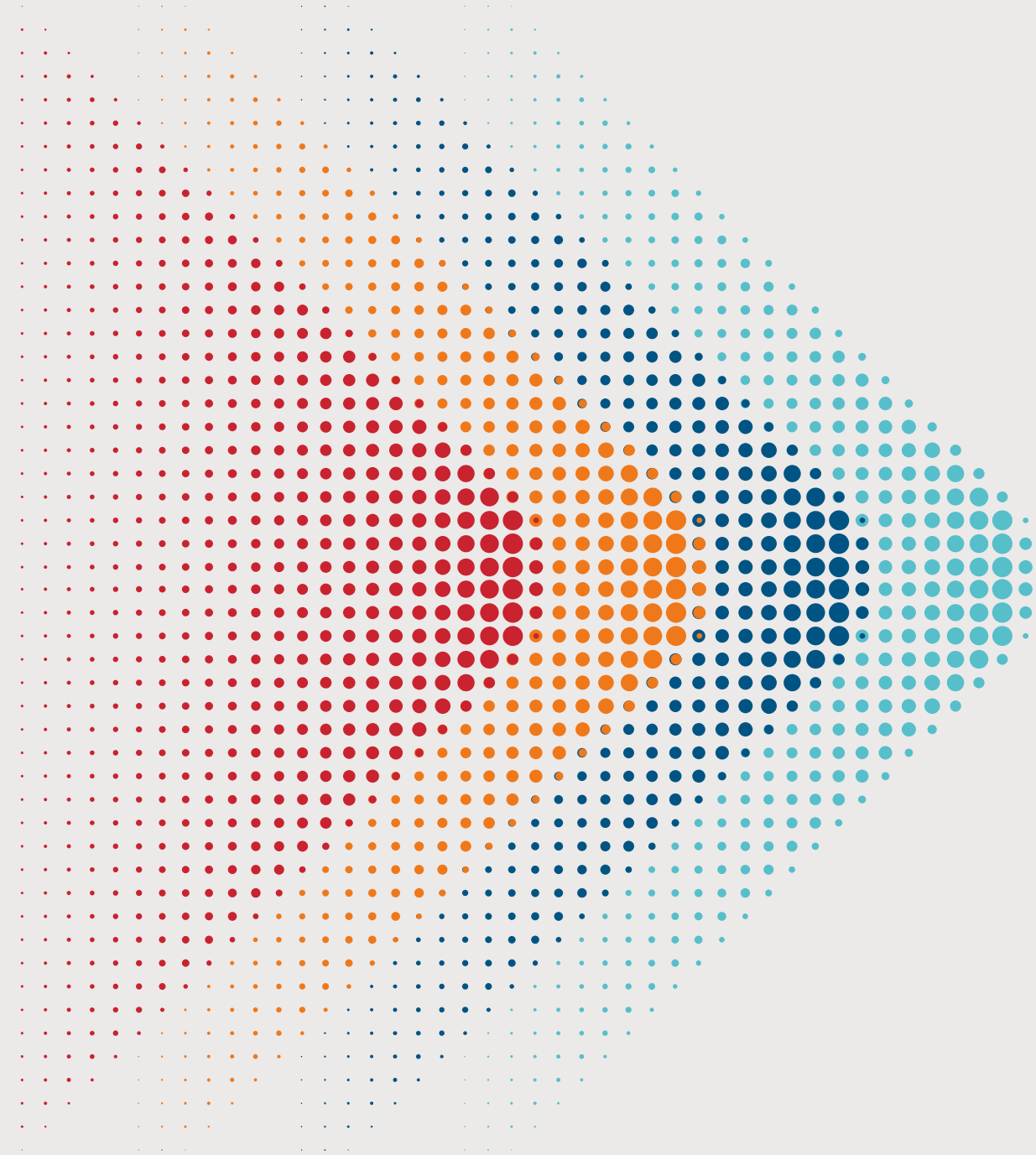
The Network for Improving Quality of Care for Maternal, Newborn, and Child Health

EVOLUTION, IMPLEMENTATION AND PROGRESS

2017–2020 REPORT

World Health Organization



The Network for Improving Quality of Care
for Maternal, Newborn, and Child Health

EVOLUTION, IMPLEMENTATION AND PROGRESS

2017–2020 REPORT

World Health Organization

The network for improving quality of care for maternal, newborn and child health: evolution, implementation and progress. 2017-2020 report

ISBN 978-92-4-002374-1 (electronic version)
ISBN 978-92-4-002375-8 (print version)

Printed in Switzerland.

Design and layout: Annovi Design.

Contents

Foreword v

Acknowledgements vi

Abbreviations vii

Executive summary viii

Introduction 1

Objectives of the report 2

Scope of the report 3

Why quality of care matters 5

Global trends in maternal, newborn and child health 5

Quality of care within universal health coverage and primary health care 6

Challenges to implementing quality of care for maternal, newborn and child health 6

WHO framework and standards for improving quality of care for maternal, newborn and child health 7

The Quality of Care Network 9

The evolution of the Network 9

A country-led implementation approach to quality of care 11

Global support for country-led implementation 13

Catalysing change for quality of care 17

Country progress across Network strategic objectives 17

Leadership 21

Action 24

Learning and accountability 28

Learning from implementation: Levers that enhance quality of care implementation 35

The way forward 39

References 40

Foreword

In 2017, ten countries and partners established the Network for Improving Quality of Care for Maternal, Newborn and Child Health. The countries in the Network committed to halving maternal and newborn deaths and stillbirths and to improving the experience of care for pregnant women, mothers, and their babies in health facilities within five years.

Despite significant increases in access and coverage of health services for mothers and children, a staggering number of women and newborns still face sickness and death during and after childbirth. There is still much work to be done to improve quality of care in health systems around the world.

Most maternal and newborn deaths and stillbirths can be prevented with good quality care, which is critical for addressing health system inequities and inefficiencies, improving accountability, and providing dignified and respectful service delivery.

A well-functioning health system is also a more resilient health system, better able to prepare for and respond to external shocks, disease outbreaks, and other health emergencies.

The country-driven, collaborative model presented in this report serves as an example for governments and partners to operationalize quality of care for maternal and newborn heath in their health systems.

This report contains valuable lessons learned on how to build and institutionalize health systems able to implement quality of care across programmes and countries.

First, ownership and leadership by national governments is essential to establish and manage quality of care systems and structures and deliver results.

Second, the alignment and support of technical and funding partners and other stakeholders, such as academia, civil society, and health professional associations, enables the translation of the goals into action.

Third, continuous technical support from the World Health Organization and partners in introducing and implementing evidence-based quality of care standards and guidance, along with facilitating the sharing of knowledge and lessons learned, has enhanced South-South learning and collaboration for maternal and newborn health and quality of care.

But significant work to improve quality of care is still needed.

More investment is needed to consolidate the foundations of health systems, improve the engagement of communities to define and deliver quality care for mothers and newborns, and cultivate a quality culture within and among health managers and the broader health workforce.

Looking ahead, WHO will expand its efforts to improve quality of care beyond maternal, newborn and child health, and to expand the number of Network countries.

Working together, we can build a healthier, safer, and fairer world for all.

Dr Tedros Adhanom Ghebreyesus
Director-General, WHO

Acknowledgements

The World Health Organization gratefully acknowledges the contributions of various individuals, organizations and countries that have contributed immensely to the conception of the Network for Improving Quality of Care for Maternal, Newborn and Child Health (the Network) as well as the implementation of Network activities in participating countries since 2017. We would like to recognize the Governments of the Network countries – Bangladesh, Côte d'Ivoire, Ethiopia, Ghana, India, Malawi, Nigeria, Sierra Leone, Uganda and the United Republic of Tanzania – and their Ministries of Health for their leadership and commitment to improving quality of care for MNCH.

This report was written by Blerta Maliqi, Moïse Muzigaba, Nuhu Yaqub Jr., Bénédicte Walter, Theresa Diaz, Martin Dohlsten, Shamsuzzoha Syed, Matthew Neilson, Nana Mensah-Abrampah and Ozge Tuncalp, with the direction of Anshu Banerjee, Director of the Maternal Newborn Child Adolescent Health and Ageing department within the Universal Health Coverage and Life Course Division at World Health Organization (WHO) headquarters in Geneva. Special thanks go to Rachael Hinton (RHEdit) for her support to compile this report, Carol Nelson for copy-editing and Roberta Annovi for the report design.

Special thanks also go to the following individuals who contributed to the compilation of Network country examples:

- Bangladesh: Minara Chowdhury, Muntasir Moin Nabil, Mamun Bhuiyan, Sumona Ferdous (Institute for Healthcare Improvement); Umme Salma Jahan Meena (Save the Children Bangladesh).
- Ethiopia: Desalegne Bekele, Ftalew Dagnaw, and Aynalem Legesse (Federal Ministry of Health); Haimanot Ambelu Workineh (WHO Ethiopia).
- Malawi: Andrew Likaka, Bongani Chikwapulo, (Ministry of Health); Harriet Chanza (WHO Malawi).
- Uganda: Joseph Okware, Jesca Nsungwa Sabiiti (Ministry of Health); Olive Sentumbwe, Ibrahim Kirunda, Robert Mrema, Bodo Bongomin, (WHO Uganda).

We give thanks to the representatives of the Ministries of Health of the 10 Network countries who lead the Network through the Leadership Working Group and the health managers and health workers in learning facilities and districts.

This report would not have been possible without the contributions of many to the implementation of the Network, including Deepti Agrawal (WHO India), Abosede Adeniran (Federal Ministry of Health Nigeria), Md. Nurul Amin (Ministry of Health and Family Welfare Bangladesh), Ernest Konadu Asiedu (Ministry of Health Ghana), Pierre Barker (Institute for Healthcare Improvement), Dinesh Baswal (Ministry of Health and Family Welfare India), James Bunn (WHO Sierra Leone), Ram Chahar (WHO India), Tamar Chitashvili (University Research Co), Anthony Costello (WHO HQ), Bernadette Daelmans (WHO HQ), Roseline Doe (WHO Ghana), Claudine Diango Nobou (Ministry of Health Cote d'Ivoire), Paul Dsane-Aidoo (WHO Ghana), Azmach Gebregiorgis (WHO Zambia), Eyob Gebretsadik (WHO Ethiopia), Phanuel Habimana (WHO AFRO), Tedbabe Hailegebriel (UNICEF), Binyam Hailu (WHO Sierra Leone), Aminul Hasan (Ministry of Health and Family Welfare Bangladesh), Kathleen Hill (JHPEIGO), Debra Jackson (London School of Hygiene and Tropical Medicine), Theopista Kabuteni John (WHO Rwanda), Lily Kak (USAID), Anneka Knutsson (UNFPA), Samantha Lattof (WHO HQ), Nigel Livesley (Independent consultant), Ahmad Makuwani (Ministry of Health, Community Development, Gender, Elderly and Children Tanzania), Margarat Mannah (Ministry of Health and Sanitation Sierra Leone), Rajesh Mehta (WHO SEARO), Margaret Montgomery (WHO HQ), Allisyn Moran (WHO HQ), Assumpta Muriithi (WHO AFRO), Kasonde Mwinga (WHO AFRO), Zainab Naimy (WHO HQ), Iriya Nemes (WHO Tanzania), Olumuyiwa Ojo (WHO Nigeria), Ali Omar (WHO Tanzania), Seun Oyedele (UNICEF), Anayda Portela (WHO HQ), Teja Ram (Ministry of Health and Family Welfare India), Isabelle Sagoe-Moses (Ghana Health Services), Genevieve Saki (WHO Cote d'Ivoire), Murad Sultan (WHO Bangladesh), Edwin Swai (WHO Tanzania), Hilina Tadesse (Federal Ministry of Health Ethiopia), Joy Ufere (WHO Nigeria), Sonali Vaid (Independent consultant), Wilson Were (WHO HQ), Felicitas Zawaira (WHO AFRO) and Willibald Zeck (UNICEF).

We would like to recognize the unwavering support of the technical and implementing partners and donors which include, in alphabetical order: All India Institute of Medical Sciences (AIIMS), Department for International Development (DFID), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Institute for Healthcare Improvement (IHI), JHPIEGO, Japan International Cooperation Agency (JICA), KEMRI Wellcome Trust, London School of Hygiene and Tropical Medicine (LSHTM), Management Sciences for Health (MSH), Partnership for Maternal, Newborn & Child Health (PMNCH), Save the Children, University College London (UCL), UNFPA, UNICEF, USAID, USAID Applying Science to Strengthen and Improve Systems (ASSIST) and University Research Co (URC) is also acknowledged. Their contributions and commitment to support the Network countries in their journey to improve quality of care have been tremendous.

Finally, we would like to thank the Bill & Melinda Gates Foundation for its trust and support, especially Kate Somers for her vision and encouragement from the outset of this initiative and throughout implementation.

Abbreviations

DHMT	District Health Management Team
DHIS2	District Health Information Software 2
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HIS	health information system
HSQD	health service quality directorate
HUMC	Health Unit Management Committee
IHI	Institute for Health Improvement
MCSP	Maternal and Child Survival Programme
MDSR	maternal death surveillance and response
MNCH	maternal, newborn and child health
MNCSP	Maternal and Newborn Care Strengthening Project
MNH	maternal and newborn health
M&E	monitoring and evaluation
MoH	Ministry of Health
NQPS	national quality policy and strategy
PHC	primary health care
QI	quality improvement
QIST	quality improvement support teams
QoC	quality of care
RHBs	regional health bureaus
SDGs	Sustainable Development Goals
SEARO	WHO South-East Asia Regional Office
TWG	Technical Working Group
UHC	universal health coverage
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization
WIT	Working Improvement Teams

Executive summary

In February 2017, 10 countries – Bangladesh, Côte d'Ivoire, Ethiopia, Ghana, India, Malawi, Nigeria, Sierra Leone, Uganda and the United Republic of Tanzania – together with the World Health Organization (WHO) and supported by a coalition of technical and implementing partners, established the Network for Improving Quality of Care for Maternal, Newborn and Child Health (the Network). The Network was established to accelerate achievement of universal health coverage goals with a focus on quality. Driven by the values of equity and dignity, all countries in the Network committed to halving maternal and newborn deaths and stillbirths and to improving the experience of care for pregnant women, mothers and their babies by the end of 2022. To achieve these targets, the Network agreed to pursue four strategic objectives: Leadership, Action, Learning, and Accountability, as a framework for implementation of its activities and the key ingredients for impact.

This report details how the Network was conceived and its implementation approach to quality of care for maternal, newborn and child health. It also presents progress towards the achievement of Network strategic objectives and the reflections on successes and shortfalls, to inform implementation at scale within the Network and beyond.

The Network was purposefully established as a platform to facilitate the formation of alliances around maternal, newborn and child health quality of care, and to enable the sharing of learnings around quality of care implementation among countries and partners.

The Network's country implementation approach builds on principles of government leadership and multi-stakeholder partnerships. The approach is driven by the development of a common maternal and newborn health quality of care implementation agenda and a commitment to using learning and data to guide the implementation and foster accountability. The implementation approach calls for the ministries of health to align a broad coalition of partners and resources to develop national policies, strategies and structures for quality of care in health services. Together, this partnership supports implementation through facilitating quality improvement activities such as onsite support, learning, quality of care measurement, community and stakeholder engagement and programme management.

Over the last four years, the Network has been successful in keeping quality of care at the top of countries' national health agendas. This has been possible due to commitment from country leadership, partners and WHO to the goals and strategic objectives of the Network. The ability of the Network to stay flexible and respond to country needs has been fundamental to this success.

In the Network countries, most governments have taken the lead to develop the strategic directions and structures for supporting the institutionalization of quality of care for maternal and newborn health within their health systems. All countries have made efforts to adopt and adapt the WHO maternal and newborn health quality of care standards to their context and priorities. This adaption was followed by active support by ministries of health and the Network partners towards preparation of districts and facilities for quality of care implementation, measurement, monitoring and learning. Countries and partners are now focusing their work around strengthening accountability and community engagement for quality of care, along with building the learning agenda and capacities to support it. Initial data from countries indicate the Network is on the path to achieving its results.

Although the Covid-19 pandemic has slowed down quality of care implementation activities and impacted the collection of quality of care data, it has also tested the relevance of the collaboration and learning functions of the Network. Throughout the 2020 Covid-19 pandemic period, the learning and sharing of experiences in response to the pandemic has intensified and expanded to engage more countries and partners.

Along with the successes, however, there are still persistent challenges, notably those related to quality of care measurement and monitoring to demonstrate impact. For most countries, this is mainly due to insufficient resources to support service delivery, gaps in quality of care data and data systems, lack of a critical mass of health managers and practitioners with the requisite skills in quality improvements methods, and continuous dependency of countries on donors' technical assistance and financial investments.

