RMNCAEH+N QUALITY OF CARE LEARNING NEEDS IN NIGERIA

Report of a national needs assessment, January 2023

MOMENTUM Country and Global Leadership

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ACKNOWLEDGEMENTS

This assessment was undertaken by the Federal Ministry of Health (FMoH), Nigeria to determine what learning platforms exist, their contents and gaps in knowledge exchange, and how the utilization of the platforms can be enhanced to strengthen quality of services related to Reproductive, Maternal, Newborn, Child, Adolescent and Elderly Health plus Nutrition (RMNCAEH+N). The FMoH acknowledges the support offered by the USAID Momentum Country and Global Leadership (MCGL) QoC Project in the development of national documents related to RMNCAEH+N policies, strategies, learnings, research, and data systems. The FMoH is grateful for the support from the state and local government area (LGA) officers who supported the planning and data collection for the assessment. The FMoH is grateful to the officers from several departments, including the Department of Family Health; Department of Health Planning, Research and Statistics (DHPRS); National Primary Healthcare Development Agency (NPHCDA); National Institute for Pharmaceutical Research and Development (NIPRD); and Hospital Services, who reviewed and provided valuable insights on the assessment. The Ministry acknowledges the support and strategic partnership provided by the MCGL Quality of Care project on the design and implementation of this assessment, including preparation of the final report.

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ABBREVIATIONS

AOP	Annual Operational Plan
DFF	Design for the Future
DRF	Drug Revolving Fund
DHPRS	Department of Health Planning Research and Statistics
FCT	Federal Capital Territory
FGD	Focus Group Discussion
FMoH	Federal Ministry of Health
HPME	Head of Planning, Monitoring, and Evaluation
IHI	Institute for Healthcare Improvement
IP	Implementing Partner
IRB	Institutional Review Board
KII	Key Informant Interview
LGA	Local Government Area
M&E	Monitoring and Evaluation
MCGL	Momentum Country and Global Leadership
MDA	Ministries, Departments, and Agencies
MEAL	Monitoring, Evaluation, Accountability and Learning
MEL	Monitoring, Evaluation and Learning
RMNCAEH+N	Reproductive, Maternal, Newborn, Child, Adolescent and Elderly Health and Nutrition
MNH	Maternal, Newborn Health
MNCH	Maternal, Newborn and Child Health
NHREC	National Health Research Ethics Committee
NIPRD	National Institute for Pharmaceutical Research and Development
NPHCDA	National Primary Healthcare Development Agency
NSHDP	National Strategic Health Development Plan
PDF	Portable Document Format

PNC	Post Natal Care
PPH	Post-Partum Hemorrhage
QI	Quality Improvement
QoC	Quality of Care
SDG	Sustainable Development Goals
SMO1	Senior Medical Officer 1
SMOH	State Ministry of Health
SMS	Short Message Service
SOP	Standard Operating Procedure
SPHDA	State Primary Healthcare Development Agency
SSO	Senior Scientific Officer
SSNB	Small and Sick Newborn
TWG	Technical Working Group
UHC	Universal Health Coverage
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

In July 2022, the Federal Government of Nigeria, in partnership with the MOMENTUM Country and Global Leadership (MCGL) Quality of Care (QoC) project, conducted a national assessment of the needs and priorities of health care professionals for virtual and in-person learning and information sharing in support of improving the quality of Reproductive, Maternal, Newborn, Child, Adolescent, and Elderly Health, plus Nutrition (RMNCAEH+N) services. The primary goal of the needs assessment was to inform the development of a user-friendly RMNCAEH+N quality of care learning platform, one of several complementary workstreams being supported by the national RMNCAEH+N QoC Technical Working Group (TWG) and the MCGL project. The overarching aim of the MCGL QoC project in Nigeria is to strengthen RMNCAEH+N QoC policies, strategies, learnings, research, and data systems, including incorporation of World Health Organization (WHO) small and sick newborn (SSNB) and pediatric/adolescent QoC standards into an updated national RMNCAEH+N QoC strategy.

In March 2022, the National RMNCAEH+N QoC Technical Working Group (TWG) approved the establishment and maintenance of a virtual learning system to accelerate improvements in the quality of RMNCAEH+N services, including developing and maintaining a repository of products and tools for QoC and ensuring regular updates of the platform and links to relevant external websites. A goal of the RMNCAEH+N quality of care learning platform is to develop and maintain a system to promote regular interstate collaborative learning.

MCGL is collaborating with the FMoH to develop this virtual QoC learning system (learning platform) to facilitate in-country learning on RMNCAEH+N QoC, sharing of knowledge, and generation of evidence. In furtherance of this objective, the MCGL QoC team led a needs assessment process engaging stakeholders to understand the current state of learning platforms and resources related to RMNCAEH+N quality of care and to inform the design of the learning platform.

Assessment Objectives and Methods: The needs assessment sought to explore the utilization of current RMNCAEH+N learning platforms in Nigeria; identify content gaps on those platforms; and understand stakeholders' priorities for and perspectives on the process, barriers, and facilitators of knowledge exchange on such platforms. The needs assessment included qualitative and quantitative methods and was conducted in two phases. In the first phase, the team conducted two FGDs at the FMoH to understand the sources, content, barriers, and facilitators of knowledge exchange for RMNCAEH+N QoC. In the second phase, frontline health care professionals completed a self-administered online survey to identify their learning needs. This report summarizes the key findings of the needs assessment and outlines recommendations for development of a user-centered learning system and virtual platform based on assessment findings.

Key Assessment Findings: Of the 751 people who completed the survey, approximately two-thirds were frontline health care professionals and one-third were facility managers and administrators. Survey respondents identified the following in-person (offline) sources of knowledge sharing as important sources for their learning related to RMNCAEH+N quality of care: informal discussion with colleagues (50%) and conferences (30%). Online platforms identified by respondents as important for learning included government/official websites (e.g., FMoH, WHO) (39%) and social media platforms (33%). Forty-nine percent (49%) of survey respondents identified communities of practice (e.g., professional associations) as important sources of learning.

As part of the survey, respondents ranked their top three priority features for the new learning platform (Table 2) including: a platform for members to share news and resources with each other (70%); to share upcoming events

and news related to RMNCAEH+N in Nigeria (59%); to share country-level data and progress toward RMNCAEH+N goals (42%); to share "how-to" documents and guides related to RMNCAEH+N (42%); to establish clear linkages between RMNCAEH+N activities in Nigeria and global strategy/goals (40%); and to share RMNCAEH+N technical documents and resources (39%).

Two Focus Group Discussions were held with a total of twenty-three stakeholders representing a range of functions, including staff of the Federal Ministry of Health, frontline health care workers, and other health care workers in government ministries and agencies. The FGDs focused on six themes: process of knowledge exchange, barriers to knowledge exchange, facilitators to knowledge exchange, utilization of online learning platforms, user-friendly features, and recommendations on the design of the new RMNCAEH+N QoC virtual learning platform. FGD participants highlighted the following purposes for their current utilization of existing online platforms (Figure 5): training, data, events, guidelines, research and learning, improvement, and development of standards. For the process theme, FGD participants identified sources, access and medium of information sharing as crucial. For the utilization of the platforms, they highlighted the type of content and purpose of information. Participants identified a range of barriers and facilitators for knowledge exchange. Illustrative facilitators identified by FGD participants (Figure 6) include easy accessibility and interactivity, while barriers included inadequate and outdated information (Figure 7). In addition, they were able to identify user-friendly website features that make the existing platforms interesting for navigation, such as easy access, rich content, free access, and flexibility to upload and download materials. Finally, the participants made recommendations for additional features, including the importance of equipping users to be able to deal with the technical barriers identified in searching for information on online platforms.

Key Recommendations: An RMNCAEH+N quality of care learning platform should provide a wealth of resources to facilitate user learning and research, as well as peer-to-peer knowledge exchange. In early stages, the platform should prioritize training content and other resources for practical application that users can apply immediately to their work. Nutrition and Maternal, Newborn, Child, and Reproductive Health are top areas of concern for users and should be prioritized from the beginning.

The platform should be free to use and user-centered through ease of navigation and accessibility on mobile devices with unreliable internet connectivity. Resources should be hosted on (and downloadable from) the platform to minimize linking and redirection of users to third-party websites that may be less accessible.

Finally, the platform must be designed and maintained as a resource for the entire health system, including not only public-sector health providers and administrators, but also those in the private sector, pre-service health training institutions, professional associations, regulatory bodies, and others who contribute directly or indirectly to the quality of RMNCAEH+N care.

Based on the assessment findings, the FMoH, in collaboration with the national RMNCAEH+N QoC TWG and MCGL, plans to design and test a hybrid virtual and in-person learning system to promote regular knowledge sharing and learning among key stakeholders working to improve quality of RMNCAEH+N services. In the spirit of continuous learning, user feedback will be periodically solicited to strengthen the learning platform to meet stakeholders' learning needs for improving quality of care for women, newborns and children in Nigeria.

INTRODUCTION

The Federal Government of Nigeria remains committed to achieving the goals of Universal Health Coverage (UHC) and its targets of ending preventable maternal, newborn, and child mortality as defined under the health-related Sustainable Development Goals (SDGs). In February 2017, with support of the Federal Ministry of Health (FMoH), Nigeria joined the first wave of nine countries in the WHO-led network to improve the quality of facility-based maternal, newborn, and child health care known as the MNCH QoC Network.[1] That same year, FMoH launched the Reproductive, Maternal, Newborn, Child, Adolescent, and Elderly Health plus Nutrition (RMNCAEH+N) Strategic Plan with Quality of Care (QoC) as a major focus.

