Developing national learning systems to sustain and scale up delivery of quality maternal, newborn and child health care in the Network countries

26-27 April 2018, Entebbe, Uganda

TECHNICAL CONSULTATION REPORT

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ABBREVIATIONS AND ACRONYMS

AIIMS	All India Institutes of Medical Sciences
CHS	Center for Human Services
EHIAQ	Ethiopian Health Institutions Alliance for Quality
FRH	WHO Department of Family and Reproductive Health
GLL	Global Learning Laboratory
HMIS	health management information systems
IHI	Institute for Healthcare Improvement
LSTM	Liverpool School of Tropical Medicine
MCA	WHO Department of Maternal, Newborn, Child and Adolescent Health
MNCH	maternal, newborn and child health
MoH	ministry of health
the Network	the Network for Improving Quality of Care for Maternal Newborn and Child Health
PDSA	Plan, Do, Study, Act
QI	quality improvement
QoC	quality of care
SDGs	Sustainable Development Goals
SDS	WHO Department of Service Delivery and Safety
UHC	universal health coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

Achieving the Sustainable Development Goal (SDG) targets for goal 3 as elaborated in the Global Strategy for Women's, Children's, and Adolescent's Health (2016-2030) will require ensuring access to safe, effective, quality and affordable care for women and children.[1-3] Although coverage of health services has increased, many women, newborns and children continue to die from poor care practices, even after reaching a health facility. In 2016, the World Health Organization (WHO) identified improving quality of care (QoC) for women and children as a priority. In support of this vision, ten countries led by WHO, United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA), and in collaboration with partners, joined forces and established the Network for Improving Quality of Care for Maternal Newborn and Child Health (the Network).

The Network countries aim to halve the number of maternal and newborn deaths and stillbirths in participating health facilities within five years. This goal calls for identification of transformative responses that will support sustainable quality improvement (QI) at scale. Under the leadership of Ministries of Health of the participating countries, the Network supports the implementation of national strategies for QoC in the health sector by pursuing four strategic objectives: leadership, action, learning, and accountability.

With the learning objective in mind, four Network country teams (from Ethiopia, Ghana, Malawi, and Uganda), technical experts, Network partners and representatives of the Network's implementation and learning working group convened for a two-day technical consultation with the aim of facilitating the design and activation of the national learning systems in support of delivering quality care for maternal, newborn and child health (MNCH) in the Network countries. During the meeting, the country teams and technical experts shared experiences from country-based learning systems related to QoC. They initiated the development of a framework that will guide the Network countries in the development of national learning systems, including aspects of documentation of implementation, operational research and information sharing. Participants also agreed on the next steps for activating the national learning system in the Network countries.

This report summarizes the proceedings of the two-day technical consultation. The meeting agenda, meeting reference documents, and presentations are available in the Annexes.

1. INTRODUCTION

1.1 Rationale for the meeting

Achieving the SDG targets for goal 3 as elaborated in the Global Strategy for Women's, Children's, and Adolescent's Health (2016-2030) will require ensuring access to safe, effective, quality and affordable care for women and children.[1-3] Although coverage of health services has increased, many women, newborns and children continue to die from poor care practices, even after reaching a health facility. In 2016, the WHO identified improving QoC for women and children as a priority in addressing preventable maternal and child mortality. In support of this vision, ten countries led by WHO, UNICEF and UNFPA, and in collaboration with partners, joined forces and established the Network.

The Network countries aim to halve the number of maternal and newborn deaths and stillbirths in participating health facilities within five years. This goal calls for identification of transformative responses that will support sustainable quality improvement (QI) at scale. Under the leadership of Ministries of Health of the participating countries, the Network supports the implementation of national strategies for QoC in the health sector by pursuing four strategic objectives:

1. **Leadership:** Build and strengthen national institutions and mechanisms for improving QoC in the health sector.
2. **Action:** Accelerate and sustain implementation of QoC improvements for mothers and newborns.
3. **Learning:** Facilitate learning, share knowledge and generate evidence on QoC.
4. **Accountability:** Develop, strengthen and sustain institutions and mechanisms for accountability for QoC.

National health systems are complex, and solutions that lead to QI are often context-specific. Much is yet to be learnt and understood about how to effectively deploy and sustain practices that deliver quality care at facility, district or national levels. Recognizing this complexity and the importance of innovative thinking, the Network's strategic objective on learning prioritizes the development of national learning systems.

Building on existing capacities of national institutions and organizations, countries in the Network are now in the process of developing the national learning systems that will facilitate cross-country and cross-sectoral learning and knowledge exchange. Informed by implementation needs and experiences, the national learning system aims to bring together a community of health practitioners from facility, district, national and global levels who share and document experiences in order to develop evidence-based yet context-specific strategies for QI for scale up.

The national learning systems are comprised of layers of exchanges and learning within and between QI implementing teams in facilities, district, and national levels. These layers of learning reflect the context where care is provided, as well as the broader dynamics among different actors who are involved in organizing and supporting service delivery. For simplification, the learning systems can be viewed through two interlinked levels:

- **Local learning systems**: Facility teams involved in QI cycles generate best practices and learning. Much of this learning is of interest to both providers and communities who operate at facility and district levels and face similar challenges. The identification, monitoring and sharing of this learning will be facilitated by local learning systems. The mechanisms will vary and may include face-to-face or virtual learning communities, review and supervision processes built within or outside the existing structures and support mechanisms, etc.
- **National learning systems**: Much of the QI learning generated by local systems could have potential to be taken at scale and sustained nationally. This scale up will require a national learning system to facilitate the identification, documentation and sharing of this learning. The national learning system will work with local learning systems to identify learning that has potential for scaling up by applying rigorous evidence-based processes to document, analyse and synthesize the potential learning. It is expected that the national learning systems will be supported and facilitated by national institutions that have the capacity to document and generate the evidence and best practices for scale up.