Informed by the Network implementation experience, this report highlights a set a of critical levers that countries interested in implementing quality of care at scale need to consider. First, the report acknowledges that it takes a whole health system to improve quality of care, and that government leadership and long-term commitment to the quality of care agenda are key ingredients for success. Implementing quality of care requires dedicated and sustainable investment and partnerships.

The report also recognizes that country health systems operate in different contexts, which impacts the pace at which quality of care initiatives are developed, adapted and implemented. Lessons from implementation demonstrate that quality improvement activities alone are not enough to realize significant gains in quality of care. However, workforce capabilities to apply quality improvement methods are needed to sustain implementation of quality of care. Furthermore, the report suggests that investing early and intentionally in the development and strengthening of data systems for quality of care is essential. At the subnational, facility and community levels, designing, implementing and monitoring a comprehensive and adaptable quality of care programme is also critical. The report recognizes that documenting and sharing lessons from quality of care initiatives can help build more effective programmes, and that the Network offers a useful platform for rapid cross-country learning and accelerated progress in quality of care. However, demonstrating impact of quality of care programmes takes time.

The work undertaken by the Network countries will help them to accelerate the operationalization of the new primary health care framework. The Network guidance and approach offer an example to other programmes on how to integrate their quality improvement activities within wider health system efforts for quality of care. The Network has also stimulated change through enhancing partnerships and facilitating South-South learning and collaboration. Building on these strengths, the Network aspires to be a bridge that facilitates knowledge sharing and collaboration within maternal, newborn and child health and across programmes, countries and regions.

Moving forward, the Network countries will have to invest more in quality of care, including strengthening their health information systems to improve the overall quality of the data they produce, including maternal, newborn and child health quality of care data. There is a need to strengthen accountability mechanisms and the systematic involvement of communities to improve quality of care. The involvement of academic institutions will be critical to support the development and implementation of a national learning platform for quality of care.

Continued engagement with governments and partners will be required to sustain the gains made, and to strengthen the institutionalization of quality of care for maternal, newborn and child health. Strengthening the Network partnership to reflect changes in priorities and the development context will be needed to maintain the relevance and effectiveness of the Network. For this, WHO must continue to play its pivotal convening role and facilitate knowledge sharing and learning at all levels of implementation.

Photo: Tena Esubalew, a health extension worker in Ethiopia, conducting counseling with Etenesh Belay 22, on the positioning of her son Eneyew 45days, for effective breastfeeding.

Introduction

"Without quality, universal health coverage remains an empty promise."

Dr Tedros Adhanom Ghebreyesus,
WHO Director General *[1]*

The Sustainable Development Goals (SDGs) set ambitious health-related targets for mothers, newborns, and children by 2030. World Health Organization (WHO) member states have also emphasized the need to invest in quality of care to end preventable maternal and newborn deaths and stillbirths and reduce disabilities as reflected in World Health Assembly resolutions on universal health coverage (UHC) (WHA64.9),*[2]* Every Newborn Action Plan (WHA67.10) *[3]* and the Global Strategy for Women's, Children's and Adolescents' Health (WHA69.2).*[4]*

Quality of care (QoC) is critical to the operationalization of these global agendas and the achievement of the health-related SDGs and targets. Improvements in coverage of lifesaving interventions for maternal, newborn and child health (MNCH) have not consistently translated into reductions in mortality from preventable conditions.*[5]* It is estimated that 61% of neonatal conditions and half of maternal deaths in low- and middle-income countries (LMICs) are due to poor quality services.*[6]*

WHO has adopted Budd and colleagues' definition of quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.*[7, 8]* Health care must be effective, safe, people-centred, timely, equitable, integrated and efficient. (Box 1)

Box 1. Criteria to define quality of care *[7, 8]*

Effective	Safe	People centred	Timely	Equitable	Integrated	Efficient
Providing services based on scientific knowledge and evidence-based guidelines.	Delivering health care that minimizes risks and harm to service users, including avoiding preventable injuries and reducing medical errors.	Respecting and responding to individuals' preferences, needs and values within health services that are organized around the needs of people.	Reducing delays in providing and receiving health care.	Providing health care that does not differ in quality according to personal characteristics such as gender, race, ethnicity, geographical location or socioeconomic status.	Coordinating health care across levels and providers of health services and across sectors and makes available the full range of health services throughout the life course.	Providing health care in a manner that maximizes resource use and avoids waste.

Based on this definition, WHO has elaborated a global vision in which 'every pregnant woman and newborn receives quality care throughout pregnancy, childbirth and the postnatal period' under the umbrella of UHC and quality.*[9]*

In January 2016, a WHO technical consultation on the implementation of QoC standards, noted that because most quality improvement (QI) efforts were introduced as projects, they were rarely sustained or scaled up beyond the project period.*[10]* The consultation also identified the need to bridge the gap between the development and introduction of QoC technical guidance and standards and their translation into impact at the country level.

The establishment of the Network for Improving Quality of Care for Maternal, Newborn and Child Health (the Network) was seen as a way to learn how to implement QoC in a sustainable and scalable way. Ten countries – Bangladesh, Côte d'Ivoire, Ethiopia, Ghana, India, Malawi, Nigeria, Sierra Leone, Uganda and the United Republic of Tanzania – and their implementing partners joined the Network, motivated by the need to holistically address QoC for MNCH and build the systems required to deliver QoC.*[11, 12]*

This report documents the evolution of the Network since its launch in 2017 and progress to date. It responds to the Network's strategic objective on accountability for the Network to regularly monitor its own progress, publish results, use key findings to guide the review and adaptation of the Network's activities and make learning publicly available.*[13]*

The report draws on the compilation and collection of data from Network key events, such as Network annual meetings and other sources including: a) monthly and annual progress updates and reports provided by WHO country offices in Network countries; b) pulse surveys conducted by the Network secretariat usually in advance of Network annual meetings[1] or symposia; c) periodic calls held with the QoC Technical Working Groups (TWGs) and country teams in Network countries; and d) stories and examples from Network country implementation.

The report will be of interest to policymakers, programme managers, health planners at national, subnational, district and facility levels, maternal and newborn healthcare professionals, and professional bodies, donors or technical partners involved in QoC programming and implementation.

Objectives of the report

1. To describe the evolution of a multi-country, multilateral network focused on MNCH QoC as an integrated health system effort.
2. To present the role the Network has played to catalyse the development of national policies, strategies and structures for QoC, the alignment of partners and resources and the establishment of a learning network that responds to country needs and implementation experiences.
3. To share examples of Network country implementation progress.
4. To reflect on successes and shortfalls during implementation of Network activities to inform implementation at scale and identify the levers of change that shaped an implementation strategy and approach.

1. Network annual meetings were conducted in February and December 2017, March 2018 and March 2019.

Scope of the report

The report provides an overview of why QoC matters for MNCH and the health system more broadly. It then describes the formation and operationalization of the Network, and specifically how the Network catalysed the introduction and implementation of policy change, partner and resource alignment and learning at the country and global levels.

The report presents progress and lessons learned in implementing QoC activities prioritized by the Network countries to improve QoC for maternal and newborn health (MNH). Country examples describe initial improvements in select MNH interventions and related QoC outcomes. The lessons learned in operationalizing MNH QoC at the country level can serve as a basis for initiating and sustaining QI efforts for other programmes. As countries in the Network consolidate their learning and expand their focus, future reports will aspire to cover impact data as well as an expanded focus to include paediatric care.

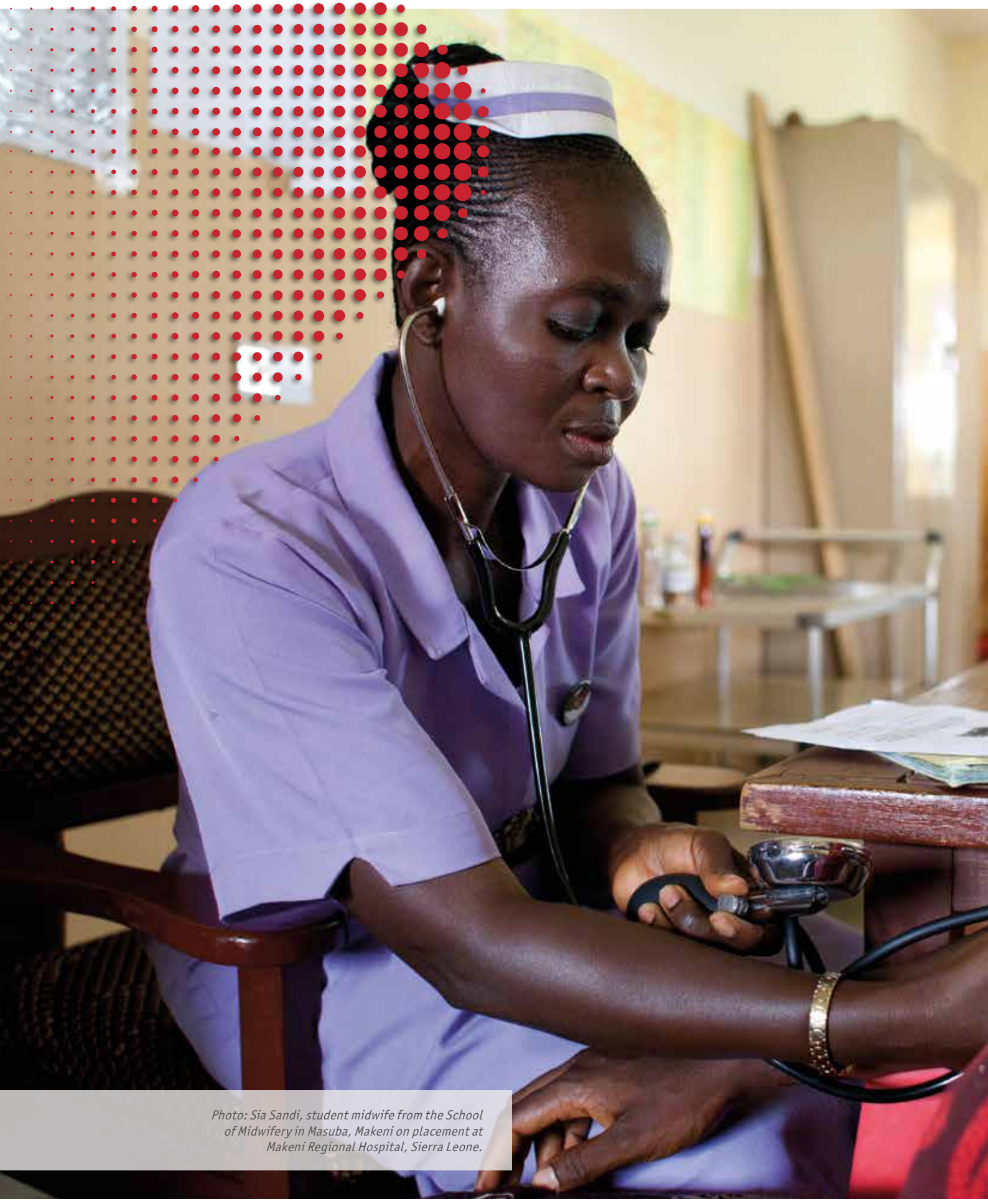


Photo: Sia Sandi, student midwife from the School of Midwifery in Masuba, Makeni on placement at Makeni Regional Hospital, Sierra Leone.

Why quality of care matters

Global trends in maternal, newborn and child health

In the last decade despite significant improvements in coverage of key MNCH interventions, maternal and child mortality and morbidity has not progressed at the same pace. In 2019 the number of deaths among children under five years of age had declined almost 60% since 1990, and in the past two decades the number of maternal deaths dropped by around 35%.*[14-16]* Coverage of essential interventions increased on average around the world, with some interventions exceeding 80% coverage, such as immunizations, skilled birth attendance and access to safe drinking water.*[14]* However, progress has not been universal. Over 80% of deaths in children under the age of five and 86% of maternal deaths are concentrated in sub-Saharan Africa and South Asia where resources are more constrained.*[15, 16]*

Neonatal mortality has declined globally but there are still notable disparities across regions and countries. For example, a child born in the highest mortality country has a 55 times higher risk of dying in the first month of life than a child born in the lowest mortality country.*[16]* In 2019, about 1.9 million babies were stillborn at 28 weeks of pregnancy or later, of which 40% occurred during childbirth.*[17]* Not surprisingly, maternal deaths in the world's least developed countries are high, estimated at 415 maternal deaths per 100 000 live births with the lifetime risk as high as 1 in 37 for a 15-year old girl in sub-Saharan Africa. In comparison, the same girl living in Australia or New Zealand would have a risk of just 1 in 7800.*[15]* The majority of these deaths could have been prevented with the provision of high-quality care.

The Covid-19 pandemic has threatened the progress made in MNCH. For example, lockdowns, the closure of primary health services, overburdened or redeployed health workers to Covid-19 care, and the fear of infection among health workers and service users, have all contributed to disruptions in providing and accessing quality essential MNCH services. Some of the most severely impacted services have been routine immunization, malaria bed net distribution campaigns, family planning and antenatal care.*[18-20]* These disruptions put women, children and adolescents at higher risk of death, disease, and disability from preventable and treatable causes. Modelling and projections have estimated potentially catastrophic consequences of the Covid-19 pandemic on MNCH with probable increases in child and maternal mortality, and unintended pregnancies.*[21-24]*

Quality of care within universal health coverage and primary health care

The need for urgent action for UHC with quality was explicitly highlighted in the high-level United Nations (UN) resolution on UHC adopted by the General Assembly in 2019.*[25]* The resolution reaffirmed the commitment to the 2030 Agenda for Sustainable Development *[26]* and the achievement of UHC by 2030. It also reinforced the need to take measures to reduce maternal, neonatal, infant and child mortality and morbidity and increase access to quality healthcare services for newborns, infants and children, and all women before, during and after pregnancy and childbirth.

The UHC resolution highlighted the need for national strategic direction on QoC and made a strong call to expand the provision and prioritization of primary health care (PHC) for more sustainable, people-centred and integrated health systems, as stated in the Declaration of Alma-Ata and reaffirmed in the Declaration of Astana.*[27]* This was further reinforced in 2019 by the WHO Director-General in his report to the World Health Assembly on PHC towards UHC,*[28]* as well as by the 2020 WHO operational framework for PHC. The PHC operational framework highlights systems for improving QoC as one of the 14 strategic levers needed to translate the commitments into concrete actions and interventions.*[29]* The QoC lever calls for systems at the local, subnational and national levels to continuously assess and improve the quality of health services. To operationalize these systems, countries have to build consensus on what QoC means, how to measure it, its integration within overall health service provision and the best methods and interventions to improve QoC outcomes in different contexts.*[30]*

Since 2017 the body of knowledge on QoC has continued to grow and includes three global publications on the quality of health services and systems published in 2018: the Lancet Global Health Commission report on high-quality health systems in the SDG era,*[31]* the US National Academies of Science's report, Crossing the global quality chasm: improving health care worldwide *[32]* and the WHO-World Bank-Organisation for Economic Co-operation and Development (OECD) report, Delivering quality health services: a global imperative for universal health coverage.*[8]* All three highlight the challenges to implementing and actions for improving QoC for MNCH. The reports agree that unless services are provided with quality, investments will not result in saving lives and reducing inefficiencies. They also emphasize the need for national strategic direction on QoC.

Challenges to implementing quality of care for maternal, newborn and child health

Despite efforts to strengthen health system foundations in LMICs, persistent challenges to deliver services with quality, such as weak infrastructure, inadequate workforce, poor water and sanitation (WASH) in facilities, and ineffective organizational referral systems, remain problematic. In this context, maintaining quality high enough on the political agenda is not always possible. Many of these challenges are more evident in fragile, conflict-affected, and vulnerable settings.

Efforts to improve QoC in countries with a high burden of maternal, newborn and child mortality and morbidity are often fragmented, project-based and not institutionalized within government systems. While some countries are engaging in the development of comprehensive quality strategies and policies, few have a written plan specifically to address quality improvements for mothers and newborns, including for disadvantaged and hard-to-reach populations. Quality of care also requires continued commitment to implementation, which can be hindered by recurrent leadership changes at national, subnational and local levels.*[11, 13]*

In many countries data on resources, processes and impact is often absent. This data is needed to improve care and inform the decisions of health managers, healthcare providers and users. Rarely are QoC indicators included in national health information systems (HIS). Individual countries and the global community have much experience of what does and does not work, especially from small-scale projects, however, this experience has yet to be adapted and integrated in the national information systems. A lack of data, weak information systems, and absence of independent review mechanisms hamper QoC accountability. Governments, local authorities, health facilities and communities need clear guidance on how to achieve good accountability for QoC in MNH.