Despite the government's and partners' efforts in recent years to ensure that every citizen, including every mother and child, is provided with and experience quality care, not much traction has been gained. Some factors contributing to this include gaps in: policy adoption and implementation, coordination of MNCH QoC activities, robust QoC data systems including data use, and strategic QoC learning and research to help drive and monitor improved quality of MNCH care and health indices in Nigeria.[2] As a result, the National Technical Working Group (TWG) on QoC led the development of the QoC for RMNCAEH+N Annual Operational Plan (AOP) 2021–2022,[3] which identified clear actions to drive improvement in five key output areas:

- Leadership & Coordination
- Action
- Learning
- Accountability
- Community Engagement

The National RMNCAEH+N QoC program was designed to support State- and LGA-level QoC TWGs in accelerating efforts to improve quality of care and thereby increase positive health outcomes for women, newborns, and children in Nigeria.

In support of the Learning output area, the AOP calls for "mechanisms to facilitate learning and share knowledge through a learning network [to be] developed and strengthened." It further proposes the establishment of "distance/online learning systems with access to national and international resources on MNH QoC," to include a website or mobile phone application, as well as virtual and face-to-face learning opportunities and a community of practice "at all levels" of the health system.

The FMoH further developed the RMNCAEH+N QoC Strategic Plan with monitoring, evaluation, accountability and learning (MEAL) as one of its core objectives.[4] The MEAL Plan is critical to ensuring the impactful implementation of Nigeria's RMNCAEH+N QoC agenda and ensuring a viable and interactive platform for learning, experience sharing, and information dissemination.

To this end, the National RMNCAEH+N QoC TWG approved the establishment and maintenance of a virtual learning system for improving RMNCAEH+N QoC, developing and maintaining a repository of products and tools for QoC, ensuring regular updates of a website dedicated to QoC and robust linking of the FMoH platform to relevant sites, as well as developing and maintaining a system for interstate collaborative learning and mechanisms to enhance communication between implementing States and Federal stakeholders.

RATIONALE

Since inception of the RMNCAEH+N QoC Strategic Plan in 2017, significant efforts have been made to establish national platforms that promote learning in Nigeria and strengthen QoC at the three tiers (national, State, and LGA levels) of the health care system.

There is a significant body of literature on the role of technology and learning platforms[5,6] in medical education. Using modern communication technology, learning platforms can be established to bring together health care teams with quality improvement (QI) experts to collaboratively learn, execute, and share their experiences in improving quality of care in their own settings.[7] This is particularly important as inadequate knowledge and skills related to QI methodologies impact quality of care, which in turn contributes to low utilization of health care services by clients and reduced client satisfaction. In Nigeria, there is no national learning platform for RMNCAEH+N QoC. It is believed that establishment of a learning platform will facilitate adequate RMNCAEH+N QoC knowledge sharing towards utilization of health care services and improve health care delivery at all levels.

ASSESSMENT OBJECTIVES

The objectives of this needs assessment were to:

I. Determine what learning platforms already exist for RMNCAEH+N QoC in Nigeria
II. Identify the content, gaps, and utilization in the existing RMNCAEH+N QoC learning platforms
III. Understand the process, barriers, and facilitators of knowledge exchange in existing RMNCAEH+N QoC learning platforms in Nigeria

ASSESSMENT QUESTIONS

The research questions were:

- What learning platforms exist, with what contents and gaps in knowledge exchange?
- How can the utilization of the existing platforms be enhanced for RMNCAEH+N QoC?

METHODOLOGY

STUDY DESIGN

The needs assessment adopted a cross-sectional study design with a mixed methods approach to evaluate existing learning platforms related to RMNCAEH+N in Nigeria and priorities and needs of key stakeholders related to regular learning and knowledge exchange. It involved both quantitative and qualitative data collection in the form of Focus Group Discussions (FGDs) and an online, self-administered survey. FMoH convened a stakeholder meeting to develop, review, and validate both the quantitative and qualitative data tools. These tools were then piloted before eventual deployment to a larger number of respondents. Objectives I and II were addressed through a quantitative approach using a structured questionnaire, while

Objective III was addressed through both quantitative and qualitative approaches using Focus Group Discussions.

STUDY SETTING AND SAMPLE SIZE SELECTION

The study was planned to be conducted in the 36 States including the Federal Capital Territory (FCT); respondents from 30 of the 36 states participated in the study. The survey used a sample frame of 8500 health facilities and involved Ministry, Departments and Agencies (MDAs) at all levels, and relevant implementing partners. Using Taro Yamane's statistical formula,[8] the expected sample size of survey respondents (382) was approximated at 390. Out of a total of 390 respondents, 359 were to be health care workers from the health facilities, and the remaining 31 respondents were to be distributed among the MDAs at all levels, including relevant implementing partners.

See the formula below:

- n=N/1+ N(e)2
  - Where 'n' is the required sample size from the population under study.
  - 'N' is the whole population that is under study.
  - 'e' is the precision or sampling error, which is usually 0.10, 0.05 or 0.01.

Sample size calculation for the survey:

- n=N/1+ N(e)2
- n=8500/(1 + 8500(0.05)2)
- n=8500/(1 + 8500 * 0.0025)
- n=8500/22.25
- n= 382.02

The sample size was rounded to 390 to adjust for non-response.

Ultimately, we received feedback from 751 respondents. A convenience sampling method was used and the link to the survey was shared by email to the government State coordinators, who then shared the link on their various online platforms. Respondents consented and then volunteered to participate in the assessment.

For the qualitative approach, the plan was to have 8-10 participants per FGD team. Two FGDs were conducted with a total of 23 respondents purposively selected among the health care workers from the health facilities, MDAs at all levels, and relevant implementing partners.

INCLUSION CRITERIA

The inclusion criteria for the survey included participants who had been working in the field of RMNCAEH+N QoC for a minimum of one year and had smartphones with access to the internet to complete the online survey. The inclusion criteria for the FGDs included participants who had been providing RMNCAEH+N QoC services for a minimum of one year.

EXCLUSION CRITERIA

The exclusion criteria for the survey included health care workers who have not worked in the field of RMNCAEH+N QoC or who had worked in this field for less than a year. Respondents who did not consent to participate in the study – regardless of their eligibility otherwise – were also excluded from the survey. The same exclusion criteria were applicable to the FGD participants.

DATA COLLECTION

Survey data were collected using a pretested structured questionnaire, which was deployed online to selected respondents. From each of the 36 states plus FCT, we selected Reproductive Health state coordinators, State Health Management Information Officers, and National Primary Healthcare Agency state coordinators. A Microsoft Forms link was shared through email. The coordinators then shared the link with the officer in charge at the health facilities through WhatsApp groups. To ensure effective and timely responses, reminders were sent to the state coordinators, who followed up with the respondents.

Qualitative data collection was done using standardized interview guides during the FGDs of relevant stakeholders involved in RMNCAEH+N QoC services. The information derived from the interview was audio recorded, transcribed, and saved in a secured computer storage device prior to analysis.

Both the online survey and FGDs were conducted between July and August of 2022.

DATA ANALYSIS

The quantitative data were analyzed using the Stata V.17 statistical package for descriptive and inferential statistics. Demographic data were summarized using counts and proportions. The crosstab function was used to describe variable characteristics and levels of care.

For the qualitative data, emerging themes and codes were identified and coded using MAXQDA 2022. The code structure for each objective was developed by clearly delineating each study objective and defining its associated research question(s). Each segment in the dataset was then color-coded for the specific research question it was intended to address. Using the software functions and steps, the segments were coded to their various themes by an independent analyst, who developed an initial draft code system. From the initial code, we followed up with the team to reach inter-code agreement before finalizing the themes and codes.

As part of the data analysis processes, a multidisciplinary team was set up and convened to review both the quantitative and the qualitative analysis. Team members included people with expertise in monitoring and evaluation, information technology, public health program implementation, and qualitative research methods. Several iterations and multiple revisions of the datasets were conducted. The quantitative data were cleaned, and non-eligible observations were excluded from the dataset. Some text variables were categorized for purposes of analysis. The analyst's code structure for the qualitative data was examined and compared to the assessment objectives, and similar themes and codes were merged. Upon reaching consensus, a final all-inclusive code structure was developed to address the research questions. The final output had very high inter-coder agreement because of the approach used in developing the code structure and final analyses. This process enabled the aggregation and categorization of the various responses towards improved result analysis and findings.

ETHICAL CONSIDERATIONS

The ethical approval to undertake this assessment was obtained from the National Health Research Ethics Committee (NHREC) (NHREC/01/01/2007-03/072022). The assessment also received clearance from the Johns Hopkins University Institutional Review Board as a non-human subject research project. Informed consent was obtained from all respondents for the survey, while for the FGDs, oral consent was obtained from the participants. In addition, confidentiality was preserved in line with global best practices. This study did not pose any risk to the participants, and there was no direct financial benefit to participants.