Countries in the Network are now accelerating the implementation of their national QoC roadmaps. It is therefore critical that they establish these learning systems to facilitate the learning to inform systemic changes to bring evidence based best practices to scale for sustaining QI.

1.2 Meeting aims, objectives and participants

WHO convened the technical meeting with the aim to facilitate the design and activation of the national learning systems in support of delivery of quality care for MNCH in the Network countries. The meeting moved the Network towards the development of an implementation guidance note aiming to inform the establishment and running of this learning network.

Three objectives were identified for the meeting:

1. To share experiences from country-based learning systems related to QoC;

2. To co-develop the framework that will guide the Network countries in the development of national learning systems, including aspects of documentation of implementation, operational research and information sharing; and
3. To agree on the next steps for activating the national learning system in the Network countries.

The discussions, in English, were informed by reference documents (Annex 1) shared with participants in advance of the meeting and by expert presentations and case studies during the meeting. The complete meeting agenda is attached as Annex 2 of this report. The expected outcomes of these discussions were to:

- Share experiences from country-based learning systems related to QoC with participating country teams;
- Finalize the framework for national learning systems, including aspects of documentation of implementation, operational research and information sharing; and
- Agree on the next steps for activating the national learning system in selected countries.

The meeting brought together 56 participants (Annex 3), including participants from four selected Network countries (Ethiopia, Ghana, Malawi, Uganda) that are well positioned to start the development of the national learning system. Meeting participants included:

- Four Network countries teams (2-4 people) represented by:
    - Representatives of national learning institution identified by the Ministry of Health Quality of Care Technical Working Group
    - Ministry of Health (MoH) focal person for Network activities
    - Local implementing partner working in the learning districts
    - Representatives from WHO, UNICEF and UNFPA country offices
- Technical experts in establishing learning networks, information sharing and implementation research related to QI; and
- Representatives of the Network's implementation and learning working group, regional and global WHO, UNICEF, UNFPA and other technical partners.

1.3 Funding and declaration of interest

WHO funded specific country participants invited by WHO. Other partners interested in attending the meeting were expected to be self-funded and to provide support for some of the country team delegations for which support was not possible through WHO.

All participants were required to submit a declaration of conflicts of interests prior to the meeting. The Network Secretariat reviewed the declarations and identified no conflicts of interest.

1.4 Report content

This report synthesizes both the content shared and issues raised in the presentations, discussions, and working groups. Greater detail of the presentations' content is available in Annexes 4-24. The report concludes with key messages and next steps to further develop and to implement the Network's strategic objective of learning.

2. LEARNING AS A CORNERSTONE

Learning is a cornerstone for sustaining and scaling up QoC for MNCH. It is critical to sustain investments and lessons learnt. As one of the Network's four strategic objectives, specific outputs under learning include:

- a common language to document and share QoC efforts and improvements;
- the development and activation of mechanisms for sharing and facilitating exchange of learning; and
- the application of a process for evidence-based analysis and synthesis of knowledge and sharing.

National learning systems ensure that learning occurs and is shared across all levels of the health system to drive policy change. These systems inform countries' actions for sustaining and scaling up QoC. They build excitement and motivation within and between countries by sharing progress and challenges. Learning systems also provide a growing inventory of tested ideas and make data transparent, comparable, available and easily accessible. They must have a set of core indicators, a system for capturing qualitative data (e.g., case studies), and data collection synthesis.

Within learning networks, learning opportunities occur at all levels. Critically, partners must showcase both their successes and failures, as showcasing only the best practices and successful experiences interferes with learning processes. At the community and facility levels, frontline QI teams learn for better patient care. At the district and regional levels, learning occurs across facilities and communities for effective district management. At the national level, countries learn across districts for scale up. Globally, learning occurs across countries for replication. For a learning network to be effective, it must:

- develop or strengthen data systems to integrate and use QoC data for improved care;
- develop and strengthen mechanisms to facilitate learning and to share knowledge through a learning network; and
- analyse and synthesize data and practices for an evidence base on QI.

Greater detail about these criteria appears in Annex 4.

A need exists to establish a learning network to sustain QoC at the country level. In a case study from Malawi, learning requires a culture of documentation at health facilities to understand what works, optimization of existing structures within districts, and investment in the establishment of a national learning centre and learning labs for QI. Planning for implementation of QI requires consideration of effective methodologies and cost

implications. Although human resources remained a challenge, one district in Malawi found that the introduction of QI activities resulted in 144 days without a maternal death. Learning is a powerful mechanism for influencing policy.

3. EXPERIENCES FROM COUNTRY-BASED LEARNING SYSTEMS

Countries shared experiences from country-based learning systems related to QoC, including implementation experiences and other lessons learned. These experiences will inform the development of a national learning system.

3.1 Government systems to support learning in Ethiopia

Systems to support learning in Ethiopia occur at each level of the health system. At the facility level, learning occurs from client satisfaction surveys, Functional QI Teams, and pregnant mother conferences, for example. Additionally, facilities focus on building capacity in specific areas using a process that includes peer-based validation to help establish a culture for quality. Quality focal points within districts provide coaching and mentorship at the facilities. Each hospital chooses its own base process for QI, benchmarks its work and documents its best practices. This information is then sent to officials at the regional level. At the regional level, this information is validated during facility visits. Best practices are escalated upwards to the national level where they are disseminated.