WHO framework and standards for improving quality of care for maternal, newborn and child health

The endorsement by WHO Member States of the Every Newborn Action Plan and the Global Strategy for Women's, Children's and Adolescents' Health provided fertile ground for increased attention to improve quality of MNCH services, to end preventable deaths. In this context, WHO in collaboration with partners adopted a standards-based approach to improve QoC for MNCH. Building on well-established models,*[33-35]* WHO first proposed the framework for improving QoC for mothers and newborns during pregnancy and childbirth (Figure 1).*[36]* Based on this framework, WHO developed standards for QoC for women and newborns during childbirth and the postnatal period in health facilities (2016),*[37]* for children and young adolescents (2018),*[38]* and for small and sick newborns (2020).*[39]* The standards are based on WHO guidelines and can be used to inform the assessment, improvement and monitoring of MNCH care in health facilities and the organization of services within the broader health system.

The QoC standards are organized in eight domains that cover provision and experience of care. Each QoC domain represents a standard of care. Each standard includes a set of quality statements and measures that can be used as benchmarks for QoC improvement (Figure 2). In many countries MNCH services make up a large proportion of service provision at all levels of care. Introducing and implementing the MNCH QoC standards provides an opportunity to improve MNCH outcomes and strengthen health service delivery overall.

Figure 1. The framework for improving quality of care for mothers and newborns

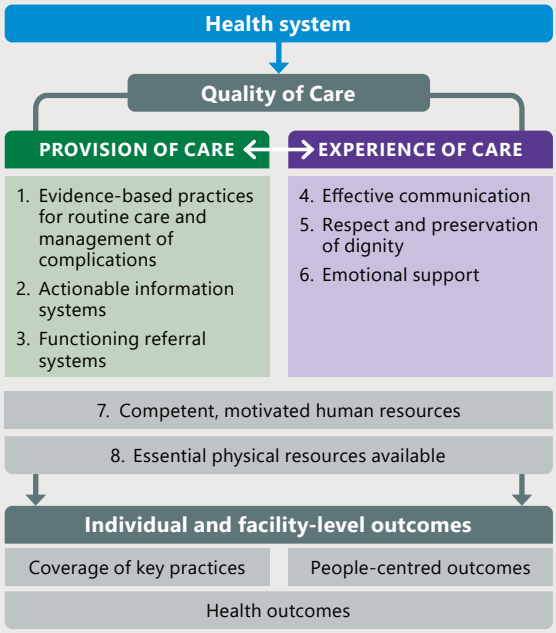


Figure 2. Quality of care standards as an organizing framework for quality of care measurement

Photo: Auxillary Nurse Midwife Varsha speaks to Kali, who has been referred with her severely malnourished daughter to the Nutrition Rehabilitation Centre in Badnavar, India.

The Quality of Care Network

The evolution of the Network

In 2016 a series of meetings and consultations hosted by WHO and involving government representatives, UN agencies and implementation and funding partners, discussed what was required to implement QoC standards and assist countries to achieve their SDG targets. In preparation, a WHO internal discussion paper highlighted the experiences and challenges for building systems that support the delivery of QoC in an effective, scalable and sustainable way.*[40]* Given the fragmented approach to QoC implementation and related knowledge, it was agreed that more learning was needed to understand how to implement and sustain QoC. A facilitated global learning network on QoC was seen to offer a powerful tool for forming alliances, sharing learnings among countries and partners, generating solutions to address the most pertinent challenges to QoC for MNCH and bringing attention to the broader systems needed to support QoC.

With this in mind, governments of 10 countries – Bangladesh, Côte d'Ivoire, Ethiopia, Ghana, India, Malawi, Nigeria, Sierra Leone, Uganda and the United Republic of Tanzania – supported by WHO, the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and partners from all stakeholder groups, agreed to establish the Network for Improving Quality of Care for Maternal, Newborn and Child Health (the Network).*[11, 13]*

At the 2017 Network launch meeting, the 340 participants, representing QoC Network countries and founding partners,[2] embraced the vision that every pregnant woman and newborn infant receives good-quality care and equitable and dignified care throughout pregnancy,

2. Founding partners include: All India Institute of Medical Sciences (AIIMS), Bill & Melinda Gates Foundation (BMGF), Department for International Development (DFID), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Global Fund to Fight AIDS, Institute for Healthcare Improvement (IHI), JHPIEGO, Japan International Cooperation Agency (JICA), KEMRI Wellcome Trust, London School of Hygiene and Tropical Medicine (LSHTM), Management Sciences for Health (MSH), Partnership for Maternal, Newborn & Child Health (PMNCH), Save the Children, University College London (UCL), UNFPA, UNICEF, USAID, USAID Applying Science to Strengthen and Improve Systems (ASSIST) and USAID University Research Co (URC) World Bank, WHO HQ, WHO South-East Asia Regional Office and WHO Regional Office for Africa.

Box 2. Quality, equity and dignity of care throughout pregnancy, childbirth and the postnatal period

Quality
Many morbidities, disabilities and deaths of mothers and newborns could be prevented by effective, scalable and sustainable improvements in quality of care

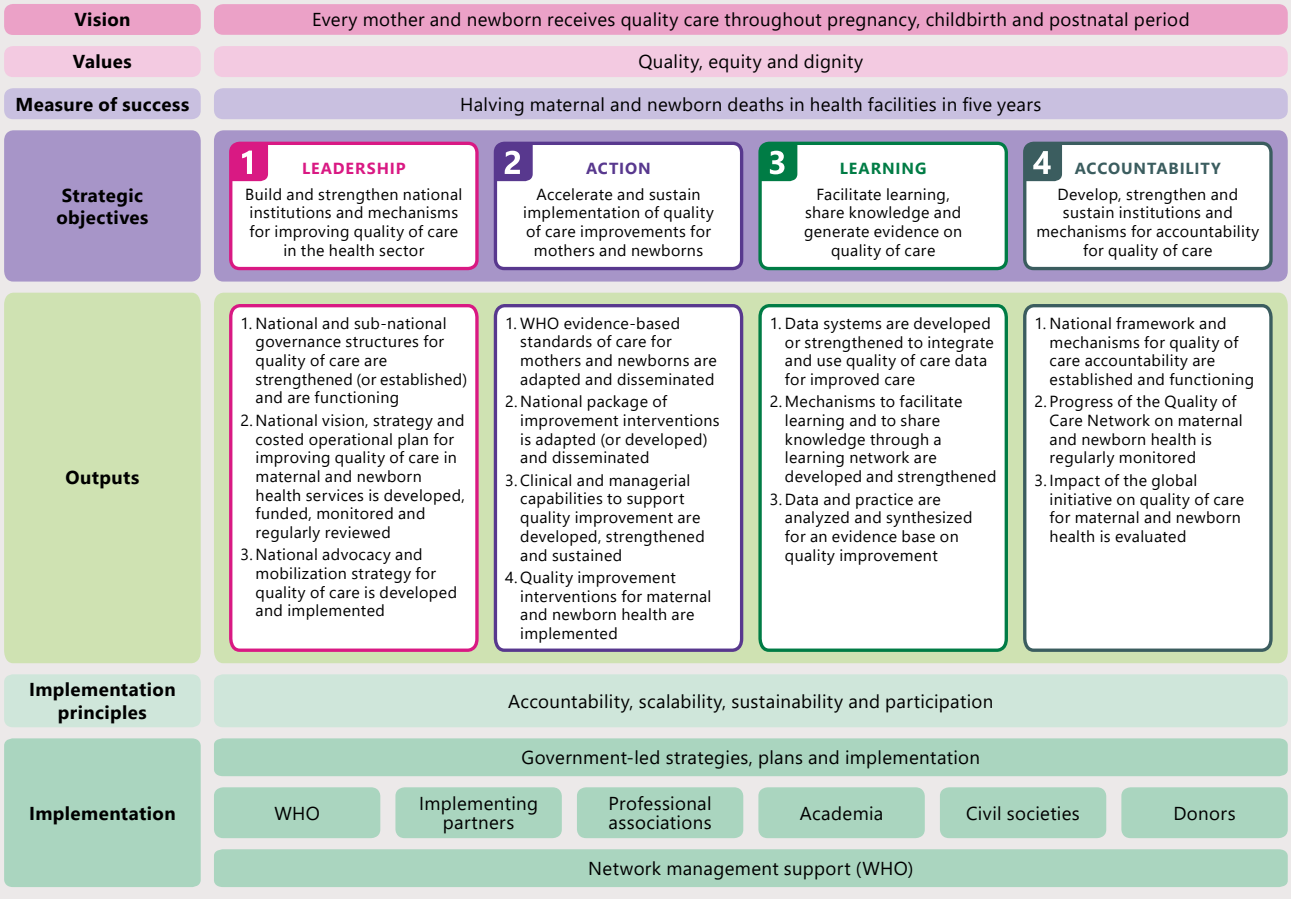
Equity
Quality care addresses the needs of the mother and the newborn in a holistic manner and minimizes inequities between those who are rich and poor, marginalized or otherwise disadvantaged

Dignity
Women and newborns should receive care with respect and dignity, and a woman and her family should have access to the social and emotional support of their choice

childbirth and the postnatal period (see Box 2). The 10 Network countries committed to reduce maternal and newborn deaths and stillbirths in participating health facilities by 50% over five years and to improve user satisfaction with the care received.

To implement this vision and achieve its targets, the Network countries articulated four strategic objectives – Leadership, Action, Learning, Accountability. The strategic objectives describe what needs to happen at the country level to improve QoC.*[13]* Their implementation depends on leadership and commitment to quality by ministries of health, use of data for adaptation and learning, and coordinated and predictable technical support (Figure 3).

Figure 3. Logical framework for the Quality of Care Network



A country-led implementation approach to quality of care

In response to the Network strategic objectives, Network countries and partners codeveloped an implementation approach underpinned by principles of government leadership and multistakeholder partnership. The approach emphasizes the need for an overall strategic direction for quality health services, with MNCH as an entry point. It also emphasizes the need to use and share data to guide implementation, monitoring of progress and accountability (Figure 4).

At the national level, the implementation approach calls for the Ministry of Health (MoH) to align a broad coalition of partners and resources to develop national policies, strategies and structures for QoC in health services. This is operationalized through a national TWG on MNCH QoC – a coalition of MoH, implementation and donor partners, academics, professional associations, civil society organizations among others – which is established within existing MNCH QoC coordination mechanisms. Under the leadership of the MoH, the TWG develops a national MNH QoC roadmap and operational plan to guide the adaption and implementation of QoC standards as an integral part of the national strategic direction for QoC.

Within the roadmap, the TWG identifies a number of learning districts and facilities to serve as laboratories for learning from the adaptation and contextualization of QoC activities and for the documentation of processes and results. The selection of learning districts is based on the commitment of District Health Management Teams (DHMT) to learning and to making changes to improve QoC for MNH. The learning districts are representative of others in the country, so the learning is more likely to be generalizable. Facilities within learning districts systematically implement a package of QoC interventions for MNH, under the leadership and coordination of the MoH and DHMTs and supported by implementing partners. The MoH identifies focal points to coordinate MNH QoC activities across learning districts. Among other activities, the focal points would coordinate the initial HIS readiness assessment for MNH QoC measurement, continuous data collection, reporting and analysis, and support the DHMT and facilities to use the data for QI. More specifically, support to QoC activities is ensured through the establishment and implementation of five interrelated functions:

Onsite support is provided to strengthen QI in learning facilities, district governance for QoC and the capacities of DHMTs to analyse and use data. District teams are also supported to align their implementation models with agreed national implementation QoC packages and approaches.

Learning is facilitated within and between health facilities and districts through peer to peer learning, with additional support provided by academic and research institutions for the documentation of best practices. The aim is for the implementation experience to influence management decisions and inform policy dialogue and implementation research, to support scaling up within and across countries.

QoC measurement is critical for demonstrating whether QoC is improving and results are achieved. Measurement includes a set of 15 QoC MNH common indicators that measure important aspects of provision and experience of care and WASH. These indicators were identified and agreed on by all Network countries. Learning districts and facilities measure these indicators and coordinate measurement activities across their constituent learning sites, with the support of the MoH and partners.*[41]*

Community and stakeholder engagement is critical to ensure accountability for QoC and help identify gaps, prioritize concerns, monitor performance and provide solutions to improving QoC. The Network's accountability structure also includes activities to generate users' demand for MNCH QoC.*[42]*

Programme management is required at all levels to support QoC implementation. This includes advocating and promoting a culture of quality within the health system, starting with the management and leadership. Attention has to be paid to the development of QI capacities of managers and services providers at all levels.

The lessons generated by the implementation of this approach informed the development of the WHO planning guide for quality health service.*[43]* The planning guide highlights the need for a health systems approach to enhance QoC, with a common understanding on the activities needed by all stakeholders across different health system levels.

Figure 4. Network country implementation approach

Planning for implementation at national level

- Establish national policy, strategy and structure
- Build a broad coalition of stakeholders
- Undertake landscape analysis and review of quality of care data
- Develop an operational roadmap and identify learning districts and facilities
- Adapt and adopt guidelines and quality of care standards
- Agree on indicators and a monitoring framework and plan
- Build capability for quality improvement interventions

Support implementation in districts and facilities

On-site support
To address gaps in health workers' skills and competencies, and the ever-changing best practices in clinical care

Learning
To build learning systems where facility-level staff can learn from their peers within the same system based on best practices from islands of excellence

Measurement
To assess whether planned activities to improve quality of care are implemented as planned and whether they are leading to better care and outcomes

Community and stakeholder engagement
Recognizes that people are not passive participants in health care and that they should be active decision-makers in their own lives and experiences

Programme management
Leaders and managers should have defined responsibilities for managing implementation, including ensuring that all other 4 systems are functioning

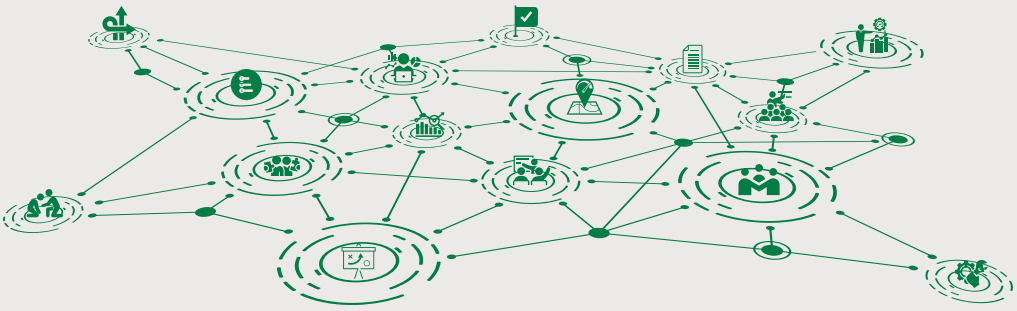
Measuring and monitoring implementation and impact

Quality improvement indicators
Flexible menu of **prioritized indicators** to support rapid improvements in quality of care led by facility-based quality improvement teams and supported by district/ regional managers

District or regional performance indicators
Flexible menu of indicators to support **district or regional managerial and leadership functions** in improving and sustaining quality of care in facilities

Core quality of care indicators
Prioritized small set of **input, process and outcome indicators** for use by all stakeholders at every level of the health system. Can be used for tracking progress across countries

Programmatic milestones
To track whether the quality of care programme activities are being implemented as intended (e.g. fidelity of implementation). They may include both preparatory and ongoing activities



Establishing and sustaining a learning system

Global support for country-led implementation

A WHO-based Network secretariat was established to support and coordinate activities across the Network. The secretariat works with countries and partners to codevelop and provide normative guidance and technical support for activities in Network countries. The secretariat also manages the learning network across countries and partners.

The Leadership Working Group, composed of the high-level representatives of MoH in Network countries, specifically the leadership of the QoC and MNCH departments, leads and oversees the development and implementation of the Network strategic objectives at the country and global levels.*[13]*

Network partners play a fundamentally important role in the Network by providing technical support and funding to countries, codeveloping technical guidance and actively contributing to learning on QoC implementation. The Network has benefited from a close partnership and collaboration with UNICEF, the Institute for Health Improvement (IHI) and USAID implementing partners, among others. Partners and country representatives co-lead and contribute to the Network working groups. Examples include the time-bound QoC implementation working group tasked with the development of the Network implementation guidance, and the QoC monitoring working group which functions as part of the broader QoC for MNH monitoring effort. The Network secretariat co-convenes and facilitates the working groups. In collaboration with Network working groups, the secretariat has codeveloped a number of technical resources which provide health policy and decision-makers, managers and practitioners with mechanisms, tools and guidance to support the design and implementation of QoC activities (see Box 3). The secretariat is also part of the WHO-wide Quality Taskforce, a technical expert network on quality within WHO,[44] helping to leverage linkages across technical areas, to maximise country impact and strengthen WHO's approach to addressing QoC.

In its facilitation role, the secretariat organizes periodic technical briefs, reviews and updates with the national TWGs and implementing partners. During these interactions the MoH and partners discuss progress towards Network milestones and targets, identify technical needs and resource gaps, and coordinate technical support and response among partners.

The priorities identified in these country-led processes have informed the development of the Network guidance and learning activities across and beyond Network countries. For example, the Tanzania Network meeting in December 2017 informed the development of the Network's implementation approach and monitoring framework.