LIMITATIONS

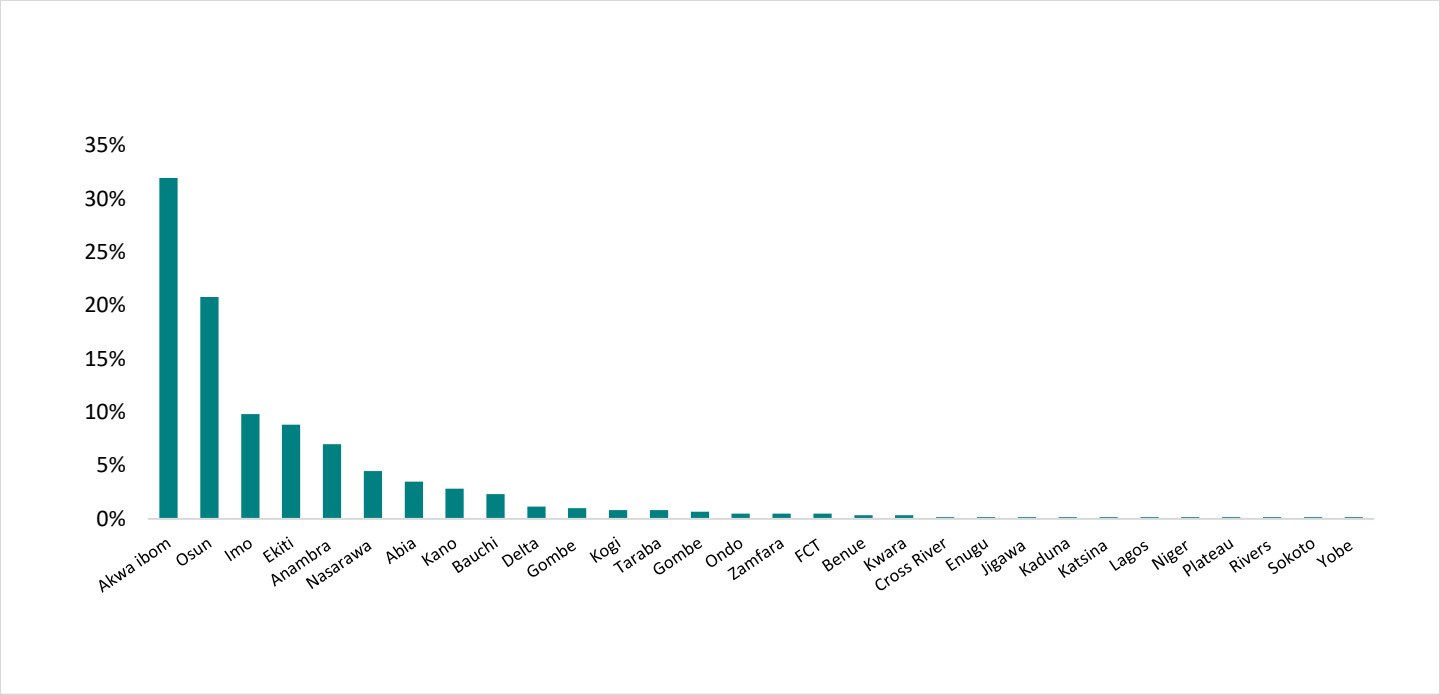
We planned to conduct the survey across the 36 states of Nigeria plus FCT, but we ultimately received responses from 30 states. However, the respondents covered the six geo-political zones of Nigeria. One factor in not reaching all states was that participation was totally voluntary. Additionally, it was difficult to get the contact phone numbers of the direct respondents. However, we were able to communicate through the State coordinators, who in turn reached out to the respondents. Getting a fair distribution of respondents across cadres, professions, and national and subnational levels was another limitation. With the FGDs, we were able to reach several cadres of staff in RMNCAEH+N. In FGDs in general, there is a possibility that participants will not share their thoughts fully due to discomfort sharing around other people. Furthermore, very few private, secondary, and tertiary health facility operators participated in the study. Finally, we were constrained by time; therefore, we were not able to wait to get responses from the remaining States and other cadres of expected respondents. Despite these limitations, the feedback from both the survey and FGDs was rich and informative. The number of respondents based on our initial sample size estimation for the survey doubled. The information was very useful in addressing our needs assessment objectives.

ASSESSMENT FINDINGS: SURVEY

QUANTITATIVE RESULT

We received 751 responses to the survey, which was well over the sample size estimation of 390. Out of the 751 responses, 616 were included for data analysis; the remaining responses were discarded in accordance with the exclusion criteria. Thirty out of 36+FCT States responded to the questionnaire, with Akwa-Ibom State having the highest response rate (Figure 1). Most respondents had over 10 years of experience working in the field of RMNCAEH+N (Table 1).

Figure 1: States of Respondents



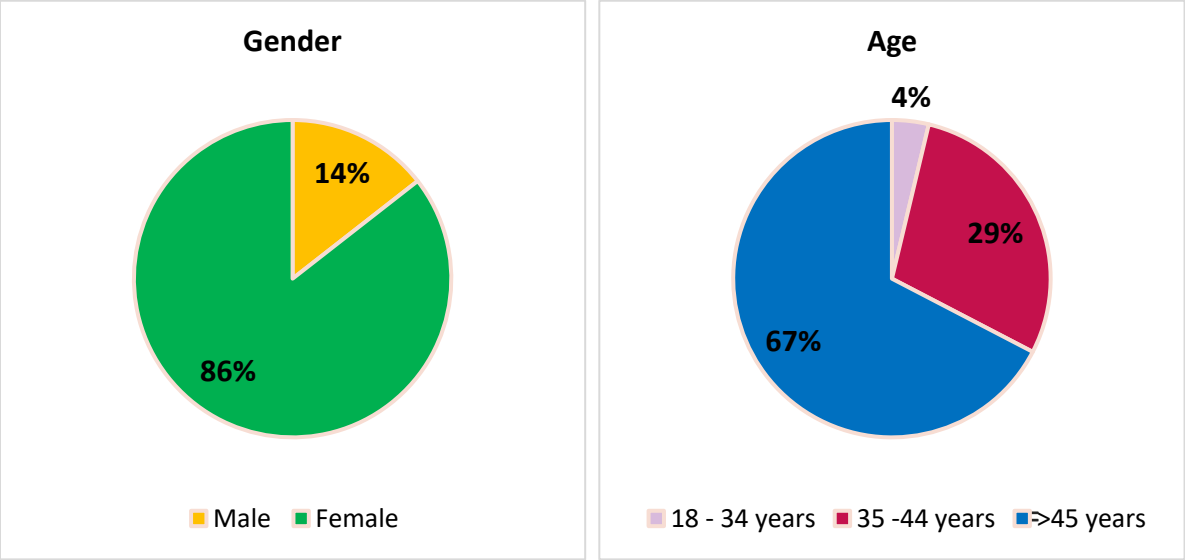
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1 shows the socio-demographic distribution of respondents. More than half (67.4%) were above 45 years of age. More females (85.5%) completed the survey than males (14.5%). Furthermore, more than half (56.8%) of the respondents reported attaining a Bachelor's Degree as their highest level of education. The majority (99.2%) work in public organizations, including 94.9% who provide care at primary-level facilities. More than half (59.1%) had more than 10 years' experience working in the RMNCAEH+N space.

Table 1: Socio-demographic characteristics of respondents		
Demographic characteristics		
		N=616
Age	Categories	N (%)
	18-34 years	23 (3.7%)

	35-44 years	178 (28.9%)
	45 or more years	415 (67.4%)
Gender		
	Male	89 (14.5%)
	Female	527 (85.5%)
Highest Level of Education		
	Secondary school	46 (7.5%)
	Bachelor's Degree	350 (56.8%)
	Postgraduate	220 (35.7%)
Type of organization		
	Public	611 (99.2%)
	Not Applicable*	5 (0.8%)
Level of Care		
	Primary	585 (94.9%)
	Secondary	11 (1.8%)
	Tertiary	8 (1.3%)
	Not Applicable	12 (1.9%)
Number of years of experience working in RMNCAEH+N		
	1-4 years	146 (23.7%)
	5-10 years	106(17.2%)
	More than 10 years	364(59.1%)

Figure 2: Gender and Age Distribution of the Respondents



DISTRIBUTION OF RESPONDENTS BY PREFERRED FUNCTIONS OF RMNCAEH+N LEARNING PLATFORM AND LEVEL OF CARE

Table 2 shows the selected preferred functions of an RMNCAEH+N learning platform and respondents' level of care. The highest proportion (35.23%) of the respondents reported that they rarely share RMNCAEH+N information online. Looking at the distribution across the levels of care, more than half (62.50%) of the respondents at the tertiary level of care, 45.45% of respondents at the secondary level of care, and 34.70% of the respondents at the primary level of care rarely share RMNCAEH+N information online.

Furthermore, the table also presents feedback on ten illustrative potential functions to be fulfilled by the new learning platform. Using a multiple selection option for the variables, the top three selected functions by the participants were: sharing news and resources among members (69.54%), sharing upcoming events, initiatives and news related to RMNCAEH+N in Nigeria (59.28%), and establishment of clear linkages between RMNCAEH+N activities in Nigeria and global strategies/goals (46.74%).

These three top functions expected of the new learning platform were most frequently prioritized by respondents at the primary level of care.