The MoH does not prescribe the interventions or methodologies that must be used to improve QoC. Rather, health facilities themselves come up with the change ideas based on the problems they identify. If the ideas are successful, then they are shared within the learning systems. The MoH is responsible for oversight, documenting best practice, and Ethiopia's national quality strategy. Through a committee, the MoH aligns the various activities and methodologies. This process creates a competitive culture and puts on political pressure and leaders to become committed to QoC. To ensure that leadership is strong at all levels of the health system for learning, the MoH provides grants for projects at the facility level. These grants reward performance and facilitate the investment of health managers at different levels of the health system. Budget support for activities like meetings is limited, but support is critical to filling gaps.

Ethiopia's leaning district network includes 15-18 learning districts with high performance facilities supporting low performance facilities. Annex 5 expands upon the activities at each of level in the system and diagrams where QoC efforts sit within the national health system governance structure. The national framework shows how QoC will be delivered and how the model is adaptable at all levels of the health systems, including the grassroots level. The governance structures and approaches for QI reflect the different responsibilities at each level of the health system. The structures and approaches at each level speak to each other. The Health Service Quality Directorate is responsible for overseeing QI activities and coordinates with the programme directorates to ensure that learning can be dispersed to other related or non-related programmes.

Annex 5 also illustrates the Ethiopian Health Institutions Alliance for Quality (EHIAQ) Collaboration and partnership framework for supporting learning on QoC. Lead hospitals support member hospitals and health centre clusters. District learning networks spread from lead hospitals to health posts with high performing facilities supporting low performance facilities.

3.2 Establishing learning systems at district and facility levels in Uganda

In northern Uganda, the United States Agency for International Development (USAID)-ASSIST project developed its learning system through a collaborative improvement model with the goal to develop a systematic approach for assessment and implementation. Fifteen sites (e.g., regional hospitals, health centres, peripheral units) simultaneously tested changes, common indicators, and peer learning about how to improve care. This method set sites up for best practices to be scaled based on the maternal and newborn health QoC standards.

Interventions were addressed at each level of the health system, and motivation for change was intrinsic. Uganda had no allocated budget for change ideas, and improvement processes at sites were not based on financial support. Rather, the learning meetings drove the process changes that led to improved quality. Learning occurred at district monthly meetings and could occur from a distance. Other learning innovations included MoH protocols, skills labs, and suggestion boxes. The project did not include new technologies in the learning system; however, in different aspects of the overall QI programme, collaborating teams did use social media and other similar tools to facilitate learning. The pilot programme identified common gaps in learning systems, such as communication, respect and dignity, and staff retention.

To develop learning systems for quality MNCH, USAID-ASSIST has identified a need to have unified goals, focus on specific standards such as those where the performance is inadequate, build on lessons learnt, measure impacts and link to the global community. The programme used triangulation in order to ensure data validity. It also used data trends to monitor the situation rather than standalone snapshots. Based on these data, the programme has produced significant changes, including increases in the hospital budget and procurement. Communication has also improved. Coaching reports are needed next to uphold this trajectory. To maintain motivation and sustain QI beyond specific projects, countries must have leadership and ownership to establish learning systems. Greater detail of this pilot programme, including the facility self-assessment tool and programme outcomes, appear in Annex 6.

3.3 Building institutional ability to manage learning systems for quality of care in India

In India, the USAID-ASSIST project built institutions' ability to manage learning systems for QoC. The project aimed to reduce mortality and support the spread of QI methods in institutions in the Indian health system. The planning phase required implementers to understand the system's limitations so that the QoC programme's implementation could be adapted to the system. Each health system needed to precisely define what QI and learning means within their health system. This included defining which key structures are needed to implement QI and which tools were needed to assess systems readiness to implement and calibrate health system for implementation of QoC interventions. Most health systems, however, lacked a structure or system to help individuals learn and to sustain QI efforts.

During the project's implementation in six districts, it faced common barriers such as negative attitudes about the QoC changes and misunderstandings about what was expected. It is a challenge that QI does not necessary show impact. There are three ways to address universal barriers to why people think QI will not work:

1. Analyse and share patient-level results.
2. Generate aggregated data.
3. Adapt learning so that people can learn in different ways and will be better able to work with their counterparts.

Different types of skills are needed for learning. Learning is contextual and cultural. It comes with a cost and requires an investment. Since not everyone likes to learn, telling the story is crucial. Key take away messages from the project, which is detailed in Annex 7 along with single-facility case studies, include the following:

- Be precise with terminologies.
- National leadership must define what quality means within its health system.
- Start as quickly as possible in order to overcome the universal barriers to implementation. As little successes occur, they motivate health workers.
- Generating aggregated data is important for providing evidence for change.
- Learning requires champions.
- QoC requires a holistic approach.
- Eliminate fear. Be nice and optimistic.

4. APPLYING IMPLEMENTATION SCIENCE TO IDENTIFY AND SCALE UP EFFECTIVE LEARNING

4.1 Overview of implementation research

Implementation research occurs in the 'real world' and addresses how the 'how,' 'why', and 'what' are implemented as well as their effects. More specifically, it is "the scientific inquiry into questions concerning implementation—the act of carrying an intention into effect, which can be policies, programmes, or individual practices," (Annex 8). Concerns with interventions may occur at multiple levels (i.e., politics, programmes or individuals). Conducting implementation research requires implementers who ideally embed the research into their programmes and adapt implementation designs to local context.

In implementation research, the research question determines the methods and assumptions. Developing research questions is a complex process requiring researchers to follow eight steps:

1. Describe the intervention.
2. Describe the context.
3. Describe the system.
4. Describe the current implementation strategy.
5. Describe the barrier.

