapid responsiveness to investigate deficits and problems as they are identified, and for addressing performance with sanctions and awards. Targets and performance criteria must be carefully crafted to reduce the risks of punitive actions by well-meaning government, traditional and/or religious leaders; falsification of data by health workers and government officials; and/or use of “bad” incentives to keep numbers up.

Among Commissioners for Health, SPHDA management, and partners, there is widespread awareness of the need to sustain and expand RI services, but also recognition that focusing on supply alone will not solve the critical public health issues of low child immunization coverage – i.e., demand creation is a major need. Service quality concerns must also be addressed as they affect supply and demand. Strategies are needed for service improvements to address known gender-related and other barriers to RI and to PHC services as were noted in this assessment, with special emphasis on quality concerns related to children bringing children for immunizations.

Our “consensus statement” is that the USAID investment in Bauchi and Sokoto State has shown the value of the TA provided by MCSP provided at each level in collaboration with MOU and other TA partners and, coupled with the basket fund, has resulted in improved RI programming. Where there are RI outcome differences between MOU States, these cannot be attributed to TA provided by MCSP or other partners. The assessment team hopes that the results of the comparative analyses will foster introspection and interpretation involving all key stakeholders.

There is valuable knowledge to be gained by USAID and Foundation Partners as they review together the MOU partnerships, the pros and cons of the collaborative TA approach and different TA delivery models (including embedding or seconding of technical advisors, how TWGs are being utilized, and the use of LGA consultants), as well as lessons learned in shifting from project-driven development toward a State-led approach.

Our observations in assessing the different TA delivery and operational models is that they must be context-specific. Important factors to consider include: availability of government human resources and their capacities; size of the State; health system situation (e.g., stable versus one in reform); planned or anticipated system changes; coverage (e.g., institutionalizing of new guidelines or tools); and the immediacy or severity of the public health issue. Using this criteria, the team views the MCSP model of

56 Procedures were noted that bypass the LGAs, e.g., distribution of RI funds directly from State to LGA SS personnel bank accounts and directly to HFs for outreach activities.
utilizing LGA consultants at LGA and HF levels in Sokoto and Bauchi States as appropriate as they have been important to rolling out new procedures and forms, assisting LGA and HF managers to plan and for more community involvement, providing coaching and on-the-job training for staff to deliver RI, and improving data recording and reporting. This model could be improved by providing more specialized TA to coach/mentor LGAs officers, the new LERICCs, HF managers, and the new CE focal persons in the areas of community assessment, participatory planning (REW), and use of data for increasing access and quality of services.

Looking ahead at future programming directions, there is a need for more focus on developing transformative leadership, better accountability, and improved governance at all levels – with more concerted effort at the LGA level – to ensure availability, accessibility, acceptability, equity, and quality of RI services and to create greater demand for immunizations. This development focus must also contribute to broader public health and PHC system strengthening initiatives in each State.

With these foci, we strongly encourage USAID to build on the current public-private partnerships in both Bauchi and Sokoto States. This will require shifting to TA models, bringing a variety of specialized skill sets and advisors with experience working in the government domain to directly advise responsible State and LGA management and technical units and HF managers. Collaboration with States, the Foundations, and other RI partners must be more clearly defined and coordinated, wherein (a) roles and responsibilities are delineated to avoid duplication and “scope creep,” (b) contributions of each partner are measurable, accountable, and documented, and (c) results are rigorously monitored and evaluated (baseline and annually using OCA, measuring benchmarks, outputs as compared to targets, and short/medium term outcome indicators) to show skills transfer and/or system change. USAID and MOU partners are also encouraged to critically re-examine the collaborative TA approaches and the current model of working through TWGs (rather than directly) to build leadership and the technical capacities of governmental structures and responsible personnel to carry out their functions. This is particularly true with developing governance, finance, and performance monitoring capacities, systems, and tighter accountability measures.

The team applauds the shift of USAID and MOU partners to integrate RI with delivery of MCH services and high-impact preventive health and child survival measures. But we also caution donors, program managers, and TA providers to keep a concerted focus on addressing low child immunization rates, a critical public health issue in the region.
PRIORITY RECOMMENDATIONS

PRIORITY RECOMMENDATION 1 – SPECIALIZED, FOCUSED, AND TAILORED TECHNICAL ADVISING

To improve RI programs and have a broader application to strengthening the State Public Health system and PHCUOR, USAID and their MOU TA Partners are advised to invest in TA that is specialized, focused (addressing specific identified capacity needs), targeted (where needed most), tailored, time-bound, with TA “ingredients” documented and rigorously evaluated (i.e., skills transfer and/or changes in systems), accountable (to beneficiaries and donors), coordinated to maximize resources and reduce duplication, and collaborative (enhancing TA provided by others).

A specific recommendation for MCSP and other partners conducting SS or technical monitoring is to review that they have a) sufficient field staff or consultants both in terms of quality and quantity given the diverse situations within the States; 2) that these field TA providers have the competencies to provide or facilitate the on-the-job training, coaching, or mentoring needed to strengthen capacities in each of the thematic areas, and 3) that their performance as capacity-builders is closely appraised.

Three inter-related areas are recommended for prioritizing the specialized RI-related TA. Below we present a subset emphasizing high priority needs for TA. The full listing of recommendations can be found in Annex VII. Recommendations for Improving RI Services.

PRIORITY RECOMMENDATION 2 – TA TO DEVELOP RI-FOCUSED STRATEGIC INFORMATION SYSTEMS

USAID, in collaboration with MOU and other TA partners (including CDC, UNICEF, and WHO), is encouraged to make a concerted and collaborative effort to further develop strategic information systems within the State Planning Research and Statistics Department and the LGAs. TA will build on past and current data management system investments in developing the DHIS 2.0 and special studies/surveys. It will feed the increased demand for more useful and better data for understanding the RI issue, for use of data for planning and managing services, and will foster data ownership. The purpose of the system is to compile, analyze, triangulate, and interpret data from a variety of sources and to systematically plan for gathering additional information as needed. With the latter, developing capacities to understand and employ good methodology and appropriate use of specific data is critical. Having quality strategic information is expected to (a) result in informed planning, rationalization/placement, and allocation of resources; (b) aid in mobilization of additional resources; and (c) strengthen governance, accountability, and management systems at all levels of the public health and PHC system. The usefulness of the information is expected to further reduce falsification tendencies and to increase the focus on better reporting.

Three major objectives of the recommended strategic information system, along with proposed high priority TA, are presented below.

1) A better understanding of the public health issue: in this case, the low child RI rates

Based on needs observed during the assessment, specialized technical advising is needed to build on work being done and information already gathered to assist States to determine better estimates (population under age 1) and for acceptable denominators for analyzing immunization coverage for submission to the relevant national agencies. Such technical advising is also needed to design and lead formative studies, including barrier analysis in the Sokoto and Bauchi State LGAs with lowest
proportions of children appropriately immunized for age, coupled with a mini-diagnostic assessment of the supply side/service availability and accessibility. Furthermore, technical advising should help conduct an analysis of vaccine-related barriers (e.g., the prevalence of AEFI-s – fever after injectable immunizations) and facilitate a participatory\textsuperscript{57} retrospective evaluation/review in Bauchi and Kano States that contributes to the RI outcomes during the MICS survey and cohort.

2) To identify areas of weaknesses or capacity gaps within the health systems

Recommended as high priority: 1) MCSP and Training TWG to build on previous assessments and SS findings to design and facilitate systematic management capacity assessments (subset of OCA) of State units, individual LGA PHCs, and HFs before conducting the planned Mid-Level Management Training in Sokoto and Bauchi – with findings used as baseline and for tailoring the training program and for evaluating the application of skills and changes in management as a result of the training program; 2) participatory\textsuperscript{58} technical assessments to identify contributing or causal factors negatively affecting the functioning of the data management systems (e.g., quality of administrative data) using a total system approach of how administrative data is gathered, recorded,\textsuperscript{59} summarized, reviewed (at each level), corrected, inputted, aggregated, triangulated (e.g., with vaccine delivery, usage and wastage reports, and the planned use of administrative data), and interpreted. These findings to feed the development of strategies for improving the data management system, as well as actions or resources needed.

3) To track and measure the health sector’s provision of RI services

Recommended as high priority: 1) MCSP and partner field consultants to be assigned to work closely with LGA PHC management, LERICCs, and HFs to plan RI services building on past and current work to utilize REW processes, GIS maps, and community registry data; 2) system to be developed to document SS findings (including those captured on ODK) at States and LGAs for analysis, use, and action; 3) MCSP and partner field consultants to build capacities of LGA PHCs and LERICCs to monitor utilization of services—particularly outreach sessions – and to explore reasons for low utilization and plan accordingly\textsuperscript{60}; 4) expert TA (linked to the first recommendation) to build LGA capacities to help conduct barrier and root cause analyses and mini-diagnostic supply assessments/surveys at low performing LGAs (as identified by the LQA surveys); and 5) collaborate with the Foundations, providing expert TA as needed to support the development of measures and procedures for RI program and service performance appraisal.

**PRIORITY RECOMMENDATION 3 – TA TO CREATE DEMAND FOR RI**

It is recommended that USAID invest in highly specialized technical advising to lead the development of strategies that are State-specific to create demand for vaccines, full immunization, and immunization services and to change practices (e.g., children taking children for immunizations and low card

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\textsuperscript{57} All key stakeholders working on RI/Child Health in the States during this time period.

\textsuperscript{58} All TA partners working on data management with their State and LGA counterparts.

\textsuperscript{59} Involvement of specialists in development of paper record-keeping systems at health facilities, i.e., organization of registers/ledgers, SOPS for completing registers including transcription of records of previously received immunization records, identification of defaulters, and use for tracking. Advocating or providing TA for user-centered paper-based recording tools may be a national level assignment, but would recommend piloting any new changes in Bauchi or Sokoto.

\textsuperscript{60} Regularly assess service utilization (at the facilities and outreach clinics) to determine if clientele and attendance is increasing. Are the sites for the regular outreach sites working? Are they cost-effective or do we need to do less and take more of a campaign mentality – less days, more staff, floating aides to help record, use of volunteers to mobilize ahead of time, link to market days, or are there other ways to improve access and utilization?
retention). Based on the barriers analysis and formative studies mentioned above, *multi-faceted* strategies to be developed for each State using a collaborative and participatory approach incorporating a) behavior change theory and communications, including the use of role models; b) SM building on lessons learned from current CE strategies; c) structural interventions (e.g., mandating immunizations to attend school or to be eligible for health insurance or free child survival preventive measures); d) periodic intensification of immunization services, e.g. Local Immunization Days, Child Health weeks, or MNCH week; e) marketing of PHC services; and e) good incentives. These strategies will use both “carrot” and “stick” to motivate parents to immunize their children.

To operationalize the strategies, it is recommended that resources are mobilized and collaborative approaches taken with other partners. USAID is encouraged to invest in short-term technical advisors to work at LGAs with PHC coordinators to operationalize the demand creation strategies.

This must go hand-in-hand with the investment in service improvement and CE; working on demand alone will not improve coverage. Services must be available, accessible, gender-responsive, client-oriented, and acceptable to the communities being served.

**PRIORITY RECOMMENDATION 4 – TA TO DEVELOP SYSTEMS TO ASSURE QUALITY AND GENDER-RESPONSIVE RI SERVICES**

To advance a culture of quality within the State MOH and SPHCDA, it is recommended that USAID provide specialized TA to develop or strengthen structures, systems, and/or processes to (a) communicate and act on identified quality technical issues and concerns; (b) ensure high standards and practices; and (c) foster client-focused and gender-responsive MCH services along the continuum of care and prevention. Re-directing the focus on ensuring and awarding quality and client-focused services, rather than on numbers only, is expected to inspire government workers to higher performance, to reduce falsification of administrative data, to build the trust of the population, and thereby to attract clients.

High priority areas for focused TA include development or strengthening of the following.

1) **Communication channels**

TA is needed to develop direct communication channels for HF managers/supervisors and LGA officials to report critical needs or service-/support-related issues to the responsible government unit or personnel with a copy to LERICCs/SERICCs. The SERICC and LERICC QA communication system must also be able to capture key deficits noted during strategic information gathering, monitoring, and from SS systems.

2) **Advisory team/technical task force to address critical RI quality issues**

As an immediate QA/QI initiative, it is recommended that USAID facilitate and provide specialized technical advising to Bauchi and Sokoto States to establish a technical team/task force as an arm of SERICC to ensure that critical service quality concerns are addressed.

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61 Several partners noted the need for “good” incentives: a story was told of a district leader who has given funds to buy paracetamol as a gift to mothers bringing their infants for immunization. A partner noted that they are considering the provision of soap to be handed out at the immunization clinics.

62 Versus issues and concerns passing through TWGS to LERICC/SERICC.
Based on the assessment findings, we suggest that the following are of highest priority: (a) guidance on how to best respond to the practice of children bringing children for immunizations; (b) protocols to treat minor AEFIs and improved take-home instructions (with supplies) for new mothers and for those with children getting their first Penta immunization (e.g., demonstrating how to give proper dosage of paracetamol), to put more emphasis on the importance of return visits and card retention; (c) guidance on how to reduce waiting times at clinics; and (d) QA of the cold chain for outreach sessions and minimal requirements for staff level to keep good records. New or revised SOPs or protocols will need to be piloted before wide dissemination. See Annex VII. Recommendations for Improving RI Services for other areas of concern.

3) Quality-minded management

USAID, in collaboration with MOU partners, is encouraged to foster a quality-minded culture within the State MOH and SPHCD and Board and importantly with LGA PHC Public Health and Primary Health Care Managers and LGA Boards. This is a longer-term development initiative to consider as new MOUs are developed with States. See Annex VII. Further Recommendations for Improving RI Services – resources noted/recommended.

USAID is encouraged to invest in mentoring\textsuperscript{63} State, LGA, and HF Managers. This will complement the MCSP mid-management training program planned in Sokoto State. Several mentoring models are proposed in Annex VII. Further Recommendations for Improving RI Services.

It is also recommended that USAID, along with other partners, refine and/or scale up current peer-to-peer sharing and learning initiatives: SERICC Program Managers in the Northern states and State meetings for the LERICC Program Managers to meet for information-sharing about QI issues and actions which have been effective.

4) Staff development capacity

USAID is advised to invest in technical advising to build State structures and capacities to provide or organize (a) ongoing refresher or in-service skills-building/competency-based training to apply guidelines/SOPs developed by the QA/QI task force/team and inter-personal communication with mothers and with fathers on treatment of fever and other minor AEFIs; (b) orientation to gender-responsive service delivery modalities and measures, new service guidelines and standards, and effective utilization of volunteers; and (c) teaching materials for low-cost cascaded provision of training for new staff or new RI providers, job aids, and refresher training, and to cross-train all clinical staff at HFs.

5) Supportive supervision and technical monitoring

As a high priority, MCSP Sokoto, in collaboration with government and other partners performing SS, are strongly advised to immediately put into place mechanisms for improved documentation of instruction, coaching, or other TA provided during SS visits. A format developed by MCSP in Bauchi is a resource that may be adapted and kept in a notebook at the HF. These would include any actions taken during the visit (as well as planned actions), be signed by HF management and staff, and help put tracking mechanisms in place to ensure that actions are carried out to correct deficits or service weaknesses.

\textsuperscript{63} In this setting, it is recommended that mentors will have shared/common experience with their mentees and have demonstrated competencies and success in similar State, LGA, or HF management roles.
With the new assignment of SS visitors to specific staff and facilities, MCSP is encouraged to work with other TA partners providing SS to identify and mentor LGA SS personnel to support those facilities needing close supervision during RI services, with special attention given to quality of record-keeping, hygienic practices, and inter-personal communication.

In the long-term, USAID implementing partners are advised to make a distinction between monitoring and SS systems and to move from external SS to internalized supervisory models. This revision is designed to ensure that accessible and client-focused services are being offered, support (including data management systems) are functioning, RI providers are sufficient in number and are providing care which meets standards, complete records are being kept, defaulters are being identified and tracked, and timely and accurate data reports are produced. This model provides for greater accountability and regularity; it is a hands-on model and does not require a checklist.

With further investments it is recommended that USAID build on MCSP work in Bauchi and Sokoto States to develop technical monitoring systems. The level for developing these systems may vary from State-to-State, depending on state structure, level of decentralization, and assigned functions to that level. It will be key to review the SS checklists and to revise as needed. Annual monitoring will focus on (a) the sufficiency of skilled staff, supplies/materials, and supervision; (b) the quality of services along the continuum of care and prevention according to standards and client feedback mechanisms; and (c) facility results/utilization of services, uptake of immunizations, and drop-out. The system will include joint planning to address deficits and follow-up of facilities with major deficits.

6) Development of continuum of care (newborn registration, outreach, follow-up, tracking and cross-referral) processes and systems

It is recommended that USAID invest in specialized technical advisors to bring global best practices to refine the design of community-based child health systems including the registration of newborn children, promotion of RI and services, tracking of defaulters, and facilitators to help with access along the continuum of care and prevention. This will build on current MCSP work with traditional leaders and workers and community structures (e.g., ward development committees) and incorporate government cadres (e.g., CE focal persons, ward public health officers, and the anticipated Community Health Influencers, Promoters and Services [CHIPS]). Community-based systems to develop include: Human Resources (volunteer roles and responsibilities), Management and Supervision, Coordination, Community Support and Monitoring, Data Management, Social Mobilization and Behavior Change Communication Skills Training and Refresher Training, Peer-to-Peer Sharing, and Recognition/Award/Incentives for high performance and quality service.

7) Community monitoring of RI services

Global experience has shown the effectiveness of community involvement in planning, promoting, supporting, and monitoring the “quality” of services. See Annex VII. Further Recommendations for Improving RI Services for suggested models or methods to scale up or adopt, e.g., HF development committees as are being utilized in Kano and Kaduna States and/or COPE® or community score cards.

64 COPE®: Client-Oriented, Provider-Efficient Services. Results are used for joint community-staff QI planning.
ANNEX I. SCOPE OF WORK

Assignment #: 457 [assigned by GH Pro]

Global Health Program Cycle Improvement Project (GH Pro)
Contract No. AID-OAA-C-14-00067

EVALUATION OR ANALYTIC ACTIVITY STATEMENT OF WORK (SOW)
Date of Submission: September 13, 2017
Last update: 5/7/18
Amendment #1

I. TITLE: Comparative Assessment of USAID Technical Assistance for Routine Immunization Program in Bauchi and Sokoto States

II. Requester / Client

☐ USAID Country or Regional Mission
Mission/Division: USAID/Nigeria / Health Population & Nutrition (HPN) office

III. Funding Account Source(s): (Click on box(es) to indicate source of payment for this assignment)

☐ 3.1.1 HIV ☐ 3.1.4 PIOET ☐ 3.1.7 FP/RH
☐ 3.1.2 TB ☐ 3.1.5 Other public health threats ☐ 3.1.8 WSSH
☐ 3.1.3 Malaria ☐ 3.1.6 MCH ☐ 3.1.9 Nutrition
☐ 3.2.0 Other (specify):

IV. Cost Estimate: ____ (Note: GH Pro will provide a cost estimate based on this SOW)

V. Performance Period

Expected Start Date (on or about): December 15, 2017
Anticipated End Date (on or about): July 31, 2018

VI. Location(s) of Assignment: (Indicate where work will be performed)

This evaluation will be conducted in Nigeria and will be focused on Memorandum of Understanding (MOU) states where USAID immunization program is implemented, in Bauchi and Sokoto, as well as Kano, Kaduna, Yobe, Borno. Note: states in green (quaripartite) are States supported by USAID with technical assistance (TA) that includes additional funding from the foundation partners; while states in red (tripartite) are supported with funding from foundational partners, with no USAID TA is being provided.

Type of Analytic Activity (Check the box to indicate the type of analytic activity)

EVALUATION:

☐ Performance Evaluation (Check timing of data collection)
☐ Midterm ☐ Endline ☐ Other (specify): One-time

Performance evaluations encompass a broad range of evaluation methods. They often incorporate before–after comparisons but generally lack a rigorously defined counterfactual. Performance evaluations...
may address descriptive, normative, and/or cause-and-effect questions. They may focus on what a particular project or program has achieved (at any point during or after implementation); how it was implemented; how it was perceived and valued; and other questions that are pertinent to design, management, and operational decision making.

**OTHER ANALYTIC ACTIVITIES**

- **Assessment**
  Assessments are designed to examine country and/or sector context to inform project design, or as an informal review of projects.

- **Costing and/or Economic Analysis**
  Costing and Economic Analysis can identify, measure, value and cost an intervention or program. It can be an assessment or evaluation, with or without a comparative intervention/program.

- **Other Analytic Activity (Specify)**

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**PEPFAR EVALUATIONS** (*PEPFAR Evaluation Standards of Practice 2014*)

**Note:** If PEPFA-funded, check the box for type of evaluation

- **Process Evaluation** *(Check timing of data collection)*
  - [ ] Midterm
  - [ ] Endline
  - [ ] Other (specify):

  *Process Evaluation* focuses on program or intervention implementation, including, but not limited to access to services, whether services reach the intended population, how services are delivered, client satisfaction and perceptions about needs and services, management practices. In addition, a process evaluation might provide an understanding of cultural, socio-political, legal, and economic context that affect implementation of the program or intervention. For example: Are activities delivered as intended, and are the right participants being reached? (*PEPFAR Evaluation Standards of Practice 2014*)

- **Outcome Evaluation**

  *Outcome Evaluation* determines if and by how much, intervention activities or services achieved their intended outcomes. It focuses on outputs and outcomes (including unintended effects) to judge program effectiveness, but may also assess program process to understand how outcomes are produced. It is possible to use statistical techniques in some instances when control or comparison groups are not available (e.g., for the evaluation of a national program). Example of question asked: To what extent are desired changes occurring due to the program, and who is benefiting? (*PEPFAR Evaluation Standards of Practice 2014*)

- **Impact Evaluation** *(Check timing(s) of data collection)*
  - [ ] Baseline
  - [ ] Midterm
  - [ ] Endline
  - [ ] Other (specify):

  *Impact evaluations* measure the change in an outcome that is attributable to a defined intervention by comparing actual impact to what would have happened in the absence of the intervention (the counterfactual scenario). IEs are based on models of cause and effect and require a rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. There are a range of accepted approaches to applying a counterfactual analysis, though IEs in which comparisons are made between beneficiaries that are randomly assigned to either an intervention or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured to demonstrate impact.