Table 2: Percent distribution of respondents by preferred functions of RMNCAEH+N learning platform and level of care

Characteristics	**Level of care**				
How often do you share RMNCAEH+N information online	**Not applicable (N, %)**	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**
1-2 times a week	1 (8.33%)	57 (9.74%)	4 (36.36%)	0 (0.00%)	62 (10.06%)
1-3 times a month	5 (41.67%)	83 (14.19%)	1 (9.09%)	2 (25.00%)	91 (14.77%)
Daily	1 (8.33%)	78 (13.33%)	0 (0.00%)	1 (12.5%	80 (12.99%)
Most days	0 (0.00%)	96 (16.41%)	0 (0.00%)	0 (0.00%)	96 (15.58%)
Never	1 (8.33%)	68 (11.62%)	1 (9.09%%)	0 (0.00%)	70 (11.36%)
Rarely	4 (33.33%)	203 (34.70%)	5 (45.45%)	5 (62.50%)	217 (35.23%)
Which of the following functions should the new learning platform fulfill? (Select your top 3 priorities)					
Share country level data and progress toward RMNCAEH+N goals	9 (75%)	240 (41.10%)	5 (50.00%)	4 (50.00%)	258 (42.02%)
Share upcoming events, initiatives, and news related to RMNCAEH+N in Nigeria	8 (66.67%)	347 (59.42%)	5 (50.00%)	4 (50.00%)	364 (59.28%)
Provide a platform for members to share news and resources with each other	6 (50.00%)	411 (70.38%)	5 (50.00%)	5 (62.50%)	427 (69.54%)
Share RMNCAEH+N technical documents and resources	5 (41.67%)	229 (39.21%)	4 (40.00%)	3 (37.50%)	241 (39.25%)

Share "how to" documents and guides related to RMNCAEH+N	8 (66.67%)	242 (41.44%)	1 (10.00%)	6 (75.00%)	257 (41.86%)
Provide an inventory of the RMNCAEH+N-focused agencies and organizations throughout Nigeria	3 (25.00%)	163 (27.91%)	5 (50.00%)	2 (25.00%)	173 (28.18%)
Aggregate global data and information related to RMNCAEH+N	4 (33.33%)	111 (19.01%)	1 (10.00%)	1 (12.50%)	117 (19.06%)
Make the case for investing in RMNCAEH+N in Nigeria	4 (33.33%)	141 (24.14%)	2 (20.00%)	1 (12.50%)	148 (24.10%)
Establish clear linkages between RMNCAEH+N activities in Nigeria and global strategy/goals	5 (41.67%)	275 (47.09%)	4 (40.00%)	3 (37.50%)	287 (46.74%)
None	3 (25.00%)	47 (8.03%)	1 (9.09%)	1 (12.50%)	52 (8.44%)
Other (Specify)	0 (0.00%)	9 (1.54%)	0 (0.00%)	0 (0.00%)	9 (1.46%)

DISTRIBUTION OF RESPONDENTS BY SOURCES OF INFORMATION ON RMNCAEH+N QOC

Table 3 presents the findings on respondents' sources of RMNCAEH+N QoC information by their levels of care. Respondents were allowed to select more than one source. Colleagues were the most commonly reported source of RMNCAEH+N QoC information among the respondents (49.91%), followed by a community of practice (CoP) such as a professional association (47.05%) and government or other official websites (39.36%). Among primary level of care providers, 50.09% and 47.07% of the respondents reported colleagues and CoP as their main sources of RMNCAEH+N QoC information, respectively. The same top sources were reported among respondents at the secondary level of care. However, among respondents at the tertiary level of care, CoP (62.50%) and TWG (50.00%) were the most frequently reported sources of RMNCAEH+N QoC information.

Table 3: Percent distribution of respondents by sources of information on RMNCAEH+N QoC					
Characteristics	**Levels of care**				
To update your knowledge on RMNCAEH+N QoC, which of the following are your sources of information?	**Not applicable (N, %)**	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**

Self-paced online trainings, certificates, or courses	2 (16.67%)	74 (13.99%)	0 (0.00%)	1 (12.50%)	77 (13.77%)
Online discussion forum via website pages	4 (33.33%)	104 (19.66%)	4 (40.00%)	1 (12.50%)	113 (20.21%)
Databases (e.g., DHIS2)	2 (16.67%)	131 (24.76%)	3 (30.00%)	2 (25.00%)	138 (24.69%)
Webinars or other "real-time" online events	5 (41.67%)	50 (9.45%)	0 (0.00%)	1 (12.50%)	56 (10.02%)
Government or official websites (e.g., FMoH, WHO)	6 (50.00%)	207 (39.13%)	4 (40.00%)	3 (37.50%)	220 (39.36%)
Social media (e.g., WhatsApp, Telegram, Facebook, Twitter, LinkedIn)	2 (16.67%)	175 (33.08%)	3 (30.00%)	3 (37.50%)	183 (32.74%)
Peer-reviewed journals	0 (0.00%)	54 (10.21%)	0 (0.00%)	1 (12.50%)	55 (9.84%)
An intranet or closed website	1 (8.33%)	36 (6.81%)	0 (0.00%)	1 (12.50%)	38 (6.80%)
Smartphone app	2 (16.67%)	95 (17.96%)	2 (20.00%)	2 (25.00%)	101 (18.07%)
Community of practice (e.g., professional associations)	4 (33.33%)	249 (47.07%)	5 (50.00%)	5 (62.50%)	263 (47.05%)
Technical Working Groups	3 (25.00%)	149 (28.17%)	3 (30.00%)	4 (50.00%)	159 (28.44%)
Conferences	7 (58.33%)	156 (29.49%)	4 (40.00%)	2 (25.00%)	169 (30.23%)
Colleagues	6 (50.00%)	265 (50.09%)	5 (50.00%)	3 (37.50%)	279 (49.91%)
Reports and technical documents	1 (8.33%)	100 (18.90%)	1 (10.00%)	2 (25.00%)	104 (18.60%)
Other websites	2 (16.67%)	38 (7.18%)	0 (0.00%)	0 (0.00%)	40 (7.16%)
Library or resource center	1 (8.33%)	42 (7.94%)	0 (0.00%)	1 (12.50%)	44 (7.87%)
Newsletters/magazines	1 (8.33%)	83 (15.69%)	0 (0.00%)	1 (12.50%)	85 (15.21%)
None of the above	0 (0.00%)	14 (2.65%)	1 (10.00%)	0 (0.00%)	15 (2.68%)

DISTRIBUTION OF RESPONDENTS BY AVAILABILITY OF GLOBAL AND NATIONAL GUIDELINES RELATED TO RMNCAEH+N QOC ON PREFERRED PLATFORM AND LEVELS OF CARE

Table 4 shows whether global and national guidelines related to RMNCAEH+N QoC are available on the current platform used by service providers at different levels of care. Among the global guidelines, maternal health (76.14%), reproductive health (70.45%), and newborn and child health (61.53%) guidelines were the most frequently available. At the primary level, respondents report global guidelines related to maternal health (76.92%), reproductive health (71.88%), and newborn and child health (61.88%) are the most commonly available on the platforms they use.

Respondents working at secondary-level care facilities reported most common access to global guidelines on reproductive health (72.73%), newborn and child health (63.64%), and maternal health (54.55%).

Users in tertiary facilities had the greatest access to global guidelines for nutrition (75%), maternal health, (62.5%), reproductive health (37.5%), and newborn and child health (37.5%).

Findings for available national guidelines were similar to those for global guidelines. For national guidelines related to RMNCAEH+N QoC available on platforms used by respondents, maternal health (73.38%), reproductive health (71.59%), and newborn and child health (63.96%) guidelines were the most reported categories available on the current platforms that respondents use.

Table 4: Percent distribution of respondents by availability of global and national guidelines related to RMNCAEH+N QoC on preferred platform and levels of care

Characteristics	**Levels of care**				
Which of the following global guidelines related to RMNCAEH+N are on the platform you use?	**Not applicable (N, %)**	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**
Newborn and child health (Small sick newborn, immunization)	7 (58.33%)	362 (61.88%)	7 (63.64%)	3 (37.50%)	379 (61.53%)
Reproductive health (e.g., family planning, fertility service, use of partograph)	5 (41.67%)	418 (71.45%)	8 (72.73%)	3 (37.50%)	434 (70.45%)
Adolescent health (youth-friendly)	2 (16.67%)	258 (44.10%)	5 (45.45%)	1 (12.50%)	266 (43.18%)
Care for the elderly	2 (16.67%)	180 (30.77%)	3 (27.27%)	1 (12.50%)	186 (30.19%)
Nutrition (e.g., weighing of baby, growth monitoring, malnutrition, treatment of severe malnutrition)	2 (16.67%)	95 (16.24%)	0 (0.00%)	6 (75.00%)	103 (16.72%)
Maternal health (e.g., ANC, labor, delivery, PNC, PPH)	8 (66.67%)	450 (76.92%)	6 (54.55%)	5 (62.50%)	469 (76.14%)
None	3 (25.00%)	39 (6.67%)	2 (18.18%)	0 (0.00%)	44 (7.14%)
Others (Specify)	0 (0.00%)	9 (1.54%)	0 (0.00%)	0 (0.00%)	9 (1.46%)
Which of the following national guidelines related to RMNCAEH+N are on the platform you use?					
Newborn and child health (e.g., small sick newborn, immunization)	8 (66.67%)	376 (64.27%)	7 (63.64%)	3 (37.50%)	394 (63.96%)

Reproductive health (e.g., family planning, fertility service, use of partograph)	7 (58.33%)	421 (71.97%)	9 (81.82%)	4 (50.00%)	441 (71.59%)
Adolescent health (e.g., youth-friendly)	2 (16.67%)	252 (43.08%)	4 (36.36%)	1 (12.50%)	259 (42.05%)
Care for the elderly	2 (16.67%)	175 (29.91%)	3 (27.27%)	1 (12.50%)	181 (29.38%)
Nutrition (e.g., weighing of baby, growth monitoring, malnutrition, treatment of severe malnutrition)	4 (33.33%)	94 (16.07%)	1 (9.09%)	4 (50.00%)	103 (16.72%)
Maternal health (e.g., ANC, labour, delivery, PNC, PPH)	9 (75.00%)	433 (74.02%	6 (54.55%)	4 (50.00%)	452 (73.38%)
None	2 (16.67%)	43 (7.35%)	2 (18.18%)	0 (0.00%)	47 (7.63%)
Others (Specify)	0 (0.00%)	4 (0.68%)	0 (0.00%)	0 (0.00%)	4 (0.68%)

DISTRIBUTION OF RESPONDENTS BY AVAILABILITY OF CASE STUDIES AND CONTENT RELATED TO RMNCAEH+N QOC ON PREFERRED PLATFORM AND LEVELS OF CARE

Table 5 presents findings on the availability of case studies and other content areas and types related to RMNCAEH+N QoC on the current platforms. The most reported available case studies related to RMNCAEH+N QoC on the current platform were maternal health (71.59%), reproductive health (70.94%), and newborn and child health (61.15%).