Box 3. Network implementation tools, guidance documents and other resources

Implementation guidance documents and technical briefs

- Implementation guidance: Improving quality of care for maternal, newborn and child health.*[45]*
- Guidance on integrating stakeholder and community engagement in quality of care initiatives for maternal, newborn and child health.*[42]*
- Technical briefs looking into the links between quality of care and WASH and UHC.*[46, 47]*

MNH QoC monitoring framework and tools

- The MNH QoC monitoring framework includes four types of MNH QoC metrics (set of 15 common MNH QoC indicators; catalogue of MNH QoC indicators for use at facility and district level; and programmatic milestones) (see Figure 4). These metrics are designed to meet MNH QoC monitoring needs across the Network.*[41]*
- Microsoft Excel-based automated, interactive and multilevel data collection, reporting, management, analysis and visualization tools: designed for common MNH QoC indicator data. A guidance document was also developed on how to use these tools. The same tools were programmed in a web-based tool for use in settings where internet connectivity is optimal.
- Microsoft Excel-based automated run-chart and process control chart template: for use by quality improvement teams to monitor and evaluate the performance of their initiatives.

The Network meeting in Uganda in March 2018 served as a basis for introducing QoC paediatric standards and the operationalization of the learning network concept at the country level.

In collaboration with countries and partners the secretariat develops and implements the Network learning agenda which aims to promote South-South networking and learning within and beyond Network countries.

For example, the Network web-based learning platform provides a tool for health professionals, health managers and partners working on QI initiatives, to share information and implementation experiences (see Box 4). Network meetings provide another venue for networking and learning. In March 2019 at the Ethiopia strategic review meeting, Network countries shared and critically reflected on their experiences and lessons learned with other countries interested to join the Network.*[48]*

As part of its learning function, the Network has provided a mechanism for identifying and rapidly responding to emerging priorities. For example, the Network has focused on capturing country implementation challenges and solutions to deliver QoC for MNCH in the context of Covid-19, including a series of digital learning sessions led by Network countries and partners.

Another example is the engagement with the private sector to deliver health services. Responding to the interest from countries, the secretariat is now working with the MoH in Network countries to facilitate policy dialogue with the private sector to deliver QoC for MNH.

Figure 5 presents a timeline of critical activities in preparation for the launch of the Network and its implementation from 2016 to 2020. The timeline also includes the publication of key resources, such as the WHO standards for improving QoC, and the establishment of systems and mechanisms to support Network implementation, learning and accountability.

Box 4. Network web-based learning platform

The Network website *[49]* provides a platform to share resources, know-how and best practices by and for QoC professionals within and beyond the Network, through several channels:

- a knowledge library dedicated to QoC for MNCH. The focus of the knowledge library is on guidance and tools for QoC implementers;*[50]*
- a topical webinar series co-organized with partners, with a focus on sharing national level experience and know-how;*[51]*
- the Quality Talks podcast to capture and share the know-how of health practitioners, and stories of their personal experience in designing, implementing or observing a quality improvement initiative; *[52]*
- a global community of practice for QoC, designed to bring together health practitioners to discuss shared topics and troubleshoot issues;*[53]*
- monthly updates which compile the upcoming activities, recent releases and announcements from the Network and its partners.*[54]*

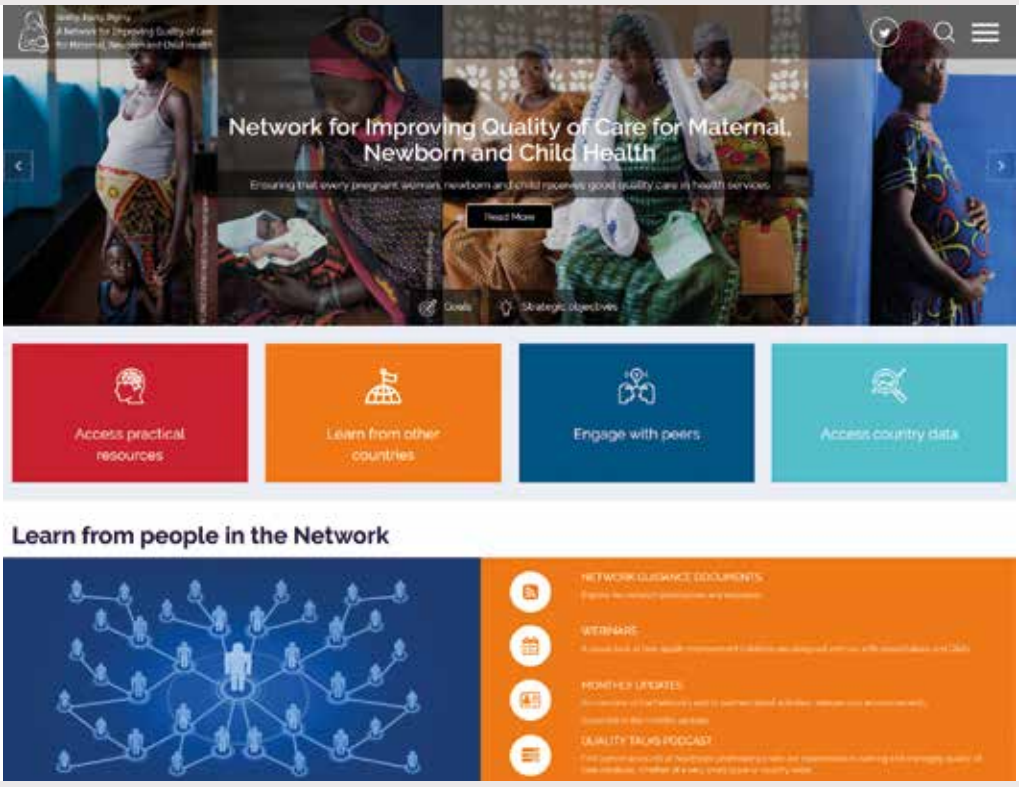


Figure 5. Timeline of critical activities related to the QoC Network 2016–2020

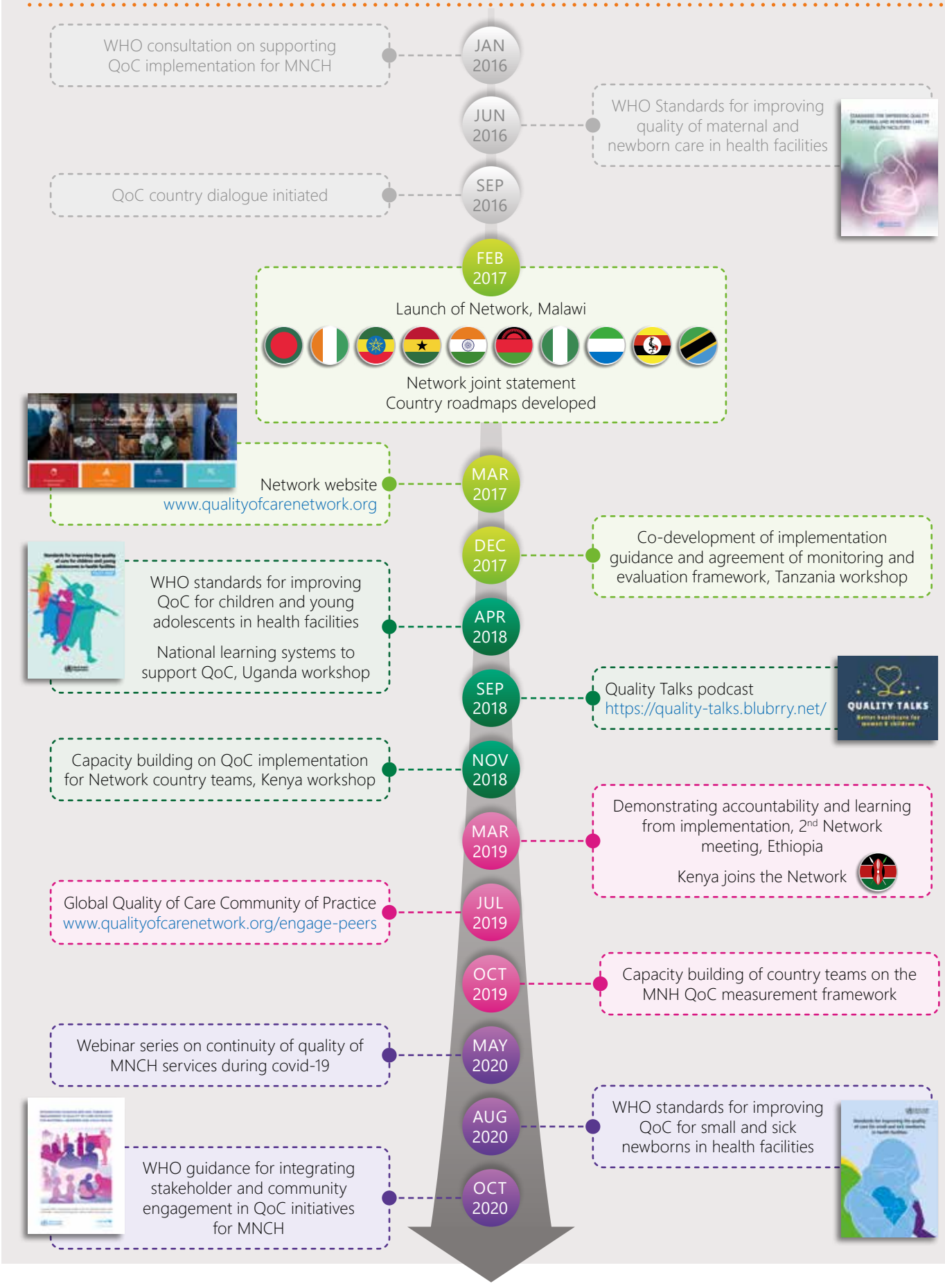


Photo: HoHoe Midwifery Training school in Ghana. Students experience a simulated birth while Charity Mote (middle, glasses) advises her students through the process.

Catalysing change for quality of care

Country progress across Network strategic objectives

At the outset of the Network, governments took the lead to operationalize the strategic objectives - Leadership, Action, Learning and Accountably. They first developed or strengthened the strategies, structures and mechanisms for supporting the institutionalization of MNH QoC within the national health systems. Activities were then directed towards action, learning and accountability, starting with the establishment and preparation the learning districts, QI coaching and training, adaptation of QoC standards and monitoring and measurement. Box 5 provides an overview of the strategic objectives and associated outputs of the QoC Network. Figure 6 visualizes the 10 countries' progress in implementing selected milestones related to the Network strategic objectives from 2017 to 2020.

Box 5. Strategic objectives and associated outputs of the Quality of Care Network

1 STRATEGIC OBJECTIVE 1: LEADERSHIP

Build and strengthen national institutions and mechanisms for improving quality of care in the health sector

OUTPUT 1:
National and sub-national governance structures for quality of care are strengthened (or established) and are functioning

Key deliverables:

1. A national leadership structure for quality of care in health services established or strengthened;
2. A ministerial, multi-stakeholder steering group for quality improvement in maternal and newborn health services established or strengthened;
3. Quality of care committees in district health management teams established and functioning;
4. Quality of care committees in hospitals and quality improvement teams in health facilities established or integrated into existing structures, and functioning;
5. A liaison mechanism on quality issues set up between groups at national, district and health facility levels established and functioning.

OUTPUT 2:
National vision, strategy and costed operational plan for improving quality of care in maternal and newborn health services is developed, funded, monitored and regularly reviewed

Key deliverables:

1. National vision, strategy and operational plan have been developed (with targets) for improving quality of care in maternal and newborn health services;
2. Partners are aligned and resources mobilized for the implementation of the national operational plan;
3. Implementation of the national operational plan costed, with funding from the budget allocated;
4. Human resources for implementation of the national plan have been committed, and roles and responsibilities of different stakeholders agreed;
5. Regular reviews of progress against targets are in place and the national plan is ready to be adjusted as required.

OUTPUT 3:
National advocacy and mobilization strategy for quality of care is developed and implemented

Key deliverables:

1. Professional associations, academics, civil society and the private sector brought together and mobilized to champion the Quality of Care Network and support implementation;
2. A national advocacy and mobilization strategy developed with multistakeholder involvement and is implemented and monitored.

2 STRATEGIC OBJECTIVE 2: ACTION

Accelerate and sustain implementation of quality of care improvements for mothers and newborns

OUTPUT 1:
WHO evidence-based standards of care for mothers and newborns are adapted and disseminated

Key deliverables:

1. National standards and protocols for maternal and newborn quality of care compiled and reviewed;
2. National standards and protocols adapted and updated to follow WHO standards;
3. National standards and protocols incorporated into national practice tools;
4. Updated national standards and protocols plus their practice tools disseminated to all relevant stakeholders and are in use.

OUTPUT 2:
National package of improvement interventions is adapted (or developed) and disseminated

Key deliverables:

1. The quality of care situation assessed, with gaps in quality identified based on the national standards of care;
2. National package of quality of care interventions to address identified quality gaps developed and disseminated, drawing on the WHO quality of care interventions.

OUTPUT 3:
Clinical and managerial capabilities to support quality improvement are developed, strengthened and sustained

Key deliverables:

1. A national resource centre, with tools to improve capabilities of health-care providers and managers established and functioning;
2. National and district pools of experts in quality improvement (including participatory learning and action) identified and trained;
3. National manuals for quality improvement and participatory learning and action for national, district and facility levels, and community groups and committees developed and in use;
4. Monthly meetings for participatory learning on quality improvement at district, facility and community levels scheduled and take place.

OUTPUT 4:
Quality improvement interventions for maternal and newborn health are implemented

Key deliverables:

1. Learning sites identified and established to implement a national package of improvement interventions for quality of care in maternal and newborn health services;
2. A change package adapted to the district context;
3. Resources and technical support to implement the change package in the districts provided;
4. Success of learning sites reviewed and assessed regularly;
5. A refined package of effective and scalable quality improvement interventions identified from learning sites;
6. The implementation of a refined package of interventions expanded into new districts and health facilities.

3 STRATEGIC OBJECTIVE 3: LEARNING

Facilitate learning, share knowledge and generate evidence on quality of care

OUTPUT 1:
Data systems are developed or strengthened to integrate and use quality of care data for improved care

Key deliverables:

1. A national core set of quality of care indicators for maternal and newborn health agreed and validated, and aligned with the core global indicators;
2. A process to add a core set of maternal and newborn quality of care indicators into the national health information system established and supported;
3. Data collection, synthesis and reporting are standardized, and data quality is monitored and assessed;
4. Capabilities in data collection, synthesis and use at health facility, district and national levels strengthened;
5. A system for collection and reporting of case histories, stories from the field, and testimonials developed and in use;
6. Key data shared with health-facility staff, district health teams and community groups to inform user decision-making, prioritization and planning.

OUTPUT 2:
Mechanisms to facilitate learning and to share knowledge through a learning network are developed and strengthened

Key deliverables:

1. National and international resources on quality of care accessible through a dedicated quality of care website;
2. Virtual and face-to-face learning networks and communities of practice established and supported at the global, national and district levels;
3. Learning collaboratives between health facilities and districts established and supported;
4. A government focal point and national institution established to coordinate and sustain a national learning network.

OUTPUT 3:
Data and practice are analyzed and synthesized for an evidence base on quality improvement

Key deliverables:

1. Data analyzed and synthesized regularly to identify successful interventions; and
2. Best practices and variations identified and disseminated within and between countries.

4 STRATEGIC OBJECTIVE 4: ACCOUNTABILITY

Develop, strengthen and sustain institutions and mechanisms for accountability for quality of care

OUTPUT 1:
National framework and mechanisms for quality of care accountability are established and functioning

Key deliverables:

1. Quality indicator dashboards developed, with appropriate analytics to track progress at facility, district and national levels, and regularly updated and published;
2. Inputs and outputs in the national operational plan for quality of care tracked and regularly reported, and reports disseminated to stakeholders and discussed in national and sub-national forums;
3. Regular multi-stakeholder dialogue takes place to monitor progress;
4. Resources committed and action taken to resolve issues;
5. Periodic independent assessments of progress in place to validate routinely reported results.

OUTPUT 2:
Progress of the Quality of Care Network on maternal and newborn health is regularly monitored

Key deliverables:

1. An annual progress report on the Quality of Care Network published;
2. The Quality of Care Network plan reviewed, revised and shared;
3. There is an annual review and planning meeting of the Quality of Care Network;
4. Implementation learning at global and national levels is summarized and made available in the public domain (peer-reviewed publications included).

OUTPUT 3:
Impact of the global initiative on quality of care for maternal and newborn health is evaluated

Key deliverables:

1. Country-specific evaluation designs developed and agreed;
2. Pre-intervention qualitative and quantitative data collection established and implemented;
3. An interim impact analysis performed and used to inform programme implementation;
4. A final impact analysis performed and disseminated.