- **Economic Evaluation** *(PEPFAR)*
Economic Evaluations identifies, measures, values and compares the costs and outcomes of alternative interventions. Economic evaluation is a systematic and transparent framework for assessing efficiency focusing on the economic costs and outcomes of alternative programs or interventions. This framework is based on a comparative analysis of both the costs (resources consumed) and outcomes (health, clinical, economic) of programs or interventions. Main types of economic evaluation are cost-minimization analysis (CMA), cost-effectiveness analysis (CEA), cost-benefit analysis (CBA) and cost-utility analysis (CUA). Example of question asked: What is the cost-effectiveness of this intervention in improving patient outcomes as compared to other treatment models?

VII. BACKGROUND
If an evaluation, Project/Program being evaluated:

<table>
<thead>
<tr>
<th>Project/Activity Title:</th>
<th>Maternal and Child Survival Program Nigeria – Routine Immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award/Contract Number:</td>
<td>AID-OAA-A-14-00028</td>
</tr>
<tr>
<td>Award/Contract Dates:</td>
<td>September 1, 2014 – December 31, 2018</td>
</tr>
<tr>
<td>Project/Activity Funding:</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Implementing Organization(s):</td>
<td>John Snow, Inc. (JSI)</td>
</tr>
<tr>
<td>Project/Activity AOR/COR:</td>
<td>Dr. Yakubu Joel Cherima</td>
</tr>
</tbody>
</table>

Background of project/program/intervention (Provide a brief background on the country and/or sector context; specific problem or opportunity the intervention addresses; and the development hypothesis)

Global efforts to eradicate major epidemics affecting both adults and children rely predominantly on vaccines delivered through routine immunization (RI) systems or special programs and initiatives. The polio eradication (PEI) initiative has been successful in Nigeria, thanks to intensification of the PEI, in reducing the prevalence and geographical spread of the disease. The number of reservoir states reduced from 8 Northern Nigeria states in 2003 to 4 in 2013. However, states that exited the polio reservoir list recorded worse RI outcomes than states that remained on the list. Between 2003 and 2013, the entire North-West zone (except Kano) dropped from the list while 3 new states in North East (Bauchi, Borno and Yobe) moved in. Meanwhile, in 2013, coverage of DPT in North-West was lowest nationally at 13.9% compared to 20.6% in North East; only 9.6% of children aged 12-23 months received all vaccinations in North-West compared to 16.5% in North-East. Thus, progress in polio eradication seemed unconnected with the RI system in the states, and raised the possibility that the PEI was auxiliary to the RI system and concern about the ability of the RI system to withstand potential resurgence or polio or outbreak of new diseases.

Efforts to address the concern resulted in the program to strengthen routine immunization in Northern Nigeria. The RI strengthening program was initiated in Kano State through a tripartite Memorandum of Understanding (MOU) signed between the Bill and Melinda Gates Foundation (BMGF), the Dangote Foundation (DF) (collectively referred to as “the Foundations”), and the Government of Kano State in 2013. Under the MOU, the three partners agreed to contribute predetermined proportions of the cost of redesigning the RI system into a “basket fund.” The success of the tripartite management arrangement in Kano State led to an expansion of the arrangement and funding mechanisms to other northern states. In June 2014, USAID joined the Foundations and the Bauchi State Government to support the strengthening of the RI system through a quadripartite MOU. A similar quadri-partite arrangement was established in Sokoto State in January 2016. The Foundations further established other MOUs without USAID involvement with states such as, Borno (January 2016), Kaduna (January 2016), and Katsina (January 2016).

Under the quadripartite arrangement in Bauchi and Sokoto States, USAID did not contribute funding directly into the basket funding arrangement. Instead, USAID engaged the services of an implementing
partner to provide technical assistance towards enhancing attainment of the set objectives. The focus areas of the technical support were determined in consultation with the Bauchi State Primary Health Care Development Agency (BSPHCD A) and Sokoto State Primary Health Care Development Agency (SSPHCDA), the Emergency Operations Center (EOC) and other MOU partners. This is to ensure that the technical support does not replicate activities being performed by other partners but rather complements them.

Theory of Change of target project/program/intervention

Despite the improvement, a needs assessment of the program indicated notable gaps in distribution and delivery of services. Thus, the USAID technical assistance is designed and spelled out in the MOU of Bauchi and Sokoto States to provide:

- Program management and strategy at all levels of RI delivery
- Cold chain and vaccine management
- Human resources capacity building and skills improvement
- Effective use of data, social mobilization
- Operations research
- Behavior change and communications

It is expected that technical assistance in these areas will enhance attainment of the objectives of the MOUs.

Strategic or Results Framework for the project/program/intervention (paste framework below)

<table>
<thead>
<tr>
<th>Context</th>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short-Term Outcomes</th>
<th>Intermediate Outcomes</th>
<th>Long-Term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background information on the reason and nature of the TA</td>
<td>What resources are provided by USAID?</td>
<td>What is being done with the available resources?</td>
<td>What are the direct products of the work?</td>
<td>The immediate changes that occur to the beneficiaries 3 months after inception of TA</td>
<td>The subsequent benefit for the program during or 6-9 months after inception of TA</td>
<td>The eventual impact on the RI program 18-24 months after inception of TA</td>
</tr>
</tbody>
</table>

Examples:
- What issue or problem does the USAID TA address?
- How is USAID TA supplied within the quadripart

Examples:
- Project Managers?
- Coordinators?
- Trainers?

Examples:
- Training
- One-on-one technical assistance
- Working Group membership

Examples:
- 10 hours of training
- 40 hours of TA per team
- Attendance in 5 WG meetings per month

Examples:
- RI program management gain new skills, knowledge or capabilities

Examples:
- RI program implement new or improved practices
- Data and information more readily available and up-to-date

Examples:
- Reduction in vaccine stock-outs
- Increased coverage of immunization services
What is the geographic coverage and/or the target groups for the project or program that is the subject of analysis?

1. USAID TA Implémentation states – Bauchi, Sokoto
2. Non-USAID-TA states – Kano, Kaduna, Yobe, Borno

VIII. Purpose, Audience & Application
A. Purpose: Why is this evaluation or analysis being conducted (purpose of analytic activity)?

Provide the specific reason for this activity, linking it to future decisions to be made by USAID leadership, partner governments, and/or other key stakeholders.

The purpose of this assessment is to determine the effects of USAID's technical assistance to the quadripartite states compared to the tripartite states. The findings will provide insights into the performance of USAID’s technical assistance through the MCSP program to strengthening of routine immunization. Specifically, the objective is to evaluate if there are any improvements in the routine immunization program, processes, systems, and outcomes that can be contributed to USAID MCSP and/the Foundation partners.

The evaluation is necessary to inform decisions about scaling up of technical assistance in the MOU states and also enable us identify gaps that will improve the systems.

B. Audience: Who is the intended audience for this analysis? Who will use the results? If listing multiple audiences, indicate which are most important.

The findings of the evaluation will be of benefit primarily to USAID/Nigeria as it will influence how the mission will partner with states to further improve their routine immunization systems.

Secondary users will include:
- USAID Washington – who will support the Nigeria Mission and utilize the data for improving design of new programs of a similar nature
- The Government of Nigeria (Federal Ministry of Health) – who will better understand the lessons learned from donor involvement in technical support for RI services in Nigeria;
● MOU states – who will have more information on best practices and lessons learned and what will work best in their local context; and how best to use and leverage existing resources to enhance service delivery;
● Other donors and partners working in MOU focus states – who will better understand the context within which they work; and this may inform reprogramming and possibly, change in their project(s) focus.
● Other partners working or intending to work on Routine Immunization in Nigeria
● Other countries who will be interested in using similar strategy in improving RI services.

C. Applications and use: How will the findings be used? What future decisions will be made based on these findings?

This comparative assessment is essential for estimating the value of the technical assistance being provided, and necessary to inform decisions about scaling up and improving the quality of future technical assistance in the MOU or similar states.

Evaluation/Assessment Questions & Matrix:

- Questions should be: a) aligned with the evaluation/assessment purpose and the expected use of findings; b) clearly defined to produce needed evidence and results; and c) answerable given the time and budget constraints. Include any disaggregation (e.g., sex, geographic locale, age, etc.), they must be incorporated into the evaluation/assessment questions. USAID Evaluation Policy recommends 1 to 5 evaluation questions.
- State the method and/or data source and describe the data elements needed to answer the evaluation questions.

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
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</thead>
<tbody>
<tr>
<td>1. To what extent is USAID’s support to improving the RI system in Bauchi and Sokoto States effective?</td>
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<tr>
<td>Areas for consideration</td>
</tr>
<tr>
<td>a. Components of the TA are considered most effective</td>
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<td>b. Other TA components that could have contributed to the activity’s effectiveness</td>
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<tr>
<td>2. To what extent is the USAID’s support in Bauchi and Sokoto States comparable to the support being provided by other donor partners in non-USAID focus states?</td>
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<tr>
<td>3. How do RI outcomes in Bauchi and Sokoto compare with those in other states in the Northeast and Northwest? to the country as a whole?</td>
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<tr>
<td>4. What role, if any, does gender play in Routine Immunization in Bauchi and Sokoto?</td>
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<tr>
<td>Areas for consideration</td>
</tr>
<tr>
<td>a. Likelihood of women versus men to immunize their children</td>
</tr>
<tr>
<td>b. Difference in immunization rates for boys and girls (RI data disaggregated by sex)</td>
</tr>
<tr>
<td>Evaluation Question</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>1 To what extent is USAID’s support to improving the RI system in Bauchi and Sokoto States effective?</td>
</tr>
<tr>
<td>2 To what extent is the USAID’s support in Bauchi and Sokoto States comparable to the support being provided being provided by other donor partners in non-USAID focus states?</td>
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<tr>
<td>Evaluation Question</td>
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<tr>
<td><strong>3</strong> How do RI outcomes in Bauchi and Sokoto compare with those in other states in the Northeast and Northwest? to the country as a whole?</td>
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<td>Evaluation Question</td>
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<tr>
<td>4 What role, if any, does gender play in Routine Immunization in Bauchi and Sokoto?</td>
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</tbody>
</table>

D. **Methods:** Check and describe the recommended methods for this analytic activity. Selection of methods should be aligned with the evaluation/analytic questions and fit within the time and resources allotted for this analytic activity. Also, include the sample or sampling frame in the description of each method selected.

**General Comments related to Methods:**

**Document and Data Review** *(list of documents and data recommended for review)*

This desk review will be used to provide background information on the program, and will also provide data for comparative analysis for this evaluation. Documents and data to be reviewed include:

- National RI work plan (NPHCDA)
- National and states – Bauchi and Sokoto – MCSP work plans
- MOU agreement and work plans of the six states
- USAID technical assistance (ToR) description and work plan
- Literature on RI landscape in the six states
- Mid-year and End-of-year review decks of State RI program from States and Implementing partners
- Survey reports from 2013 till date

### Secondary analysis of existing data

(This is a re-analysis of existing data, beyond a review of data reports. List the data source and recommended analyses)

<table>
<thead>
<tr>
<th>Data Source (existing dataset)</th>
<th>Description of data (immunization section)</th>
<th>Recommended analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA weekly/monthly immunization performance report</td>
<td>This includes routine immunization performance, surveillance performance and Immunization Plus Days performance.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Health Management and Information System (DHIS 2)</td>
<td>NHMIS contains various health service utilization including immunization from health facility level to the national level.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Immunization Coverage Surveys (NICS)</td>
<td>The survey specifically aimed at determining coverage for the Expanded Programme on Immunization (EPI) vaccines and Vitamin A supplementation among children aged 12 - 23 months; tetanus toxoid-containing vaccine (TT) immunization coverage among the mothers of 0 - 11 months-old children, for protection of their babies from neonatal tetanus; and to elicit reasons why target children and women were not being immunized.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Multiple Indicator Cluster Survey (MICS)</td>
<td>This international household survey programme developed by UNICEF is designed to collect statistically sound, internationally comparable estimates of key indicators that are used to assess the situation of children and women in the areas of health, education, child protection and HIV/AIDS.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Nutrition and Health Survey (NNHS)</td>
<td>- Determine the coverage of DPT3/Penta3 and measles immunization among children 12-23 months of age,</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Nigeria Demographic and Health Survey (NDHS)</td>
<td>The NDHS is a household survey that collects representative information about people living in Nigeria</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Data Source (existing dataset)</td>
<td>Description of data (immunization section)</td>
<td>Recommended analysis</td>
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<td>-------------------------------</td>
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</tr>
<tr>
<td>Data Source (existing dataset)</td>
<td>and their health. The NDHS collects data related to family planning, fertility, maternal and child health, nutrition, HIV, malaria, and gender issues.</td>
<td></td>
</tr>
<tr>
<td>WHO and UNICEF estimates of infant immunization coverage;</td>
<td>Estimates were made for BCG, the third dose of diphtheria and tetanus toxoid and pertussis vaccine (DTP3), the third dose of polio vaccine - either oral polio vaccine or inactivated polio vaccine (Pol3) - the first dose of measles vaccine (MCV) and the third dose of hepatitis B vaccine (HepB3). Estimates of the proportion of live births protected (PAB) through maternal immunization with at least two doses of tetanus toxoid for country where the risk of neonatal tetanus. Estimates of the first dose diphtheria and tetanus toxoid and pertussis vaccine (DTP1) and the third dose of haemophilus influenzae type b (Hib3), in 2010 the third dose of Pneumococcal conjugate vaccine (PcV3), second or third dose of Rotavirus vaccine depending on number of doses recommended in national schedule (RotaC), and Yellow Fever vaccine for countries at risk where vaccination is recommended, in 2014 second dose of measles containing vaccine (MCV2) and Birth dose of Hepatitis B vaccine (HepBB) and in 2015 revision we included first dose of Rubella containing vaccine (RCV1) and first dose of inactivated polio vaccine (IPV1) if the country was using oral polio vaccine in 2015.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Immunization Coverage and System Performance Indicator Data</td>
<td>Immunization coverage for the six-major vaccine-preventable diseases – pertussis, childhood</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
<tr>
<td>Data Source (existing dataset)</td>
<td>Description of data (immunization section)</td>
<td>Recommended analysis</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------</td>
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</tr>
<tr>
<td>Immunization Surveillance, Assessment and Monitoring Database</td>
<td>The impact of strategies and activities for reducing morbidity and mortality of vaccine-preventable diseases. Analysis and interpretation of surveillance data.</td>
<td>Trend Analysis, Additional sub-set analysis</td>
</tr>
</tbody>
</table>

**Note:** For datasets that are not publicly available, USAID/Nigeria will assist with access to these datasets.

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**Key Informant Interviews** *(list categories of key informants, and purpose of inquiry)*

Key Informant Interviews will be conducted with:
- Executive Secretary of NPHCDA
- Director of Hospital Services at SMoH
- Executive Secretary of SPHCDA/B
- Head of LGA Department of PHC
- Immunization Program Coordinators/Desk Officers
- Heads of RI Implementing Partners
- Program Representatives of MOU Partners
- EOC
- Other relevant identified stakeholders

The purpose of the interviews is to provide context for the RI program, and to examine the extent to which the support provided by USAID is recognized by State leadership and MOU partners as critical to the success of the RI program.

---

**Client/Participant Satisfaction or Exit Interviews** *(list who is to be interviewed, and purpose of inquiry)*

Exit interviews will be conducted at selected facilities with patients who utilize services at selected facilities at the time/day of visit.

The exit interviews will support analysis of how the technical support affects service delivery differentially in the MCSP states than the other four states.

---

**Survey** *(describe content of the survey and target responders, and purpose of inquiry)*

---

**Facility or Service Assessment/Survey** *(list type of facility or service of interest, and purpose of inquiry)*

---

**Case Study** *(describe the case, and issue of interest to be explored)*

A case study of a selected LGA in each state that examines the supply side of routine immunization will be conducted. The case study will examine how technical assistance inputs make a difference in the states.
**IX. HUMAN SUBJECT PROTECTION**

The Analytic Team must develop protocols to insure privacy and confidentiality prior to any data collection. Primary data collection must include a consent process that contains the purpose of the evaluation, the risk and benefits to the respondents and community, the right to refuse to answer any question, and the right to refuse participation in the evaluation at any time without consequences. Only adults can consent as part of this evaluation. **Minors cannot be respondents to any interview or survey, and cannot participate in a focus group discussion without going through an IRB.** The only time minors can be observed as part of this evaluation is as part of a large community-wide public event, when they are part of family and community in the public setting. During the process of this evaluation if data are abstracted from existing documents that include unique identifiers, data can only be abstracted without this identifying information.

An Informed Consent statement included in all data collection interactions must contain:

- Introduction of facilitator/note-taker
- Purpose of the evaluation/assessment
- Purpose of interview/discussion/survey
- Statement that all information provided is confidential and information provided will not be connected to the individual
- Right to refuse to answer questions or participate in interview/discussion/survey
- Request consent prior to initiating data collection (i.e., interview/discussion/survey)

**X. ANALYTIC PLAN**

Describe how the quantitative and qualitative data will be analyzed. Include method or type of analyses, statistical tests, and what data it to be triangulated (if appropriate). For example, a thematic analysis of qualitative interview data, or a descriptive analysis of quantitative survey data.

The analytic plan will include analysis of qualitative data derived from Key Informant Interviews, Focus Group Discussions, Patient Exit Interviews, Observations and Case Studies, as well as Document Review. Quantitative data derived from Output and Outcomes will be analyzed using appropriate methods. These include basic descriptive and inferential statistics.

All analyses will be geared to answer the evaluation questions. Additionally, the evaluation will review both qualitative and quantitative data related to the project/program’s achievements against its objectives and/or targets.

Thematic review of qualitative data will be performed, connecting the data to the evaluation questions, seeking relationships, context, interpretation, nuances and homogeneity and outliers to better explain what is happening and the perception of those involved. Qualitative data will be used to substantiate quantitative findings, provide more insights than quantitative data can provide, and answer questions where other data do not exist.

Use of multiple methods that are quantitative and qualitative, as well as existing data (e.g., project/program performance indicator data, DHS, MICS, HMIS data, etc.) will allow the Team to triangulate findings to produce more robust evaluation results.

The Evaluation Report will describe analytic methods and statistical tests employed in this evaluation.

**XI. ACTIVITIES**

List the expected activities, such as Team Planning Meeting (TPM), briefings, verification workshop with IPs and stakeholders, etc. Activities and Deliverables may overlap. Give as much detail as possible.
**Background reading** – Several documents are available for review for this analytic activity. These include routine immunization proposal, annual work plans, M&E plans, quarterly progress reports, and routine reports of project performance indicator data, as well as survey data reports (i.e., DHS and MICS). This desk review will provide background information for the Evaluation Team, and will also be used as data input and evidence for the evaluation.

**Team Planning Meeting (TPM)** – A five-day team planning meeting (TPM) will be held at the initiation of this assignment and before the data collection begins. The TPM will:
- Review and clarify any questions on the evaluation SOW
- Clarify team members’ roles and responsibilities
- Establish a team atmosphere, share individual working styles, and agree on procedures for resolving differences of opinion
- Review and finalize evaluation questions
- Review and finalize the assignment timeline
- Develop data collection methods, instruments, tools and guidelines
- Review and clarify any logistical and administrative procedures for the assignment
- Develop a data collection plan
- Draft the evaluation work plan for USAID’s approval
- Develop a preliminary draft outline of the team’s report
- Assign drafting/writing responsibilities for the final report

**Briefing and Debriefing Meetings** – Throughout the evaluation the Team Lead will provide briefings to USAID. The In-Brief and Debrief are likely to include the all Evaluation Team experts, but will be determined in consultation with the Mission. These briefings are:
- **Evaluation launch**, a call/meeting among the USAID, GH Pro and the Team Lead to initiate the evaluation activity and review expectations. USAID will review the purpose, expectations, and agenda of the assignment. GH Pro will introduce the Team Lead, and review the initial schedule and review other management issues.
- **In-brief with USAID**, as part of the TPM. At the beginning of the TPM, the Evaluation Team will meet with USAID to discuss expectations, review evaluation questions, and intended plans. The Team will also raise questions that they may have about the project/program and SOW resulting from their background document review. The time and place for this in-brief will be determined between the Team Lead and USAID prior to the TPM.
- **Work plan and methodology review briefing**. At the end of the TPM, the Evaluation Team will meet with USAID to present an outline of the methods/protocols, timeline and data collection tools. Also, the format and content of the Evaluation report(s) will be discussed.
- **In-brief with project** to review the evaluation plans and timeline, and for the project to give an overview of the project to the Evaluation Team.
- The Team Lead (TL) will **brief USAID periodically** to discuss progress on the evaluation. As preliminary findings arise, the TL will share these during the routine briefing, and in an email.
- **A final debrief** between the Evaluation Team and USAID will be held at the end of the evaluation to present preliminary findings to USAID. During this meeting a summary of the data will be presented, along with high level findings and draft recommendations. For the debrief, the Evaluation Team will prepare a **PowerPoint Presentation** of the key findings, issues, and recommendations. The evaluation team shall incorporate comments received from USAID during the debrief in the evaluation report. (**Note**: preliminary findings are not final and as more data sources are developed and analyzed these finding may change.)
• **IP and Stakeholders’ debrief** will be held with the project staff and other stakeholders identified by USAID. This will occur following the final debrief with the Mission, and will not include any information that may be procurement deemed sensitive or not suitable by USAID.