The most common content areas related to RMNCAEH+N QoC were maternal health (66.61%), nutrition (66.28%), and reproductive health (63.50%). This held true for providers working in primary-level facilities, while providers at the secondary level reported most frequent availability of reproductive health (80.0%), maternal health, newborn and child health, nutrition, and health promotion (all 70.0%); tertiary providers reported training materials (62.5%), newborn and child health (50.0%), nutrition (50.0%), and health promotion (50.0%) as the most common.

Table 5: Percent distribution of respondents by availability of case studies and content related to RMNCAEH+N QoC on preferred platform and levels of care

Characteristics	**Levels of care**				
Which of the following case studies related to RMNCAEH+N are on the platform you use?	**Not applicable (N, %)**	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**
Newborn and child health (e.g., small sick newborn, immunization)	8 (66.67%)	370 (63.25%)	7 (63.64%)	4 (50.00%)	389 (63.15%)

Reproductive health (e.g., family planning, fertility service, use of partograph)	6 (50.00%)	417 (71.28%)	10 (90.91%)	4 (50.00%)	437 (70.94%)
Adolescent health (e.g., youth-friendly)	2 (16.67%)	252 (43.08%)	6 (54.55%)	1 (12.50%)	261 (42.37%)
Care for the elderly	2 (16.67%)	175 (29.91%)	2 (18.18%)	1 (12.50%)	180 (29.22%)
Nutrition (e.g., weighing of baby, growth monitoring, malnutrition, treatment of severe malnutrition)	2 (16.67%)	110 (18.80%)	1 (9.09%)	4 (50.00%)	117 (18.99%)
Maternal health (e.g., ANC, labor, delivery, PNC, PPH, etc.)	9 (75.00%)	420 (71.79%)	7 (63.64%)	5 (62.50%)	441 (71.59%)
None	3 (25.00%)	47 (8.03%)	1 (9.09%)	1 (12.50%)	52 (8.44%)
Others (Specify)	0 (0.00%)	9 (1.54%)	0 (0.00%)	0 (0.00%)	9 (1.46%)
Which of the following content areas related to RMNCAEH+N are on the platform you use?					
	Not applicable (N, %)	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**
Global RMNCAEH+N guidelines	3 (25.00%)	159 (27.37%)	3 (30.00%)	2 (25.00%)	167 (27.33%)
National RMNCAEH+N policies and guidelines	5 (41.67%)	224 (28.55%)	3 (30.00%)	1 (12.50%)	233 (38.13%)
State RMNCAEH+N policies and guidelines	6 (50.00%)	245 (42.17%)	2 (20.00%)	3 (37.50%)	256 (41.90%)
Program implementation materials	6 (50.00%)	241 (41.48%)	3 (30.00%)	2 (25.00%)	252 (41.24%)
Training materials	6 (50.00%)	311 (53.53%)	3 (30.00%)	5 (62.50%)	325 (53.19%)
Advocacy materials	3 (25.00%)	184 (31.67%)	2 (20.00%)	2 (25.00%)	191 (31.26%)
Case studies	4 (33.33%)	132 (22.72%)	1 (10.00%)	1 (12.50%)	138 (22.59%)
Job aids, SOPs, standardized tools or templates	5 (41.67%)	233 (40.10%)	2 (20.00%)	2 (25.00%)	242 (39.61%)
Clinical updates	5 (41.67%)	173 (29.78%)	2 (20.00%)	1 (12.50%)	181 (29.62%)
Reproductive health (e.g., family planning, fertility service, use of partograph)	9 (75.00%)	368 (63.34%)	8 (80.00%)	3 (37.50%)	388 (63.50%)
Maternal health (e.g., ANC, labour, delivery, PNC, PPH)	10 (83.33%)	387 (66.61%)	7 (70.00%)	3 (37.50%)	407 (66.61%)
Newborn and child health (e.g., small and sick newborns, immunization)	7 (58.33%)	346 (59.55%)	7 (70.00%)	4 (50.00%)	364 (59.57%)

Adolescent health (e.g., youth-friendly)	4 (33.33%)	256 (44.06%)	5 (50.00%)	1 (25.00%)	266 (43.54%)
Nutrition (e.g., weighing of baby, growth monitoring)	8 (66.67%)	386 (66.44%)	7 (70.00%)	4 (50.00%)	405 (66.28%)
Care for the Elderly	1 (8.33%)	190 (32.70%)	4 (40.00%)	1 (25.00%)	196 (32.08%)
Human resources for health/health workforce (e.g., motivation, rewards, staff retention, team building)	4 (33.33%)	164 (28.23%)	3 (30.00%)	1 (25.00%)	172 (28.15%)
Health promotion (e.g., behavioural change communication, community mobilization, town hall meeting, social mobilization, risk communication)	4 (33.33%)	262 (45.09%)	7 (70.00%)	4 (50.00%)	277 (45.34%)
Quality of Care (QoC)/quality improvement	4 (33.33%)	267 (45.96%)	4 (40.00%)	2 (25.00%)	277 (45.34%)
Health financing (e.g., workplans, financing approach, DFF, DRF, resource management, health insurance)	4 (33.33%)	187 (32.19%)	2 (20.00%)	1 (12.50%)	194 (31.75%)
Logistics and supply chain management	4 (33.33%)	163 (28.06%)	2 (20.00%)	2 (25.00%)	171 (27.99%)
Client-centered care (e.g., turnover time, attendance time, provider attitude)	2 (16.67%)	137 (23.58%)	2 (20.00%)	1 (12.50%)	142 (23.24%)
Monitoring, evaluation, research & learning	8 (66.67%)	203 (34.94%)	3 (30.00%)	3 (37.50%)	217 (35.52%)
Mental health (e.g., postpartum depression)	4 (33.33%)	137 (23.58%)	2 (20.00%)	1 (12.50%)	144 (23.57%)
QoC success stories	4 (33.33%)	140 (24.10%)	1 (10.00%)	1 (12.50%)	146 (23.90%)
Health Education	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

DISTRIBUTION OF RESPONDENTS BY SELECTED TRAINING-RELATED CHARACTERISTICS AND LEVELS OF CARE

Table 6 shows the distribution of respondents by selected training-related characteristics and levels of care. Overall, a plurality of respondents (28.90%) reported that they had last received training related to improving QoC on RMNCAEH+N between zero and five months before the survey. At the primary level of care, the greatest proportion (28.89%) of respondents reported that they last received such trainings 0-5 months prior. In contrast, at the secondary level of care, the greatest proportion (36.36%) of respondents reported that they last received such training 6-11 months prior to the survey.

Furthermore, the assessment explored whether the respondents' pre-service training had any course or module that covered QoC. Three-quarters of the respondents reported that their pre-service training included QoC materials. The assessment asked the respondents about their preferred medium for sharing or receiving information on RMNCAEH+N, and the greatest proportion (48.45%) of the respondents reported email or e-newsletters as their preferred medium. Other preferred media included text messages (42.06%) and smartphone applications (41.24%). Across the levels of care, respondents expressed mixed preferences for media.

Table 6: Percent distribution of respondents by selected training-related characteristics and levels of care

Characteristics	**Levels of care**				
When last did you have any training relating to improving quality of care on RMNCAEH+N?					
	Not applicable (N, %)	**Primary (N, %)**	**Secondary (N, %)**	**Tertiary (N, %)**	**Total (N, %)**
0-5 months ago	5 (41.67%)	169 (28.89%)	1 (9.09%)	3 (37.50%)	178 (28.90%)
6-11 months ago	2 (16.67%)	87 (14.87%)	4 (36.36%)	2 (25.00%)	95 (15.42%)
1-2 years ago	1 (8.33%)	113 (19.32%)	2 (18.18%)	1 (12.50%)	117 (18.99%)
3-4 years ago	3 (25.00%)	62 (10.60%)	2 (18.18%	1 (12.50%)	68 (11.04%)
More than 4 years ago	0 (0.00%)	99 (16.92%)	0 (0.00%)	1 (12.50%)	100 (16.23%)
Never	1 (8.33%)	55 (9.40%)	2 (18.18%)	0 (0.00%)	58 (9.42%)
Did your pre-service training have any course/module that covers Quality of Care					
I don't remember	1 (8.33%)	55 (9.40%)	0 (0.00%)	1 (12.50%)	57 (9.25%)
No	5 (41.67%)	82 (14.02%)	2 (18.18%)	3 (37.50%)	92 (14.94%)
Yes	6 (50.00%)	448 (76.58%)	9 (81.82%)	4 (50.00%)	467 (75.81%)
How would you prefer to share/receive information about RMNCAEH+N?					
Email/e-newsletter	11 (91.67%)	276 (47.59%)	4 (36.36%)	5 (62.50%)	296 (48.45%)
Smartphone app	5 (41.67%)	238 (41.67%)	5 (45.45%)	4 (50.00%)	252 (41.24%)
Text message	3 (25.00%)	249 (42.93%)	3 (27.27%)	2 (25.00%)	257 (42.06%)
Website/online platform	6 (50.00%)	183 (31.55%)	3 (27.27%)	3 (37.50%)	195 (31.91%)
Print newsletter or documents	3 (25.00%)	97 (16.72%)	2 (18.18%)	3 (37.50%)	105 (17.18%)
Others	0 (0.00%)	8 (1.38%)	0 (0.00%)	0 (0.00%)	8 (1.31%)

ASSESSMENT FINDINGS: FOCUS GROUP DISCUSSIONS

Twenty-three respondents worked in the public sector, including 91% in federal roles and 9% frontline health care workers providing RMNCAEH+N-related services. Of the 23 participants, 16 (70%) were male. All participants had over two years' experience in the field of RMNCAEH+N QoC.