Figure 6. Dashboard of country progress by Network strategic objectives, 2017 to 2020

Leadership

Leadership: progress and challenges at a glance

National QoC policy and strategy, and related QoC MNCH roadmaps have successfully been developed or updated by all countries. This has led governments to dedicate domestic funding to operationalize QoC support structures. Despite this initial investment, more funding is needed to scale up the implementation of QoC and QI capacity building.

National technical working groups that coordinate government and partners' QoC for MNCH efforts are operational within existing coordination structures. However, this coordination did not always lead to partners' changing their QoC technical support objectives.

Leadership structures for QoC have been successfully built. At times tensions can arise between the new QoC structures and existing MNCH programmes due to the absence of clarity on roles and responsibilities for QoC action.

Development of the national strategies and MNH QoC roadmaps

A key focus of the Network's efforts has been to support countries to develop and update national QoC strategies and establish QoC governance structures. Figure 7 summarizes the status of implementation for selected milestones under the leadership strategic objective in 2020.

In 2017 at the inception of the Network, it was agreed that developing a national quality policy and strategy (NQPS) and related structures would strengthen QoC governance and provide the foundation for sustainable progress. In each country the development of a NQPS included articulating a vision for QoC and defining the journey towards establishing a high-quality health system. As of November 2020, Ghana, Malawi, and Sierra Leone have developed their NQPS, while Bangladesh, Ethiopia and Tanzania are updating their strategies for finalization in 2021. Of further note, the experiences of Ethiopia, Ghana and Malawi fed directly into the development of the WHO handbook on national quality policy and strategy.*[55]*

As part of the overall QoC strategy, countries in the Network developed roadmaps which prioritized the adaptation of the WHO MNH QoC standards, articulation of MNH QoC package of interventions and identified the districts to serve as a learning platform for QoC implementation. Nigeria chose to first develop a national QoC strategy for MNCH, which in 2020 was used to inform the development of the NQPS. In Sierra Leone, the development of the QoC MNCH roadmap vitalized an agenda of quality across all of the Ministry of Health and Sanitation, encouraged buy-in from partners and helped to bring much needed technical resources to the table, ultimately leading to the development of the NQPS.

Figure 7. Status of implementation for selected milestones under the leadership strategic objective, 2020

	Bangladesh	Cote d'Ivoire	Ethiopia	Ghana	India	Malawi	Nigeria	Sierra Leone	Tanzania	Uganda
National leadership for quality of care										
Quality of care (QoC) for maternal and newborn health (MNH) roadmap developed and being implemented	On track	In progress	On track	On track	On track	On track	On track	On track	No information	In progress
Supportive governance policy and structures developed or established	In progress	In progress	On track	On track	On track	On track	On track	On track	In progress	On track

Legend: On track (achieved) · In progress (initiated but not completed) · Not started · No information

Governance and coordination QoC structures

By the end of 2020, all countries had set up QoC management structures within the MoH, compared to February 2017 when only Bangladesh, Ethiopia, Tanzania, and Uganda had such structures. These structures are important for sustaining the implementation of QoC. However, their effectiveness is undermined when their role and responsibilities are not clearly defined. During the reporting period, tensions were observed for this reason between new QoC structures and the MNCH programmes responsible for the provision of quality in MNCH services.

All countries established a TWG to galvanize partners around a common approach for QoC implementation, align resources, and build commitment towards sharing and disseminating emerging knowledge. The development of the QoC MNH roadmap helped countries define activities to improve QoC for MNH at all levels of the health system. It also enabled the alignment of government and partner's resources around a common MNCH QoC agenda. While this coordination is important, it did not influence the implementation cycles of partners or change the predictability of funding.

Ethiopia

Leading and developing a holistic systems' approach to support implementation of QoC improvement across all levels in Ethiopia

Ethiopia started to develop its QoC structures and related policies well before the launch of the Network. By 2016 the Federal MoH had established a well-functioning health service quality directorate (HSQD). It also launched the first National Quality Strategy in 2016 within which maternal and child health was one of five priority public health areas for QoC improvement. Based on this readiness, the MoH was one of the first countries to align with the vision of the Network and recognize the MNH QoC network as a national flagship initiative. The HSQD has provided a good platform for building collaboration and understanding across the quality and programme structures for QoC implementation. However, the engagement of programme directorates working on MNH in national quality initiatives, such as MNH QoC, still needs to be strengthened. A similar challenge exists at the regional level, sometimes leading to the duplication of efforts and competition for resources between the quality and programme structures. Revisiting the scope and position of quality structures, especially at the MoH level, will be necessary to inform the next strategic period (2021–2025).

Very early in the process to develop QoC structures, the MoH established a specific MNH QoC TWG that is part of the national quality TWG. The MNH QoC TWG mobilizes partners to provide technical and financial support for MNCH QoC, especially for the learning districts.

The MNH QoC TWG also undertakes quarterly, biannual and annual reviews of the HSQD operational plan on MNH QoC. Eight regional health bureaus (RHBs) and one city administration have also established quality TWGs to motivate partners and bureau staff to leverage available resources for the initiative at the subnational level. The staffing and functionality of these quality TWGs varies across regions, even more so since the Covid-19 pandemic.

To operationalize MNH QoC as per the National Quality Strategy and MNH QoC roadmap, the MoH has allocated specific funding to MNH QoC in 48 learning facilities within 14 learning sites/districts, to undertake QI projects, QI coaching and mentoring and to conduct learning collaborative sessions. This is in addition to the financial support provided by implementing partners. The 14 learning sites have also initiated a QoC implementation package. By December 2018, RHBs, learning districts and 48 learning facilities had been oriented on the QoC intervention package and MNH QoC standards, and QI teams in learning facilities received basic QI training. Due to workforce turnover, training is ongoing for new staff to address skills gaps.

Mini QI projects on MNH are ongoing in learning facilities using a model for improvement. This model includes: reviews of routinely collected health information data; self-assessment and facility audits against MNH QoC standards; maternal and perinatal death surveillance and response; and patient or community feedback through a community scorecard and other community engagement approaches. A government-led quality coaching and mentoring system, composed of primary hospital and district health office experts and supported by implementing partners and QI experts, has been developed at the district level to support health centres in QoC implementation. Through this system, a range of onsite and in-service coaching and mentoring supports are provided, including national and regional training of trainers on QI coaching, and QI coaching and clinical mentoring of health providers in facilities.

Facility level staff have received training on data management and data quality and there is ongoing onsite support for data quality and use at facility level. MoH staff and partners undertake supportive supervision in all learning facilities on a biannual basis, and regional and district teams conduct similar activities each quarter. Primary and higher-level hospitals receive QI coaching support from a central team composed of MoH and partners. As a result, learning facilities have gained experience in planning, implementing and monitoring QI projects for MNH. Building on existing quality support systems has also helped to avoid the duplication of efforts and has improved partner collaboration.

Supportive supervision, mentoring and coaching activities are crucial for QoC and QI. However, these activities can also be resource intensive, requiring more human resources, transportation, and communication support than the traditional training and supervision. It is worth noting that in 2020 due to Covid-19, many of these activities were interrupted. Moving forward it will be critical to sustain this blended system of mentoring and clinical support that the MoH has nurtured and developed within existing structures, even more so once partner support comes to an end. Already, the performance of some learning facilities has declined following the phasing out of partner supported projects. These experiences are being used to shape the new strategy for 2021–2025 so that long-term financing for these structures and activities are budgeted for. In the short- to medium-term, clear project phase-out plans will be needed to sustain results and, at the same time, continuous mapping of potential new partners will be important to support and scale up the MNH QoC activities.

Steps have also been taken to establish a culture of learning for quality at district, regional and national levels. Facility-level MNH QI teams hold regular meetings to review progress of their QI projects. Similarly, quarterly district learning collaborative sessions bring facility QI teams together within a learning district to review and share QI project experiences. Non-learning facilities within the district also participate to discuss the lessons learned. Unfortunately, due to Covid-19, these learning meetings were held less regularly in 2020.

At national level, learning collaboratives are conducted twice a year for QI teams from the 48 learning facilities. During these collaboratives, teams share QI projects, review national and subnational progress and learn about new tools for monitoring and evaluation (M&E) and data collection. These sessions were conducted virtually in 2020 due to Covid-19, however, in December, it was possible to hold a face to face national learning collaborative. Since the launch of the National Quality Strategy in 2016 annual quality summits have also been conducted. However, a system that allows for documentation and sharing of learning from the implementation of QI projects has to be developed. It is envisaged that the development of a local web-based learning platform will facilitate the documentation and inform the scale up of QoC implementation.

The WHO MNH QOC monitoring framework was adopted for monitoring progress at national and learning district/facility levels. A parallel system has been created to collect and report on these indicators, with a vision for their full incorporation in the DHIS2 during the next HIS revision. Following this system, learning facilities are periodically monitoring and reporting on common MNH QoC indicators. Partners supported learning facilities with training on data quality, management and use.

Learning facilities have gained experience in QI measurement and use of data for decision-making. To scale up this experience beyond the learning facilities to more regions, it will be important to strengthen the QI capacities of RHBs.

As part of the QI model of improvement, PHC facilities also implement the Community Score Card (CSC) to improve QoC and promote accountability and good governance. The process is led by community elected client councils and is used in all regions of Ethiopia. Service users score services at formally convened sessions with government representatives and health workers and develop a joint action plan to address gaps identified by low scores. Ensuring the participation of health workers and users in the review process is more likely to result in solutions being owned and acted upon by all parties.

The status of existing accountability practices such as CSCs and public and town hall meetings are not captured by the HSQD, which is leading the national quality work. For example, the Reform Directorate in the MoH leads the work on CSCs but a closer collaboration needs to be established between HSQD and the Reform Directorate on this initiative. An important step will be to map existing community engagement mechanisms for quality, such as the CSC initiative, document the implementation status and take steps to strengthen the approaches as needed. Community engagement and accountability for QoC will benefit from a strong partnership between the directorates responsible for quality and community engagement at all levels.

Action

Action: progress and challenges at a glance

WHO maternal and newborn health QoC standards have been adopted and adapted by all Network countries. The related QoC intervention packages are diverse across countries and reflect the implementation context and priorities.

Action in learning districts has benefited from the use of existing QI methods supported by coaches trained as part of previous QI related programmes.

Scaling up the experience from learning districts within Network countries requires continuous technical assistance from the QoC structures at the national and subnational levels. To build these capabilities, partner support as well as more time and resources are needed.

Adaptation of the MNH QoC standards and development of the implementation packages

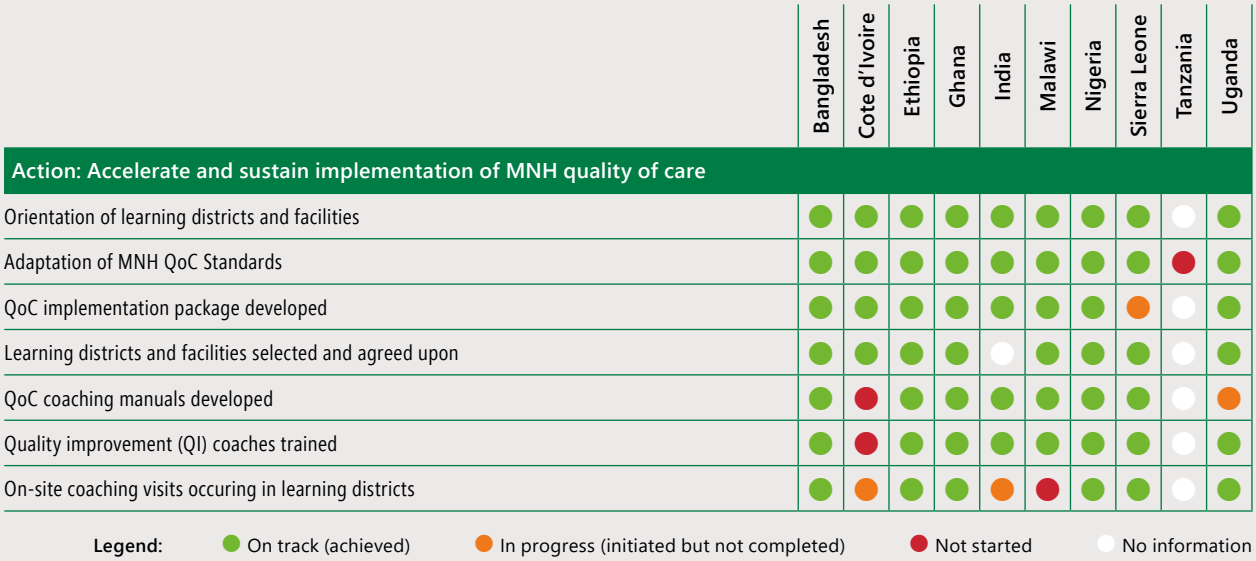
Since the inception of the Network, all countries have made efforts to adopt and adapt the WHO MNH QoC standards to their context and priorities. Figure 8 summarizes the status of implementation for this and other selected milestones under the action strategic objective in 2020. In Ethiopia for example, the standards were integrated into the national quality standards and audit tools for hospitals and health facilities. In Bangladesh, Ghana and Malawi in addition to their use as a QI reference tool, the standards were also used to assess QoC in health facilities. Malawi added a ninth standard which focused on community engagement. In Cote D'Ivoire and Sierra Leone the standards are used as clinical training tools. All countries have incorporated the standards into their QoC MNH implementation packages.

Additionally, Cote d'Ivoire, Malawi and Sierra Leone have started to adopt and adapt the WHO paediatric and young adolescent QoC standards.

Network countries have developed QoC MNH implementation packages to inform QI efforts. The package usually consists of a number of MNH priority interventions and QI tools and processes used by health providers, facilities, and districts. The development of the implementation package takes more time than most of the other activities. It requires consensus from the different stakeholders, as well as testing, adaptation, and targeted resources.

By the end of 2020, eight countries had developed their implementation packages. These packages are diverse and reflect country priorities. In Ethiopia for example, the implementation package consists of the national audit tool, the MNH QoC standards, QI methods as defined by the national QI protocol, in-service

Figure 8. Status of implementation for selected milestones under the action strategic objective, 2020



capacity-building and mentoring, the MNH QoC indicators and framework, and maternal and perinatal death surveillance and response. Ghana and Malawi have similar implementation packages, however, Ghana has given prominence to a community engagement component. Bangladesh has developed intervention bundles that in addition to childbirth also cover antenatal and postnatal care. India's implementation package is based on the LaQshya programme, a QI initiative aimed at improving QoC for mothers and newborns during the intrapartum and immediate postpartum period in the labour room and maternity facilities. While it's important for the implementation packages to reflect the diversity of context, this limits the opportunity to compare results across countries.

Selection of learning districts and facilities

Eight countries have identified learning districts where implementation, documentation and monitoring is taking place. In addition to engaging with districts interested in improving QoC, most countries have prioritized districts with a heavier burden of maternal and newborn morbidity and mortality. They have also aimed to achieve good geographical spread. Each country has taken steps to prepare the learning districts for implementation. This includes orienting the learning districts on the Network implementation approach, QI methods, and QoC intervention packages. Additional efforts have focused on strengthening DHMTs and QoC governance structures to support implementation readiness and the development of district plans for the implementation of QoC activities.

Orientation of learning districts and facilities and development of QoC coaching manuals

Although partners in most countries were already implementing QoC activities at the district level, it took the majority of countries over a year to identify learning sites. However, countries were able to capitalize on existing experiences and structures developed by country partners such as UNICEF (Bangladesh, Ghana, Tanzania), IHI (Ethiopia, Ghana), USAID Applying Science to Strengthen and Improve Systems (Assist) (Uganda), Save the Children (Bangladesh), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (Malawi), LaQshya programme (MoH India), and Maternal and Child Survival Programme (MCSP)/ JHPIEGO (Nigeria).

Orientation of the learning districts in most countries gained momentum towards the end of 2018. Following the orientation, country teams began to establish QI approaches and supporting tools for learning districts. The choice of QI tools was defined by existing experiences at the country level, for example, Bangladesh applied the point of care quality improvement approach developed by the WHO South-East Asia Regional Office (SEARO),*[56]* Cote d'Ivoire used the Japan International Cooperation Agency (JICA) 5S QI approach,*[57]* Malawi with GIZ developed QI training materials and Tanzania capitalized on Every Mother, Every Newborn QI tools *[58]*. By the end of 2020 eight countries had agreed on and developed or updated QI coaching manuals.

Quality improvement coaches trained and on-site coaching visits occurring in learning districts

Most countries have trained QI coaches, even though QI coaching is not a routine function of the heath system and QI coaches are not a recognized cadre within the health workforce. Many QI coaches work for partners implementing QoC projects and it has been difficult to mobilize or engage coaches outside of these specific project settings. As a result, most countries had to identify new coaches for learning districts before being able to start on-site coaching. Often these coaches were clinicians or nurses working at the district level or in facilities and the new responsibilities were added to their existing workload. Six countries have developed, maintained or integrated on-site QI coaching as part of routine activities. However, during the Covid-19 pandemic, these activities were often suspended. The on-site coaching is assisting teams to identify gaps in the implementation of the MNH standards, develop solutions and advocate for resources to address implementation gaps.