**Fieldwork, Site Visits and Data Collection** – The evaluation team will conduct site visits to the six states – Bauchi, Sokoto, Kano, Kaduna, Yobe and Borno – for data collection. The evaluation team will outline and schedule key meetings and site visits prior to departing to the field.

**Evaluation/Analytic Report** – The Evaluation/Analytic Team under the leadership of the Team Lead will develop a report with findings and recommendations (see Analytic Report below). Report writing and submission will include the following steps:

1. Team Lead will submit a draft evaluation report to GH Pro for review and formatting
2. GH Pro will submit the draft report to USAID
3. USAID will review the draft report in a timely manner, and send their comments and edits back to GH Pro
4. GH Pro will share USAID’s comments and edits with the Team Lead, who will then do final edits, as needed, and resubmit to GH Pro
5. GH Pro will review and reformat the final Evaluation/Analytic Report, as needed, and resubmit to USAID for approval.
6. Once Evaluation Report is approved, GH Pro will re-format it for 508 compliance and post it to the DEC.

The Evaluation Report excludes any procurement-sensitive and other sensitive but unclassified (SBU) information. This information will be submitted in a memo to USAID separate from the Evaluation Report.

**Data Submission** – All quantitative data will be submitted to GH Pro in a machine-readable format (CSV or XML). The datasets created as part of this evaluation must be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. It is essential that the datasets are stripped of all identifying information, as the data will be public once posted on USAID Development Data Library (DDL).

Where feasible, qualitative data that do not contain identifying information should also be submitted to GH Pro.

### XII. DELIVERABLES AND PRODUCTS

Select all deliverables and products required on this analytic activity. For those not listed, add rows as needed or enter them under “Other” in the table below. Provide timelines and deliverable deadlines for each.

<table>
<thead>
<tr>
<th>Deliverable / Product</th>
<th>Timelines &amp; Deadlines (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch briefing</td>
<td>December xx, 2017</td>
</tr>
<tr>
<td>In-brief with USAID</td>
<td>Virtual in-brief: December 28, 2017</td>
</tr>
<tr>
<td></td>
<td>In-country in-brief: January 8, 2018</td>
</tr>
<tr>
<td>Workplan and methodology review briefing</td>
<td>Preliminary (virtual): January 8, 2018</td>
</tr>
<tr>
<td></td>
<td>Workplan (end of TPM): January 11, 2018</td>
</tr>
<tr>
<td>In-brief with target project / program</td>
<td>January 15, 2018</td>
</tr>
<tr>
<td>Workplan submitted to USAID (must include questions, methods, timeline, data analysis plan, and instruments)</td>
<td>January 13, 2018</td>
</tr>
<tr>
<td>Routine briefings</td>
<td>Weekly</td>
</tr>
<tr>
<td>Debrief with USAID with Power Point presentation</td>
<td>February 19, 2018</td>
</tr>
</tbody>
</table>
### Deliverable / Product

<table>
<thead>
<tr>
<th>Deliverable / Product</th>
<th>Timelines &amp; Deadlines (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Findings review workshop with IP and stakeholders with Power Point presentation</td>
<td>February 20, 2018</td>
</tr>
<tr>
<td>□ Draft report</td>
<td>Submit to GH Pro: March 12, 2018</td>
</tr>
<tr>
<td></td>
<td>GH Pro submits to USAID: March 20, 2018</td>
</tr>
<tr>
<td>□ Final report</td>
<td>Submit to GH Pro: May 7, 2018</td>
</tr>
<tr>
<td></td>
<td>GH Pro submits to USAID: May 14, 2018</td>
</tr>
<tr>
<td>□ Raw data (cleaned datasets in CSV or XML with data dictionary)</td>
<td>May 14, 2018</td>
</tr>
<tr>
<td>□ Report Posted to the DEC</td>
<td>July 9, 2018</td>
</tr>
<tr>
<td>□ Other (specify):</td>
<td></td>
</tr>
</tbody>
</table>

#### Estimated USAID review time
Average number of business days USAID will need to review the Report? __10__ Business days

### XIII. TEAM COMPOSITION, SKILLS AND LEVEL OF EFFORT (LOE)

**Evaluation/Analytic team:** When planning this analytic activity, consider:

- Key staff should have methodological and/or technical expertise, regional or country experience, language skills, team lead experience and management skills, etc.
- Team leaders for evaluations/analytics must be an external expert with appropriate skills and experience.
- Additional team members can include research assistants, enumerators, translators, logisticians, etc.
- Teams should include a collective mix of appropriate methodological and subject matter expertise.
- Evaluations require an Evaluation Specialist, who should have evaluation methodological expertise needed for this activity. Similarly, other analytic activities should have a specialist with methodological expertise.
- Note that all team members will be required to provide a signed statement attesting that they have no conflict of interest (COI), or describing the conflict of interest if applicable.

**Team Qualifications:** Please list technical areas of expertise required for this activity:

#### Overall Team requirements:

The evaluation team will consist of 8 consultants with different specialties, among which one will be the Team Lead. In addition to the Team Lead, the team will consist of national consultants: 1) Evaluation Specialist, 2) Public Health Specialists. Additionally, Evaluation Logistic/Program Assistants who will also serve as research assistants/local data collectors will be required.

The team should represent a balance of expertise in conducting rigorous evaluations, technical expertise related to routine immunization service delivery in general and in the public sector, including health services planning and programming, as well as public sector approaches to health service delivery.

The evaluation team members must have significant national/international program evaluation experience. The team lead should have some Nigeria country or African regional experience, along with comparative experience in developing countries.
Substantial experience in conducting evaluations, reviews or assessments is expected of the members, and experience in routine immunization planning would be useful. All team members must be computer literate and have fluent professional-level English speaking writing and presentation skills.

Key staff

1. **Team Leader/Senior Evaluator (1)**: This person will meet the requirements of both this and the other key positions. The team lead should have considerable experience conducting project evaluations/analyses.

   **Roles & Responsibilities**: The team leader will be responsible for (1) providing team leadership; (2) managing the team’s activities, (3) ensuring that all deliverables are met in a timely manner, (4) serving as a liaison between the USAID and the evaluation/analytic team, and (5) leading briefings and presentations, (6) writing and submitting the evaluation report in accordance with USAID standards.

   **Qualifications**:
   - Minimum of 10 years of experience in public health and/or public policy, which includes experience in program implementation and evaluation in developing countries
   - Must have a depth knowledge and understanding of the Nigerian immunization landscape
   - Demonstrated experience leading project/program evaluation/analyses, utilizing both quantitative and qualitative methods
   - Excellent skills in planning, facilitation, and consensus building
   - Excellent interpersonal skills, including experience successfully interacting with host government officials, civil society partners, and other stakeholders
   - Excellent skills in project management
   - Excellent organizational skills and ability to keep to a timeline
   - Good writing skills, with extensive report writing experience
   - Experience working in the Africa region, and experience in Nigeria/West Africa is desirable
   - Familiarity with USAID health sector programs
   - Familiarity with USAID policies and practices
     - Evaluation policy
     - Results frameworks
     - Performance monitoring plans

2. **Evaluation Specialist/Statistician (1)**

   **Roles & Responsibilities**: Serve as a member of the evaluation team, providing quality assurance on evaluation issues, including methods, development of data collection instruments, protocols for data collection, data management and data analysis. S/he will oversee the training of all engaged in data collection, insuring highest level of reliability and validity of data being collected. S/he is the lead analyst, responsible for all data analysis, and will coordinate the analysis of all data, assuring all quantitative and qualitative data analyses are done to meet the needs for this evaluation. S/he will participate in all aspects of the evaluation, from planning, data collection, data analysis to report writing.

   **Qualifications**:
   - At least 5 years’ experience conducting evaluations
   - Experience in design and implementation of evaluations
   - Strong knowledge, skills, and experience in qualitative and quantitative evaluation tools
• Experience implementing and coordinating other to implements surveys, key informant interviews, focus groups, observations and other evaluation methods that assure reliability and validity of the data.
• Experience in data management
• Able to analyze quantitative, which will be primarily descriptive statistics
• Able to analyze qualitative data
• Experience using analytic software
• Demonstrated experience using qualitative evaluation methodologies, and triangulating with quantitative data
• Able to review, interpret and reanalyze as needed existing data pertinent to the evaluation
• Strong data interpretation and presentation skills
• A degree in statistics, with experience and an advanced degree in statistics, public health, health economics, development studies, or related field
• Proficient in English
• Good writing skills, including extensive report writing experience
• Familiarity with USAID health programs/projects, primary health care or health systems strengthening preferred
• Familiarity with USAID M&E policies and practices is a plus

3. Public Health Specialist (with focus on immunization) (2)
Roles & Responsibilities: Serve as a member of the evaluation team, providing expertise in public health and routine immunization. S/he will participate in planning and briefing meetings, data collection, data analysis, development of evaluation presentations.
Qualifications:
● At least 8 years’ experience with public health projects; USAID project implementation experience preferred
● Expertise in supply and demand for RI services
● Experience working on gender, integration and/or transformation is desirable
● Excellent interpersonal skills, including experience successfully interacting with host government officials, civil society partners, and other stakeholders
● Proficient in English
● Good writing skills, specifically technical and evaluation report writing experience
● Experience in conducting USAID evaluations of health programs/activities is a plus

Other Staff Titles with Roles & Responsibilities (include number of individuals needed):

| Local Evaluators / Logistics Program Assistants (4) | will support the Evaluation Team with all logistics and administration to allow them to carry out this evaluation. S/he will also assist the Evaluation Team with data collection, analysis and data interpretation. They will have basic familiarity with RI programs and services, as well as experience conducting surveys interviews and focus group discussion, both facilitating and note taking. Furthermore, S/he will assist in translation of data collection tools and transcripts to, as needed. The Logistics/Program Assistant will have a good command of English and local language(s). S/he will have knowledge of key actors in the health sector and their locations including MOH, SPHCDA, MOU partners, Implementing Partners and other stakeholders. To support the Team, S/he will be able to efficiently liaise with hotel staff, arrange transportation (ground and air), arrange meeting and workspace as needed, and insure business center support, e.g. copying, internet, and printing. S/he will work under the guidance of the Team Leader to prepare, arrange meetings and appointments. S/he will conduct programmatic administrative and support tasks as assigned and ensure the processes moves forward smoothly. S/he |
may also be asked to assist in translation of data collection tools and transcripts, if needed. In consultation with the Team Lead, GH Pro may split these tasks into two positions, **Local Evaluators** (2) who will assist with data collection and analysis, and **Logistics Program Assistants** (2) who will focus on logistic needs.

Will USAID participate as an active team member or designate other key stakeholders to as an active team member? This will require full time commitment during the evaluation or analytic activity.

- ☐ Yes – If yes, specify who:
- ☐ Significant Involvement anticipated – If yes, specify who:
- ☐ No

**Staffing Level of Effort (LOE) Matrix:**
This LOE Matrix will help you estimate the LOE needed to implement this analytic activity. If you are unsure, GH Pro can assist you to complete this table.

a) For each column, replace the label "Position Title" with the actual position title of staff needed for this analytic activity.
b) Immediately below each staff title enter the anticipated number of people for each titled position.
c) Enter Row labels for each activity, task and deliverable needed to implement this analytic activity.
d) Then enter the LOE (estimated number of days) for each activity/task/deliverable corresponding to each titled position.
e) At the bottom of the table total the LOE days for each consultant title in the 'Sub-Total' cell, then multiply the subtotals in each column by the number of individuals that will hold this title.

### Level of Effort in **days** for each Evaluation/Analytic Team member

<table>
<thead>
<tr>
<th>Activity / Deliverable</th>
<th>Team Lead / Senior Evaluator</th>
<th>Eval Specialist/ Statistician</th>
<th>Public Health Specialist</th>
<th>Logistics / Program Asst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of persons →</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1 Launch Briefing</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Preparation for Team convening</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3 Desk review of the national and state RI program contexts</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4 Virtual In-Brief with Mission</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>5 Remote Team Planning Meeting</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6 Travel to Nigeria (RT)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 In-Country In-Brief with Mission, including draft Workplan &amp; protocol briefing</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>8 Team Planning Meeting</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9 Workplan and protocol briefing with USAID</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>10 In-brief with MCSP</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>11 Prep / Logistics for Site Visits</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>12 Data Collection DQA Workshop (protocol orientation/training for all data collectors)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>13 Travel to States</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14 Data collection / Site Visits (including travel to sites)</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>15 Data analysis</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>16 Debrief with Mission with prep</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>17 MCSP &amp; Stakeholder debrief workshop with prep</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18 Draft report</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>19 GH Pro Report QC Review &amp; Formatting</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>20 Submission of draft report(s) to Mission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity / Deliverable</td>
<td>Evaluation/Analytic Team</td>
<td></td>
<td></td>
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<tr>
<td>------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team Lead / Senior Evaluator</td>
<td>Eval Specialist/ Statistician</td>
<td>Public Health Specialist</td>
<td>Logistics / Program Asst</td>
</tr>
<tr>
<td>21 USAID Report Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 USAID manages Stakeholder review and submits any Statement of Difference to GH Pro.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Revise report(s) per USAID comments</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>24 Finalize and submit report to USAID</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 USAID approves report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Final copy editing and formatting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 508 Compliance Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Upload Evaluation Report(s) to the DEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total LOE per person</strong></td>
<td><strong>66</strong></td>
<td><strong>59</strong></td>
<td><strong>51</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

If overseas, is a 6-day workweek permitted  
☐ Yes  ☐ No

**Travel anticipated:** List international and local travel anticipated by what team members.

It is anticipated that the 6 Logistics/Program Assistants will have language skills needed for the respective states where the team will collect data. All local consultants who reside outside of Abuja will be travelled to Abuja for the Team Planning Meeting and Analysis phases of this evaluation.

It is anticipated that travel will be required for data collection in 6 States: 1) Bauchi, 2) Sokoto, 3) Kano, 4) Kaduna, 5) Yobe, and 6) Borno.

**XIV. LOGISTICS**

**Visa Requirements**
List any specific Visa requirements or considerations for entry to countries that will be visited by consultant(s):

If a consultant is not Nigerian, a visa will be required.

<table>
<thead>
<tr>
<th>Name of Country</th>
<th>Type of Visa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>☐ Tourist</td>
</tr>
<tr>
<td></td>
<td>☐ Tourist</td>
</tr>
<tr>
<td></td>
<td>☐ Tourist</td>
</tr>
</tbody>
</table>

**Clearances & Other Requirements**

**Note:** Most Evaluation/Analytic Teams arrange their own work space, often in conference rooms at their hotels. However, if a Security Clearance or Facility Access is preferred, GH Pro can apply for it on the consultant’s behalf.

GH Pro can obtain **Secret Security Clearances** and **Facility Access (FA)** for our consultants, but please note these requests processed through USAID/GH (Washington, DC) can take 4-6 months to be granted, with Security Clearance taking approximately 6 months to obtain. If you are in a Mission and the RSO can grant a temporary FA locally, this can expedite the process. If Security Clearance or FA is granted through Washington, DC, the consultant must pick up his/her badge in person at the Office of Security in Washington, DC, regardless of where the consultant resides or will work.
If **Electronic Country Clearance (eCC)** is required prior to the consultant’s travel, the consultant is also required to complete the **High Threat Security Overseas Seminar (HTSOS)**. HTSOS is an interactive e-Learning (online) course designed to provide participants with threat and situational awareness training against criminal and terrorist attacks while working in high threat regions. There is a small fee required to register for this course. [Note: The course is not required for employees who have taken FACT training within the past five years or have taken HTSOS within the same calendar year.]

If eCC is required, and the consultant is expected to work in country more than 45 consecutive days, the consultant may be required complete the one-week **Foreign Affairs Counter Threat (FACT) course** offered by FSI in West Virginia. This course provides participants with the knowledge and skills to better prepare themselves for living and working in critical and high threat overseas environments. Registration for this course is complicated by high demand (consultants must register approximately 3-4 months in advance). Additionally, there will be the cost for additional lodging and M&IE to take this course.

Check all that the consultant will need to perform this assignment, including USAID Facility Access, GH Pro workspace and travel (other than to and from post).

- [ ] USAID Facility Access (FA)
  Specify who will require Facility Access: __________________________

- [ ] Electronic County Clearance (ECC) (International travelers only)
  - [ ] High Threat Security Overseas Seminar (HTSOS) *(required in most countries with ECC)*
  - [ ] Foreign Affairs Counter Threat (FACT) *(for consultants working on country more than 45 consecutive days)*

- [ ] GH Pro workspace
  Specify who will require workspace at GH Pro: __________________________

- [ ] Travel -other than posting (specify): Travel to Abuja for consultants who do not reside in Abuja __________

- [ ] Other (specify): __________________________

### XV. GH PRO ROLES AND RESPONSIBILITIES
GH Pro will coordinate and manage the evaluation/analytic team and provide quality assurance oversight, including:

- Review SOW and recommend revisions as needed
- Provide technical assistance on methodology, as needed
- Develop budget for analytic activity
- Recruit and hire the evaluation/analytic team, with USAID POC approval
- Arrange international travel and lodging for international consultants
- Request for country clearance and/or facility access (if needed)
- Review methods, workplan, analytic instruments, reports and other deliverables as part of the quality assurance oversight
- Report production - If the report is public, then coordination of draft and finalization steps, editing/formatting, 508ing required in addition to and submission to the DEC and posting on GH Pro website. If the report is internal, then copy editing/formatting for internal distribution.
XVI. USAID ROLES AND RESPONSIBILITIES

Below is the standard list of USAID’s roles and responsibilities. Add other roles and responsibilities as appropriate.

<table>
<thead>
<tr>
<th>USAID Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAID will provide overall technical leadership and direction for the analytic team throughout the assignment and will provide assistance with the following tasks:</td>
</tr>
</tbody>
</table>

Before Field Work
- **SOW.**
  - Develop SOW.
  - Peer Review SOW
  - Respond to queries about the SOW and/or the assignment at large.
- **Consultant Conflict of Interest (COI).** To avoid conflicts of interest or the appearance of a COI, review previous employers listed on the CV’s for proposed consultants and provide additional information regarding potential COI with the project contractors evaluated/assessed and information regarding their affiliates.
- **Documents.** Identify and prioritize background materials for the consultants and provide them to GH Pro, preferably in electronic form, at least one week prior to the inception of the assignment.
- **Local Consultants.** Assist with identification of potential local consultants, including contact information.
- **Site Visit Preparations.** Provide a list of site visit locations, key contacts, and suggested length of visit for use in planning in-country travel and accurate estimation of country travel line items costs.
- **Lodgings and Travel.** Provide guidance on recommended secure hotels and methods of in-country travel (i.e., car rental companies and other means of transportation).

During Field Work
- **Mission Point of Contact.** Throughout the in-country work, ensure constant availability of the Point of Contact person and provide technical leadership and direction for the team’s work.
- **Meeting Space.** Provide guidance on the team’s selection of a meeting space for interviews and/or focus group discussions (i.e. USAID space if available, or other known office/hotel meeting space).
- **Meeting Arrangements.** Assist the team in arranging and coordinating meetings with stakeholders.
- **Facilitate Contact with Implementing Partners.** Introduce the analytic team to implementing partners and other stakeholders, and where applicable and appropriate prepare and send out an introduction letter for team’s arrival and/or anticipated meetings.

After Field Work
- **Timely Reviews.** Provide timely review of draft/final reports and approval of deliverables.

XVII. ANALYTIC REPORT

Provide any desired guidance or specifications for Final Report. (See How-To Note: Preparing Evaluation Reports)

The Evaluation/Analytic Final Report must follow USAID’s Criteria to Ensure the Quality of the Evaluation Report (found in Appendix I of the USAID Evaluation Policy).
The report must not exceed 35 pages (excluding executive summary, table of contents, acronym list and annexes).

The structure of the report should follow the Evaluation Report template, including branding found here or here.

Draft reports must be provided electronically, in English, to GH Pro who will then submit it to USAID.

For additional Guidance, please see the Evaluation Reports to the How-To Note on preparing Evaluation Draft Reports found here.

**USAID Criteria to Ensure the Quality of the Evaluation Report (USAID ADS 201):**

- Evaluation reports should be readily understood and should identify key points clearly, distinctly, and succinctly.
- The Executive Summary of an evaluation report should present a concise and accurate statement of the most critical elements of the report.
- Evaluation reports should adequately address all evaluation questions included in the SOW, or the evaluation questions subsequently revised and documented in consultation and agreement with USAID.
- Evaluation methodology should be explained in detail and sources of information properly identified.
- Limitations to the evaluation should be adequately disclosed in the report, with attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Evaluation findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or simply the compilation of people’s opinions.
- Findings and conclusions should be specific, concise, and supported by strong quantitative or qualitative evidence.
- If evaluation findings assess person-level outcomes or impact, they should also be separately assessed for both males and females.
- If recommendations are included, they should be supported by a specific set of findings and should be action-oriented, practical, and specific.

**Reporting Guidelines:** The draft report should be a comprehensive analytical evidence-based evaluation/analytic report. It should detail and describe results, effects, constraints, and lessons learned, and provide recommendations and identify key questions for future consideration. The report shall follow USAID branding procedures. The report will be edited/formatted and made 508 compliant as required by USAID for public reports and will be posted to the USAID/DEC.