The FGDs focused on six themes: process of knowledge exchange, utilization of the learning platforms, facilitators to knowledge exchange, barriers to knowledge exchange, website user-friendly features and recommendations for the learning platform (*Figure 3).*

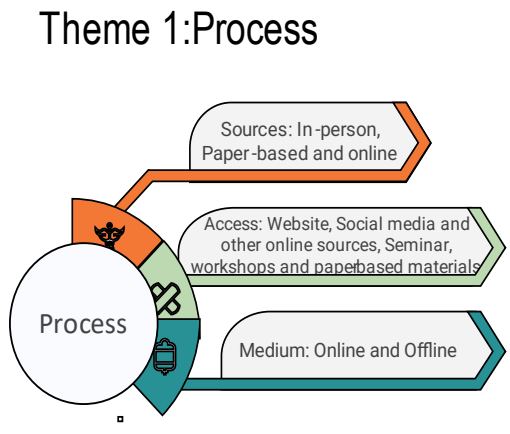
Figure 3: Identified Themes

PROCESS OF INFORMATION SHARING AND EXCHANGE IN RMNCAEH+N

The process of knowledge exchange as identified by the assessment includes the source, access, and medium for information sharing (Figure 4). All the respondents interviewed identified websites, webinars, social media platforms, online forums and other online and web-based platforms as the main sources and media for learning.

In-person meetings with colleagues, seminars, workshops, and print materials were also identified as sources and media for information sharing and learning.

Figure 4: Process for Information Sharing

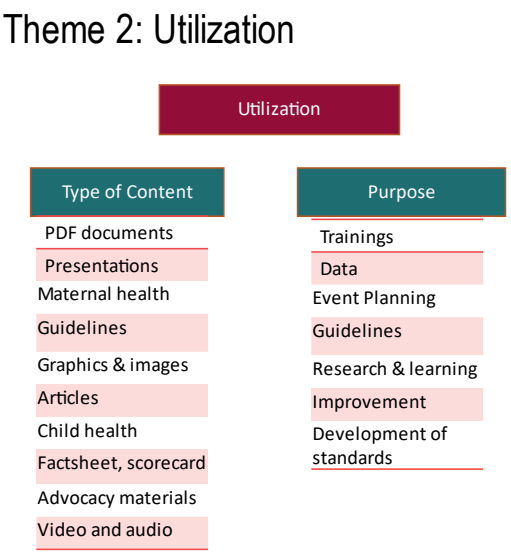


UTILIZATION OF EXISTING RMNCAEH+N QOC LEARNING PLATFORMS FOR KNOWLEDGE EXCHANGE

Participants discussed two related subthemes: their purpose in seeking information on current learning platforms, and the type or format of content they utilize most (Figure 5). The most utilized content types included video and audio materials, articles, fact sheets and scorecards. Graphics and images, as well as guidelines and materials on maternal and child health, were also highlighted.

Participants described using learning platforms to support research and learning, to locate programmatic data, and to complete trainings. One respondent explained that research and evidence standards are a key motivation, saying, “I go on to look at articles for research purposes and, if it is abstract that interests me more, I want to see how scientifically significant [it is], p-value and stuff. That's what interests me more. I look at something on eclampsia or hemorrhage within the article. That's what interests me more.”

Figure 5: Existing Platform Utilization



FACILITATORS OF KNOWLEDGE EXCHANGE IN EXISTING RMNCAEH+N QOC LEARNING PLATFORMS

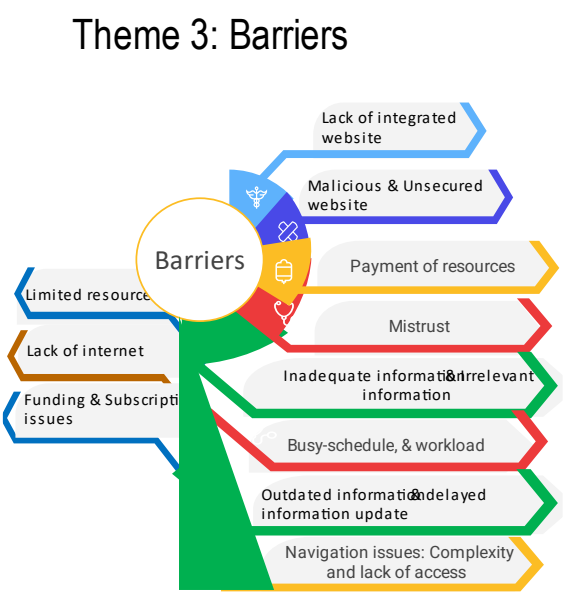
Respondents identified key facilitators of knowledge exchange: specificity to subject matter, reliability of the information, up-to-date nature of an online source or medium, and the existence of a microsite (Figure 6). Other facilitators included a website that is easily accessible and interactive, as well as a platform that offers different learning opportunities about best practices. Respondents also preferred a platform with the flexibility to change the language option and that can be easily navigated with good internet connectivity. One of the respondents, who prioritized applicability of the lesson material, said: “I go for lesson learned and how we can practicalize using the lesson learned and then recommend it to the authorities to see how it can work for us.”

Figure 6: Identified Facilitators

BARRIERS TO KNOWLEDGE EXCHANGE IN EXISTING RMNCAEH+N QOC LEARNING PLATFORMS

In the focus group discussion, respondents identified several barriers to sourcing information from existing learning platforms (Figure 7). Some of the major barriers identified were navigation on the platform, delays enconcountered in opening the pages, unsolicited requests, difficulty in accessing resources, and complexity of access (e.g., login requirements). Another major barrier identified was payment to access resources on the platform. Other barriers include inadequate information on the platform, outdated information, subscription issues, lack of an integrated site that could serve as a "one-stop shop," unsecure platforms, and mistrust.

Figure 7: Identified Barriers



One respondent talked about the difficulties of finding good resources and stated, "When I first joined the service, my first thought was the Ministry website. So, we had challenges with the ministry website, me and [another colleague] sometimes we even will talk about it, saying this website doesn't have anything because we even go to our own department and begin to search each division. We just see skeletal information. We move, we say this website, there's nothing there. So, we started with the website in the initial phase. We now start interacting with partners, stakeholders, we now begin to discover there are better options."

USER-FRIENDLY FEATURES THAT CAN ENHANCE UTILIZATION OF A LEARNING PLATFORM

Respondents described user-friendly features of the platforms under the following themes: communication, navigation, rich content, free access, offline access, and flexibility to upload and download materials (Figure 8). Communication includes a platform that is interactive, with feedback mechanisms and announcement opportunities. Key identified features for navigation include ease of navigation and referencing such that users can get a link to other resources from the websites.

One of the respondents described an ideal setup with user-friendly features: "What I think a learning platform that is user friendly is … I'm able to access both the videos [and] PDFs. I am also able to interact with people in the same course, for example, maybe introduction to QoC. I say, 'Hi, what do you understand by this?' The person replies back to me. So, we have a forum where we can talk ... So, it's user friendly. In terms of that discussion too, I can download videos there, I can download PDFs."

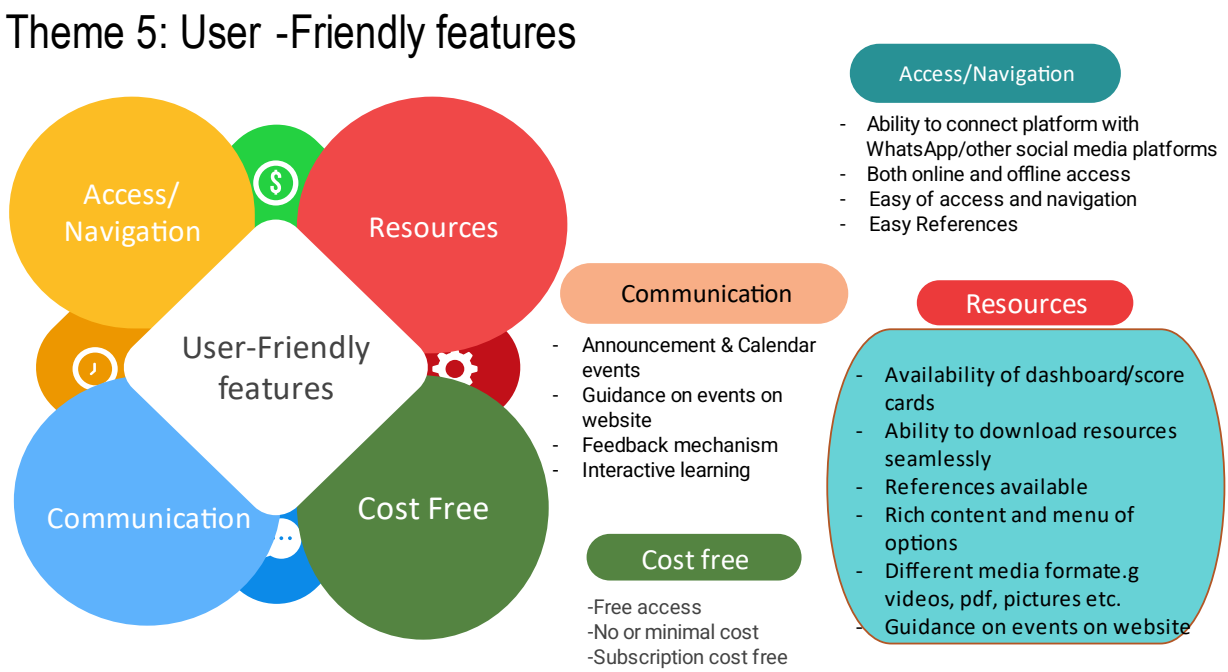


Figure 8: User-Friendly Features

RECOMMENDATIONS

Respondents recommended providing a "one-stop shop" for Nigeria-specific information that health care workers can leverage for service improvement. They suggested an interactive platform to enable knowledge sharing and cross-fertilization of ideas among health care workers.