Quality improvement interventions for MNH are implemented by learning districts

By early 2018 and with assistance from partners, most Network countries had initiated the adaption of the national packages of QoC for MNH interventions at the learning district level. Since then, India is working to scale up the locally adapted package (LaQshya programme) across the country. However, most Network countries continue to depend on partner resources and technical support to implement the package within and beyond learning districts. Scaling up of the intervention package is part of each Network country's vision, however, more time and resources will be needed to transfer the required technical skills from partners to national and subnational structures responsible for supporting implementation of QoC.

Bangladesh

Emerging results from a quality improvement initiative to improve outcomes for maternal and newborn care in Bangladesh

In support of the Government of Bangladesh's commitment to significantly reduce maternal and neonatal mortality by 2022, the USAID MaMoni Maternal and Newborn Care Strengthening Project (MaMoni MNCSP) *[60]* is advancing the learning and scaling up of effective maternal and newborn care interventions to improve outcomes for mothers and newborns. From 2018 to 2023, this project is being implemented by Save the Children and a consortium of partners, including the IHI with responsibility for leading the QoC component. It aims to roll out proven maternal and newborn care interventions and approaches with quality in 10 priority districts to reach an estimated 22 million people, including poor and marginalized women and newborns for whom the risk of dying is greatest.

In 2018, MaMoni MNCSP selected the Manikganj district within the Dhaka Division as a QoC Network learning site to design, develop, test and implement QoC MNH interventions. At a multidisciplinary design meeting, a series of clinical and operational intervention bundles were identified based on the WHO QoC framework and presented as areas requiring improvement (Figure 9).

Figure 9. Clinical and operational bundles for the MaMoni MNCSP project

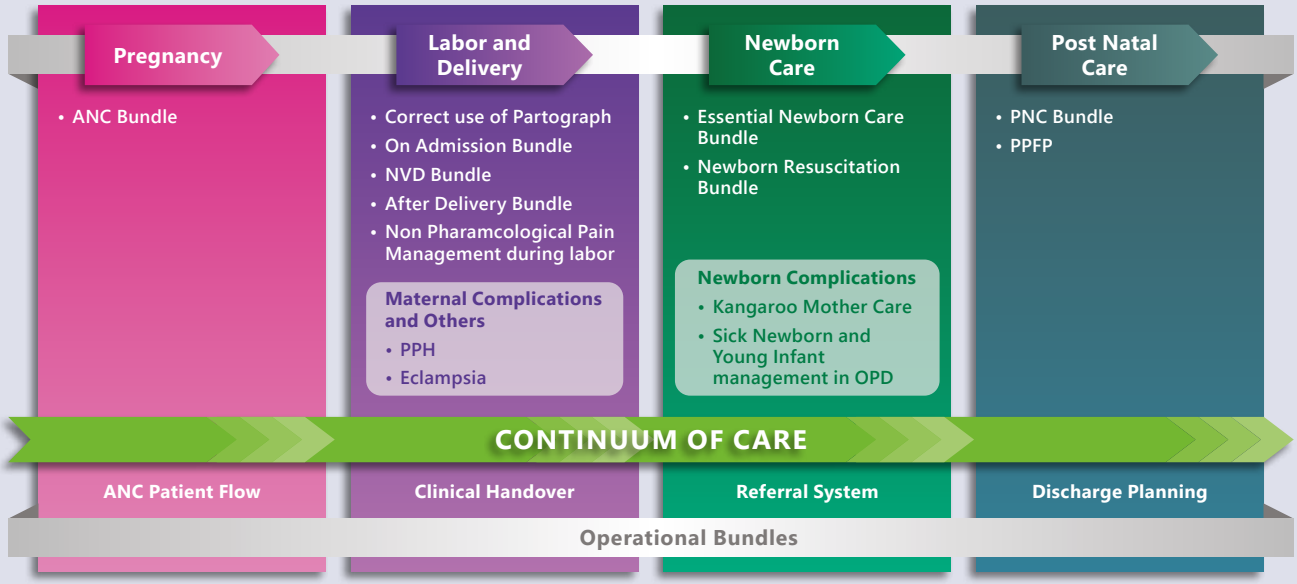
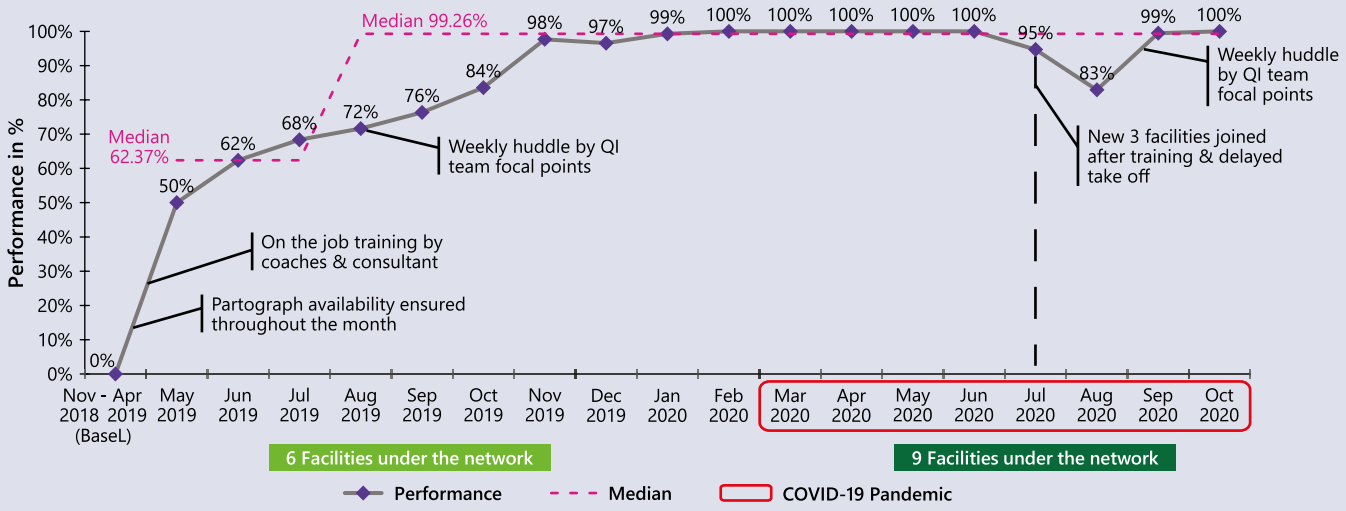


Figure 10. Improvement in correct partograph use across nine health facilities in Manikganj district

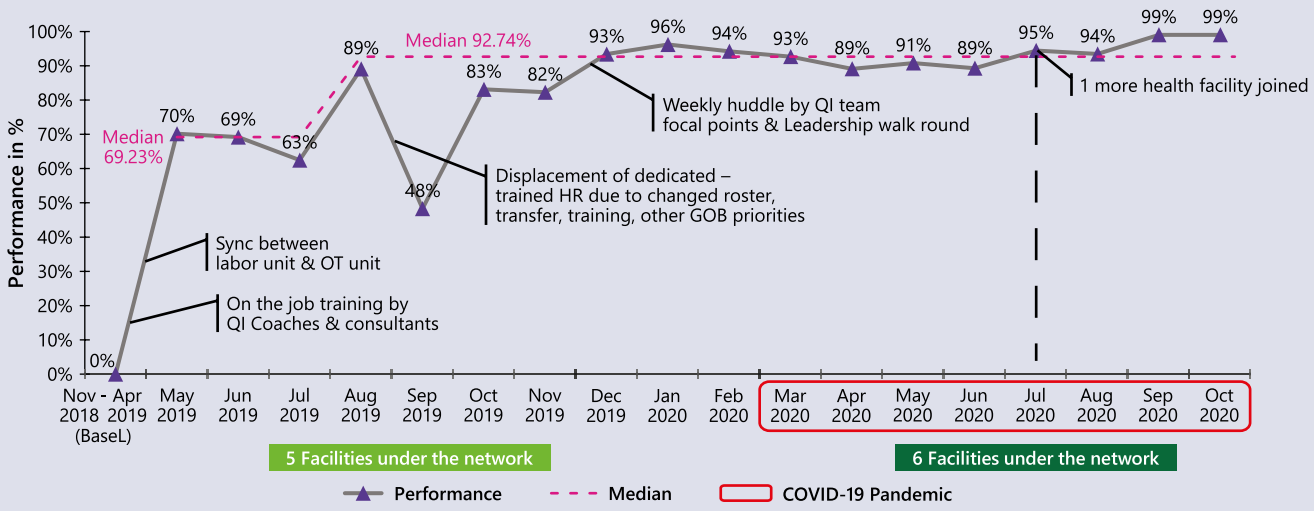


Between April 2019 and October 2020, five MNH clinical bundles were tested and implemented in 39 facilities. The bundles focused on antenatal care, postnatal care, essential newborn care, correct partograph use and kangaroo mother care.

Figures 10 and 11 show findings on the effectiveness of specific QI interventions implemented in several health facilities in Manikganj district between April 2019 and October 2020. Figure 10 shows how multiple change ideas – small-scale, easy to implement and measurable actions introduced at different points of QI implementation *[61]* – improved health workers' partograph use. Performance in six health facilities improved from a baseline score of 0% to 50% within one month of making a partograph available. Within seven months, two additional interventions (training and weekly huddle) had improved the performance score to 100% which remained fairly consistent until 16 months later when three new health facilities were introduced into the programme. In this case, performance fell only by 17 percentage points and returned back to 100% within a month.

QI interventions aimed at improving newborn care have also showed similar patterns of improvement (Figure 11). The introduction of four complementary change ideas though Plan Do Study Act (PDSA) cycles improved the performance of newborn care in five health facilities from a baseline of 0% to 93% within eight months of implementation. This improvement was sustained at a median score of 92% over the next 11 months of implementation. The scaling up of these interventions has already started in five other districts covering 97 health facilities. Further expansion to 13 other districts covering more than 250 health facilities has also been initiated.

Figure 11. Improvement in essential newborn care across six health facilities in Manikganj district



Learning and accountability

Learning and accountability: progress and challenges at a glance

A set of common QoC MNCH indicators was successfully agreed to be monitored and reported on by the Network countries. Progress in documenting and sharing this data varies across countries, reflecting the capacity and constraints of the information system.

Progress is being made in establishing QI learning systems at local levels. However, the institutionalization of learning systems at district and national levels depends on strengthening the coordination between knowledge generation and sharing, and policymaking and programme management processes.

Countries have made progress in developing community engagement mechanisms, and related accountability platforms. More is needed to systematise and integrate community engagement for QoC and accountability processes.

Common set of QoC indicators agreed, collected and reported

The MNH QoC monitoring framework and standardized tools for MNH QoC measurement were codesigned with the Network countries and partners in 2018. Following the agreement of this framework, countries assessed the readiness of the HIS to generate the QoC common indicators and developed a plan to collect the data using HIS and additional sources of QoC information.

Figure 12 summarizes the status of implementation for this and other selected milestones under the learning and accountability strategic objectives in 2020.

Countries' capacity to collect data varies across indicators. Some countries do not routinely collect data on institutional maternal and neonatal mortality by cause.

Indicators on provision of care are mainly generated by the HIS, while those related to experience of care and WASH are still collected through survey methods. To mitigate these gaps, the Network secretariat deployed a complementary data system to facilitate the collection and use of MNH common indicators. This strategy has been a useful stopgap to help countries respond in the short term to their commitment to measure MNH QoC, while investing in the long term strengthening of the HIS.

Most Network countries have managed to collect data on provision of care, whether through their official national data systems or through other data collection mechanisms. Bangladesh, Cote d'Ivoire, Ethiopia, Ghana, Malawi, Nigeria, Sierra Leone, and Uganda are progressing towards including the common indicators in their HIS. Ghana, Malawi, Sierra Leone and Uganda have incorporated MNH common indicators on the provision of care in the District Health Information Software 2 (DHIS2).

Figure 12. Status of implementation for selected milestones under the learning and accountability strategic objectives, 2020

	Bangladesh	Cote d'Ivoire	Ethiopia	Ghana	India	Malawi	Nigeria	Sierra Leone	Tanzania	Uganda
Learning and Accountability										
Common set of MNH QoC indicators agreed upon for reporting from the learning districts	●	●	●	●	●	●	●	●	○	●
Baseline data for MNH QoC common indicators collected	●	●	●	●	●	●	●	●	○	●
Common indicator data collected, used in district learning meetings, and reported upwards	●	●	●	●	●	●	●	●	○	●
District learning network established and functional (reports of visits)	●	●	●	●	○	●	●	●	○	●
A research institution to facilitate documentation of lessons learned identified and is active	●	●	●	●	●	●	●	●	○	●
Mechanism for community participation integrated into QoC planning in learning districts	●	○	●	●	●	●	●	●	○	●

Legend: ● On track (achieved) ● In progress (initiated but not completed) ● Not started ○ No information

Challenges to collect WASH and experience of care data are widespread across the Network. Ghana, Malawi, and Sierra Leone have established an additional mechanism to collect and report facility-based data on experience of care and WASH indicators periodically.

The Network secretariat and partners have provided substantial technical support for QoC measurement at country level. However, all Network countries face overarching structural and operational HIS constraints that undermine the availability and quality of data, including those related to MNH QoC. More investment and capacity-building in health information systems to improve the overall quality of data is needed.

District learning network established and functional

The QI activities initiated by learning districts provide the basis for the design of learning collaboratives. To date only Ethiopia and Ghana have managed to establish functioning district learning networks. For Ethiopia, the learning network is integrated within the QoC processes rolled out by the MoH, while in Ghana, district learning activities are implemented within the MNH DHMT review processes. Other countries, such as Malawi, are using social media platforms (e.g., WhatsApp groups) to share learning and information among learning districts. In 2020, the disruption of services due to Covid-19 hampered the overall implementation, especially activities related to measurement and learning. Despite these difficulties, Bangladesh, Ethiopia, Malawi and Sierra Leone continued to use QI data for learning purposes.

The vision of the Network is that QI activities and its supporting learning system become an integral activity and function of the periodic DHMT review and supportive supervision. This vision has yet to be realised due to the latent quality culture and the widespread absence of QI capabilities at the management and frontline levels.

Academic institution and a national learning platform

The development of a national learning platform to support QoC implementation was identified as a priority at the onset of the Network. While all countries had platforms that facilitated exchanges of learning for different purposes, none of these platforms was able to capture the multiple elements that are required to support and scale up implementation of QoC programmes.

The Network countries and partners codesigned the concept of the national QoC learning platform. These platforms build on existing structures and integrate multiple elements of learning. Part of operationalizing the design involved identifying an academic institution to support the development and implementation of the national learning platform, including to facilitate exchanges among practitioners, learning districts, decision-makers, and academics, among others. This institution also facilitates the documentation of QoC implementation experiences and undertakes implementation research to inform scaling up of interventions. To this end, Bangladesh and Uganda established partnerships with the National Institute of Preventive and Social Medicine (NIPSOM) and Makarere School of Public Health respectively, successfully building upon existing relationships between the MoH and these institutions.

While other countries are in the formative stage of establishing similar partnerships, their absence has not prevented the sharing of emerging learning between districts and facilities. Implementing teams have developed innovative solutions driven by social media and digital technology to bring together practitioners to share experience and learning. For example, Ghana, Malawi and Nigeria have established WhatsApp groups on QoC for MNH. In Ghana, coaches (mentors) give in-person presentations on MNH interventions and QoC data is shared on a weekly basis on WhatsApp group forums. Implementing teams in Ethiopia are using the QoC Facebook page managed by the MoH to share experiences and communicate with each other. Social media is a useful tool, but it should not replace other forms of QI documentation that can be used for learning. Social media allows for the rapid sharing of information and learning, however, the quality of information may not be always relevant or evidence-based and it is unclear whether the information is used or has an impact.

Annual national quality forums have also provided countries with an effective mechanism for sharing learning. Learning districts from Ethiopia, Ghana and Malawi have used these forums to share experiences and advocate for changes to support QoC implementation at scale.

Despite these examples, countries are yet to translate the documentation of QoC learning into policy dialogue for scaling up successful packages of interventions or to adapt strategies and systems to address implementation gaps. This is because coordination and alignment of the work of stakeholders responsible for evidence-generation, policymaking and the day-to-day implementation of programmes is yet to be institutionalised and funded. The Covid-19 pandemic also hampered the implementation of national learning plans for the QoC Network. In this context, the Network secretariat maximized the use of the global virtual learning platform to facilitate rapid information exchange across the Network and beyond. Country teams are leveraging this and other similar engagements to move forward in developing their own national learning platforms for QoC.