The findings from the evaluation/analytic will be presented in a draft report at a full briefing with USAID and at a follow-up meeting with key stakeholders. The report should use the following format:

- Abstract: briefly describing what was evaluated, evaluation questions, methods, and key findings or conclusions (not more than 250 words)
- Executive Summary: summarizes key points, including the purpose, background, evaluation questions, methods, limitations, findings, conclusions, and most salient recommendations (2-5 pages)
- Table of Contents (1 page)
- Acronyms
- Evaluation/Analytic Purpose and Evaluation/Analytic Questions: state purpose of, audience for, and anticipated use(s) of the evaluation/assessment (1-2 pages)
• Project [or Program] Background: describe the project/program and the background, including country and sector context, and how the project/program addresses a problem or opportunity (1-3 pages)
• Evaluation/Analytic Methods and Limitations: data collection, sampling, data analysis and limitations (1-3 pages)
• Findings (organized by Evaluation/Analytic Questions): substantiate findings with evidence/data
• Conclusions
• Recommendations
• Annexes
• Annex I: Evaluation/Analytic Statement of Work
• Annex II: Evaluation/Analytic Methods and Limitations ((if not described in full in the main body of the evaluation report)
• Annex III: Data Collection Instruments
• Annex IV: Sources of Information
  o List of Persons Interviews
  o Bibliography of Documents Reviewed
  o Databases
  o [etc.]
• Annex V: Statement of Differences (if applicable)
• Annex VI: Disclosure of Any Conflicts of Interest
• Annex VII: Summary information about evaluation team members, including qualifications, experience, and role on the team.

The evaluation methodology and report will be compliant with the USAID Evaluation Policy and Checklist for Assessing USAID Evaluation Reports

--------------------------------
The Evaluation Report should exclude any potentially procurement-sensitive information. As needed, any procurement sensitive information or other sensitive but unclassified (SBU) information will be submitted in a memo to USAID separate from the Evaluation Report.
--------------------------------

All data instruments, data sets (if appropriate), presentations, meeting notes and report for this evaluation/analysis will be submitted electronically to the GH Pro Program Manager. All datasets developed as part of this evaluation will be submitted to GH Pro in an unlocked machine-readable format (CSV or XML). The datasets must not include any identifying or confidential information. The datasets must also be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. Qualitative data included in this submission should not contain identifying or confidential information. Category of respondent is acceptable, but names, addresses and other confidential information that can easily lead to identifying the respondent should not be included in any quantitative or qualitative data submitted.
XVIII. USAID CONTACTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Primary Contact</th>
<th>Alternate Contact 1</th>
<th>Alternate Contact 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Senior Health Advisor</td>
<td>Senior Maternal &amp; Child Health Program Manager</td>
<td>Director, Health, Population, and Nutrition Office</td>
</tr>
<tr>
<td>USAID Mission</td>
<td>USAID/Nigeria</td>
<td>USAID/Nigeria</td>
<td>USAID/Nigeria</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:lmcgough@usaid.gov">lmcgough@usaid.gov</a></td>
<td><a href="mailto:ycherima@usaid.gov">ycherima@usaid.gov</a></td>
<td><a href="mailto:hsmith@usaid.gov">hsmith@usaid.gov</a></td>
</tr>
<tr>
<td>Telephone</td>
<td>+2344619397</td>
<td>+234-9-461-9547</td>
<td>+234-9-461-9390 +1-202-216-6242, ext. 9390</td>
</tr>
<tr>
<td>Cell Phone</td>
<td>+234 8149576013</td>
<td>+234-703-624-4967</td>
<td>+234-803-665-0338</td>
</tr>
</tbody>
</table>

List other contacts who will be supporting the Requesting Team with technical support, such as reviewing SOW and Report (such as USAID/W GH Pro management team staff)

<table>
<thead>
<tr>
<th>Name</th>
<th>Technical Support Contact 1</th>
<th>Technical Support Contact 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID Office/Mission</td>
<td></td>
<td></td>
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<tr>
<td>Email</td>
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<tr>
<td>Cell Phone</td>
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</tbody>
</table>

XIX. OTHER REFERENCE MATERIALS
Documents and materials needed and/or useful for consultant assignment, that are not listed above

XX. ADJUSTMENTS MADE IN CARRYING OUT THIS SOW AFTER APPROVAL OF THE SOW (To be completed after Assignment Implementation by GH Pro)

The questions of this evaluation were changed prior to the field work. USAID approved the following changes to the evaluation questions:

1. To what extent is USAID’s technical assistance contributing to RI system improvements in Bauchi and Sokoto States? Based on the guiding principles of the MOU, the TA includes thematic areas of governance/accountability, vaccine security and cold chain, access and utilization of RI services, monitoring and use of data, community engagement, and RI related capacity building/training programs.

Areas for inquiry include:

a. Description of technical assistance being provided by USAID, formal partners and other donors to these thematic areas
b. Components and approaches of the USAID-funded TA considered most effective
c. Gaps in technical assistance
d. TA consideration of promoting gender responsiveness to improve RI accessibility and utilization and community engagement

To what extent is the USAID’s support in Bauchi and Sokoto States similar or different from the support to improve RI system being provided by other donor partners in the non-USAID TA focus states of Kano and Kaduna?
ANNEX II. ANALYTIC METHODS AND LIMITATIONS

METHODOLOGY

From January 8 to February 22, 2018, an external team of consultants planned and carried out data collection for the assessment of technical assistance (TA) provided to strengthen routine immunization (RI) programming in four States in Nigeria. In addition to the USAID-funded States of Bauchi and Sokoto, Kaduna and Kano States were selected as both have Memoranda of Understanding (MOU) between the States and their partners – the Bill and Melinda Gates Foundation and the Dangote Foundation. The study population included government agencies and personnel who have partnered or benefited from TA provided by Maternal and Child Survival Program (MCSP), Foundation partners, and other donors/projects. Different types of methods and/or analyses were used for each question: Question 1 was a summative assessment of program effectiveness touching on a formative study of gender-related barrier using a TA need/gap analysis; Question 2 was a learning study; and Question 3 was a comparative analysis using secondary survey and administrative data. The development of the assessment protocol was done in consultation with USAID.

Using a descriptive approach, the assessment methodology included desk reviews of key MCSP project documents, State MOUs, harmonized RI plans, and national RI reference materials; key informant interviews (KII); consultative meetings; focus group discussions (FGDs); and observations.

The case studies involved a two-stage sampling technique for the selection of local government areas (LGAs). Stage 1 comprised the selection of one or two LGAs per State by simple random sampling. LGAs with security challenges and located more than 100 km away from the State capital were excluded from the sampling frame prior to selection. Stage 2 involved the selection of one Primary Health Care (PHC) clinic in each LGA by simple random sampling among those providing RI. Two randomly selected LGAs each in Bauchi and Sokoto States were visited, with one PHC visited in each LGA. Also, visits were made to one randomly selected LGA and one health facility (HF) each in both Kano and Kaduna States.

Standardized tools were used, including: interviews, FGDs, observation guides, and a checklist for observing systems, e.g., the cold chain and immunization clinics/sessions.

Field visit activities and interviews were conducted as outlined in the Scope of Work (see Annex I), with the exception of interviewing the Executive Director of National Primary Health Care Development Agency (NPHCDA), the Dangote Foundation representative, United Nations Children’s Fund (UNICEF) Country Head or program staff, and the World Health Organization (WHO) State Coordinator in Kano State.

The information gathered through these various methods was transcribed, reviewed by the team, and cleaned as needed before analysis. Content and thematic analysis was conducted, triangulating data from the various sources, and looking for frequency or perceptions, differences as well as similarities of the TA approaches, models, and activities within each State, and/or innovative practices. Special focus was placed on verification of reported TA, results, and on the TA related to use of data.

Secondary analysis of the survey datasets was undertaken with Stata 14.0 MP. The survey datasets include Nigeria Demographic and Health Survey (NDHS) 2013 and Nigeria Multiple Indicator Cluster
Surveys (MICS) 2016/2017. The survey design of these two datasets is complex, involving stratification to gain efficiency, clustering to reduce survey cost, and weighting to obtain population inference. During secondary data analysis, design-based estimation taking into consideration stratification, clustering, and weighting was applied to obtain point estimates. The analyses were mainly descriptive and involved percentages and graphs. Also, bivariate analyses were performed by comparing percentages of RI outcomes of interest from NDHS and MICS, and sex differences using the survey data. Thus, two-sample tests of proportions were used in assessing statistical significance which generated p-value. Additionally, routine data were analyzed using MS Excel, generating percentages and graphs. Previously conducted state-based LQAS survey findings were reviewed, and data retrieval using immunization registers at each facility visited was performed. Based on the length of the MOUs in each State, the analysis included looking at differences in RI outcomes between Bauchi and Kano States and between Kaduna and Sokoto States.

LIMITATIONS AND CHALLENGES

The assessment team had hoped to stratify and sample high and low performing LGAs, but such rating systems were not readily available as at the time of the assessment. Thus, all LGAs that met the distance and security criteria were included in and randomly selected from the sampling frame in each State.

As may be seen from the study questions, the assessment was ambitious in scope and coverage, with travel to four States to assess the TA relating to multiple thematic areas. To accommodate information needs, careful attention was given to the development of tools for use in the USAID-supported States of Bauchi and Sokoto and adapted to capture learning in Kaduna and Kano. Methods65 and sampling strategies were selected for greater efficiency and more in-depth information-gathering. Because of time limitations in each State, simultaneous KIIs were conducted, with the teams breaking into pairs or at times conducting interviews individually. While successfully carried out as planned, this resulted in long hours of work as team members completed their notes and participated in daily debriefings and continuous analysis.

Within the MOU partnerships, MCSP was and is expected to provide TA under a collaborative and harmonized approach. A challenge for the assessment team was to tease out distinct, specific, measurable, and documented MCSP TA given the myriad RI TA partners and collaborative approaches. Looking at the effectiveness of the TA (e.g., skills transfer, skills application, or system change), unless already measured and documented, was outside the scope of this assessment. Thus, the assessment team primarily relied on asking similar thematic-related questions, listening to key stakeholder perceptions or examples, analyzing for frequency, and triangulating findings from desk reviews, KIIs, discussions, and observation. The assessment team focused on gathering information TA and documented improvements in the thematic areas where MCSP focused their TA, namely access and utilization of RI services, SS, and monitoring, data management, use of data, community engagement, and capacity-building and training. To stay within the scope of the assessment, no direct inquiry was conducted looking at the effectiveness of the TA provided by other MOU partners to strengthen governance including leadership, financial management, and accountability.

Scheduling appointments was difficult at times due to frequent unavailability of governmental and non-governmental stakeholders. In some of the States visited, stakeholders were not accessible as they were

65 FGD methodology was used instead of exit interviews for more efficiency and discussion and consultative meetings were held to listen to a larger sample of the field-based LGA consultants than those visited at the two selected LGAs.
engaged in other RI meetings, (e.g., the daily State Emergency Routine Immunization Coordination Center (SERICC), partner planning meetings, Immunization Plus Days (IPD) activities) or out of state for national and/or sub-national meetings. To compensate, team members met with key informants in the evening or met with lower ranking department staff.

In retrospect, visits with other NGOs working on maternal and child health (MCH) issues – e.g., PLAN International, Save the Children, and the Core Group – would have been valuable.

Several challenges were faced relating to access to quantitative data related to RI. While much effort went into obtaining MICS and NICS datasets, in the end, the NICS dataset was not released for public use.

As noted throughout this report, there were concerns about the quality of the administrative (District Health Information System version 2 [DHIS 2.0]) data. States were looking for a better denominator (than the current use of census population data). Thus, the assessment analyzed for change in absolute numbers reported rather than percentages.

The use of the NDHS and MICS survey datasets for comparing changes in RI outcomes between States was only considered for Bauchi and Kano States. Both States shared similar MOU timeframes whereby the 2013 NDHS data could serve as the baseline and the MICS dataset to look at subsequent changes, though the starting point of the projects varied, with the MOUs in Kano State starting in 2012 and in Bauchi State in September 2014. Thus, this difference is important to note when interpreting these data. In spite of the administrative data concerns as mentioned above, these data from the DHIS 2.0 were used to analyze differences outcomes in all of the four States including comparing Kaduna and Sokoto States.

While the format of the immunization registers at the health facility level is standardized nationally, how the registers are used, completed, and organized differed and were not user-friendly and difficult for rapidly gleaning information, thus limiting the team’s review of data using immunization registers. This was observed as a major finding and a gap where more TA needs to be directed in the area of documentation.

In addition, availability of reliable vaccine stockout data varied in each of the States. Until recently, vaccine stockout data were captured by the District Vaccine Data-Management Tool (DVD-MT), the WHO information system. All four States have now shifted from using the DVD-MT to the DHIS 2.0. The DHIS 2.0 does not yet report on vaccine stockouts. Only one State reported using a new electronic logistics system.

In-depth studies or surveys conducted by State Technical Working Group (TWGs) or partners were not readily available, unlike the MOU review reports, which were easily accessible through the MOU partners. The recently released December 2017 LQAS survey preliminary report was accessed with the help of an MOU partner late in the assessment.

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66 Note that there are limitations as the cohorts studied were age 12-23 months at the time of surveys. The baseline timeframe using the NDHS is 2011-2012 and the second reference period using the MICS would have cohorts within the 2014-2016 time period.
## ANNEX III. PERSONS INTERVIEWED

### USAID-Nigeria Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Location</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heather Smith-Taylor</td>
<td>USAID</td>
<td>Abuja</td>
<td>Director of Health Population &amp; Nutrition</td>
</tr>
<tr>
<td>Pamela Foster</td>
<td>USAID</td>
<td>Abuja</td>
<td>Deputy Director Health Population &amp; Nutrition</td>
</tr>
<tr>
<td>Laura McGough</td>
<td>USAID</td>
<td>Abuja</td>
<td>Senior Health Adviser Health Systems Strengthening/Strategic Information</td>
</tr>
<tr>
<td>Yakubu Joel Cherima</td>
<td>USAID</td>
<td>Abuja</td>
<td>Senior Maternal &amp; Child Health Program Manager</td>
</tr>
<tr>
<td>Reuben Odum</td>
<td>USAID</td>
<td>Abuja</td>
<td>Security Adviser</td>
</tr>
<tr>
<td>Ala Alashir</td>
<td>USAID</td>
<td>Abuja</td>
<td>RH Advisor</td>
</tr>
<tr>
<td>Gertrude Ode Zugo</td>
<td>USAID</td>
<td>Abuja</td>
<td>MCH Program Manager</td>
</tr>
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### MCSP-RI National Office

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<th>Name</th>
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<th>Location</th>
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<tbody>
<tr>
<td>Femi Oyewole</td>
<td>MCSP</td>
<td>Abuja</td>
<td>National Immunization Technical Advisor</td>
</tr>
<tr>
<td>Nomtai Tukura</td>
<td>MCSP RI</td>
<td>Abuja</td>
<td>Program Officer</td>
</tr>
<tr>
<td>Olumide Faleke</td>
<td>USAID/MSGP</td>
<td>Abuja</td>
<td>Advocacy Adviser</td>
</tr>
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</tr>
<tr>
<td>Jenny Sequeira</td>
<td>BMGF</td>
<td>Abuja</td>
<td>Senior Program Manager</td>
</tr>
<tr>
<td>Violaine Mitchell</td>
<td>BMGF</td>
<td>Abuja</td>
<td>Kano State Lead</td>
</tr>
<tr>
<td>Katie Maloney</td>
<td>BMGF</td>
<td>Abuja</td>
<td>Kano Health MOU Manager</td>
</tr>
<tr>
<td>Uchenna Igbokwe</td>
<td>Solina Health</td>
<td>Abuja</td>
<td>Associate Principal</td>
</tr>
<tr>
<td>Maurchi Wotobhe</td>
<td>Solina Health</td>
<td>Abuja</td>
<td>Program Manager-RI</td>
</tr>
<tr>
<td>Omotayo Boku</td>
<td>CDC</td>
<td>Abuja</td>
<td>County Director</td>
</tr>
<tr>
<td>Fiona Braka</td>
<td>WHO</td>
<td>Abuja</td>
<td>WHO Team Lead for EPI</td>
</tr>
<tr>
<td>Sisay Tegegne</td>
<td>WHO</td>
<td>Abuja</td>
<td>M&amp;E Focal Person</td>
</tr>
<tr>
<td>Tesfe Erbeto</td>
<td>WHO</td>
<td>Abuja</td>
<td>Data Management</td>
</tr>
<tr>
<td>Arin Aregay</td>
<td>WHO</td>
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<td>GIS Officer</td>
</tr>
<tr>
<td>Dauda Sulaiman</td>
<td>Palladium-Nigeria</td>
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<td>County Director</td>
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</table>
## MCSP-Sokoto

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<tbody>
<tr>
<td>Bello Ililjon</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>State Immunization Technical Adviser (SITA)</td>
</tr>
<tr>
<td>Obed Tarkie</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>Finance Officer</td>
</tr>
<tr>
<td>Yusuf Saur</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>State Immunization Technical Officer (SITO)</td>
</tr>
<tr>
<td>Mayam Sadiq</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>Knowledge Management Officer</td>
</tr>
<tr>
<td>Halima Abubakar</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>SITO</td>
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<tr>
<td>Muazu Muhammed</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>Communications</td>
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<tr>
<td>Usman Tijani</td>
<td>MCSP</td>
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<td>M&amp;E</td>
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<td>Usman Farouk Umar</td>
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<tr>
<td>Farouk Saiud</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>SITO</td>
</tr>
<tr>
<td>Sabina Ahywa</td>
<td>MCSP</td>
<td>Sokoto</td>
<td>Program Assistant</td>
</tr>
<tr>
<td>Egbule Emmanuel</td>
<td>Black Swan</td>
<td>Sokoto</td>
<td>Technical Advisor</td>
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### TA Partners-Sokoto

<table>
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<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Sani Mustapha</td>
<td>BMGF/DF</td>
<td>Sokoto</td>
<td>State Consultant</td>
</tr>
<tr>
<td>Shamsu Mohammed Bello</td>
<td>Chigari</td>
<td>Sokoto</td>
<td>CE Advisor-Sokoto</td>
</tr>
<tr>
<td>Kenneth Macaulay</td>
<td>Solina Health</td>
<td>Sokoto</td>
<td>Technical Advisor</td>
</tr>
<tr>
<td>Halimatu A. Bolatiti</td>
<td>CDC NSTOP</td>
<td>Sokoto</td>
<td>Team Lead-Sokoto</td>
</tr>
<tr>
<td>David Audu</td>
<td>UNICEF</td>
<td>Sokoto</td>
<td>Immunization Officer</td>
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<tr>
<td>Habibu Yahaya</td>
<td>WHO</td>
<td>Sokoto</td>
<td>State Coordinator</td>
</tr>
<tr>
<td>Hussein Iliya</td>
<td>WHO</td>
<td>Sokoto</td>
<td>RI Focal Person</td>
</tr>
<tr>
<td>Aliyu Adamu Y.</td>
<td>e-Health</td>
<td>Sokoto</td>
<td>State Coordinator</td>
</tr>
<tr>
<td>Shehu B. Kekele</td>
<td>MOH</td>
<td>Sokoto</td>
<td>Commissioner of Health</td>
</tr>
<tr>
<td>Abdullahi Bali</td>
<td>MOH</td>
<td>Sokoto</td>
<td>Permanent Secretary</td>
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### MCSP LGA Consultants Sokoto State

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### Sokoto State LGA, Health Facility, and Community Informants

#### Goronyo LGA

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<td>Cold Chain Officer</td>
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<tr>
<td>Dahiru Sodangi</td>
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<td>M&amp;E Officer</td>
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<td>WDC Chairman</td>
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<td>Alhaji Maman Lulu</td>
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<td>Marafa Dahiru</td>
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<td>Peter Joshua Ndit</td>
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**MCSP Bauchi State**

**Name** | **Organization** | **Location** | **Designated** |
---|---|---|---|
Ahmed Akiya | MCSP | Bauchi | SITA |
Peter Joshua Ndit | MCSP | Bauchi | SITO |
Aliyu Ahmed D. | MCSP | Bauchi | CPO |
Muhammed Umar Sakwa | MCSP | Bauchi | SITO |
Hayura A. Keli | MCSP | Bauchi | SITO |

**TA Partners-Bauchi State**

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<td>Program Officer</td>
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<td>Musa Usman</td>
<td>Chigari</td>
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<td>CE adviser</td>
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<td>E-Health</td>
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<td>Advisor-EOC Management</td>
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<td>Makinde Idowu</td>
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<td>Field Coordinator</td>
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<td>Immunization Specialist</td>
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<td>Moji Afolabi</td>
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<td>RI Focal Person</td>
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### Bauchi State Government Personnel

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<td>DCCDU</td>
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### Bauchi State LGA, Health Facility and Community Informants

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## MCSP LGA Consultants Bauchi State

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**Kano State Government Personnel**

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<td>Kananata Shehu Karem</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone Health Education Officer</td>
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<tr>
<td>Ibrahim Abdulahi</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone M&amp;E</td>
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<tr>
<td>Babannam Abdulahi</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone Surveillance Officer</td>
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<tr>
<td>Awwalu Abdullahi</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone SS Officer</td>
</tr>
<tr>
<td>Idris Osaini</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone Immunization Officer</td>
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<tr>
<td>Rufai Gosha Kabasa</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone Cold Chain Officer</td>
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<tr>
<td>Bala Usman</td>
<td>SPHCMB</td>
<td>Wudil Zone</td>
<td>Zone Accountant</td>
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## TA Partners - Kaduna State