Synthesising information from both the quantitative survey and qualitative Focus Group Discussions, our recommendations can be organized into several categories (Table 7).

Table 7: Recommendations

Purpose

The platform should:
• **Facilitate knowledge exchange** through **user-to-user interaction**, such as a discussion forum.
  ○ Collaborate with existing communities of practice (e.g., professional associations)
• **Support research and learning** for users by including:
  ○ Trainings for continuing professional development (with CEUs or other certification, where possible)
  ○ Up-to-date data related to RMNCAEH+N
  ○ The latest scientific and grey literature
• **Serve as a "one-stop shop"** for RMNCAEH+N
  ○ Resources should (to the extent possible) be accessible directly on the platform, rather than linking to third-party sites

    - Incorporate news, announcements, and events related to RMNCAEH+N (for example, a calendar of upcoming webinars or an announcement of a new guideline publication)
- **Establish clear linkages** between RMNCAEH+N activities in Nigeria and global strategies/goals

Design & Functions

The platform should:

- Be free to use
- Not require an account to use (i.e., login should be optional)
- Be mobile-accessible
- Be accessible with limited internet connectivity
- Allow easy upload and download of files
- Prioritize simple, clear navigation
- Allow easy provision of feedback for improvement
- Share updates with users via email, text message, and/or smartphone app

Content Subject Matter

At the beginning, prioritise subjects users find most relevant:

- Maternal Health
- Nutrition
- Reproductive Health
- Newborn & Child Health

As the platform matures, expand into other relevant topics.

Content Type

Focus on materials that users find most useful and relevant, including:

- Training materials
- National and Subnational guidelines on RMNCAEH+N
- How-to guides, Job aids, Standard Operating Procedures, Standardized tools and templates
- National and Subnational data on RMNCAEH+N activities and outcomes

Content Format

Prioritise formats that users find most helpful:

- Meetings, courses, or other interactive learning events
- Videos
- Data visualizations
- Radio, podcast, or other audio recordings

Minimise the use of formats users find less helpful, including lengthy written pieces (e.g., blogs) and passive learning events (e.g., lectures).

Respondents emphasized that the platform should target not only providers and administrators in the public health care system, but those in the private sector, in pre-service health training institutions, in professional associations, and any other stakeholder organizations that work to create the conditions that promote RMNCAEH+N. As one respondent stated, “When you're talking about QoC, the private sector also has the wealth of experience; we can also learn from them. So, I think involving the private sector in community of practice and other key stakeholders, professional bodies that we can also learn from, will be a very good avenue or platform for us to really achieve improvement in QoC.”

Another respondent said, “I think if we want to improve quality of care at the facility level, we can make QoC as part of the courses that will be included into their [continuous medical education]. … So, you discover that at the level of the facility we are now bringing the health care workers to that level of understanding.”

CONCLUSIONS

This need assessment has identified opportunities for meeting the needs of stakeholders working to improve RMNACAEH+N quality of care. Across the States where the needs assessment was conducted, the existing learning platforms that were identified were mainly web-based platforms. Respondents expressed barriers accessing online platforms due to the complexities of these websites, and most of them preferred to source information from platforms that had local content. Care should be taken to ensure that the proposed website is user-friendly with no subscription charges. The site should allow easy access and include discussion forums and linkages with social media platforms such as WhatsApp. The proposed learning platform should provide information about past, current, and upcoming events related to RMNCAHE+N QoC.

MCGL, in partnership with FMoH, will use the results to develop a comprehensive web-based learning platform for health care practitioners in Nigeria. An integrated RMNCAHE+N QoC learning platform will help address most of the identified barriers of the existing platforms as highlighted by the health care workers.

While the initial development of the national learning platform will be an important contribution, our findings show that additional actions are also needed. To support effective learning and knowledge sharing among health care workers, the national learning platform must be frequently reviewed and updated with rich content to increase utilization and accessibility and facilitate linkages to communities of practice and events that incorporate blended remote and in-person learning mechanisms. Furthermore, health care professionals must be supported with the necessary tools – in addition to the interactive and user-friendly platform – to enable easy utilization and learning. Finally, policy makers and administrators need to encourage health care professionals to make use of the resources on the learning platform to learn more about quality of care and provide opportunities for health care professionals to put this knowledge into practice.

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APPENDIX A – LIST OF CONTRIBUTORS

S/No	Names	Organization	Designation
1	Nnenna Ezeokafor	IHI	Learning Advisor
2	Dr. Kendra Njoku	IHI	Improvement Advisor
3	Maureen Tshabalala	IHI	Senior Project Director
4	Stephen Luna-Muse	IHI	Senior Project Manager
5	Patience Kudzai Manyau	IHI	Associate Project Manager
6	Cayla Saret	IHI	Senior Managing Editor
7	Dr. Adeyinka Odejimi	FMoH	Head/HSC
8	Dr. Anthony Adoghe	FMoH	Assistant Director, M&E
9	Dr. Bala Harri	FMoH	SMOI DHPRS
10	Dr. Eko David	FMoH	SMO
11	Dr. Adeola Jegede	FMoH	NIPRD, HPME
12	Dr. Ayoola Olusola,	FMoH	Research & Knowledge Management Focal Person
13	Dr. Jensen Fofah	FMoH	Policy Officer
14	Oluwayomi Ale Lucia	FMoH	Assistant Director Nursing
15	Anointed Riches	FMoH	Medical Officer
16	Oris Ikiddeh	JHPIEGO	Senior Knowledge Management & Training Advisor
17	Elizabeth Njoku	JHPIEGO	Strategic Information Advisor
18	Femi Lawal	JHPIEGO	Infographics Officer
19	Folasade Amoko	JHPIEGO	M&E Officer
20	Kemi Obatoyinbo	JHPIEGO	Program Assistant
21	Dr. Chibugo Okoli	JHPIEGO	Project Director
22	Kathleen Hill	JHPIEGO	Quality Improvement Senior Technical Advisor
23	Sadiya Aliyu Auta	FMoH	Senior Program Officer
24	Okoedoh Justina	FMoH	SSO, FMoH
25	Dr. Alabi Olatunji	Save the Children	Assessment and Research Manager
26	Pharm. Adeyemi Adebowale Sylvester	Consultant	Independent Research and Data Consultant

APPENDIX B – FGD ANALYSIS SUMMARY TABLE

This table outlines the code structure used to analyze the needs assessment to understand what learning platforms are utilized for knowledge exchange to improve RMNCAEH+N QoC.

Themes and Codes	Frequency
Coded Segment	322
Process	91
Process\Sources	46
Process\Sources\In-person	7
Process\Sources\Paper-based	11
Process\Sources\Online	28
Process\Access	1
Process\Access\Website and other online sources	28
Process\Access\Seminar, workshops	6
Process\Access\Paper-based materials	8
Process\Medium	1
Process\Medium\Online, offline	1
Utilization	86
Utilization\Type of content	32
Utilization\Type of content\PDF documents	1
Utilization\Type of content\Presentations	1
Utilization\Type of content\Maternal health	1
Utilization\Type of content\Guidelines	2
Utilization\Type of content\Graphics & images	2
Utilization\Type of content\Articles	8
Utilization\Type of content\Child health	2
Utilization\Type of content\Factsheet, scorecard	3
Utilization\Type of content\Advocacy materials	1
Utilization\Type of content\Video and audio	11
Utilization\Purpose	54
Utilization\Purpose\Trainings	5
Utilization\Purpose\Data	4
Utilization\Purpose\Event planning	1
Utilization\Purpose\Research & learning, improvement	7
Utilization\Purpose\Development of standards	1
Utilization\Purpose\Source	0
Utilization\Purpose\Source\Colleagues, seminars, workshop	8
Utilization\Purpose\Source\Website and online	28
Facilitators	0
Facilitators\Interactive website	3
Facilitators\Specialized & current, right information	14
Facilitators\Language option	2