If researchers cannot answer describe the barrier due to a lack of information, this step should be the focus of their implementation research. If they have sufficient information about the five points above, they continue with the next step:

6. Describe the systems failure or underlying issue.

If researchers cannot describe the systems failure or underlying issue due to a lack of information, this step should be the focus of their implementation research. If they have sufficient information about it, they continue with the next step:

7. Describe what implementation strategies or changes could be used to address or overcome this failure.

If researchers cannot describe the possible implementation strategies or changes, this step should be the focus of their implementation research. If they have sufficient information about it, they continue with the final step:

8. Is/are the implementation strategy/strategies effective? What implementation outcomes will you measure to know?

Researchers who have reached the eighth and final step have identified a new implementation strategy that requires testing. This step should be the focus of their implementation research. If one does not know the problem, the problem is in the process and may require implementation research. If the problem is known, then it is a management issue. Annex 8 includes implementation research questions from a case study in Senegal and offers an exercise for developing research questions. Implementation research funds (US$20,000) are available to the four Network countries that participated in this meeting.

4.2 Using implementation science to document and learn

In India, the Janani Suraksha Yojana conditional cash transfer scheme increased the number of births at government health facilities. This increase has affected health facilities unequally. Already burdened district hospitals experience a major burden, while primary health centres remain largely unutilised. As a result, perinatal and neonatal mortality have stagnated. To test the hypothesis that improving quality of services leads to improved faith of the community and thus improved service utilisation at primary health centres, researchers in India used implementation science to document and learn. Researchers tested a holistic QI package in a stepped wedge randomized controlled trial among 15 primary health centres in Haryana.

Facility teams with external facilitation drove the QI package that included capacity building, regular review of key inputs and outcomes, and identifying and closing gaps. They sought to improve 12 critical practices for improving QoC for MNH using readily available tools and packages. QI processes occurred internally and externally. Internal QI processes focused mainly on quality and included weekly meetings. External QI processes focused mainly on assessment, feedback, motivation and problem solving. These processes involved external experts and quality coaches.

Following implementation of the QI package, researchers found a modest improvement in seven of the 12 critical practices: meeting participation of nurses and doctors, hand hygiene, number of deliveries at the primary health centres, skin-to-skin contact, recording of fetal heart rate, use of the partograph, adequate discharge preparedness (e.g., exclusive breastfeeding at discharge, counselling on danger signs), and discharge after 24 hours after delivery. Factors such as the transfer of staff and gaps in leadership at the facility level affected the impact of the intervention. Importantly, the results showed that most stillbirths and maternal deaths happened before women reached the primary health centres.

Based on the findings and case studies reported in Annex 9, operationalization of the QI model was feasible, acceptable and effective. It improved utilization of services, confirming the initial hypothesis. To ensure internal and external QI support, on-going efforts are needed.

5. APPROACHES, TOOLS, AND PLATFORMS TO SUPPORT LEARNING

Learning within and between countries requires a common language for learning, standardizing documentation and reporting. A variety of tools are available for health facilities and districts to record and track change ideas, to conduct routine monitoring, and to document improvements in QoC. Platforms are also available to facilitate learning about quality care between countries.

5.1 WHO Programme reporting standards

In response to the need for adequate and transparent reporting about programme processes, WHO developed *Programme reporting standards for sexual, reproductive, maternal, newborn, child and adolescent health.*[4] Standardized reporting and systematic data collection are crucial for successful replication, scale-up, and the interpretation of results and lessons learned. The reporting standards provide a template to ensure systematic data collection on 'what' works, 'how' it works, and the context ('where') it works. Programme implementers and researchers may use this template for describing programme preparation, implementation and evaluation processes. The tool includes five components (i.e., programme overview, programme components and implementation, monitoring, evaluation and results, and synthesis) plus a checklist and is intended for use in multiple ways during a programme's life cycle. It is adaptable for work on QoC. Additional details of the tool's development and organization are available in Annex 10.

5.2 Tools to document learning in district and facility approaches

Countries seeking to document learning in district- and facility-level approaches to improve QoC may consider structured learning stories and/or reporting templates.

5.2.1 Learning stories

Learning stories require a beginning, middle, and end. At the facility level, the beginning of a learning story requires documenting the aim and objectives of a specific patient goal. The middle requires documenting the methods one used to reach the goal and the context (e.g., barriers, facilitators) in which this approach was used. At the end of the facility-level learning story, one must describe what was improved and what was done, documenting what the data show and situating the story in the context of the bigger picture. When writing learning stories at the district level, the beginning and end are the same as they are for a facility-level learning story. The middle of the story, however, is longer to reflect the multiple methods and activities used at the district level to achieve the goal. Examples are available in Annex 11.

5.2.2 Reporting templates to capture district-level changes ahead of national scale-up

The Plan, Do, Study, Act (PDSA) process captures knowledge and change processes to make them more efficient and effective. The lessons learned may be adapted in response to a change in context. Change ideas include the 'good idea' as well as the data to support the idea. These ideas may be linked to theory and WHO standards, and they can lead to scale-up. Developing a change package requires (1) recording changes introduced at specific steps in the pathway (i.e., when, where, how); (2) evaluating evidence linking introduction of changes to process performance; (3) building a package of successful changes for each step along the continuum of care; and (4) scaling up the change package. Annex 12 illustrates the steps in this process by presenting change ideas along the tuberculosis care pathway at a South African sub-district with 53 clinics.

5.3 Tools to monitor and document improvements

Tools like dashboards and data aggregators exist for routine monitoring and documenting improvements at the facility-, district- and national-levels. Examples of how to document and disseminate learning appear in Annex 13 along with additional resources from USAID-ASSIST. These tools capture the changes needed for continuous improvement processes as well as the data. Researchers and implementers have different motivations, particularly around publishing, that may influence tool selection. Tool selection, motivating frontline workers to document QoC improvements, linking tools and approaches and disseminating information require greater thought and input from the Network.