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<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Location</th>
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<tbody>
<tr>
<td>Anthony Shamay</td>
<td>BMGF/DF</td>
<td>Kaduna</td>
<td>State Consultant</td>
</tr>
<tr>
<td>Ibrahim Musa</td>
<td>SOLINA</td>
<td>Kaduna</td>
<td>Program officer</td>
</tr>
<tr>
<td>Attahir Abubakar</td>
<td>EU-SIGN</td>
<td>Kaduna</td>
<td>Technical advisor</td>
</tr>
<tr>
<td>Abubakar Abdullahi</td>
<td>CHIGARI</td>
<td>Kaduna</td>
<td>CE Advisor</td>
</tr>
<tr>
<td>Victor Gugong</td>
<td>CHIGARI</td>
<td>Kaduna</td>
<td>Consultant</td>
</tr>
<tr>
<td>Ahmed Tsofo</td>
<td>UNICEF</td>
<td>Kaduna</td>
<td>State Coordinator</td>
</tr>
<tr>
<td>Lemu Funsho</td>
<td>APO CHAI</td>
<td>Kaduna</td>
<td>Senior Program officer</td>
</tr>
<tr>
<td>Sambo Ishailu</td>
<td>WHO</td>
<td>Kaduna</td>
<td>Immunization Focal Person</td>
</tr>
<tr>
<td>Muazu Habibu</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>State Coordinator</td>
</tr>
<tr>
<td>Esther Kaka Omar</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>Integrated Service Delivery</td>
</tr>
<tr>
<td>Bashir A. Bashir</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>Demand Creation</td>
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<tr>
<td>Paulina Akanet</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>Social Mobilization</td>
</tr>
<tr>
<td>Emmanuel Garry</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>LGA Facilitator</td>
</tr>
<tr>
<td>Maji Tijani</td>
<td>MNCH2</td>
<td>Kaduna</td>
<td>Strategic Planning</td>
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## Kaduna State Government Personnel

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<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Paul Manya Dogo</td>
<td>SMOH</td>
<td>Kaduna</td>
<td>Commissioner of Health</td>
</tr>
<tr>
<td>Joyce B. Tum</td>
<td>SPHCDA</td>
<td>Kaduna</td>
<td>RI Accountant</td>
</tr>
<tr>
<td>Aliyu Zubairu</td>
<td>SPHCDA</td>
<td>Kaduna</td>
<td>Chair of Finance TWG</td>
</tr>
<tr>
<td>Maxwell U. Sanda</td>
<td>SPHCDA</td>
<td>Kaduna</td>
<td>Dep. Dir. Admin and Finance</td>
</tr>
<tr>
<td>Name</td>
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<tr>
<td>Salisu Yahaya</td>
<td>Zaria LGA</td>
<td>Kaduna</td>
<td>M&amp;E</td>
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<tr>
<td>Jamaila Adamu</td>
<td>LGA</td>
<td>Kaduna</td>
<td>RI Community Engagement</td>
</tr>
<tr>
<td>Shafiu Ladan</td>
<td>L.G.A</td>
<td>Kaduna</td>
<td>Community Mobilization</td>
</tr>
<tr>
<td>Alh. Shehu Ibrahim</td>
<td>Health Development Committee</td>
<td>Kaduna</td>
<td>Chairman</td>
</tr>
<tr>
<td>Sani Nabawa</td>
<td>Health Development Committee</td>
<td>Kaduna</td>
<td>Secretary</td>
</tr>
<tr>
<td>Fatima Ja'afaru</td>
<td>T/Wada PHC</td>
<td>Kaduna</td>
<td>In-charge</td>
</tr>
<tr>
<td>Adamu Uba</td>
<td>T/Wada PHC</td>
<td>Kaduna</td>
<td>RI Provider</td>
</tr>
<tr>
<td>Samuel Abboti</td>
<td>CDC/NSTOP</td>
<td>Kaduna</td>
<td>Field staff</td>
</tr>
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**Kaduna State LGA, Health Facility, and Community Informants**
ANNEX IV. SOURCES OF INFORMATION

1. National RI Strategic Plan, NPHCDA 2013-2015
2. Bauchi, Kaduna, Kano and Sokoto States’ Harmonized RI Plans 2015-2018
3. MCSP RI PMP 2016
4. State MOUs and annual and mid-term MOU review power point presentations 2015- 2017
5. MCSP Annual Reports, Quarterly Reports (2017) and Work Plans
6. Bauchi State CE Strategies (original and revised)
7. MCSP Needs Assessments Sokoto State 2015
8. RI SS Workshop Report-MCSP Bauchi State 2015
9. RI In-depth Program Review and SS Report, MCSP Sokoto State 2017
12. MCSP Nigeria Revised GIS Concept 2016
13. MCSP Draft Orientation for Traditional Leaders and LGA CEP Bauchi State 2017
14. Basic Guide for RI Provider Training Program (undated)
15. REW Training modules (undated)
16. SS SOPS and checklists Bauchi and Sokoto States (undated)
17. Various TWG meeting minutes-Bauchi and Sokoto State 2015-17
18. TWG TORs –Bauchi and Sokoto States (undated)
19. SERICC Roles and Responsibilities, Kaduna State (undated)
20. NERICC/SERICC M&E Framework (undated)
21. SOP for LERICC-Bauchi State 2018
22. LGA Consultants TOR MCSP (undated)
23. RI Diagnostic Reports, Kaduna and Sokoto States 2015
24. Preliminary Findings LQA surveys, WHO 2017
25. USAID Trip Reports, DQA Report USAID/WHO 2017
26. MICS Report 2016-17
29. IVAC Landscape Analysis of RI in Nigeria 2012
30. Sex Disaggregation of Immunization Coverage Data, PATH 2010
34. “Gender inequality, relationship power and childhood immunization uptake in Nigeria, Antai, D. et al., IJID, 2011
35. Review of the DHS data on sex and immunization coverage, Swiss TPH, WHO 2010
36. Gender Analysis for Strategic Planning, USAID Nigeria 2014
37. Performance Measurement for Health System Improvement, Smith, P. et al., WHO 2008
38. TSHIP Final Evaluation Report
ANNEX V. DATA COLLECTION TOOLS

Ensuring and obtaining informed consent is a critical part of each of the tools. With the printed tools, the user is guided to provide introductions, to explain the purpose of the assessment, that information will be kept anonymous and how findings will be used. The team also asked for permission to take photos to document visits and to potentially use in reports.

A. Discussion Guide-MCSP State Staff
B. Consultative Meeting Guide-LGA consultants
C. KII Guide-MOU and other non-governmental Partners
D. KII Guide-State Agencies
E. KII Guide-TWGs
F. Addendum-specific questions regarding TA per thematic area
G. KII Guide-PHCC Staff
H. KII and Observation Guide-Health Facility Staff
I. Guide to Observation of RI Session and Informal Interviews
J. FGD Guide-Females and Males with Children Age Two and Younger
K. FGD Guide-Community Health Workers or Committees
L. KII Guide-Formal and Informal Partners in Kaduna and Kano
M. KII/Discussion Guide-Formal and Informal TA Partners in Kaduna and Kano

A. Discussion Guide-MCSP RI State Technical Advisor and Officers
1. Staffing-roles and tenure (length of time with this project and previous experience)
2. Any shift in MCSP foci-from the State, MCSP Program or USAID point of view?
3. Major system changes or skills transfer resulting from MCSP TA (as lead or pooled) or by TA from others?
4. Specific TA provided to the different levels-State, LGA, Health Facilities and Community
   a) Planning (State, LGA and HF levels)- Probe for specifics of “MSCP support”
   b) Coordination- Probe for specifics of “MSCP support”
   c) Financial management
      - Probe how effective were the release of funds to Health facilities and use for RI services?
      - And the MCSP TA provided
      - Challenges and how these addressed
      - Major changes seen since the basket fund was initiated?
   d) Vaccine Security, Cold Chain Probe:
o Gaps and challenges in the maintenance of vaccine security and cold chain management? How has MCSP responded to these? How is the vaccine dashboards used at the different levels – state, LGA and state. How is “functional” cold chain defined?

e) Service Delivery-Access and Utilization

o TA MCSP provided to encourage or equip LGAs and HF to use data for planning for improved access?

o Gender norms or cultural practices affecting both access and utilization? Location, schedule, sex of providers, mobility of women, mothers too busy Is it common or uncommon for children to bring children for immunizations, also any differences on uptake of vaccines related to the sex of the child

o TA MCSP providing to address this?

o Integration of RI with polio or measles campaigns?

f) Data management

o Data quality issues-probe for the causal or contributing factors? Specific TA being provided by MCSP, also others to address the issues

o Specifically about recording PENTA 2, an issue raised by USAID

g) Monitoring and Supportive Supervision

o Tell us about the TA approaches being used to address these systems

h) Capacity-Building and Training

o Probe for how are state and LGA training and staff development capacities being built

o Major contributions of MCSP in the area of training materials or aids?

o How effective has been the shift from formal training to step-down, cascaded or on the job-training, coaching and mentoring?

i) Community Engagement and Social Mobilization

o Probe Community engagement-community mechanism (WDC or other)

o Probe outreach and tracking system development-TA by MCSP and others, e.g. UNICEF or other projects

o Probe social mobilization and behaviour change communication-channels supported, MCSP and others, e.g. BMGF, Dangote or others

5. Gender-Generally, how did MCSP RI TA addresses gender in strengthening service delivery (access and utilization), community engagement, outreach and demand creation, and skills training and transfer?

o Probe for a written strategic plan/protocol, development/review of tools to capture data on gender, training for staff or outreach workers on gender responsive services.

o Ask about practices, e.g. children bringing children for immunizations; also if there are sex differences related to uptake or coverage

6. Collaboration

o Collaboration between MCSP and government?
7. Approaches
From your experience with the MCSP TA RI Programme in what thematic areas and with what approach would you identify as the biggest contributor to improving RI services in this states?

- Use of LGA consultants
- Lessons learned with all approaches used by MCSP

8. Major changes related to RI in the State – Ex. increase in number of children immunized

9. Schedule additional meeting times with members of team

Request Documents: Harmonized RI plans; MOU Review, Basic Guide for RI Providers, REW training modules, Mid Management Training (was this based on a needs assessment?), Orientation guide for traditional barbers and traditional birth attendants, draft SM/CE assessments, draft CE strategy for Sokoto, any documents describing the community data management and referral system, OR protocol-GIS mapping for planning, and any reports of other studies done

B. Consultative Meeting Guide-MCSP LGA Consultants

Questions to guide the discussion

1. When did you join the program and how were you selected to be an LGA consultant?

2. Ask about their previous experience, probe for management, training/staff development, RI, supportive supervision and/or monitoring, data management.

3. What do you see as your main responsibilities and your deliverables? Probe also if they have a LGA “counterpart”

4. What orientation were you provided and training since joining the program? Probe for skills training related to supportive supervision, coaching, mentoring, monitoring, data analysis

5. Tell us about your technical assistance, supportive supervision and monitoring activities
   5a. At the LGA level. Probe for type of TA, approach used for each, and also others providing TA
   5b. At the health facility level, (Probe specific to TA provided in data management, data analysis and feedback; monitoring and reporting, use of data , engaging community, micro plans, catchment area mapping from LGA down to the ward/settlements levels
   5c. At the community level – who are you working with? What has been developed during the study period? Probe for mechanisms in engaging community in planning, monitoring and outreach, development of community data systems-registers, tracking of drop outs and newborns, and referral of unimmunized children to Health Facilities in their catchment areas

6. What are the challenges LGAs and HFs are facing with data management; how is MCSP (and specifically you as LGA consultants) helping to address these

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67 Formal or informal training, coaching, mentoring, provision of tools or job aids, joint monitoring, exchange visits, provision of inputs (for monitoring or meetings), TORs (TWG), SOPs
7. Besides data, what are the other major challenges you experience related to a certain thematic area or working at a certain level and how are these addressed?

8. What is your involvement with LGA and State RI program staff-participation in meetings, reporting and the TWGS (note if State or LGA level)

9. What are the key changes in RI processes which they have observed: (planning, coordination, financial/accounting practices, vaccine security and cold chain, collection, analysis, reporting and use of data, monitoring and supportive supervision as well as provision of RI? Probe for how MCSP contributed to this either taking the lead, working along, with others or the TA provided by others.

10. With this experience, what are the lessons learned relating to the provision of TA-approaches and activities? Probe for LL learned cascaded/step-down training, coaching/mentoring, exchange visits, peer to peer (if used), SS as the entry for OJT

11. Ask about their perceptions of unmet needs and ideas for improved TA

12. What do you see as the causal or contributing factors relating to low immunization uptake, dropout-noting gender-related issues or norms?

Ask about barriers to access and utilization noting low immunization uptake and coverage, what could be the reasons or contributing factors? Ask about gender-related factors which may inhibit access or uptake of immunizations. Could share the stories we have heard about parents sending their babies with older siblings to get immunizations asking if this is a common practice and how MCSP TA is providing TA to address these barriers.

C. KII Guide- Non-Governmental Formal (MOU) Partners, Bill and Melinda Gates Foundation and Dangote Foundation and Informal RI Partners, i.e. UNICEF, WHO, EU, CDC in Bauchi and Sokoto States

1. What technical assistance is your agency/organization providing directly or through contracts to improve or strengthen the RI system? Probe for TA specifics and the level, e.g. State or other

2. We would like to learn how you have been pooling your resources with MCSP, as well how this partnership has worked in the areas of:
   a) governance/accountability,
   b) financial management,
   c) data management,
   d) monitoring and supportive supervision,
   e) service delivery-access and utilization,
   f) capacity-building and training and
   g) community engagement
   h) social mobilization and behavior change communication

3. In each of these area, what do you think has been the most effective or helpful technical assistance provided by the MCSP Program or their contracted partners?
a) Strategic and work-planning process and use of strategic information. Probe for MCSP contribution to the planning process and use of data e.g. GIS mapping for population estimates, support for the TWGs and reviews and reports

b) Coordination (State and LGA levels). Probe for MCSP “support” to the state, TWGS, and LGAs, e.g. RI resource mapping -try to specify that support and use of those data.

c) Financial oversight and accounting. Probe for MCSP’s TA related to financial management and accounting at the LGA/HF level, use of monitoring data.

d) Technical oversight, monitoring and supportive supervision. If not mentioned, probe for technical assistance for development of TORs for the TWG (listen for LGA consultants).

e) Vaccine security and cold chain. If not mentioned, probe for training, use of data for vaccine forecasting, monitoring of the cold chain, spot checks and onsite coaching of LGAs and HF on vaccine forecasting and micro planning and RI session planning.

f) Service delivery-access and utilization. Probe for support for expansion of services, LGA micro-planning, and HF use of data for planning fixed and outreach services.

g) Monitoring and Supportive Supervision. Probe for role of the TWGs, also the development of SS tracking system, technical or other support for joint visits.

h) Data Management. Probe for MCSP assistance to improve and monitor data quality, to analyze and promote use service/administrative data.

i) Capacity Building and Training-Probe for awareness of activities and their approaches.

j) Social Mobilization and Community engagement. Probe for TA for strategy development, training/orientation of community volunteers, support for use of community-based registers and tracking and referral system, and engagement of citizens including traditional leaders.

4. What major changes have you observed, looking at the timeframe (since 2014 in Bauchi and since 2015 in Sokoto and in Kano and Kaduna (MOU time period)?

5. What additional technical assistance is needed to further develop RI in these States?

6. What do you think are key factors causing or contributing to both low immunization uptake and coverage?
Listen for different partner contributions. Probe for MCSP “support to the state planning process” (specify), e.g. RI resource mapping tool, GIS mapping for population estimates and use of these data for planning and then budget, allocation, and support to the TWGs to develop plans.

b) Coordination

Probe for specifics of MCSP “support” the state and LGAs with this function- Probe for support to State TFI, TWGs, Meeting Agendas, SOPs.

c) Reporting - including the mid-year and annual review meeting and reports.

d) Financial oversight and accounting - How has MCSP contributed to the tracking of basket fund disbursement and assessment of the use of RI basket funds at each level?

Probe to find out the role and type of assistance provided by MCSP in assisting with tracking expenditures and retirements of funds e.g. operationalization of the financial management tracking tool, reporting to accountability boards, responding to financial audits.

e) Technical oversight

Note the current active TWGS. Probe for TA provided by MCSP including the development of TORs for the TWGs, Tools development, Supportive supervision State-LGA), and the LGA consultants.

f) Training and Capacity-building

Probe for TA provided by MCSP or others in this area, e.g. cascade, step down, OTJ, (teaching modules and aids), flu coaching, mentoring (by whom), state and LGA capacities, RI as part of pre-service; attrition a challenge? Listen for their perceptions of these approaches, unmet needs and lessons learned.

g) Vaccine security and cold chain

If not mentioned, probe for the assistance provided by MCSP-training, monitoring of the cold chain, or provision of job aids.

h) Service delivery-access and utilization

Probe for MSCP’s support for micro-planning, the use of GIS mapping to estimate populations and hard to reach populations, expansion of services, outreach.

We are interested in hearing your thoughts about the reported low immunization uptake and coverage, what could be the reasons or contributing factors? If time allows, ask about gender-related factors which may inhibit access or uptake of immunizations. Could share the stories we have heard about parents sending their babies with older siblings to get immunizations.

i) Monitoring and Supportive supervision

Probe for State level functions for both monitoring and SS and role of the M&E/SS TWGs, also the development of SS tracking system, technical or other “support” for joint visits-MCSP’s contribution. The value of these activities, i.e. how findings are being used for action/quality improvement of the M&E/SS visits and at the LGA and facility levels.

j) Data Management
Ask about the current status of the different databases and information channels in the state, e.g. DHIS-2.0 and DVD, NAVISION. probe for assistance provided to improve and monitor data quality, analysis and use and to support collection of strategic information, e.g. surveys.

k) Social Mobilization and Community engagement

Probe for work with the social mobilization TWG, strategy development (in Bauchi – the operationalizing of the strategy, training/orientation of community volunteers, development of community-based registers and tracking and referral system). Also probe for TA for engagement of citizens at the strategic planning level and the utilization of WDCs as entry points to community engagement. Also ask about demand creation efforts – noting any contribution of MCSP.

2. In looking at TA provided by MCSP to the State Agencies, State Task Force and State Level TWGS, what approaches have been most effective, resulting in skills transfer or system change?
3. What major changes would you say have occurred in routine immunization program in this State since 2014 (Bauchi) and 2015 (Sokoto)? Probe for expansion of services, RI coverage, etc.
4. What assistance is needed to further strengthen critical RI systems and processes?

E. KII/Discussion Guide-Broad Questions for Technical Working Groups- Include relevant questions from Addendum of thematic-related questions. If possible, review the TWG TOR prior to the visit. Optimally to meet with TWG head or leader

I. We are interested in learning about the technical assistance that has been provided to strengthen this TWG since 2014 (Bauchi) and 2015 (Sokoto)?

Probe for that provided by MCSP – alone or with others and/or also by others, with enough description to understand the TA approach/inputs provided,

2. How has this TA helped you as a TWG to carry out your functions, TOR?
3. With the MCSP TA approaches, which has been most helpful to you as a TWG?
4. What has changed regarding the functioning of this TWG?
5. What remarkable changes would you say have occurred in routine immunization system in this LGA since 2014 (Bauchi) and 2015 (Sokoto)?
6. How has this TWG contributed to this change?
7. What additional technical assistance is needed to further strengthen and support this TWG?
8. What technical assistance do you think is needed to address critical needs related to the RI system?

F. Addendum- Per thematic areas with relevant TA providers and TA recipients including TWGs – noting TA approaches, results, and lessons learned

I. State Governance and accountability. KIIIs with SERICC, EOC, State Immunization Taskforce, SIO, TWGs, BMGF sub-contractors, WHO, CDCN-Stop, EU-Sign, UNICEF and MNCH2

– Clarify functions

68 Formal or informal training (step-down, cascade training, on-the-job), provision of training modules, tools or job aids, embedded staff, LGA consultants, intermittent coaching, mentoring, joint monitoring, exchange visits, peer-to-peer assistance, provision of inputs (for monitoring or meetings), specific TA, e.g. development of TORs (TWG), SOPs.
2. **LGA Governance and Accountability.** KIIs with LGA PHCC, LIO, CCO, CEFP, HE, Finance, and relevant TA providers
   - LGA functions
   - TA for LGA planning (REW, use of GIS maps or other)
   - TA for LGA level coordination and collaboration
   - TA for LGA (and HF) finance and accounting, accountability mechanisms

3. **State Monitoring, SS and Data Management.** KIIs with SPHCDA, EOC, SERICC, PRS, relevant TWGs, and relevant TA providers
   - TA for development or strengthening Monitoring and SS systems- probe for use (and usefulness) of state level dashboards, LGA review meetings at State level, joint monitoring or SS visits or “spot checks”, checklists, feedback mechanisms, use of findings for action
   - TA for strengthening Data Management Systems (how document skills transfer or system change)
   - TA for gathering other strategic information, e.g. LQAs, GIS mapping-probe for who is responsible for overseeing or conducting
   - TA for use of DHIS and other strategic data (note examples)
   - TA for performance appraisal system including sanctions and awards
   - TA for transition planning/budgeting of SS after MOU ends

| Observe-examples of use of data, performance criteria/rating system, any state-specific check-lists for monitoring, spot checks or SS. Gather service expansion data. |

4. **LGA Monitoring, SS and Data Management**-KIIs with Relevant state body, relevant TWGs, and relevant TA Providers and Observation
   - TA for SS system development-Assignment of Health Facilities-problems or benefits; TA for skills development
   - TA for monitoring and reporting, e.g. LGA level review meetings (note if adopted “revised” meetings, use of monitoring and SS findings for action, use of dashboards
   - TA for Data Management-focus on approach and how skills transfer or changes are documented-data quality, analysis and use of data (examples). Note if improvements what have been the contributing factors.

| Observe: dashboard, data analysis, monitoring/SS tools, SS plan, and minutes of last LGA review meeting noting documentation of reporting critical findings/action plans, e.g. RI-related TA being provided to Health Facilities and by whom (and how this has changed during the MOU)

- SS to HF

69 MNCH2 may have been using LGA technical assistants but this may have ended – they may have been providing integrated MCH SS.
Observe log book to see who is doing and problems noted, also documentation of TA provided, actions taken and follow-up noted.