Accountability mechanisms and community engagement

National TWGs play an important accountably role within Network countries. TWGs track government and partner inputs and contributions towards implementation of the MNH QoC roadmaps. TWG meetings also provide an opportunity for policy dialogue and the sharing of data, including the MNH QoC common indicators. Countries that have managed to integrate QoC common indicators in DHIS2 now have the capacity to generate QoC indicator dashboards and demonstrate progress.

Accountability mechanisms and the systematic involvement of communities to improve QoC is critical. By December 2020, Ethiopia, Ghana, Malawi, and Uganda had established a mechanism for the systematic integration of community participation and accountability for QoC. For example, Ethiopia uses the CSC as a social accountability tool in all regions.

Ghana is using a sector-wide strategy based on the development and roll out of a community scorecard. *[59]* The scorecard is used by the community to monitor health services provision and provides a platform for their participation in the development of solutions to address service gaps and challenges. Malawi is also implementing initiatives that promote listening to community voices for improved health services, including the establishment of an ombudsman structure within health facilities. In Uganda, the Community Health Department developed Community Dialogue Guidelines that guide discussions with the community on the findings of QoC MNH assessments. These dialogues result in the development and implementation of joint action plans by communities and facilities in the learning district area. Despite these good examples, more work is needed to ensure that accountability mechanisms are fully integrated in routine systems across all Network countries.

Malawi

Building structures to increase community engagement and social accountability in efforts to improve quality of care in Malawi

Since joining the Network in 2017, Malawi has developed and finalized a range of national policies, strategies, guidelines, reporting templates and tools to guide the work and support districts and facilities to improve the QoC for MNCH. These include the National Quality Management Policy, MNCH QoC roadmap and implementation guide and the adaptation of the MNH and paediatric QoC standards, assessment tools, etc. Structures to guide country implementation of MNCH QoC have also been established and include a TWG which meets quarterly, and a monthly QoC coordination committee, which engages key QoC implementation partners. At the national level, a QoC coordinator and coordination team is in place and all learning districts and facilities have QoC MNCH focal points, Quality Improvement Support Teams (QISTs) and Working Improvement Teams (WITs) to support the improvement of MNCH QoC.

QISTs are multidisciplinary teams that consist of clinicians, pharmacists, midwives, nurses, administrators and a community representative. The teams meet every month to oversee and coordinate the QI interventions at the learning facilities. WITs are small teams that work under the supervision of the QIST. They operate within a specific department in facilities, such as the paediatric or maternity wards, to identify and address QoC challenges that arise in their day-to-day work. Challenges and progress are discussed at QIST meetings and all WITs are represented.

The links between policy and guideline implementation in the learning sites needs further strengthening even though policies, guidelines and tools are in place and learning sites have been oriented to their purpose and use. For example, it has been a challenge for health workers to document their QI projects, because the templates and tools for doing so are not available in a user-friendly format. Due to the frequent rotation of staff at learning sites, there is also a constant need to orient and train new health workers on the QoC implementation package and standards. Ongoing supervision and mentoring at district and facility levels is necessary to keep up the momentum for MNCH QoC implementation, especially when QI initiatives are not well integrated in routine activities and add to the burden of health workers.

Much emphasis has been placed on creating a sustainable system to capture QoC data in a way that is linked to the regular HIS. In mid-2018, Malawi created an integrated collection form in DHIS2 which captures most of the QoC MNH common indicators for provision of care. This data is then uploaded to a global data sharing platform, allowing for the visualization of progress and challenges at national, district and facility levels. Quality gaps in the data still exist due to weak data collection systems. Data is still manually collected in hard copy in many facilities before being sent to the district for uploading in the DHIS2. Districts and facilities still need capacity-building support and systematic follow-up from the MoH and partners.

Malawi chose to include a ninth standard, in addition to the eight QoC MNCH standards developed by WHO, which focused on community engagement and social accountability. In relation to this, by the end of 2019, all 25 learning facilities in Malawi had a designated Hospital Ombudsman. Launched in 2018, the Hospital Ombudsman is used as a platform for patients and community members to raise concerns about challenges in accessing or receiving health care services. Common complaints to the Hospital Ombudsman include delays in healthcare delivery experienced by patients and requests for patients to pay for services which should be free. The Ombudsman is expected to discuss the concerns with facility management so they can take remedial action as needed. The Hospital Ombudsman is also a member of the QIST.

Spot checks of service provision by community health workers are also being piloted in two learning districts through the Community Based Maternal and Newborn Care programme. A community scorecard process also commenced in November 2020 in two districts. The aim of the scorecard is to monitor health services, empower citizens, and improve the accountability of service providers. Two indicators on patient experience of care have also been included in DHIS2 and the data can be used to inform these activities.

Although progress has been made to support accountability and strengthen community engagement for improved QoC, challenges still exist. For example, as the Hospital Ombudsman position is newly established, its mandate and role are not clearly understood by all health workers or communities. To ensure that the Hospital Ombudsman can be empowered and add value to the QoC processes, activities to build awareness and knowledge of communities and health providers on the expected roles and responsibilities is needed.

Uganda

Leveraging partnerships to strengthen the institutionalization of quality of care and learn from implementation in Uganda

Over the last decade, the MoH has sought to strengthen national institutions and mechanisms for improving QoC in the health sector. The launch of the Network boosted these past efforts and refocused attention on the need to deliver QoC in MNCH at all levels of service provision. In committing to the Network goals and strategic objectives, the MoH established a TWG within its national coordination for MNH QoC. Comprised of development and implementing partners, the task of the TWG is to spearhead the MNH QoC agenda and to monitor progress. Through the TWG, professional associations, academics, and civil society champions have been engaged to promote MNH QoC as well as support the implementation of planned activities. The MoH has also established a governance structure that spans from national, to subnational and health-facility levels. As part of this structure, district-level QoC committees work hand-in-hand with QI teams in health facilities.

A national roadmap, which highlights the MoH vision for MNH QoC, and national guidelines for improving MNH QoC have been developed together with an agreed set of quality indicators for reproductive, maternal, newborn and child health relevant to context. These all support QoC implementation, documentation and learning in an initial six districts and 18 sites selected by the MoH and partners. Substantial time and effort were needed to establish these structures and processes. Regular communication with and between partners helped to enhance trust and create and sustain buy-in from other MoH departments, MNH QoC donors and implementers. Maintaining this engagement will require strong MNH QoC coordination from the national to facility level, and the streamlining of QoC activities within relevant MoH departments beyond MNH.

An important step in the implementation process was the adaptation and update of national QoC standards based on WHO QoC standards and their inclusion in national practice tools. Following this step, learning sites were oriented on the implementation of the national package of QoC improvement interventions.

These activities have been possible due to the partnership between the MoH and implementing partners fostered by the TWG. Since 2017, facility teams have implemented two MNH QoC assessments to identify gaps and address challenges within MNH QoC. Following the second assessment, Makerere University School of Public Health was engaged to provide ongoing technical support to the learning sites. Similarly, in 2019 the Uganda Private Midwives Association was engaged to conduct supportive supervision visits to the sites.

The MoH has encouraged partners in reproductive, maternal, newborn, child and adolescent health[3] to integrate QoC approaches in their district support activities, provide regular reports, and participate in monthly QoC meetings. The result of this collaboration is the scale up of QoC MNH interventions in more than 60 districts.

3. Partners supporting the new districts include: Global Financing Facility; UNICEF; UNFPA; Clinton Health Access Initiative (CHAI); USAID Regional Health Integration to Enhance Services (RHITES); WHO; JHPIEGO; Save the Children; UNHCR; AVSI Foundation; Makerere University; and CUAM.

Moving forward, it will be important to ensure that supportive supervision, coaching and mentorship structures are in place to continue to build QI and clinical MNH skills across districts. Strengthening the capacity of DHMTs and QI committees to facilitate the implementation of MNH QoC interventions in health facilities will be needed. For example, in 2020 the MoH Department of Standards, Compliance, Accreditation, and Patient Protection trained over 300 frontline health workers in QI mentorship. However, the competing workload priorities do not allow all mentors to engage in QI projects. In addition, lockdowns and the redeployment of the health workforce to support the Covid-19 response has hindered the ability of some districts to provide QI support and mentoring to frontline health workers.

Monitoring QoC for MNH and demonstrating results has been a priority for the MoH and partners. The MoH has appointed two M&E focal points to assist facility teams with data compilation and analysis. Most of the MNH QoC common indicator data elements are being collected through the HIS, however, indicators on patient experience of care and WASH are not covered in the national system. While discussions with the MoH HIS Division continue on integrating the core indictors in the HIS, a complementary database is used to monitor MNH QoC indicators in learning facilities. A quality indicator dashboard is also used to track progress on the implementation of QoC standards.

Each learning district has initiated a WhatsApp platform with participating health facilities to share learning from district-based activities. In 2020, teams in the six learning districts were trained to document QI interventions and generate facility profiles for sharing at facility and district levels. In 2021, the Makerere University School of Public Health will be piloting a system in two districts to strengthen MNH QoC data collection and management at the facility level and to establish a community of practice, which will include the systematic reporting of case histories and stories from the field. This will form the basis of a national learning network across learning sites.

Community advocacy and mobilization strategies for MNCH QoC are gaining some momentum but still need to be systematically developed and implemented. Steps have been taken to engage community leaders in district-level activities. The MoH has also provided guidelines for engaging Health Unit Management Committees (HUMCs), which serve as a bridge between patients and health workers. HUMCs share the issues raised by communities with health workers and an action plan is developed to address identified concerns. Other community initiatives exist to strengthen accountability for MNH QoC, such as suggestion boxes in facilities, and the participation of local village councillors in HUMC meetings. Village councillors representing local communities also meet monthly to discuss health and development priorities, and key issues are conveyed to the district council for further consideration and planning.

Photo: A nurse explains the importance of nutrition to a new parent at a clinic in Accra, Ghana.

Learning from implementation: Levers that enhance quality of care implementation

Since the Network launch, Network countries have built momentum and worked intensively to integrate quality within health systems and service provision. Their efforts to improve QoC for MNCH are laying a path for broader action on quality and informing learning on how to institutionalize and support scaling up of QoC across the health system. Strong leadership and government commitments are contributing to increased investment in and strengthening of QoC structures at national and subnational levels. As countries revise their MNCH or QoC strategies, they are incorporating core elements of the QoC Network implementation approach in their plans.

Countries outside the Network have been inspired by the work done so far and are willing to undertake their own QoC journeys using the Network's implementation approach. Local contexts will shape how countries choose to start and pursue their journey. Based on Network experiences, most countries will require substantial technical and financial support.

Despite challenges to implementation created by the Covid-19 pandemic, the Network continues to progress towards its strategic objectives. The observations, reflections and lessons learned from implementing Network activities over the past four years provide policymakers implementers with insights on a set of critical levers required to build momentum and show results.

It takes a whole health system to improve QoC. National strategic direction on quality provides an important framework for action across the health system. The implementation of the QoC agenda has advanced in countries that developed national quality policies and strategies, started to set up dedicated QI structures, initiated QI capacity-building for health managers and health workers and established mechanisms for community and stakeholders' engagement. The PHC operational framework provides further impetus to build this whole-system approach with focused attention on QoC.

Government leadership and long-term commitment are prerequisites for success. QoC may not always be a priority in resource-constrained environments where there are competing health needs. It is therefore critical to identify and engage key decision-makers and policy influencers to make the case for investment in QoC and to create an enabling and supportive environment for QoC improvement, through leadership.*[62]* Government leadership makes it possible to align partners and investments, allocate domestic resources in support of QoC and strengthen accountability for QoC implementation. Substantial time and a long-term commitment are needed to establish structures, systems and partnerships for QoC and to align resources. Attention must be paid to addressing and managing potential tensions between new QoC structures and existing programme structures responsible for the provision of health services.

QoC requires dedicated and sustained investment and partnership. The QoC agenda does not exist in isolation. Investments in the whole health system are needed to strengthen QoC implementation. Countries should therefore consider anchoring and integrating QoC within other ongoing health system strengthening efforts, including to increase domestic resources for UHC and PHC. Financing initiatives, such as the Global Financing Facility and Global Fund should support this country-led QoC agenda. The Network countries saw successes where partners were aligned around a government's drive for QoC, and their technical assistance was predictable and continuous. In the short- and medium-term, national governments alone cannot mobilize the level of resources required to develop and sustain a large, system-wide change. Partner engagement in the development of QI capabilities across all levels of the health system will be required to support governments' efforts towards the institutionalization of QI.

Health systems operate in different contexts which impact the pace of QoC development, adaptation and implementation, and QI alone is not enough to change QoC. Countries progress better when their QoC structures and strategy are anchored in their existing health system architecture and reflect their actual capacity to reach targets. While it is important to be aspirational, it is equally important to have realistic expectations about what and by when a QoC strategy and interventions would achieve the intended results. A QoC strategy is not a panacea for all the unresolved problems in service provision, but it should be seen as a significant opportunity to improve how services are delivered. Quality improvement interventions alone are not enough to improve QoC. Improving quality at the point of care is necessary but will only bring about small-scale changes if not supported by fit for purpose infrastructure, access to medicines and equipment, adequate WASH, and qualified human resources, etc. There is a real risk of exhausting enthusiasm for QoC if systemic and resource gaps identified during QI cycles are not addressed.

Building QI capabilities is necessary for sustaining the provision of QoC. QI capabilities in many countries' health systems are still limited and QI capacity-building requires time and investment. Pre-service education should include a focus on building the QI knowledge of health workers. At the same time, health services management must change to embrace a QoC culture and encourage QI as a method of work across all levels.

Investing early and intentionally in the development and strengthening of data systems for QoC is essential. Integrating relevant QoC indicators in routine HIS strengthens accountability for QoC. It also allows for the impartial assessment of results achieved through different QI efforts. HIS in many countries continue to suffer structural and operational deficiencies which are unlikely to be resolved solely because of the need to meet MNH QoC measurement requirements. Addressing these deficiencies requires HIS strengthening or reform.

While reforms take place, a possible avenue to address the immediate needs for QoC data could be to develop QoC measurement tools which are systematically incorporated into the broader measurement landscape and routine information systems. Opportunities should be leveraged to integrate MNH QoC measurement efforts within broader initiatives to improve HIS, for example relating to wider investment in PHC reforms. It is important that HIS managers are engaged early in the development of QoC indicators and measurement frameworks to ensure there is an understanding of how HIS and related strategies need to be shaped and financed to support their implementation.

Designing, implementing and monitoring a comprehensive and adaptable QoC programme at the district or regional levels is critical. At district or regional levels, all key stakeholders need to be engaged early in the process to codevelop a fit-for-purpose QoC programme aligned with national QoC priorities and strategies. Engaging communities and stakeholders from different disciplines and sectors, such as WASH, education, etc. is critical for understanding the underlying causes of persistent QoC challenges. The programme design should clearly articulate the organizational and delivery plan. The organizational plan should be monitored and allow district or regional managers to identify and track specific activities and the resources required. Data on programme implementation, such as duration and intensity, will help district or regional managers assess whether the results are impacted due to implementation or external circumstances, such as Covid-19. Even the best programme designs will not show impact if implemented poorly, not monitored or are neither context sensitive nor adaptable.

Demonstrating impact of QI activities takes time. Implementers have to plan for a district-wide impact assessment from the very beginning of a QoC MNH programme. QI interventions implemented at the health facility level can show tangible results in a short time. However, demonstrating the impact of QI initiatives implemented in multiple health facilities, with varying focus, intensity and timing, will likely be limited if the impact assessment is conducted too early in the implementation process.

Documenting and sharing lessons from QoC initiatives can help build more effective programmes and it requires trust. The learning from QoC initiatives can be transferable to other QoC programmes when they document and respond to why improvement ideas worked or did not. Documenting the context is important for understanding the conditions under which the results are achieved. Countries must be willing to share their data and lessons so other countries can apply the learning to their own implementation context. Building trust among members of the Network has been critical for the sharing of lessons within and between countries.

Engaging communities and stakeholders in designing and implementing QoC for MNH programmes paves the way to progress and ensures accountability for QoC. This engagement is critical to help identify gaps, prioritize concerns and monitor performance. When community engagement mechanisms are in place, they provide a powerful avenue to ensure accountability for results.

And finally, the Network offers a valid platform for rapid South-South learning and accelerated progress in QoC. The Network provides a facilitated platform of collaboration for countries and partners to work together under a common vision, to codesign and engage in joint implementation. Implementation experience demonstrates no one single organization has all the technical knowledge, resources and outreach to improve QoC. The Network has provided a trusted and safe space where different QoC country leadership and stakeholders can meet, partner, and exchange ideas and solutions to implementation challenges. Setting up and managing this type of network requires commitment, leadership and resources. The lessons learned from implementing the Network could serve as a starting point for other programmes aiming to improve health outcomes and strengthen health systems.