5.4 Platforms to support learning across countries

5.4.1 WHO Global Laboratory for Quality Universal Health Coverage

The WHO Global Learning Laboratory (GLL) for quality universal health coverage (UHC) is a repository of online information about quality UHC with links to MNCH. Its purpose is "to create a safe space to **share** knowledge, experiences & ideas; **challenge** those ideas & approaches; and **spark** innovation for quality UHC," (Annex 14). Using different mechanisms for capturing emerging learning on QoC, it documents the 'what' and 'how' using simple and precise language. The GLL also seeks to collectively define the way forward for linking MNCH QoC learning with broader QoC efforts. Clinical care is complex and requires quality at the frontline. Rather than unnecessarily reinventing QoC, the GLL seeks to support learning between countries so that members of the platform can access existing knowledge and exchange ideas. With programmatic pods driven by participants' interests (e.g., compassion; water, sanitation and hygiene), country deep dives, workshops, and knowledge products, for example, the platform is more than a traditional learning platform. Anyone may register to join the GLL (www.who.int/servicedeliverysafety/areas/qhc) and access its packaged learning resources.

5.4.2 The Network for Improving Quality of Care for MNCH

The Network provides opportunities for global learning via its website (www.qualityofcarenetwork.org) that features three types of tools (Annex 15). Website visitors and Network members may access knowledge (e.g., library, database, country pages) or packaged learning (e.g., documentation, stories, podcasts). Individuals and countries may also exchange know-how, engaging with other members through the communities of practice, webinars, and social media (@qualitycareNET).

6. DEVELOPING GUIDANCE FOR BUILDING NATIONAL LEARNING SYSTEMS

6.1 Initial thoughts from the Secretariat

The Secretariat developed a matrix to assist initial thinking around the development of guidance for building national learning systems to sustain and scale up delivery quality MNCH care (Annex 16). The matrix outlines who learns, what is learnt, how to document learning, and how this knowledge is shared across all levels of QI efforts (i.e., from the health facility or community up to the national level). Learning is expected to occur in two directions:

- Horizontally, learning occurs, is documented and is shared within the same level of implementation (i.e., across facilities, across districts or nation).
- Vertically, knowledge from within facilities is shared up to district level, and knowledge from the district is shared up to the national level. Knowledge from the district and national levels may be shared internationally across countries in the Network.

National learning systems should ideally have both data and stories. The data will cover information on what will is needed to scale up the QI initiatives and advance health. The stories will expand on how this scale-up could be achieved by documenting the best practices. Common tools may need to be developed to capture these data and stories. Mechanisms to share this learning require further exploration, including whether existing platforms could be leveraged to share learning or whether new platforms must be created. Sharing learning will therefore require the development of a common language and defined terminology to be used within facilities, districts, countries and countries in the network. This task may need to be developed early on by the Network.

Building national learning systems may also require additional support for the learning process as well as links to processes that help identify which learning to scale up and implement quickly (operational research). For instance, at the facility level, there may be a need for QI coaching and a re-design of systems with the aim to optimise and use of existing management processes to address the QI initiatives and learning. Similarly, additional support may be needed at the district level (e.g., change in district management practices and operations research) and at the national level (e.g., understanding systems support for learning, a National Learning Officer for QI). The national QI agenda will be best advanced if countries commit to setting up a Quality Directorate. Addressing QI requires a bottom-to-top approach with three important steps:

1. Identify gaps.

2. Bring together common knowledge and share learning.
3. Address crosscutting issues like the need for communication and media platforms.

Building national learning systems will require countries to ask and answer questions such as:

1. What do we want to learn and how do we capture it?
2. How should we share this learning/information?
3. Should and can we develop a common terminology within the Network?
4. What is the role of National Learning Centres in supporting learning within and between countries?
5. What capacities do we need?

6.2 Input from the working groups

Four parallel working groups further developed the Secretariat's initial proposal on developing a national learning system to sustain and scale up delivery of quality care for MNCH. Notes and presentations from these working groups are available in Annexes 17-20.

6.2.1 Group 1: What is the product or output of learning?

In its output or product, the learning network should aim to capture both data and stories. The data to be captured should include both normal health outcomes (e.g., deaths) and the performance of facilities, districts and national systems. Some of these data are already being captured in health management information systems (HMIS), but the data quality presents a challenge. A lack of appropriate indicators, particularly for experience of care, necessitates the development of new indicators. Data must be collected at baseline and continuously as interventions are implemented. Process documentation will explain how the outcomes were achieved.

Capturing stories as part of the learning process raised numerous questions, including the following:

- What components of the story do we need to know? Which are most important to include?
- How do we decide that we will need to share the story?
- How do we document from the start so that we can tell the story later?
- How do we document everything so that when we want to share, we have the details?
- Is guidance needed on how to transmit learning?

There is a need to streamline how stories are transmitted through learning systems because not all stories will likely require transmission to the national level. Clear guidelines are needed for selecting which stories to share, and greater sharing of expertise between countries is welcomed. A standard template that countries can adapt to facilitate implementation would assist with capturing stories for transmission. All stakeholders, including frontline health workers, should benefit from the learning. If learning is not happening at all levels, it warrants an inquiry. Documenting learning at the provider level is especially difficult.

In Ghana, on-going meetings at the regional level were adapted for data capture on QoC. These meetings have a peer-review system for discussions, where each region showcases what they are doing for QoC. Meetings include discussions of tools, inputs, processes, outputs and processes for their review. The meetings are rotated from region to region at regular intervals. These meetings aim to promoting competition between regions in an attempt to improve regional performance.