- TA for building HF capacities for data management
- TA for developing population estimates, REW microplans to reach under-service populations or nomadic peoples or to improve service accessibility-ask about use of GIS maps and other data. Also to integrate RI with IPDs and if so if IPDs included in the microplan
- TA to the HF for community engagement processes (mnch2 may be using facility committees)
- TA for addressing barriers to access or utilization

Observe: REW microloans-noting when last revised, defaulter lists, and data management system. Also conduct register review.

5. Vaccine Security and Cold Chain-State to health facilities- KIIIs with State/LGA CCO, Logistics TWG, eHealth or other TA provider

- TA for strengthening vaccine security, distribution\(^{70}\) and cold chain management

Observe for dashboards or other tools, e.g. spot checks for monitoring cold chain and how used Cold chain management-observe equipment and tools, functioning of refrigerators, logbook showing monitoring visits or spot checks. Gather stock-out data for the state

6. Training –KII with Training TWG and Training Leads-note training approach,\(^{71}\) methods and curriculum-also collaborations with other partners

- TA for training Community Engagement Personnel-state, LGA and ward orientation and training
- TA for supportive supervision skills training
- TA for REW training
- TA for Basic Guide for RI providers and transition plan for continuation of training after MOU ends
- TA for Mid-level Management Training
- TA for training needs assessment; for training database
  - TA for other major RI-related training since the MOU (specify topic)

7. Community Data Management, Tracking, Referral and System and RI Promotion–KII with relevant TWGS (CE, SM) and TA providers (MNCH2, UNICEF, Chigari Foundation) and LGA HE and CEFP and HF staff (IC and RI nurse)

- Description of TA provider models/strategies for CE, SM, BCC
- TA for developing new cadres-State, LGA, Ward, CE Focal Persons
- TA for development of CE, SM, BCC strategies
- TA for development of community data management systems-use of data for tracking and referral and reporting

\(^{70}\) Kano has push-government is contracting vendors replacing eHealth-note how this is working, note in Kaduna where the push system is not established.

\(^{71}\) Residential versus non-residential, on-the-job, cascaded/step-down, peer to peer, etc. including follow-up of training-assessment, coaching and mentoring, note if competency-based, exchange visits, development of master trainers/unit, use of pre-service institutions/tutors, etc.
• TA for development of community volunteers
• TA for involvement of traditional/religious leaders to promote RI; male involvement
• TA for supportive supervision of the community systems
• TA for addressing practices, e.g. Children bringing children for immunizations

G. KII Guide- LGA PHC Coordinator/Director, M&E, LIO, CCO, CE Focal Person, HE Officer

I. We are interested in learning how the routine immunization system is developing in this LGA since (2014 in Bauchi and 2015 in Sokoto) and the technical assistance that you are receiving?

Note to interviewer: The question starts as open-ended. Use the following to cover the thematic areas and systems that are not mentioned to learn: 1) about the TA provided during the study period-by MCSP-alone or with others and/or also by others, with enough description to 2) understand the TA approach/inputs and gather perceptions about the TA most helpful or valued., to 3) learn about positive changes-noting what can be quantified, to 4) Understand challenges; and 5) to listen to needs

a) Planning, Coordination and Management
   o Specific TA that was provided and by whom
   o Probe for specific changes in these processes. In particular, probe for use of data or new strategic data for planning, e.g. GIS mapping for population estimates, micro-planning at LGA organizing and holding of monthly LGA/HF review meetings and reporting
   o If not mentioned, probe for the TA that helped them acquire new skills or to be better equipped to carry out these functions.
   o Major challenges for carrying out planning, coordination and managing RI?

b) Financial oversight and accounting-
   o TA to improve finance/accounting practices at the LGA level, e.g. budgeting, allocating, and retirements of funds and responding to audits. And then at the HF level
   o Probe for their thoughts about the use of financial spot checks, monthly updates of resources received and spent through accountability boards (are these dashboards)-MCSP contribution?
   o Major challenges for covering RI costs; for handling basket funds?

c) Technical oversight
   o Probe for TA to develop technical (RI) capacities and skills at the LGA and then at the HF areas; if TWGs-note or new skills sets, also if training-list that provided or supported (specify) by MCSP. What are the technical areas that are under-developed at the LGA or the HF levels?

d) Monitoring and Supportive Supervision
   • Probe for LGA level functions for both monitoring and SS. And TA provided to these functions.
     o Probe as needed “support” to the LGA- joint visits and SS tracking system.
     o Probe for use of SS/monitoring data to RI service or system improvements at both LGA and HF level-resulted in action or new activities.
Challenges to improve and sustain these functions?

 Probe for perceived changes in the monitoring and SS by the State to the LGA and the benefits

 e) Data Management

 Major changes and the current status of the databases e.g. DHIS-2.0, DVD, and NAVISION.

 Probe for changes since in data quality assessments, reporting, analysis, access to useful data, “support” to LGA M&E Officers and LIOS noting contributing factors.

 Note his/her perceptions of the data quality issues and major contributing factors.

 Technical support provided by MCSP for collecting strategic information, e.g. GIS mapping or to do surveys.

 f) Vaccine-Logistics and Cold Chain

 Probe for TA-training (specify topic), vaccine forecasting, tools, e.g. job aids and SOPS for monitoring of the cold chain, etc.

 Probe for + /- changes in timeframe and with the ‘push rather than pull approach’ and MCSP’s assistance to set up this system.

 g) Service delivery-access and utilization

 Probe for MCSP’s support to the HFs for micro-planning-the use of GIS mapping data to estimate populations and hard to reach populations, and how the TA from MCSP or others has contributed to expansion of services (fixed, outreach and mobile), technical support from MCSP teams in the review and updating of RI session plans based on feedback received from joint SS visits.

 Ask about improvements in the LGA to reach hard to reach populations and how TA.

 Ask about barriers with special focus gender-related factors which may inhibit access to services or uptake of immunizations. Could share the stories we have heard about parents sending their babies with older siblings to get immunizations and see if this is common (and how this is or should be addressed)

 h) Monitoring and Supportive supervision

 Ask about LGA level functions for both monitoring and SS and changes in the M&E and SS system and processes in the study period.

 Probe for the utilization of SS tracking tools and specifics about the technical or other support for joint visits and data review meetings.

 Ask for examples of how monitoring and SS findings have been used for action/quality improvement. Also their perceptions of the State SS for the LGA and how this has been useful (or not) for them, i.e. do they get feedback-also to note MCSP support, i.e. LGA consultants.

 Of special interest is to hear the work and the LGA perspective about performance appraisal concept and system, e.g. quarterly performance review -both LGAs and HFs, and the agencies.

 Ask about the challenges to carrying out monitoring and SS functions?
i) Social Mobilization and Community Engagement
   o Probe for TA provided to these areas by MCSP and others?
   o Specifically ask about MCSP work to utilize traditional barbers (and TBAs in Sokoto),
   o Probe for “support” for development/use of community-based registers and tracking
     newborns and children under age one not immunized and drop-outs/defaulters, and the
     referral system.
   o Probe for TA for engagement of citizens at the strategic planning level, “support” to LGA to
     conduct meetings for underserved communities, media engagement strategies, role of
     WDCs and traditional leaders as entry points to community engagement.
   o Ask about major challenges with SM, CE and demand creation? Probe for gender-related
     factors or issues related to SM, CE and BCC,

j) Capacity-Building and Training
   o Probe for coverage of REW training and MCSP contribution.
   o Probe for how training capacity was or is being built for the LGA
   o Also other training programs, e.g. training on various RI related topics for community
     resource groups (mostly WDC members) health educators and LIOs.
   o Probe for TA provided by MCSP or others in this area, e.g. cascade, -step down, OTJ,
     (teaching modules and aids), f/u coaching, mentoring (by whom), state and LGA capacities,
     RI as part of pre-service; attrition a challenge? Listen for their perceptions of these
     approaches, unmet needs and lessons learned
   o Probe for how the C-B/Training TA responding to critical needs for skills improvement?

H. Guide to Health Facility-KII Health Facility Officers in-charge (for Health Facilities in Bauchi and
   Sokoto States LGAs)

1. Specific current roles and responsibilities of staff relating to routine immunizations?

2. How this HF has developed RI services since (2014 in Bauchi and 2015 (Sokoto)?

   a) Access and utilization
      o Probe for TA for micro-planning and data used including the use of GIS mapping to estimate
        populations and hard to reach populations-specify the TA (and other support) provided by
        MCSP
   
   o Challenges with improving access and utilization
      Ask about barriers to access and utilization noting low immunization uptake and coverage, what
      could be the reasons or contributing factors? Ask about gender-related factors which may inhibit
      access or uptake of immunizations. Could share the stories we have heard about parents sending
      their babies with older siblings to get immunizations asking if this is a common practice and how
      they address this and other barriers.

   o Changes or improvements in access and utilization?
     If quantifiable-look for the supporting data, e.g. "we are immunizing more children," “we are now
     reaching unserved areas or we have reduced drop-out rates"
o Ideas do they have to improve access and utilization—what assistance is needed?

b) Vaccine security and cold chain (who is responsible—IC?)
   - Probe as needed for the assistance provided by MCSP—training, vaccine forecasting, monitoring of the cold chain, and tools or job aids
   - Changes or improvements in the cold chain?
   - On-going or additional assistance is needed?

c) Financial management and accounting
   - Probe—for TA to help establish and manage the basket funds—financial controls, check and balances, disciplinary measures for misuse or mismanagement of the funds and the role and type of assistance provided by MCSP LGA consultants and staff.
   - Changes or improvements in financing and also accounting practices?
   - Additional assistance is needed to further develop capacities?

d) Monitoring and Supportive supervision, and Technical Support from the LGA
   - Probe for changes in the monitoring and supportive supervision provided by the LGA and note MCSP role, e.g. LGA consultant. Also their involvement in monthly review meetings ask about the information that they present (note any analysis), technical updates and performance reviews. As is relevant in the State ask about the performance appraisal, rating system and awards. Ask about recent SS or monitoring visit findings and actions planned.

   - Observe the SS register—noting the last three months—the findings, actions recommended and any documentation about the actions taken, quality improvements or other changes

   - Changes or improvements as a result of the SS?
   - Technical support or capacity-building is needed?

e) Data management—Ask about the current status of the different databases and information channels.
   - Probe for TA provided during this timeframe (and by whom) to improve the data management system and data quality, to support collection of strategic information, e.g. GIS mapping or other information-gathering processes.
   - New skills acquired, what changes in data quality, analysis, in use of data?
   - Additional assistance needed to further develop the system and staff skills?

f) Capacity-Building, Training
   - Training provided and the provider/donor; if skills training, ask about follow-up, application of skills (Transfer of skills)
   - Probe for other capacity-building, e.g. cascade, -step down, (here note teaching modules and teaching aids provided, who is responsible—note any challenges—here to probe staff attrition, needs), on-the-job coaching, mentoring (by whom)—asking for examples and the effectiveness

g) Community engagement
o Probe for developments during the study period relating to the HF relationship and engagement with the community (specify groups, e.g. traditional leaders, WDC or VDC) - involving them in planning, regular reviews, and assisting with outreach. TA provided by the LGA, MCSP and others, e.g. training/orientation of community resource groups including traditional barbers (specify orientation/training).

o Challenges - community involvement, outreach/tracking and demand creation

o Additional assistance is needed to further develop the community data and engagement system and to improve social mobilization and demand creation?

3. (If not discussed) TA approaches provided by MCSP or others have been most helpful to you as the manager of the health facility in strengthening or improving delivery of RI services? Probe for perceptions about the TA (or other assistance) provided by the LGA Consultant.

I. KII Guide - RI Provider, e.g. Nurse/CHEW

1. Training received? Note the provider

2. What assistance or support have they received? Note the provider
   a) Planning. Probe for data used
   b) Forecasting vaccines. Probe for data used
   c) Cold chain

Observation Guide to Vaccine and Cold Chain

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a “key performance indicator report”?</td>
</tr>
<tr>
<td>Are vaccine stock-outs monitored and is the vaccine ledger updated?</td>
</tr>
<tr>
<td>Are there functional cold chain equipment in the HF? Note type of equipment</td>
</tr>
<tr>
<td>Is there a mechanism to monitor vaccine potency in the HF? (cold chain monitoring charts) Check temperature (+2 to +8°C)</td>
</tr>
<tr>
<td>Is the cold chain inventory up to date? (with register of faulty and functional CCE)</td>
</tr>
<tr>
<td>Availability of all recommended vaccines (BCG, Penta 1, Penta 2, Penta 3, OPV, IPV, Measles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation Guide –Facility and Service area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the facility clean and tidy? (floor, walls, ceiling, etc.)</td>
</tr>
<tr>
<td>Patient flow–easy to understand and move about</td>
</tr>
<tr>
<td>Is the facility adequately ventilated?</td>
</tr>
<tr>
<td>Are health workers neat and tidy?</td>
</tr>
<tr>
<td>Is the schedule posted? Does it note RI sessions?</td>
</tr>
<tr>
<td>Is the fee schedule posted</td>
</tr>
<tr>
<td>Is there adequate waiting room – seating for all care-givers</td>
</tr>
<tr>
<td>Is there a dedicated area for RI services provision?</td>
</tr>
<tr>
<td>Handwashing facilities with soap</td>
</tr>
<tr>
<td>Availability of needle collection and disposal system</td>
</tr>
<tr>
<td>Availability of RI related IEC materials/posters</td>
</tr>
<tr>
<td>Availability of child Immunization cards</td>
</tr>
<tr>
<td>Availability of all recommended antigens for children &lt;1</td>
</tr>
</tbody>
</table>

72 Formal or informal training (step-down/cascade, on-the-job), coaching, mentoring, provision of tools or job aids, joint monitoring, exchange visits, provision of inputs (for monitoring or meetings), development of TORs (TWG), SOPs
Did the nurse provide instructions to the care-giver about when to return
Did the nurse provide instructions about what to do if child becomes ill
Use of register and tally sheets

e) expansion of services (fixed, outreach, and mobile)

<table>
<thead>
<tr>
<th>Observe micro-plan, schedule and documentation of last month sessions-if not as planned, ask about reasons</th>
</tr>
</thead>
</table>

f) Utilization

<table>
<thead>
<tr>
<th>Look at registers or logs of last fixed and outreach RI session-discuss TA to help plan number of sessions both fixed and outreach. Also observe for monitoring charts-drop-out</th>
</tr>
</thead>
</table>

g) Data Management

<table>
<thead>
<tr>
<th>For one settlement review register for November 2016 and November 2017. Note utilization for each of these years. Note the completion rate (all recommended vaccines) for children from that settlement registered in November 2016. Observe for record-keeping issues. Ask about barriers to access and utilization noting low immunization uptake and coverage, what could be the reasons or contributing factors? Ask about gender-related factors which may inhibit access or uptake of immunizations. Ask if parents sending their babies with older siblings to get immunizations asking if this is a common practice and how they address this and other barriers.</th>
</tr>
</thead>
</table>

h) Monitoring or SS visits- findings and actions taken

<table>
<thead>
<tr>
<th>Observe SS register/log book (if not done with IC). Note who is providing SS, frequency of visits, findings and any actions</th>
</tr>
</thead>
</table>

i) Engagement and involvement of community-probe for use of community members to register, track, follow-up drop-outs and refer.

<table>
<thead>
<tr>
<th>Observe referral documentation</th>
</tr>
</thead>
</table>

j) BCC/IEC. Ask about key RI messages and channels used for promoting RI and for informing the community about services. Observe for BCC/IEC.

J. Guide to Observation and Informal Interviews During Immunization Services

On entry, meet with the person in charge (IC) of the immunization service to:

I. Introduce yourselves and the purpose of the visit. (As part of our assessment of the RI Program we want to learn more about the immunization services being provided.)

- Ask for permission to observe the provision of RI and to informally talk with clients as they wait and staff as they work (assure them that will keep this to a minimum so not to disturb their work). Allow for refusal.

- Ask the I.C. for information about the RI service being visited (fixed, outreach, mobile or campaign), the frequency of these services and how the community is informed. If this is a regular event, ask if today is typical, e.g. the usual number of children attending.
Ask the IC to introduce both of you to the RI provider. One member of the team will stay to observe and talk to the nurse/CHEW between clients (1 hour).

2. Interview with the RI Provider (This is optional and only to be conducted if the RI Provider does not have clients waiting)
   - What training have you received (during the study period)?
   - What TA has MCSP provided to you or this facility?
   - What has changed (during this study period)?
   - In the register, how do you record immunization records, if children were immunized at another clinic or location?
   - What do you tell the mothers to watch for or to do if their children are ill after the injections?
   - What information do you provide about returning for the next series of immunizations?
   - Is it common for an infant to come for immunizations with an older brother or sister? If this happens, what do you do?
   - Do mothers refuse certain vaccines, if so, which ones and why?
   - Have the supportive supervisors observed your services before, if so what suggestions did they have for you? What actions were taken?

3. Observe (using guide a shown previously)
   As care-takers are waiting, the second assessor, an experienced female Hausa speaking researcher will use this time as an opportunity to talk with them about RI services-touching on availability, accessibility, affordability, and acceptability. As a guide to this informal interview:
   - Warmly greet and admire the child asking the age
   - Explain that we are with a team looking at the immunization program in the State
   - Ask permission to talk with them for a few minutes; if agree:
     - Ask if this is their usual service point for immunizations-note if first time to use this service
     - Their thoughts about the location and schedule
     - Ask how they know about the services - TV, Radio, Signs, Health Provider (specify, BCC materials, community workers (specify) etc.
     - The expense – how much they pay for traveling and the service fees
     - Ask is they have any suggestions for improving the access to routine immunization services

Document-sex and estimated age of each informant, and age of the child or children receiving immunizations

K. FGD GUIDE for Women and Men with Children Under Age Two

Introduction and Informed consent: Thank you for coming to meet with us. We are an assessment team looking at routine immunization services in 4 states. We are talking to mothers and fathers with children under age two to learn more about issues relating to access to routine immunization services. This discussion takes an hour to complete. Your participation in the evaluation is voluntary-you may leave at any time if you are not comfortable. Information you provide will be confidential and will only be used for purposes of the evaluation as stated. Your names will not be identified by the responses you
provide. We’d like to record this discussion to help us as we write our notes. Do you have any questions? Is there anyone who would not like to continue? (If so, allow to leave the meeting) Also, do we have permission to take photos of this group meeting for our reports? (Look for nods or verbal permission from all)

Ice-breaker question: (adapt for male and female focus discussion groups)

Let’s talk about immunizations…

1. In your community, are you hearing information about routine child immunization (watch for verbal and non-verbal responses) If so, probe for:
   - What they have heard?
   - Source of messages and channels? if IEC-note language and if community workers-specify who – ex. WDC, TBA, Barbers

2. Tell me about where and when routine (we may need to specify that we are not asking about campaigns) immunizations services are provided in this community? Probe for:
   - Fixed (in health facilities), outreaches and mobile sessions
   - Days of the week when RI services are (Frequency)

3. We know that there are children not receiving routine immunizations, what do you think are the reasons for this?
   - Probe for problems going to or using the services at the HFs and potential issues around location, schedule, staff attitudes or concerns about the facility
   - Probe for issues related to the family situation, e.g. lack of awareness of the importance of routine immunizations, lack of information about services, mother too busy, cultural practices about women leaving the home, expense, or other.

   **If reported as a frequent occurrence in this LGA, probe if older siblings are being sent with infants to the clinic for immunizations, ask why is this happening?**
   - Probe for attitudes about vaccines, misconceptions, fears, also ask if different concerns related to the age of the child or specifically about the sex of the child taking certain vaccines

1. For families that are getting their children immunized, what do you think is helping them to do this?
   - Probe for their suggestions for improvements or ways to address the specific barriers as were mentioned?

(Please note any additional observations here and comment as to conditions or functions where MCSP has provided (TA or other inputs)

L. FGD Guide-Community Workers, e.g. Volunteer Community Mobilizers, Traditional Barbers, Traditional Birth Attendants, and or WDC or other Health Committee members

Introduction and Informed consent: Thank you for coming to meet with us. We are an assessment team looking at routine vaccination services in 4 states. Having heard that traditional barbers are now assisting these services, we would like to know more about what you are seeing and doing. This discussion takes an hour to complete. Your participation in the evaluation is voluntary—you may leave at any time if you are not comfortable. Information you provide will be confidential and will only be used for purposes of the evaluation as stated. Your names will not be identified by the responses you provide.
We’d like to record this discussion to help us as we write our notes. Do you have any questions? Is there anyone who would not like to continue? (If so, allow to leave the meeting) Also, do we have permission to take photos of this group meeting for our reports? (Look for nods or verbal permission from all)

Ice-breaker question: Tailor to audience, e.g. with traditional barbers, ask about their businesses

Let’s talk about routine immunizations.