Facilitators\Best practices & cross learning	3
Facilitators\Micro website	13
Facilitators\Free Wi-Fi and easy to internet access	3
Facilitators\Easy accessibility and navigation	11
Barriers	0
Barriers\Lack of integrated website	2
Barriers\Malicious & unsecured website	1
Barriers\Payment of resources	4
Barriers\Mistrust	1
Barriers\Inadequate Information	0
Barriers\Inadequate Information\Limited resources	2
Barriers\Inadequate Information\Irrelevant information	1
Barriers\Busy schedule, workload	1
Barriers\Outdated information, delayed site update	3
Barriers\Navigation issues	0
Barriers\Navigation issues\Complexity	2
Barriers\Navigation issues\Lack of access & navigation issues	6
Barriers\Funding or subscription issues	4
Barriers\Lack of internet	1
User friendly features	24
User friendly features\Download and upload ability	1
User friendly features\Visual appealing dashboards	2
User friendly features\online and offline access	2
User friendly features\Free access & minimal cost	3
User friendly features\Communication	10
User friendly features\Communication\Announcement & calendar events	1
User friendly features\Communication\Feedback mechanism	2
User friendly features\Communication\Interactive learning	5
User friendly features\Rich content & menu	1
User friendly features\Navigation	5
User friendly features\Navigation\Easy references	3
User friendly features\Navigation\Ease of navigation	1
Recommendations	0
Recommendations\Archive old resources	1
Recommendations\Easy accessibility, fast response, and download	1
Recommendations\Simplicity of design	4
Recommendations\Timely & right update	1
Recommendations\Cross-fertilization of ideas for learning	2
Recommendations\Data provision for the users	1
Recommendations\Community of practice forum	7
Recommendations\Grassroots development	2
Recommendations\Inclusiveness, partnership with stakeholders	8
Recommendations\Integration & right information	5

Recommendations\Capacity building & certification	3
Recommendations\offline utilization capacity	2
Recommendations\Local content	3
Preferred medium of update	4

APPENDIX C – SAMPLE FILLED SURVEY QUESTIONNAIRE

DEMOGRAPHICS

1. Has the respondent given consent to complete the interview?
    a. 1= YES
    b. 2= NO
    If YES, proceed to A2, If NO end the interview
2. Is the respondent involved in the Learning Platform to Improve Quality of Care for RMNCAEH+N in Nigeria?
    a. 1= YES
    b. 2= NO
    If YES, proceed to A3, If NO end the interview
3. State: _____ LGA: _____
4. Gender:
    a. Male
    b. Female
5. Age: _____
6. Please indicate your highest level of education
    a. Primary school
    b. Secondary school
    c. Bachelor's degree
    d. Postgraduate diploma
    e. Master's degree
    f. Doctoral degree
7. Please select the option that best describes your organization or institution.
    a. Health facility
    b. Academic/research institution
    c. Federal government
    d. State government
    e. Local government
    f. NGO
    g. CSO
    h. Private sector
    i. Other: _____
8. What level of care do you work?
    a. Primary
    b. Secondary
    c. Tertiary
    d. Not Applicable
9. What type of health services do you provide?
    a. Public
    b. Private
    c. Faith-based
    d. Not Applicable
10. What is your professional background?
    a. Government official (federal level)

b. Government official (state level)
c. Doctor
d. Nurse/allied professional
e. Other: _____

11. What is your job cadre?
    a. Frontline health care provider
    b. Facility management
    c. Support staff
    d. Other: _____
12. Designation: _____
13. Number of years of experience in health care or public health:
    a. Less than 1 year
    b. 1-4 years
    c. 5-10 years
    d. More than 10 years
14. Number of years' experience in RMNCH?
    a. Less than 1 year
    b. 1-4 years
    c. 5-10 years
    d. More than 10 years

INFORMATION SOURCES

15. When last did you have training relates to improving quality of care on RMNCAHE+N?
    a. 6-11month
    b. 1-2years
    c. 3-4years
    d. More than 4 years
16. Did your pre-service training have a course/module that covers quality of care?
    a. Yes
    b. No
17. Does your in-service training include "Quality of Care"?
    a. Yes
    b. No
18. To update your skills on RMNCAEH+N QoC, which of the following are your sources of information?

Sources of information	Tick all that apply
Colleagues	
Technical experts (e.g., RH coordinators, coaches, mentors)	
Community of practice (e.g., professional associations)	
Online discussion forum (e.g., WhatsApp Group, Facebook, Telegram)	
Technical working groups	
Webinars or other "real-time" online events	
Self-paced online trainings, certificates, or courses	
Conferences	
Government or official websites (e.g., FMOH, WHO)	
NGO websites (e.g., Jhpiego, Save the Children)	
Other websites	

An intranet or closed website
Mobile app
Social media (e.g., Facebook, Twitter, LinkedIn)
Reports and technical documents
Peer-reviewed journals
Databases (e.g., DHIS2)
Newsletters/magazines
Library or resource center

19. Which of the following content areas related to RMNCAEH+N are on the platform you use?

Content areas	**Tick all that apply**
Global RMNCAEH+N guidelines	
National RMNCAEH+N policies and guidelines	
State RMNCAEH+N policies and guidelines	
Program implementation materials	
Training materials	
Advocacy materials	
Case studies	
Job aids, SOPs, standardized tools or templates	
Clinical updates	
Reproductive health (e.g., family planning, fertility service, use of partograph)	
Maternal health (e.g., ANC, labour, delivery, PNC, PPH)	
Newborn and child health (e.g., small sick newborn, immunization)	
Adolescent health (e.g., youth-friendly)	
Nutrition (e.g., weighing of baby, growth monitoring, malnutrition, treatment of severe malnutrition)	
Care for the Elderly	
Human resources for health/health workforce (e.g., motivation, rewards, staff retention, team building)	
Health promotion (e.g., behavioural change communication, community mobilization, town hall meeting, social mobilization, risk communication)	
Quality of care/quality improvement	
Health financing (e.g., workplans, financing approach, DFF, DRF, resource management, health insurance)	
Logistics and supply chain management	
Client-centered care	
Monitoring, evaluation, research, & learning	
Others (specify):	

20. What are the barriers you face in consulting these sources of information?

	Tick all that apply
Poor internet network	
Missing/limited resources or content	
Login issues	

Payment for access
Lack of knowledge
Partner driven, sustainability issues
Lack of time, poor information seeking behavior
Poor power supply
Lack of storage devices
32Multiple link navigation to get info

21. What are the facilitators for consulting these sources of information?

	Tick all that apply
Rich content & quality information	
Current topics and updated information	
Simple and easily accessible	
Information is readily available	
Reliability	
Unlimited access to materials	
Professional development	
Interactive with video, & visuals contents	
User-friendly	
Ability to easily download materials	
Knowledge sharing	
Availability of a variety of learning resources including case studies, reports, PowerPoint presentations	
Network of QoC practitioners-community of practice	

22. What steps do you follow to access information online?

	Tick all that apply
Simply click on the link to access the platform	
Login registration	
Create an account	
Referral link	
Others (Specify)	

23. How useful are the following materials to you in relation to RMNCAEH+N QoC?

	Useful	Not Useful	Not sure
Videos			
Blogs (e.g., Health Watch)			
Datasets (e.g., indicators, data elements)			
Data visualizations (e.g., DHIS2 dashboard, Power BI etc.)			
Peer-reviewed journal articles			
Radio/Audio recording/Podcast			

Webinars or other passive learning events (i.e., you watch and listen, but do not interact with the presenter, Zoom etc.)
Meetings, courses, or other interactive learning events (i.e., you participate in activities, ask questions, complete exercises, etc.)

INFORMATION CONTENT

24. Which of the following content areas related to RMNCAEH+N QoC are on the platform you use?

	Regularly	Occasionally	Never	Not sure
Program implementation materials				
Advocacy				
Global RMNCAEH+N guidelines				
National RMNCAEH+N policies and guidelines				
Case studies				
Training materials				
Job Aids, SOPs, standardized tools or templates				
Clinical updates				
Reproductive health (e.g., family planning, fertility service)				
Maternal health (e.g., ANC, labour and delivery, PPH, PNC)				
Newborn and child health (e.g., immunization, SSNB)				
Adolescent health (youth-friendly)				
Mental health (e.g., postpartum depression)				
Nutrition				
Human resources for health/health workforce				
Behavioural change communication				
Quality of care/quality improvement				
Health financing				
Logistics and supply chain management				
Client-centered care (e.g., turnover time, attendance time, provider attitude)				
Monitoring, evaluation, research, & learning				

INFORMATION SHARING & PEER-TO-PEER LEARNING

25. How often do you share RMNCAEH+N information online? (Select one)
    a. Daily
    b. Most days
    c. 1-2 times a week
    d. 1-3 times a month
    e. Rarely

f. Never

PARTNER SUPPORT: USAID MCGL'S RMNCAEH+N LEARNING PLATFORM

26. Which of the following functions should the new learning platform fulfill? (Please select 3 priorities)

    a. Share country-level data and progress toward RMNCAEH+N goals
    b. Share upcoming events, initiatives and news related to RMNCAEH+N in Nigeria
    c. Provide a platform for members to share news and resources with each other
    d. Share RMNCAEH+N technical documents and resources
    e. Share "how to" documents and guides related to RMNCAEH+N
    f. Provide an inventory of the RMNCAEH+N-focused agencies and organizations throughout Nigeria
    g. Aggregate global data and information related to RMNCAEH+N
    h. Make the case for investing in RMNCAEH+N in Nigeria
    i. Establish clear linkages between RMNCAEH+N activities in Nigeria and global strategies/goals
    j. Other: _____

27. How would you prefer to share/receive information about RMNCAEH+N? (Select all that apply)

    a. Emails/e-newsletter
    b. Via website and online platforms
    c. Text message
    d. Mobile app
    e. Print newsletter or documents
    f. Other: _____

APPENDIX D – PICTURE GALLERY

Facilitators presentatings during the national needs assessment workshop

Participants during the breakout session

A cross-section of the participants during the workshop

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