6.2.2 Group 2: How should we share this information?

Learning products from horizontal and vertical QI initiatives include presentations, self-assessment tool, reports, scorecards, dashboards, accreditation tools, site level documentation journals, case studies, interviews and newspaper articles. To share knowledge from these products, the Network should explore using interactive approaches (e.g., in person and virtual peer-to-peer learning platforms). Critically, these learning systems should be integrated into existing meetings, possibly in dedicated sessions, and should include both horizontal and vertical learning exchange visits. Virtual platforms for sharing information include social media platforms (e.g., WhatsApp, Facebook, Skype) and traditional messaging mechanisms (e.g., SMS, websites).

Guidance is needed on how to share learning. Sharing learning effectively will require:

- developing a simplified tool to capture stories and best practices;
- training on how to use this tool; and
- monitoring and assessment of progress and the possibility of using and adapting existing tools for the purpose.

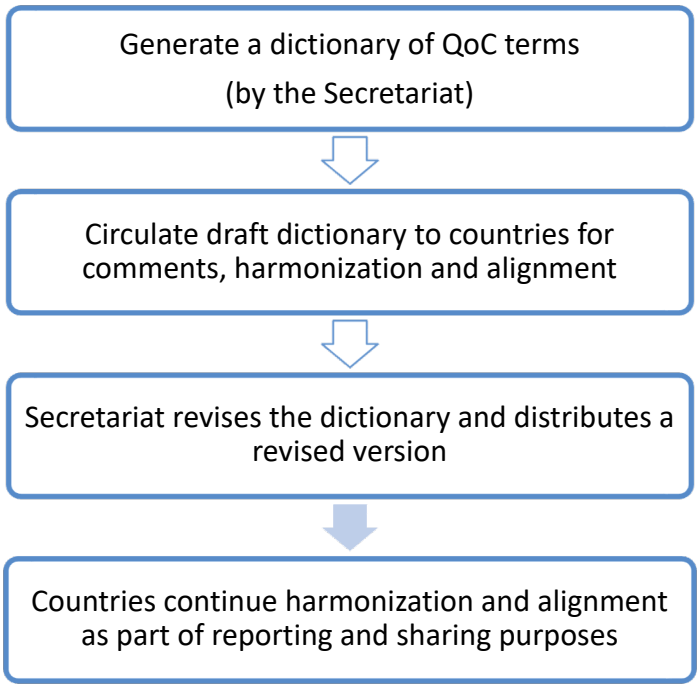
At the national level, quality must be incorporated into normal discourse. There is a need for prioritization of approaches to properly situate quality issues in national discourse and a need to involve communities in QI systems. Multiple efforts around QI have arisen because the existing systems are failing to deliver the requisite quality. Therefore, out of the box thinking is imperative. Country teams must explore innovative measures to sell the QI message and must remember that leadership is key. Leaders must be held accountable to improve QoC.

6.2.3 Group 3: Should and can we develop a common terminology within the Network?

A common terminology is needed within the Network, specifically a dictionary of QoC terms. Such a dictionary should be kept simple and be tailored to the Network. The domains to be covered in the definitions provided in the dictionary include:

- generic QI terms and interventions (that can be adapted from other established sources);
- terminology specific to the Network (e.g., learning sites or districts, mentor, change package);
- data and indicators (e.g., common, catalogue, implementation milestones); and
- QoC standards that will need to be adapted to each country context.

The process for developing this dictionary could occur as follows:



6.2.4 Group 4: What is the role of National Learning Centres in supporting learning within and between countries?

The role of National Learning Centres is to:

1. Support data generation to facilitate learning within and between countries;
2. Build capacity to conduct operations research;
3. Provide technical support to develop critical questions and how to answer them; and

4. Help synthetize evidence in support of scale-up and implementation of best practices.

Existing platforms in countries may be harnessed to provide this support. Learning centres should aim to develop capacity at various levels to facilitate learning and should promote the use of technological advancement in documenting learning. Leadership and management groups must be specifically targeted to support documentation of learning. Regarding the content of the learning, National Learning Centres will help collate stories that explain the reasons behind changes in data and will explore opportunities to facilitate sharing (e.g., national scientific conferences).

7. COUNTRY PROPOSALS FOR STRENGTHENING A NATIONAL LEARNING SYSTEM

Network countries reviewed or developed proposals for strengthening their national learning systems to facilitate, sustain and scale up the delivery of quality MNCH care. The objectives of these learning systems are as follows:

- To inform actions for sustaining and scaling up QoC;
- To build excitement and motivation by sharing progress and challenges within and between countries;
- To offer a growing inventory of tested ideas to help communities engaged in similar activities; and
- To make data transparent, comparable, available and easily accessible.

Country proposals are available in Annexes 21-24.

7.1 Ethiopian proposal

The Ethiopian country team documented its proposal for a national learning system in the matrix proposed by the Secretariat (Annex 21) and identified Jimma University as the learning hub. Jimma University will be responsible for gathering learning from the learning districts and other tasks, pending the development of any Network guidance for learning centres. The team addressed what is needed for a national learning system that covers all levels of the health system. At the facility level, for example, learning occurs among MNCH providers, facility heads, HMIS data managers, additional support staff, patients and family members/influencers. At the *woreda* level, for example, learning is shared at learning sessions and review meetings as well as benchmarking learning visits. At the regional and national levels, for example, learning is documented using reporting templates, case stories, change idea aggregation and aggregation of HMIS and non-HMIS data.