1. How were you selected and engaged in the issues of immunization (note if supplemental or routine immunizations)?
2. What orientation (Hausa word) or training on routine immunization did you receive? Who provided you the training(s)? When was the training provided? (Probe: any other or refresher)
3. We hear that there are many children who do not get immunized. What do you think are the reasons for this? (Note: specific Demand Barriers: birth place, religion, cultural, gender… Supply Barriers: male health workers at facility, attitude of the health workers etc….)
4. What is being done in this community to get more children to be immunized?
5. What are you being asked to do to help register newborn children? (Probe: who asks, it is fathers, mothers of family members)
6. What do you or the community does to help find children who have not been immunized?
7. How do you hear about children who have not returned for their next [immunization] injections? When you find these children, what do you do? Probe for use of referral cards-ask to see the cards.
8. Who do you report to; who keeps the community register?
9. What challenges do you face in providing this community service? How could these be addressed(if not already mentioned)?
10. How do you know about the schedule for immunization sessions, probe if regular meetings or communications and with whom as well as reporting system?
11. What do you think could be done to get more children fully immunized by age one?
12. Do you receive any recognition? Probe-Do you receive any gift, funds or other award for helping?
13. What additional skills or knowledge do you need to carry out this job?

M. Guide for KIs with formal MOU partners (BMGF and their sub-contractors, State and Government) and non-MOU partners- Dfid-mnch2CDC NStop, WHO, UNICEF and EU-Sign in Kaduna and Kano

Introductions-emphasize this assessment is about “learning” and assure anonymity of responses

Areas of inquiry:

1. RI-related Technical assistance being provided by whom and at which level (State, SLA, Health Facilities and/or Community), since the MOU was signed, in the areas of: governance/accountability, service delivery, vaccine/cold chain, data management systems, monitoring and supportive supervision, training, community engagement, and social mobilization.

With BMGF and State MNCH2-Probe for specifics of their TA including approach (noting if changes since the MOU)
2. Use of strategic information for planning (RI harmonized plan, micro-pans, and to identify the TA or capacity-building that is needed).

With State MNCH2 and the non-formal partners: Are there requests for and RI-related TA or activities supported outside the RI harmonized plan and the basket fund, e.g. training costs, funds for outreach, printing, etc.

3. Notable contributions of the TA provided, system changes or evidence of skills transfer since the MOU

For BMGF and mnch2-Probe for lessons learned –TA approaches, MOU-partnerships, collaboration.

4. Lessons learned with the MOU and with TA approaches.

5. Unmet needs for TA or ideas for improving current TA

6. Reasons for low uptake, defaulting (probe for gender-related factors), incomplete immunizations and what is being done to address these

| Note-Request from BMGF (or MNCH2) the State RI harmonized plans since the MOU and the most recent MOU review |
ANNEX VI. FURTHER DISCUSSIONS ON BARRIERS TO IMMUNIZATION

The following expands on findings relating to demand creation and barriers to immunizations or services as heard or observed during the assessment visits.

1. Service-related barriers or areas of client dissatisfaction heard during focus group discussions (FGDs)

   • Mothers with infants under age 2 and female community workers expressed their dissatisfaction with services, citing: long waiting time (“they wait until many people are there to start immunizations”), rude attitudes of health workers towards mothers, RI providers may be male (preference for female health workers was expressed), hard-to-reach facilities, costly transport, relocated and don’t yet know about services, and lack of incentives (e.g., insecticide-treated bed nets). The team explored the issue of waiting for a group to gather before starting the immunization session with several key informants; they acknowledged that it may be happening because of the multi-dose vials and nurses not wanting to waste vaccines. They also noted that services may start late at facilities not equipped with cold chain equipment as staff may be out collecting the vaccines.\(^73\)

   • Similar findings were noted in reviewing the 2015 Community Engagement (CE) partnership assessment conducted by MCSP: “Services include far distance to the health facility and long waiting time. Travel condition and access road to health facility are probable major concerns regarding distance. There is not much importance attached to child health card [which is] sometimes perceived [as] a prospective documentation of bills [to be paid].” Additionally, the assessment noted women’s “dislikes,” which included facility-based services and poor attendance or tardiness of staff and “likes,” which included RI being a “social gathering.”

   • Fathers with infants under age 2 and the male traditional barbers met during the assessment noted the following service-related barriers: Financial constraints (the transport fare needed to access children, the cost of treating the child after immunization), fear that there won’t be vaccines and poor attitudes of staff (“so they don’t go back”). During one FGD, several men noted that they would prefer that female children or old women from their household or Volunteer Community Mobilizers take their infants for immunizations rather than their wives. (This needs further inquiry as was not further probed during the FGD.)

2. Several conditions or factors that may negatively affect client satisfaction, utilization or RI provider satisfaction were noted during visits or observation of RI sessions:

   • Not all of the clinics had a separate waiting space and adequate seating for caregivers and children waiting for immunizations. At one busy urban clinic, the RI clinic room was small and multi-purposeful and also served as a waiting room for mothers with children waiting for immunization and pregnant women waiting for ANC. A workbench was used by the recorder to keep the

\(^{73}\) As pointed out by reviewers, another reason may be that nurses are waiting for sufficient numbers to start education sessions. Whatever the reason, this delay in starting immunization services was highlighted as a barrier by several FGD participants.
register and also to hold the cold box and supplies. There was only standing room for the nurse providing the immunizations.

- No behavior change communication materials or other health educational channels were noted for mothers as they wait. No play or educational spaces are provided for older children while they wait.

- Nurses at half of the facilities visited had standing room only; they had to bend down (sometimes very low given that mothers are sitting on benches) to give injections. Assistants to help record were only noted at one facility, which meant the nurse had to prepare and administer vaccines, give instructions, record data on the tally sheet, and add dates for each antigen in the register and also the child’s immunization card. (These poor working conditions may negatively affect worker mood and the quality of the interpersonal interaction.)

- The assessment report highlighted parent concerns or fears related to Adverse Event Following Immunization (AEFI). Information about AEFI is not available from the DHIS 2.0 and was not part of our inquiry as this is an area covered by CDC and WHO. More inquiry is needed to understand the prevalence of AEFI, including abscesses and the role and impact of geographical differences. This concern was further triggered as the team noted a lack of water and soap for handwashing, a lack of skin cleaning in the RI rooms visited, or a lack of disinfection prior to injections (use of swabs). The team was informed by partners that WHO guidelines to not disinfect skin prior to immunizations have been adopted nationally.74 If there is a higher than expected prevalence of abscesses, one wonders if there is need for more stringent skin disinfection measures and precautions.

3. Positive but still mixed observations included:

- The majority of RI providers visited were female.

- The team observed that caregivers were provided the recommended Six Fingers messages and, if they were new clients, were provided cards. However, limitations in space and time are not conducive to encouraging questions.

4. Concerns were heard about vaccines in talking with mothers, fathers, and community health workers and officials.

- Females participating in FGD mentioned: fear of vaccines, e.g., causing (“killer”) diseases or causing paralysis/leg weakness; the medical costs for children who become sick after immunizations; lack of knowledge or beliefs such as “God will protect” or “all diseases are from God.” Males also noted concerns about vaccines – “Some people think it is for family planning,” “suspect vaccines as they are free and other drugs aren’t.” (The latter issue was raised during a group in Sokoto as well as one in Bauchi.)

- No antigen-specific barriers or preferences were expressed during the FGDs. But, in Kano State, the team heard that people were upset with the lack of BCG stocks in 2017, and that there were incidents where parents traveled to the State stockroom wanting to buy the vaccine.

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74 The national Basic Guide for RI providers curriculum provides this instruction prior to giving injections: “Wash skin that looks dirty with water. Swabbing clean skin is not necessary. Do not use alcohol to clean the skin before giving vaccinations.”
• Distrust of vaccines may continue to be more of an issue than previously realized or as yet uncovered. One State Commissioner of Health told the team that he would like to have a study conducted by the State pharmacy school to assure their people of the safety of RI vaccines.

Follow-up is needed of the infrequent but serious quality concerns relating to vaccines; we heard about vaccines being delivered to health facilities that were already in a late stage and also a district traditional leader questioned whether the cold chain is adequate for outreach clinics.

5. There were some differences in source of RI information between male and female parents.

• Both males and females mentioned the town criers; this mostly related to the polio and measles campaigns.

• Female participants mentioned: health workers (ANC nurses were frequently mentioned\textsuperscript{75}), VCMs/community-based health volunteers, media (radio and TV), information, education and communications materials, pamphlets, and religious schools (Islamiyah).

• Males mentioned: Town criers, WDCs/Village Development Committees or other health committees, radio (especially messages in Hausa, Fulani, and English), traditional barbers, religious leaders during sermons.

Because of cultural and traditional norms relating to the mobility of women, decision-making in the home and access to information, there is high awareness among the RI community of the need for men’s involvement. This is being addressed through the MOU partners’ work with traditional and religious leaders. In discussions with CE advisors about the practice of children bringing children, they made comments like “we should tell husbands how important it is to allow your wife to go to the clinic so she knows how to take care of the child and when to return” and “also ask imams to urge husbands to allow their wives to go to the clinics.” In discussions about losing or forgetting to bring cards, CE advisors said that they instruct the traditional leaders, imams, and workers to encourage fathers to keep their cards, “Otherwise there is not proof that their child is immunized.” In Kano, the Commissioner for Health is promoting card retention as part of a radio jingle.

The team noted that the current strategies using traditional and religious leaders to register newborns and promote RI registration may exclude or not capture certain sub-populations because of differing ethnic, political, or religious factors. Also, if traditional leaders are expected to take on tracking defaulters, this may be unsustainable-ward leaders and traditional barbers expressed need for financial rewards for their time and travel costs.\textsuperscript{76}

6. Ideas heard to improve or increase demand for services

During the FGDs, participants were asked about what is needed to improve utilization of services. The volunteers advocated for more support for them as promoters; most often, this was for financial or material support, but they also noted ways to improve services, such as friendlier staff, increasing the number of staff giving RI, more facilities closer to the people, free drugs, telling them “doctors should

\textsuperscript{75} Several studies or surveys have noted that health workers, specifically ANC nurses, are the primary source of information for women.

\textsuperscript{76} During the assessment, at the first LGA, large numbers of traditional barbers turned up for the FGD expecting to receive financial compensation. Team members patiently explained the purpose of the FGDs and the budgeted funds, and the issue was settled.
take care of side effects,” providing paracetamol for poor families, providing gifts after children are immunized, “women sensitizing women and men sensitizing men,” and more follow-up.

RI program staff noted that parents often demand insecticide-treated bed-nets during campaigns and also with RI services. Partners (governmental and non-governmental) interviewed also offered their ideas: “We are thinking of giving soap to increase demand for services,” giving paracetamol to families (either on-site or to take home), and “staff need to talk nicer to mothers.” The MCSP Community Engagement Assessment also recommended incentives, such as baby gifts, which also promote health upon completion of immunizations. There were no indications that this recommendation had been implemented.

Coercive actions were touched on during KIIIs. Program staff, including MCSP, told us of an idea to have the ward leaders publicly post the names of families not immunizing their infants as a way to change their behaviors. Reaction to this idea varied among assessment team members. Some viewed it as inappropriate, another noted, “How is it different from posting names of people that don’t pay their taxes?” During meetings with Chigari Foundation, staff told us of the effectiveness of traditional leaders to get a family head to comply with immunization campaigns by threatening to take away his land. They also noted that the use of the traditional leaders will not work in urbanized settings, but mentioned that other strategies could be used, e.g., the use of “social police” to track defaulters.
ANNEX VII. RECOMMENDATIONS FOR IMPROVING RI SERVICES

Recommendation 1 – Specialized, Focused, and Tailored Technical Advising

For improving RI programs and having a broader application to strengthening the State Public Health system and Primary Health Care Under One Roof, USAID and their MOU TA Partners are advised to invest in TA that is specialized, focused (addressing specific identified capacity needs), targeted (where needed most), tailored, time-bound, documented, rigorously evaluated, i.e., skills transfer and/or changes in systems, accountable (to beneficiaries and donors), coordinated to maximize resources and reduce duplication, and collaborative (enhances TA provided by others).

A specific recommendation for Maternal and Child Survival Program (MCSP) and other partners conducting supportive supervision or technical monitoring is to ensure: a) that they have sufficient field staff or consultants both in terms of quality and quantity given the diverse situations within the States; b) that these field TA providers have the competencies to provide or facilitate on-the-job training, coaching or mentoring needed to strengthen capacities in each of the thematic areas; and c) that their performance as capacity-builders is closely appraised.

For developing new or continued partnerships to provide collaborative TA, ideally prior to the development of the MOUs, we suggest it is critical for USAID and MOU TA providers to take these steps:

a) Jointly plan and conduct baseline and organizational capacity/need assessments involving government throughout the process; this should include reviewing lessons learned and listening to the relevant State government partners77 and other partners providing TA.

b) As part of the assessment, gather information about other TA providers, e.g., their funding and plans.

c) Facilitate the development of a strategy or roadmap, e.g., for improving RI services, asking “Where are we?” “Where do we want to go?” and “How can we get there?” With MOUs including other TA partners, define collaboration and carefully think together about the best capacity building/health system strengthening approaches. (This design phase is critical and USAID should push for it being evidence-based.)

d) Clearly delineate areas of interest, where each partner can provide the best value and will take the lead. Develop and agree on TA plans, including details about coordination, models, deliverables, and accountability measures to ensure greater effectiveness, synergy, and efficiency.

e) Develop participatory evaluation plans – develop benchmarks and stronger process as well as short- and medium-term indicators for measuring progress. We suggest that the Organization Capacity Assessment or other tool used for baseline also be used to measure annual progress.

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77 USAID is advised to utilize its system strengthening governance experience from the recent LEAD project and expertise to ascertain which governmental department or unit is responsible, and their assigned functions within the State health system and to ascertain that implementing partners can facilitate or provide focused, targeted technical assistance at the state, LGA, health facility, and community levels.
The following three inter-related areas of focus are recommended for prioritizing the specialized RI-related TA.

**Recommendation 2 – TA to Develop RI-Focused Strategic Information Systems**

USAID, in collaboration with MOU and other TA partners, including CDC, UNICEF, and WHO, are encouraged to make a concerted and collaborative effort to further develop strategic information systems within the State Planning Research and Statistics Department and the local government areas (LGAs). TA will build on past and current data management system investments, feed the increased demand for more and better data, and foster data ownership. The purpose of the system is to compile, analyze, triangulate, and interpret data from a variety of sources and to systematically plan for gathering additional information as needed. Having quality strategic information is expected to result in informed planning, rationalization/placement, and allocation of resources; aid in mobilization of additional resources; and strengthen governance, accountability, and management systems at all levels of the public health and primary health care system. The usefulness of the information is expected to further reduce falsification tendencies and increase the focus on better reporting. Three major objectives of the recommended strategic information system, along with proposed high priority TA, are:

A. **To have a better understanding of the public health issue, in this case, the low child RI rates**

Based on needs observed during the assessment, specialized technical advising is needed, including:

- Experienced qualitative researchers to lead in-depth formative studies of the barriers and root causes to uptake of immunizations and the reasons for defaulting/drop-out in order to: understand access to and preferred information channels; understand preferences of men and women for health service modalities card retention practices; present information to develop strategies; and assist with the development of evaluation frameworks. As a high priority, TA should focus on conducting a barriers analysis in Sokoto and Bauchi State LGAs with low proportions of children appropriately immunized for age; this should be coupled with a mini-diagnostics assessment of the supply side/service availability and accessibility.

- Mapping and programming strategists to assist the States and LGAs/LERICCs to further assess areas with lowest immunization uptake as identified by the LQA surveys to identify sub-populations not being served or without access or equity to preventative health measures or to rationalize resources (staff or Cold Chain Equipment), e.g., triangulating GIS maps with information from local authorities as part of the Reaching Every Ward planning process. High priority should be given to Sokoto and Bauchi State LGAs with low proportions of children appropriately immunized for age.

- Epidemiologists to build capacities at State level to analyze and triangulate Adverse Events Following Immunization (AEFI) surveillance and health facility data, with special attention to adverse events following immunization,78 and to work with service providers to address improved AEFI reporting as well as any causal or contributing factors. Distrust of vaccines may continue to

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78 More inquiry is needed to understand the prevalence of AEFI, including abscesses and the role and impact of geographical differences. This concern was further triggered as the team noted a lack of water and soap for handwashing, a lack of skin cleaning in the RI rooms visited, and a lack of disinfection prior to injections (use of swabs). The team was informed by Partners that WHO guidelines to not disinfect skin prior to immunizations have been adopted nationally. If there is a higher than expected prevalence of abscesses, one wonders if there is need for more stringent skin disinfection measures and precautions.
be more of an issue than previously realized or as yet uncovered. One State Commissioner of
Health told the team that he would like to have a study conducted by the State pharmacy school
to assure their people of the safety of RI vaccines.

- Archiving (virtual) expertise for increased ease in accessing strategic information; medical record-
  keeping at facility level for greater efficiency and usability. High priority should be given to
  developing user-friendly record-keeping system and clear Standards of Practice (SOPS) for
  identifying defaulters.

- Facilitation of a participatory\textsuperscript{79} retrospective review in Bauchi and Kano States that contributed to
  the RI outcomes during the DHS and MICS surveys.

B. To identify areas of weaknesses or capacity gaps within the health systems

Recommended TA to lead:

- Facilitation of State, LGA, and health facility Organization Capacity Assessments for prioritizing
  and planning TA for health system strengthening (HSS) and capacity building as well as monitoring
  progress. It will be key to gather quantifiable baseline data and to develop short- and medium-
  term outcome indicators showing skills transfer, skills application, and/or change in systems and
  programs that have occurred and can be used to evaluate the effectiveness of TA. High priority
  should be given for MCSP and Training TWG to facilitate a management capacity assessment
  before the planned Mid-Level Management Training in Sokoto and Bauchi with findings used as
  baseline, and for tailoring the training program and for evaluating the investment in this training
  program.

- Participatory technical assessments to identify contributing or causal factors negatively affecting
  the functioning of the health sector systems (e.g., quality of administrative data). We suggest using
  a total system approach on how administrative data is gathered, recorded, summarized, reviewed
  (at each level), corrected, inputted, and aggregated; how quality of data is being accessed; how
  data are analyzed; and how data are interpreted, noting how administrative immunization data is
  triangulated (e.g., with vaccine delivery, usage and wastage reports, and the planned use of
  administrative data). These findings will feed the development of strategies for changes in the data
  management system and the actions or resources needed.

- Operational research to test new or innovative program improvement interventions or to learn
  from findings from previous operations research on improving paper-based information systems
  for child health as has been funded by the Bill and Melinda Gates Foundation.

C. To track and measure the health sector’s provision of RI services

As a high priority: 1) MCSP and partner field consultants to work closely with LGA PHC management,
LERICCs, and HFs to plan RI services building on past and current work to utilize REV processes, GIS
maps and community registry data; 2) MCSP and Partner field consultants to build capacities of LGA
PHCs and LERICCs to monitor utilization of services – particularly outreach sessions – and to explore
reasons for low utilization and plan accordingly\textsuperscript{80}; 3) System to be developed to domicile SS findings

\textsuperscript{79} All key stakeholders working on RI/Child Health in the States during this time period.

\textsuperscript{80} Regularly assess service utilization – at the facilities and outreach clinics – to determine if we are increasing our clientele and
  attendance, are the sites for the regular outreach sites working, are they cost-effective or do we need to do less and more of a
(including those captured on ODK at States and LGAs for analysis, use and action); 3) TA (linked to the first recommendation) to build LGA capacities to help conduct barrier and root cause analyses and mini-diagnostic supply assessments/surveys at the low performing LGAs (as identified by the LQA surveys); 4) Collaboration with the Foundations to bring best practices and TA to support the development of performance appraisal or certification systems: External Health Facility Performance Appraisal, development of carefully constructed measures and procedures for appraising HF performance, and provision of rewards and sanctions, utilizing best practices and lessons learned globally. 81

Specific skills sets or tools that will need to be developed include: a) participatory planning of low-cost surveys and assessments; b) application of research methods with sampling strategies; c) refinement of DHIS 2.0 indicators, specifically to ensure age and sex-disaggregated data; 82 d) development of valid and reliable criteria and weighted performance appraisal tools, development of databases; e) skills to conduct FGDs and root cause analysis; f) honing of data analysis, triangulation, interpretation, and presentation skills; g) planning for how strategic information will be used by the various TWGs and senior management for the annual planning process; and h) development of skills to use strategic information to mobilize new resources, prepare for community health financing schemes, and explore partnerships (e.g., corporate social responsibility or use of social marketing of preventive health measures). Of these, TA to develop capacities to conduct barrier and root cause analyses and mini-diagnostic assessments/surveys at the low performing LGAs is a high priority.

**Recommendation 3 – TA to Create Demand for Routine Immunizations**

It is recommended that USAID invest in highly specialized technical advising to lead the development of strategies which are State-specific to create demand for vaccines, full immunization, and immunization services and to change practices (e.g., children taking children for immunizations and low card retention). Based on the barriers analysis and formative studies as mentioned above, multi-faceted strategies to be developed for each State using a collaborative and participatory approach incorporating: a) behavior change theory and communications, including the use of role models; b) social mobilization building on lessons learned from current community engagement strategies; c) structural interventions (e.g., mandating immunizations to attend school or to be eligible for health insurance or free child survival preventive measures); d) periodic intensification of immunization services, e.g. Local Immunization Days, Child Health Weeks, or MNCH Week; e) marketing of PHC services; and e) good incentives. 83 These strategies will use both “carrot” and “stick” to motivate parents to immunize their children.

It is suggested that these strategies may include State-wide immunization campaigns with a catchy slogan, such as MCSP and partner Black Swan’s “We Immunize,” support for MNCH or Child Health Weeks or

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82 PATH’s 2010 Assessment found that sex-aggregated data are being gathered, could be compiled without too much extra burden, benefit is debated-but more support for use at community or sub-state level. http://www.who.int/immunization/sage/2_PATH_Report_on_Sex-Disaggregated_immunization_coverage_Data.pdf

83 Several partners noted the need for “good” incentives: the team heard a story of a district leader who has given funds to buy paracetamol as a gift to mothers bringing their infants for immunization. A partner noted that they are considering providing soap to be handed out at the immunization clinics.
National Immunization Days and consider adopting short-term “emergency” models used by the supplemental vaccine campaigns, e.g., Immunization Plus Days (IPDs) to reach under-served populations or those which have lowest immunization rates. Features of the IPDs that have been effective and have potential include the special outreach sessions for underserved populations at fixed posts, child survival measures as incentives for families who are immunizing their infants, and the concerted effort and mobilization of additional personnel to ensure strong community outreach and awareness.

To operationalize the strategies, it is recommended that resources be mobilized and collaborative approaches taken with other Partners. USAID is encouraged to invest in short-term technical advisors to work with LGA PHC coordinators to form task forces, including LGA health educators, community engagement officers, representatives from each HF, private sector providers, civil society, (e.g., women’s groups), religious and traditional leaders, and partners, such as UNICEF and CDC N-Stop and their volunteer promoters who are already working on promoting RI. One suggestion is to start with LGAs that have the lowest immunization uptake and that show the most readiness and enthusiasm as potential models for the rest of the State.

This must go hand-in-hand with the investment in service improvement and community engagement; working on demand alone will not improve coverage. Services must be available, accessible, gender-responsive, client-oriented, and acceptable to the communities being served.

Recommendation 4 – TA to Develop Systems to Assure Quality and Gender-Responsive RI Services

To advance a culture of quality within the State Ministry of Health and the SPHCDA, it is recommended that USAID provide specialized TA to develop or strengthen structures, systems and/or processes to: 1) communicate and act on identified quality technical issues and concerns, 2) ensure high standards and practices, and 3) foster client-focused and gender-responsive maternal and child health services along the continuum of care and prevention. Redirecting the focus on ensuring and awarding quality and client-focused services, rather than on numbers only would likely inspire government workers to improve their performance, reduce falsification of administrative data, build trust of the population, and thereby attract new and more clients. High priority areas on which to focus TA include development or strengthening of the following areas.

A. Communication Channels

TA is needed to develop direct84 communication channels for HF managers/supervisors and LGA officials to report critical needs or service or support-related issues to the responsible government unit or personnel with a copy to LERICCs/SERICCs. The SERICC and LERICC QA communication system must also be able to capture key deficits identified through special studies and SS/monitoring visits.

B. Advisory Team/Technical Task Force to Address Critical RI Quality Issues

As an immediate QA/QI initiative, specialized technical advising is needed to work with Bauchi and Sokoto States to establish a technical team/task force as an arm of SERICC to ensure that critical service quality concerns are addressed. Operationally, it is suggested that the team be led by a senior immunization officer and that technical expertise be tapped from partners and potentially the larger medical community, LGA officers, and HF staff.

84 Versus issues and concerns passing through TWGS to LERICC/SERICC.
Based on assessment observations, we suggest that guidelines be provided to address the following: a) How to best respond to the practice of children bringing children for immunizations; b) Development of protocols to treat minor AEFIs and improved take-home instructions with supplies for new mothers and for those with children getting their first PENTA immunization (e.g., demonstrating how to give proper dosage of paracetamol); c) How to reduce high vaccine wastage and yet provide good service (addressing long waiting time if the multi-dose vials are a contributing factor to waiting time or missed opportunities; d) development of interactive health education and promotion with low cost visuals and volunteer assistance for clients as they wait for their appointments; e) How to use other staff or perhaps interns or trained volunteers to shift recording or data inputting tasks, e.g., serve as data aides to assist RI nurses; f) How to improve handwashing and skin cleaning measures and practices at RI sessions; and g) Review of processes to ensure quality assurance of the cold chain for outreach session, provide sufficient staff to keep records, and ensure the efficacy or safety of vaccines.85

New or revised standard operating procedures or protocols will need to be piloted before wide dissemination.

It is recommended that representatives of these State task forces liaise with key stakeholders at the national level, to ensure that State-specific field knowledge, and clinician experience informs national policy, guidelines, and reporting requirements. USAID RI/MCH implementing agencies with technical personnel from the States are encouraged to follow up at the national level to: a) Address misconceptions about the provision of catch-up immunizations with children who have dropped out and or enter the RI system as older children; b) Explore use of prophylactic paracetamol86; c) Explore feasibility of procurement or re-packaging of multi-dose vials to fewer doses and moving away from the multi-dose glass ampules (yellow fever vaccines); d) Provide certification for the Basic Guide for RI providers and strengthen it to be competency-based; and e) Institutionalize the piloting of newly designed recording or reporting formats before release to ensure that are user-friendly and clear and that work burden is lessened, not increased.

C. Quality-Minded Management

USAID, in collaboration with MOU partners, is encouraged to foster a quality-minded culture within the State MOH and SPHCD and Board and importantly with LGA PHC Public Health and Primary Health Care Managers and LGA Boards. This is a longer-term development initiative and will require long-term investment by USAID or another designated Partner. TA providers are encouraged to explore tested and user-friendly tools, e.g., Organizational Culture of Quality Self-Assessment Tool developed by the National Association of County and City Health Officials87 and the development of a Quality

85 In Sokoto, several concerns were heard relating to vaccines: 1) vaccines being delivered to health facilities that were already in a late stage; 2) questions from traditional leaders as to whether the cold chain equipment is adequate for outreach clinics; and 3) need for the pharmaceutical college to test vaccines so to address public distrust of the vaccines.

86 Watch for results of Cochrane Review (Intervention) being conducted to evaluate the efficacy and safety of prophylactic paracetamol to prevent fever in children receiving vaccination as part of a childhood immunization schedule. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD012655/full

87 http://qiroadmap.org/culture-to-qi/foundational-elements-for-building-a-qi-culture/
Improvement Framework. As an entry point, introduce this framework to SERICCs with a focus on improving quality of RI facility and community-based services.

As part of the RI Quality Improvement framework, it is recommended that mentoring systems be developed for State, LGA PHC, and HF managers. Mentors will have shared experience and demonstrated competencies and success in improving quality of services as they served in similar roles. Four models are suggested: 1) To use external mentors, identified in the West Africa region or the northern Nigeria States to twin with State-level officials (e.g. COH and mentors for SPHCDA senior management); couple these with objective-driven exchange visits; 2) As a high priority, to develop peer mentoring systems for LGA management staff, as high-performing LGA management personnel are identified as role models and mentors – supporting exchange visits, virtual communication and problem-solving or, if resources are available, to assist LGA officials to create a professional association; 3) As a high priority, to utilize HF managers along with CE or ward focal persons who have successfully utilized the REW micro-planning methodology, including use of new strategic information, to coach and mentor others as they plan how to improve the delivery of quality RI services; and 4) As high priority, in States where LGA or HF management mentors are not identified or sufficient in number, it is recommended that USAID work closely with other Partners to fill gaps by assigning their qualified field staff to be mentors. This will require critical review of field staff capacities and good coordination.

It is also recommended that TA be provided to refine and/or scale up peer-to-peer sharing and learning initiatives: a) Quarterly meetings of HF managers at the LGA level to share their challenges and successes with improving quality of services; b) Information-sharing meetings with SERICC program managers in the northern States and LERICC program managers with LGA PHC heads within the States about QI issues and actions which have been effective (High Priority); c) Semi-annual meetings for SPHCDA heads from the northern states to discuss progress, experiences, and lessons learned in improving immunization coverage and quality of services; and d) Annual meetings for COHs to meet with peers in the northern states (or country) to also share experiences and promising QA/QI practice/lessons learned.

Developing award and publicity mechanisms will serve to recognize – and motivate – governmental leaders and managers who have been visionary, have led transformative positive change in the delivery of services (validated by technical assessment, community monitoring, internal audits, and performance appraisal), and have improved utilization of services and uptake of health prevention measures.

D. Staff Development Capacity

The team suggests that USAID invest in technical advising to build State structures and capacities to provide or organize: a) Ongoing refresher or in-service skills-building/competency-based training to apply guidelines/SOPs developed by the QA/QI task force/team and inter-personal communication with mothers and with fathers on treatment of fever and other minor AEFIs, b) Orientation to gender-responsive service delivery modalities and measures, new service guidelines and standards, and effective utilization of volunteers, and c) Curriculum and teaching materials for low-cost provision of training for new staff or new RI providers, job aids, and refresher training, and to cross-train all clinical staff at the health facilities.

88 Also note how the United States has used this tool to develop their Quality Improvement Framework, e.g., Minnesota Department of Health at http://www.health.state.mn.us/divs/opi/docs/qiplan.pdf
E. Supportive Supervision and Technical Monitoring

As a high priority, MCSP Sokoto, in collaboration with government and other partners performing SS, is strongly advised to immediately put into place mechanisms for improved documentation of instruction, coaching, or other TA provided during SS visits. MCSP in Bauchi has developed a format for recording TA provided with documentation kept at the health facility that may be adapted for other States. These notes would include any actions taken as well as those that are planned and would be signed by the HF management and staff. These documents would serve as a reference point for follow-up visits.

In the area of service delivery, USAID implementing partners are advised to make a distinction between monitoring and SS systems. It is recommended that the current SS system for HF be revised and that internal versus external models be designed. This revision would ensure that accessible and client-focused services are being offered, support systems are functioning, services are meeting standards, complete records are being kept, defaulters are being identified and tracked, and timely and accurate data reports are produced. This model provides for greater accountability and more regularity; it is hands-on and does not require a checklist and is much more likely to be sustained then a system that depends on external supervision. In addition to providing coaching and mentoring of the health clinic or post staff, these supervisors – who are also clinicians – would be able to assist with delivery of services when needed at busy immunization clinics or cover for staff who are at training or are ill. It is expected that they would be financially compensated for performing their supervisory role.

It is recommended that USAID build on MCSP work in Bauchi and Sokoto States to develop technical monitoring systems. The level for developing these systems may vary from State to State, depending on State structure, level of decentralization, and functions assigned to that level. TA to strengthen systems would include: a) Clarifying the responsible bodies, state or zone with assigned technical monitoring functions at State and LGA levels); b) Assisting State and LGAs to set qualifications and criteria for these monitoring personnel; c) Reviewing with the TWGs the monitoring SOPS and checklists and revising as needed for more technical focus; d) Building competencies of technical monitors to use SS approaches; e) Training monitors to be part of the performance appraisal process; f) Creating venues for technical monitors to share experiences and collectively look at approaches to address chronic problems noted during monitoring visits or review of reports; and g) Mobilizing resources for State or zone technical monitors to made annual visits and to participate in LGA review meetings by providing technical updates.

Collaborative TA is needed to assist SERICC with development of RI performance appraisal systems that would advise on carefully constructed measures and procedures for appraising HF performance and provision of rewards and sanctions, utilizing best practices and lessons learned globally,89 and employee appraisal systems.

F. Development of Continuum of Care (Newborn Registration, Outreach, Follow-Up, Tracking and Cross-Referral) Processes and Systems

It is recommended that USAID invest in specialized technical advisors to bring global best practices to refine the design of community-based child health systems including the registration of newborn children, promotion of RI and services, tracking of defaulters, and facilitators to help with access along

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the continuum of care and prevention. This will build on current work with traditional leaders and workers, community structures – e.g., ward development committees and incorporate government cadres, such as the CE focal persons, ward public health officers, and the anticipated Community Health Influencers, Promoters and Services [CHIPS], etc.). Community-based systems to develop include: Human Resources (volunteer roles and responsibilities), Management and Supervision, Coordination, Community Support and Monitoring, Data Management, Social Mobilization and Behavior Change Communication Skills-Training and Refresher Training, Peer-Peer Sharing, and Recognition/Award/Incentives for high performance and quality service.

G. Community Monitoring of RI Services

Global experience has shown the effectiveness of community involvement in planning, promoting, supporting, and monitoring the acceptability and quality of services. USAID and implementing partners are encouraged to explore these models:

- Development or utilization of already formed community health-focused committee, e.g., the ward development committees or the facility health committees, as have been developed in Kano and Kaduna States. It is proposed that the scope of their work and influence extend along the continuum of care and prevention to community-based services. In addition to supporting the facility and community-based services with resource mobilization, creating demand for preventive health measures and marketing of the services, these committees could play a major role in monitoring staff attendance, communications between the clinic and the public, community satisfaction with services and functioning of the follow-up and cross-referral systems.

- Appraisal of HF performance from the perspective of clients and staff by conducting facilitated participatory internal audits, e.g., COPE®: Client-Oriented, Provider-Efficient Services. Results are used for joint QI planning.

- Use of methodology, such as the community scorecard to gauge population’s satisfaction with services at the community level; facilitation of process by civil society that focuses on community health improvement and health-seeking behaviors. Community monitoring results in improved service provision and recognition of volunteer health promoters/workers.

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91 Location, schedules, waiting time, waiting area, availability of toilets, attitudes of staff, instructions provided, learning opportunities, care provided, e.g., provision of paracetamol, and ideas for how to improve services.
ANNEX VIII. DISCLOSURE OF ANY CONFLICTS OF INTEREST

GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

USAID NON-DISCLOSURE AND CONFLICTS AGREEMENT

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<tr>
<th>USAID Non-Disclosure and Conflicts Agreement, Global Health Program Cycle Improvement Project</th>
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<tr>
<td>As used in this Agreement, Sensitive Data is marked or unmarked, oral, written or in any other form,</td>
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<td>&quot;sensitive but unclassified information,&quot; procurement sensitive and source selection information, and</td>
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<td>which, if released, could result in harm or unfair treatment to an individual or group, or could have a</td>
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<td>negative impact upon foreign policy or relations, or USAID’s mission.</td>
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Intending to be legally bound, I hereby accept the obligations contained in this Agreement in consideration |
| of my being granted access to Sensitive Data, and specifically I understand and acknowledge that: |

1. I have been given access to USAID Sensitive Data to facilitate the performance of duties assigned to |
   me for compensation, monetary or otherwise. By being granted access to such Sensitive Data, special |
   confidence and trust has been placed in me by the United States Government, and as such it is |
   my responsibility to safeguard Sensitive Data disclosed to me, and to refrain from disclosing |
   Sensitive Data to persons not requiring access for performance of official USAID duties. |

2. Before disclosing Sensitive Data, I must determine the recipient's "need to know" or "need to access" |
   Sensitive Data for USAID purposes. |

3. I agree to abide in all respects by 41, U.S.C. 2101 - 2107, The Procurement Integrity Act, and |
   specifically agree not to disclose source selection information or contractor bid proposal information |
   to any person or entity not authorized by agency regulations to receive such information. |

4. I have reviewed my employment (past, present and under consideration) and financial interests, as |
   well as those of my household family members, and certify that, to the best of my knowledge and |
   belief, I have no actual or potential conflict of interest that could diminish my capacity to perform my |
   assigned duties in an impartial and objective manner. |

5. Any breach of this Agreement may result in the termination of my access to Sensitive Data, which, if |
   such termination effectively negates my ability to perform my assigned duties, may lead to the |
   termination of my employment or other relationships with the Departments or Agencies that granted |
   my access. |

6. I will not use Sensitive Data, while working at USAID or thereafter, for personal gain or |
   detrimentally to USAID, or disclose or make available all or any part of the Sensitive Data to any |
   person, firm, corporation, association, or any other entity for any reason or purpose whatsoever, |
   directly or indirectly, except as may be required for the benefit USAID. |

7. Misuse of government Sensitive Data could constitute a violation, or violations, of United States |
   criminal law, and Federally-affiliated workers (including some contract employees) who violate |
   privacy safeguards may be subject to disciplinary actions, a fine of up to $5,000, or both. In |
   particular, U.S. criminal law (18 USC § 1905) protects confidential information from unauthorized |
   disclosure by government employees. There is also an exemption from the Freedom of Information |
   Act (FOIA) protecting such information from disclosure to the public. Finally, the ethical standards |
   that bind each government employee also prohibit unauthorized disclosure (5 CFR 2635.703). |

8. All Sensitive Data to which I have access or may obtain access by signing this Agreement is now and |
   will remain the property of, or under the control of, the United States Government. I agree that I must |
   return all Sensitive Data which has or may come into my possession (a) upon demand by an |
   authorized representative of the United States Government; (b) upon the conclusion of my |
   employment or other relationship with the Department or Agency that last granted me access to
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data.

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE
The undersigned accepts the terms and conditions of this Agreement.

Signature

Date

Name

Title
9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that:
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<tr>
<td>Adedayo Adeyemi</td>
<td>10/09/2017</td>
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Name: Adedayo Adeyemi
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT
PROJECT

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<td>MUHAMMAD BASHEER YAHYA</td>
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25/11/2017
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

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ACCEPTANCE
The undersigned accepts the terms and conditions of this Agreement.

Signature ______________ Date 5/12/17

Name Dr. Umar Tanko Yakasai Title DR.
9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that:
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   by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii)
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<td>Aliyu Aminu Ahmed</td>
<td>10/12/2017</td>
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<td>Aliyu Aminu Ahmed</td>
<td>Evaluation Consultant</td>
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GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

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Signature

Date 9/1/2018

Name Tayo Olugbemi

Title Local Evaluator

Page 114 of 131
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT 
PROJECT

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ACCEPTANCE
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Signature: [Signatur] Date: 21-12-17

Name: Awwal Nasir Title: Consultant
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

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ACCEPTANCE
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Signature

Date 21/12/17

Name JAFAR ABUBAKAR UMAR
Title LOGISTICS COORDINATOR
ANNEX IX. SUMMARY BIOS OF EVALUATION TEAM

Ms. Beverly Stauffer, MPH, MS in adult education and counseling, RN, served as Team Leader. Ms. Stauffer is an experienced international public health specialist, providing technical advising in the areas of monitoring and evaluation (M&E), strategic planning, behavior change for disease prevention, and community involvement in improving the continuum of prevention and care services. She has led several mid- and end-of-project evaluations, including the recent SHOP Nigeria endline evaluation. As a local health officer in the United States, she developed a computerized immunization tracking system and designed and led a successful multi-faceted campaign to improve immunization coverage from 59 to 85 percent of children age three and younger.

Dr. Adedayo Adeyemi, MBBS, MPH, PhD, MSc, served as the Team Evaluation Specialist. Dr. Adeyemi has more than 20 years’ experience and expertise in epidemiology, biostatistics, M&E, and survey methods. He is involved in strengthening M&E systems at national and sub-national levels. He worked as Resident M&E Advisor for MEASURE Evaluation Nigeria where he was involved in developing the M&E plan and strengthening the HIV M&E system at national and sub-national levels. He currently works with Nasarawa State Nigeria in strengthening M&E systems at the primary health care level.

Dr. Umar Tanko Yakasai, M. B. B. S, MPH, MBA, MDS, MPPA, FWACP (Community Health), served as a Senior Public Health Specialist on the Team. He has expertise in several areas relevant to this assessment; his technical advising experience includes the Governance and Political Economy Assessment in seven States in Nigeria, serving as lead to develop the Bauchi State Strategic Health Development Plan 2017-2021, Rapid Maternal and Child Death Assessment in Kaduna State, the Baseline Assessment of Immunization Coverage in Yobe State and as short-term consultant to LGA PHCCs to develop their annual health plans.

Mr. Muhammad Basheer Yahya also served as a Senior Public Health specialist on the team. He has B.S. Pharmacy, M.C.S. Msc. Health Economics and is a PhD candidate in Public Health. He has extensive experience in conducting assessments, program evaluations and managing public health interventions with public, private and international donor organizations spanning over 20 years. Recent work to highlight is the development of capacity building training modules for malaria program managers. He serves as a clinical pharmacy lecturer on the faculty of Clinical Pharmacy Department of Clinical Pharmacy, Faculty of Pharmaceutical Sciences, Gombe State University.

Mrs. Ayodeji Omotayo Olugbemi also served as Senior Local Evaluator. She brings her training in Demography and Social Statistics and experience as an M&E Expert- working with USAID supported projects which include Monitoring and Evaluation Management Services (MEMS II) where she provided M&E support to USAID Nigeria HPN and HIV/AIDS Teams and to implementing agencies to utilize the DHIS. Ayodeji has served as M&E Specialist with GH Pro on the end of project evaluations of the Expanded Social Marketing Project in Nigeria (ESMPIN) and Family Health Plus (FH+) Project.

Mr. Aliyu Aminu Ahmed also served as Senior Local Evaluator. He is trained Statistician with over 18 years’ experience in development work; program management, monitoring and evaluation (M&E), qualitative research and systems strengthening and conducting capacity assessments, baseline, midterm and final evaluations of programs funded by various donors. He also brings management experience
having served as Country Coordinator for USAID Health Policy Project (HPP) and Program Manager of Winrock International USAID PEPFAR AIM Project. Aliyu is the current President of Nigerian Association of Evaluators and Co-Chair Last Mile, Advocacy and Accountability Working Group.

**Mr. Awwal Nasir**, served as Logistics Coordinator and facilitated focus group discussions with males. With training in marketing and expertise in strategic communication, policy advocacy and program management, he has 18 years combined working experience across the international development and the private sector. He has led design and implementation of various communication and advocacy campaigns in the areas of health, gender, agriculture and education. He has led the establishment of various sustainable community health support systems across various states in Nigeria.

**Mr. Jafar Umar** also served as Logistics Coordinator and assisted with data collection. He is an experienced program manager and Governance and Community Engagement consultant and has done extensive work at community, LGA and State levels across Northern Nigeria. More recently, Jafar supported NGOs and CBOs in Kaduna State to organize, engage and demand for equitable service provision within the Health, Education, Water & Sanitation, Livelihoods as well as Investment Sectors.

**Ms. Danladi Erisa Sarki**, Local Researcher, joined the team in the field to facilitate focus group discussions with females and to assist with note-taking. Erisa has extensive experience conducting qualitative assessments and studies. With GH Pro, she served on teams conducting the SHOPs end-line evaluation and the OVC costing study in Nigeria.
For more information, please visit
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