7.2 Ghanaian proposal

The Ghanaian country team envisaged a learning hub situated at the research division of the Ghana Health Service. This learning hub will design tools for data collection and analysis, synthesize the learning stories, and support implementation and operational research, for example. Like the Ethiopian team, the Ghanaian team used the matrix proposed by the Secretariat to help guide team members' initial thoughts on additional aspects of the national learning system (Annex 22). Knowledge at the national level would be shared with posters, conferences, flyers, leaflets, and websites. At the peripheral or district level, it would be shared with review meetings, learning sessions, and social media (e.g., Whatsapp,

Facebook). Districts would use both existing tools (e.g., registers, forms, HMIS) and additional tools that would be developed to share data, case studies, and stories.

7.3 Malawian proposal

The Malawian country team proposed a national learning system that aligns with their QoC framework for maternal and newborn health and sits within the 'learning, knowledge sharing, and generate evidence' pillar (Annex 23). This pillar includes strengthened data systems (e.g. datasets for reporting, data dashboard); a virtual learning system (e.g., national-global learning network, knowledge repository); a learning system (e.g., district-community collaboration); and evidence, infrastructure and will for scale up (e.g., redesigning from best practice, operation research on QoC).

Learning networks will occur at the community, district, and national levels. Examples of learning network activities at the community level include community scorecards and radio listening clubs. Activities between communities and districts include open days and community involvement in the maternal death review process. Malawi will implement quality labs between district and the national levels to provide training, capacity building, knowledge management, supervision, mentorship, and coaching. The quality labs will include a zone/satellite focal person, chief quality officer, innovations officer, and coordinator. At the national level, examples of learning network activities include a National Quality Commission and national conference.

7.4 Ugandan proposal

The Ugandan team identified current learning activities at the health facility level, such as facility-level QI meetings, a Whatsapp group for distance learning, and continuing medical education (Annex 24). To strengthen learning at this level, it was proposed to:

1. Explain the Network's goal to frontline health workers
2. Encourage facilities to incorporate learning into primary health care work plans and budgets
3. Schedule specific learning days for continuing medical education
4. Ensure the implementation of actions from the review meetings
5. Train health workers on documentation of the QI process

At the district level, the team identified current learning opportunities, such as district quarterly review meetings. To strengthen learning at this level, it was proposed to:

1. Encourage districts to include learning in their work plans and budgets
2. Make districts learning sites and select a few as learning catalysts

Current learning activities at the regional referral level include regional learning sessions that are mainly partner led. To strengthen learning at the regional level, it was proposed to:

1. Link the selected districts to the respective regional referral hospitals
2. Conduct inter-district learning sessions
3. Develop the capacity of RRHs and support them to coordinate the inter-district learning sessions

At the national level, Uganda currently has a national QI conference. To strengthen learning at this level, it was proposed to:

1. Identify tracer intervention areas for monitoring
2. Liaise with Makerere University School of Public Health and the Regional Center for Quality of Health Care to support learning
3. Encourage sharing at national QI conferences
4. Upload best practices to the MoH portal
5. Encourage the adoption of web-based QI documentation
6. Provide updates during quarterly QI coordination meetings
7. Include QoC indicators in the national HMIS

8. NEXT STEPS

The meeting was a step towards synthesizing evidence on how to organize a learning system at the country level. It raised new questions about what Network members want to learn from the perspective of the Network, how QoC gains and lessons learned in the Network can be transferred to other programmes within health systems, and whether the Network should place greater effort into understanding how people learn in different contexts, for instance.

Requirements coalesced for country learning systems. Participants agreed upon:

- the need to develop a common terminology;
- the need to share tools to capture data and stories;
- the need for guidance on how to implement learning systems;
- the need for guidance on how to identify which learning is relevant and at which levels to share this learning;
- the role of the learning centres; and
- the need to build capacity and set learning priorities.

The meeting was concluded by remarks that implored countries to build systems that will harness existing capacities to document and learn lessons during QoC implementation (Annex 25). The findings and conclusions of this technical consultation will inform the development of learning guidance on how to organize a learning system at the country level. This guidance will be further discussed and tested with countries before it is finalized as one of the core documents that operationalizes the Network's strategic objectives.

In follow-up of the meeting, the Network country teams will:

- develop terms of reference for their national learning centres;
- explore the use of partner organisations within countries for technical assistance; and
- advise the WHO on what technical assistance countries will need for the activities in the learning network.

In follow-up of the meeting, the Network Secretariat will:

- develop learning guidance on how to organize and manage a learning system at the country level;
- form a working group on how to build learning skills;

- draft generic terms of reference and a broad scope of work for national learning centres that countries can adapt and contextualize;
- initiate the development of a dictionary of terms using simplified language; and
- lead the standardization of available tools for documenting learning across all levels of care.

REFERENCES

1. United Nations General Assembly 69th session. U.N Doc. A/69/L.85 Annex - Transforming our world: the 2030 Agenda for Sustainable Development. Geneva: United Nations; 2015. p. 2-34.

2. Every Woman Every Child. The Global Strategy for Women's, Children's, and Adolescents' Health 2016-2030. Geneva: Every Woman Every Child, 2015.

3. Fifty-eighth World Health Assembly. WHA58.33 Sustainable health financing, universal coverage and social health insurance. Geneva: World Health Organization, 2005.

4. WHO. Programme reporting standards for sexual, reproductive, maternal, newborn, child and adolescent health. Geneva: World Health Organization, 2017.

ANNEX 1. MEETING REFERENCE DOCUMENTS

1) The Network (n.d.). "The Network for Improving Quality of Care for Maternal, Newborn and Child Health: Key Resources Briefs." Retrieved 3 Sept, 2018, from http://www.qualityofcarenetwork.org/network-improve-qoc.
2) The Network (2017). The Network for Improving Quality of Care for Maternal, Newborn and Child Health: Strategic Objectives. Geneva, World Health Organization: 1-24.
3) The Network (2017). Launch of the Network for Improving Quality of Care for Maternal, Newborn and Child Health: Meeting Report. Geneva, World Health Organization: 1-25.
4) The Network (2017). Network learning meeting report. Geneva, World Health Organization.
5) The Network (2017). Implementation Guidance: Improving quality of care for maternal, newborn and child health [working document]. Geneva, World Health Organization: 1-8.
6) Peters, D. H., et al. (2013). Implementation Research in Health: A Practical Guide. Geneva, Alliance for Health Policy and Systems Research, World Health Organization: 1-67.
7) WHO (2017). Programme reporting standards for sexual, reproductive, maternal, newborn, child and adolescent health. Geneva, World Health Organization: 1-23.

ANNEX 2. MEETING AGENDA

Day 1 – Thursday, 26 April 2018

Time	Session	Person responsible
08:30-09:00	Registration	
Chair: Wilson Were, WHO HQ		
09:00-09:30	Welcome, introductions, declaration of interests	Wilson Were, WHO HQ
09:30-09:45	Meeting objectives and expected outcomes	Nuhu Yaqub, WHO AFRO
Session 1: Setting the scene: Learning, as a corner stone for sustaining and scaling up quality of care for MNCH		
09:45-10:00	The role of learning in sustaining and scaling up quality care for MNCH – a strategic objective of the Network	Blerta Maliqi, WHO HQ
10:00-10:15	The need to establish a learning network to sustain QoC at the country level: Malawi's point of view	Andrew Likaka, Ministry of Health, Malawi
Session 2: Sharing experiences from country-based learning systems related to QoC. The session will share country and other implementation experiences and lessons learned that could inform the development of a national learning system. *Each presenter: up to 20 min presentation, 10 min discussion*		
10:15-10:45	Government systems to support learning related to quality of care: Ethiopia experience	Hillina Tadesse, Federal Ministry of Health, Ethiopia
10:45-11:15	Break	
11:15-11:45	Developing learning systems at the district and facility level to support delivery of quality care – the experience of USAID ASSIST project, Uganda	Esther Karamagi Nkolo, USAID ASSIST, Uganda
11:45-12:15	Building institutions ability to manage learning systems for quality care – the experience of the USAID ASSIST project in six states in India	Nigel Livesley, WHO HQ
12:15-12:30	Discussion	
12:30-13:30	Lunch	
Chair: Stefan Swartling Peterson, UNCEF HQ		
Session 3: Applying implementation science to identify and scale up effective learning		
13:30-14:45	Improving quality of care for MNH in primary health care facilities - Using implementation science to document and	Ramesh Agarwal, All India Institute

	learn. Experience of Haryana State, India (Presentation 30 minutes, Discussion 45 minutes)	of Medical Science (AIIMS), India
14:45-15:30	Overview of implementation research (Presentation 20 min, Discussion 25 min)	Debra Jackson, UNICEF HQ
15:30-16:00	Break	
Session 4: Approaches and tools to support learning within and between countries. Developing a common language for learning, standardizing documentation and reporting.		
16:00-17:00	WHO's Programme Reporting Standards	Moïse Muzigaba, WHO HQ
	Examples of templates to document learning in district and facility approaches to improve quality care	Nigel Livesley, WHO HQ
	Reporting templates used to capture successful changes in a 9 district demonstration phase of TB QoC ahead of national scale-up in South Africa	Pierre Barker, IHI
	Facility and district level tools to monitor and document improvements	Tamar Chitashvili, URC
Session 5: Platforms to support learning across countries		
17:00-17:10	Facilitating learning about quality care between countries – the experience of WHO Global Laboratory of QoC for UHC	Nana Mensah Abrampah, WHO HQ
17:10-17:20	Facilitating learning about quality care between countries – the experience of the Network for Improving quality of care for MNCH	Bénédicte Walter, WHO HQ
17:20-17:30	Discussion	

Day 2 – Friday, 27 April 2018

Time	Session	Person responsible
Chair: Tamar Chitashvili, URC		
08:30-08:45	Recap of Day 1	Zainab Naimy, WHO HQ
Session 6: Developing the guidance for building national learning systems to sustain and scale up delivery quality maternal, newborn and child health care		
08:45-09:30	Initial thinking on developing a national learning system to sustain and scale up delivery of quality care for MNCH (Presentation 15 min, Discussion 30 min)	Blerta Maliqi and Nigel Livesley, WHO HQ

09:30-11:30	Four parallel working groups to review and further develop the initial proposal on developing a national learning system, including:
	• Who learns and how we share learning (who and how):
	  ○ Activation and use of local platforms to support sharing of learning within countries
	• What do we want to learn and how do we capture this learning
	  ○ Develop a common terminology to describe quality of care, quality improvement, etc.
	  ○ Capturing data and information to facilitate documentation and sharing of learning within and among countries
	• How do we link with processes that assist in identifying learning that needs to be scaled up and accelerating implementation (operational research)? What capacities do we need?
	• Role of the learning centres/hubs to support learning within and across countries	

10:30-11:00	Break	
11:30-12:30	Facilitated discussion to consolidate feedback	
12:30-13:30	Lunch	
Chair: Pierre Barker, IHI		
Session 7: Network countries review or develop their proposals for strengthening a national learning system to sustain and scale up delivery of quality maternal, newborn and child health care		
13:30-15:30	Individual country working groups further refine the country specific proposals, including next steps for activating or strengthening the national learning system	
15:30-16:00	Break	
16:00-17:00	Country presentations on next steps to strengthen or activate the national learning systems (5 min presentation 10 discussion of each presentation) • Ethiopia • Ghana • Malawi • Uganda	
17:00-17:30	Next steps and closing	Blerta Maliqi and Wilson Were, WHO HQ

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