Photo: A health care worker weighing and measuring a baby's growth at the Comprehensive Health Centre Arakale in Akure, Nigeria

The way forward

As the Network countries engage in operationalizing the new PHC framework, they must build on the results of their efforts so far to institutionalize, sustain and scale up QoC within national health care systems. Network countries must continue to strengthen the health system's foundations, update the national HIS to include QoC metrics for MNCH and other programmes, increase domestic resources for improving QoC and align the support of strategic investments such as the Global Financing Facility, the Global Fund and other funding mechanisms. These investments will enable the Network countries to expand the scope of implementation to include all MNCH standards,*[38, 39]* tackle QoC in service delivery at the community level, address equity aspects of QoC and demonstrate impact. Predictable and continuous partner engagement in support of QI capacity-building will remain critical.

The Network has stimulated change through enhancing partnerships and facilitating South-South learning and collaboration. It has also proven to be a sound mechanism for catalysing the development and operationalization of national QoC strategies and the structures needed to sustain delivery of QoC. Its guidance and approach offer an example to other programmes on how to integrate their QI activities within wider health system efforts for QoC. Building on these strengths, the Network can aspire to be a bridge that facilitates knowledge sharing and collaboration within MNCH and across programmes, countries, and regions. The acceleration of the implementation of the PHC agenda and related strategic initiatives such as The Global Action Plan for Healthy Lives and Well-being for All *[63]* will benefit from building on and expanding the Network approach to more countries and regions, as well as capitalizing on the Network learning function to facilitate this expansion.

Scaling up the implementation of QoC activities within the Network and expanding its approach to additional countries and regions will also require fresh normative guidance and an updated evidence base. WHO and partners must continue to engage in the development of MNCH QoC standards and related tools for all levels of service delivery, including the operationalization of the respectful care aspects of QoC for MNCH and the development of standards of care for community-based service delivery. These developments must go hand in hand with intensified efforts to strengthen the QoC for MNCH measurement agenda. Ensuring an integrated approach across ongoing strategic measurement partnerships such as Mother and Newborn Information for Tracking Outcomes and Results (MoNITOR),*[64]* Child Health Accountability Tracking (CHAT),*[65]* and Global Action for Measurement of Adolescent Health (GAMA) *[66]* will be critical to accelerate the development of QoC measurements and tools and to enable countries to demonstrate the impact of QoC activities.*[67]* Strengthening WHO's capacity will therefore be necessary to ensure that the organization continues to play its pivotal convening role and facilitate knowledge sharing and learning at all levels of implementation.

Outstanding and emerging priorities, such as the equity aspects of QoC provision, participation of end-users in QoC decision-making, provision of quality care in conflict-affected and vulnerable settings,*[68,69]* private sector engagement in delivering QoC and use of digital technology and innovation as a means for enhancing quality service delivery, will require attention and action. In view of these developments, a fresh look at the emerging evidence and knowledge on QoC for MNH will help to update actions and recommendations on how to address these priorities and sustain and scale QoC solutions.

References

1. Ghebreyesus TA. How could health care be anything other than high quality? Lancet Glob Health. 2018;6(11): e1140-e1141. doi: https://doi.org/10.1016/S2214-109X(18)30394-2.
2. World Health Assembly, 64.9. Sustainable health financing structures and universal coverage. 24 May 2011. Geneva: World Health Organization; 2011 (https://apps.who.int/iris/handle/10665/3564).
3. World Health Assembly, 67.10. Newborn health action plan. 24 May 2014. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/162848/A67_R10-en.pdf?sequence=1&isAllowed=y).
4. World Health Assembly, 69.2. Committing to implementation of the Global Strategy for Women's, Children's and Adolescents' Health. 28 May 2016. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/252782/A69_R2-en.pdf?sequence=1&isAllowed=y).
5. Global Strategy for Women's Children's and Adolescents' Health (2016-2030). New York: Every Woman Every Child; 2015 (https://www.who.int/life-course/partners/global-strategy/ewec-globalstrategyreport-200915.pdf?ua=1).
6. Kruk ME, Gage AD, Joseph N, Danaei G, García-Saisó S, Salomon J. Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. Lancet. 2018;392(10160): 2203-2212. doi: https://doi.org/10.1016/S0140-6736(18)31668-4.
7. Quality Health Services [webpage]. Geneva: World Health Organization; 2020 (https://www.who.int/news-room/fact-sheets/detail/quality-health-services, accessed 3 December 2020).
8. World Health Organization, Organisation for Economic Co-operation and Development, and World Bank. Delivering quality health services: a global imperative for universal health coverage. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/272465).
9. Tunçalp Ö, Were W, MacLennan C, Oladapo O, Gulmezoglu A, Bahl R, et al. Quality of care for pregnant women and newborns – the WHO vision. BJOG, 2015;122(8):1045-9. doi: 10.1111/1471-0528.13451.
10. World Health Organization. WHO technical consultation on the implementation of quality of care standards. Meeting report. January 2016. Unpublished.
11. Launch of the Network for Improving Quality of Care for Maternal, Newborn and Child Health. 14–16 February 2017, Lilongwe, Malawi. Meeting Report. Geneva: World Health Organization; 2017 (http://www.qualityofcarenetwork.org/sites/default/files/2019-09/2430%20Malawi%20report%20040319%20pressready.pdf).
12. Adeniran A, Likaka A, Knutsson A, Costello A, Daelmans B, Maliqi B, et al. Leadership, action, learning and accountability to deliver quality care for women, newborns and children. Bull World Health Organ. 2018;96(3):222-224. doi: 10.2471/BLT.17.197939.
13. The Network to Improve Quality of Care for Maternal, Newborn and Child Health. Strategic Objectives. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/bitstream/handle/10665/272612/9789241513951-eng.pdf).
14. Protect the progress: rise, refocus and recover. 2020 progress report on the Every Woman Every Child Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). Geneva: World Health Organization and UNICEF; 2020 (https://data.unicef.org/resources/protect-the-progress-rise-refocus-recover-ewec-2020/).
15. World Health Organization, UNICEF, UNFPA, World Bank Group, United Nations Population Division. Trends in maternal mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/327596).

16. UNICEF, World Health Organization, World Bank Group, United Nations Population Division. Levels and trends in child mortality. New York: UNICEF; 2020 (https://data.unicef.org/resources/levels-and-trends-in-child-mortality/).

17. United Nations Inter-agency Group for Child Mortality Estimation. A neglected tragedy: the global burden of stillbirths. New York: UNICEF; 2020 (https://www.unicef.org/media/84851/file/UN-IGME-the-global-burden-of-stillbirths-2020.pdf).

18. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1).

19. Tracking the situation of children during COVID-19. Dashboard [webpage]. New York: UNICEF; 2020 (https://data.unicef.org/resources/rapid-situation-tracking-covid-19-socioeconomic-impacts-data-viz/, accessed 3 July 2020).

20. Immunization, vaccines and biologicals. Special feature: immunization and COVID-19 [webpage]. Geneva: World Health Organization; 2020 (https://www.who.int/immunization/monitoring_surveillance/immunization-and-covid-19/en/).

21. Roberton T, Carter E, Chou V, Stegmuller A, Jackson D, Tam Y, et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. Lancet Glob Health. 2020;8(7):e901-e908. doi: https://doi.org/10.1016/S2214-109X(20)30229-1.

22. Jewell B, Mudium E, Stover J, ten Brink D, Phillip A, Smith J, et al. Potential effects of disruption to HIV programmes in sub-Saharan Africa caused by COVID-19: results from multiple mathematical models. Lancet HIV. 2020;7(9):e629-e640. doi: https://doi.org/10.1016/S2352-3018(20)30211-3.

23. Impact of the COVID-19 pandemic on family planning and ending gender-based violence, female genital mutilation and child marriage: pandemic threatens achievement of the transformative results committed to by UNFPA. Interim Technical Note. New York: UNFPA; 2020 (https://www.unfpa.org/sites/default/files/resource-pdf/COVID-19_impact_brief_for_UNFPA_24_April_2020_1.pdf).

24. The potential impact of health service disruptions on the burden of malaria: a modelling analysis for countries in sub-Saharan Africa. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/bitstream/handle/10665/331845/9789240004641-eng.pdf?sequence=1&isAllowed=y).

25. Resolution A/RES/74/2. Political declaration of the high-level meeting on universal health coverage. Seventy-fourth United Nations General Assembly. New York, 10 October 2019. New York: United Nations; 2019 (https://undocs.org/en/A/RES/74/2).

26. Resolution A/RES/70/1. Transforming our world: the 2030 Agenda for Sustainable Development. Seventieth United Nations General Assembly. New York, 25 September 2015. New York: United Nations; 2015 (https://undocs.org/en/A/RES/70/1).

27. Declaration of Astana. Geneva: World Health Organization; 2018 (https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf).

28. Universal health coverage. Primary health care towards universal health coverage. Report by the Director-General. Seventy-second World Health Assembly A72/12. Geneva: World Health Organization; 2019 (https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_12-en.pdf).

29. Operational framework for primary health care. Transforming vision into action. Geneva: World Health Organization; 2020 (https://www.who.int/servicedeliverysafety/operational-framework-for-primary-health-care_WHA73.pdf).

30. Quality in primary health care. Technical series on primary health care. Geneva: World Health Organization; 2018 (https://www.who.int/docs/default-source/primary-health-care-conference/quality.pdf?sfvrsn=96f411e5_2).

31. Kruk ME, Gage A, Arsenault C, Jordan K, Leslie H, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. Lancet Glob Health, 2018;6(11):e1196-e1252. doi: https://doi.org/10.1016/S2214-109X(18)30386-3.

32. National Academies of Sciences, Engineering and Medicine, Health and Medicine Division Board on Health Care Services, Board on Global Health, Committee on Improving the Quality of Health Care Globally, Crossing the global quality chasm: Improving health care worldwide. Washington (DC): National Academies Press; 2018 (https://pubmed.ncbi.nlm.nih.gov/30605296/).

33. Everybody's business: strengthening health systems to improve health outcomes. WHO's framework for action. Geneva: World Health Organization; 2007 (https://www.who.int/healthsystems/strategy/everybodys_business.pdf).

34. Donabedian A. The quality of care: how can it be assessed? JAMA. 1988;260(12):1743–1748. doi:10.1001/jama.1988.03410120089033.

35. Juran JM. The quality trilogy. A universal approach to managing for quality. American Society for Qualtiy Control (ASQC) 40th Annual Quality Congress. Anaheim, California; 1986 (https://statmodeling.stat.columbia.edu/wp-content/uploads/2017/10/Juran-trilogy-1986.pdf).

36. World Health Organization. WHO standards of care to improve maternal and newborn quality of care in facilities. Technical Brief. Prepared for the Network launch meeting, 14–16 February 2017, Lilongwe, Malawi; 2017 (http://qualityofcarenetwork.org/oldsite/sites/default/files/brief%207%20Standards%20_1.pdf).

37. Standards for improving quality of maternal and newborn care in health facilities. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/249155/9789241511216-eng.pdf?sequence=1).

38. Standards for improving the quality of care for children and young adolescents in health facilities. Geneva: World Health Organization; 2018 (https://www.who.int/maternal_child_adolescent/documents/quality-standards-child-adolescent/en/).

39. Standards for improving quality of care for small and sick newborns in health facilities. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240010765).

40. Barker P. Building systems to support delivery of quality care in an effective, scalable and sustainable way. Internal discussion paper. 2015. Unpublished.

41. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Quality of care in the context of universal health coverage (UHC). Technical Brief. Prepared for the Network launch meeting, 14–16 February 2017, Lilongwe, Malawi; 2017 (http://www.qualityofcarenetwork.org/sites/default/files/2019-07/quality-of-care-brief-uhc.pdf).

42. Integrating stakeholder and community engagement in quality of care initiatives for maternal, newborn and child health. Geneva: World Health Organization; 2020 (http://www.qualityofcarenetwork.org/integrating-stakeholder-and-community-engagement-module).

43. Quality health services: a planning guide. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240011632).

44. World Health Organization. WHO Quality Technical Expert Network [webpage]. (https://www.who.int/groups/who-quality-technical-expert-network, accessed 11 January 2021).

45. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Implementation guidance. Improving quality of care for maternal, newborn and child health. Geneva: World Health Organization; 2017 (https://www.who.int/maternal_child_adolescent/topics/quality-of-care/quality-of-care-brief-implementation.pdf).

46. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Quality of care for maternal and newborn health: A monitoring framework for Network countries. Geneva: World Health Organization; 2019 (https://www.who.int/docs/default-source/mca-documents/advisory-groups/quality-of-care/quality-of-care-for-maternal-and-newborn-health-a-monitoring-framework-for-network-countries.pdf?sfvrsn=b4a1a346_2).

47. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. WASH in health-care facilities: Links with the Network for Improving Quality of Care for Maternal, Newborn and Child Health. Technical Brief. Prepared for the Network launch meeting, 14–16 February 2017, Lilongwe, Malawi; 2017 (http://www.qualityofcarenetwork.org/knowledge-library/wash-health-care-facilities-links-network-or-improving-quality-care-maternal).

48. Quality of Care Network Secretariat. Report of the second global meeting of the Network for Improving Quality of Care for Maternal, Newborn and Child Health in Addis Ababa, Ethiopia, March 2019. 2019 (http://www.qualityofcarenetwork.org/sites/default/files/2019-09/2nd%20Network%20Meeting%20Report%20-%20Final%20with%20cover.pdf).

49. The Network for Improving Quality of Care for Maternal, Newborn and Child Health [website]; (http://www.qualityofcarenetwork.org/home, accessed 3 December 2020).

50. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Knowledge Library [webpage]. (http://www.qualityofcarenetwork.org/knowledge-library?title=&field_repository_type_target_id%5B16%5D=16, accessed 3 December 2020).

51. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Webinars series [webpage]. (http://www.qualityofcarenetwork.org/webinarseries, accessed 3 December 2020).

52. Quality Talks. Better healthcare for women and children [podcast]. (https://quality-talks.blubrry.net/, accessed 3 December 2020).

53. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Engage with peers [webpage]. (http://www.qualityofcarenetwork.org/engage-peers, accessed 3 December 2020).

54. The Network for Improving Quality of Care for Maternal, Newborn and Child Health. Updates [webpage]. (http://qualityofcarenetwork.org/updates, accessed 3 December 2020).

55. WHO Handbook for National Quality Policy and Strategy: a practical approach for developing policy and strategy to improve quality of care. Geneva: World Health Organization; 2018 (https://www.who.int/servicedeliverysafety/areas/qhc/nqps_handbook/en/).

56. Improving the quality of hospital care for mothers and newborns: coaching manual. New Delhi: World Health Organization Regional Office for South-East Asia; 2017 (https://www.newbornwhocc.org/POCQI-Coaching-Manual.pdf).

57. Take N, Byakika S, Tasei H, Yoshikawa T. The Effect of 5S-Continuous Quality Improvement – Total Quality Management Approach on staff motivation, patients' waiting time and patient satisfaction with services at hospitals in Uganda. J Public Health Africa. 2015;6(1): 486. doi: 10.4081/jphia.2015.486.

58. Every Mother Every Newborn (EMEN) Quality Improvement Guide for Health Facility Staff. New York: UNICEF; 2016 (https://www.healthynewbornnetwork.org/hnn-content/uploads/EMEN-QI-GUIDE-.pdf).

59. Blake C, Annorbah-Sarpei N, Bailey C, Ismaila Y, Deganus S, Bosomprah S, et al. Scorecards and social accountability for improved maternal and newborn health services: A pilot in the Ashanti and Volta regions of Ghana. Int J Gynaecol Obstet. 2016;135(3):372-379. doi: 10.1016/j.ijgo.2016.10.004.

60. USAID'S MaMoni Maternal and Newborn Care Strengthening Project [website]. Bangladesh: USAID; (https://mamoni.info/, acessed 4 December 2020).

61. Understanding PDSA cycles [webpage]. LifeQI software platform; (https://help.lifeqisystem.com/pdsa-cycles/understanding-pdsa-cycles; accessed 14 December 2020).

62. National quality policy and strategy [webpage]. Geneva: World Health Organization; (https://www.who.int/teams/integrated-health-services/quality-health-services/national-quality-policy-and-strategy).

63. Stronger collaboration, better health: Global Action Plan for Healthy Lives and Well-being for All [webpage]. Geneva: World Health Organization; (https://www.who.int/initiatives/sdg3-global-action-plan; accessed 19 January 2021).

64. Mother and Newborn Information for Tracking Outcomes and Results (MoNITOR) [webpage]. Geneva: World Health Organization; 2015 (https://www.who.int/data/maternal-newborn-child-adolescent/monitor; accessed 19 January 2021).

65. Child Health Accountability Tracking Technical Advisory Group (CHAT) [webpage]. Geneva: World Health Organization; (https://www.who.int/data/maternal-newborn-child-adolescent/chat; accessed 19 January 2021).

66. The Global Actin for Measurement of Adolescent Health (GAMA) [webpage]. Geneva: World Health Organization; 2019 (https://www.who.int/data/maternal-newborn-child-adolescent/gama; accessed 19 January 2021).

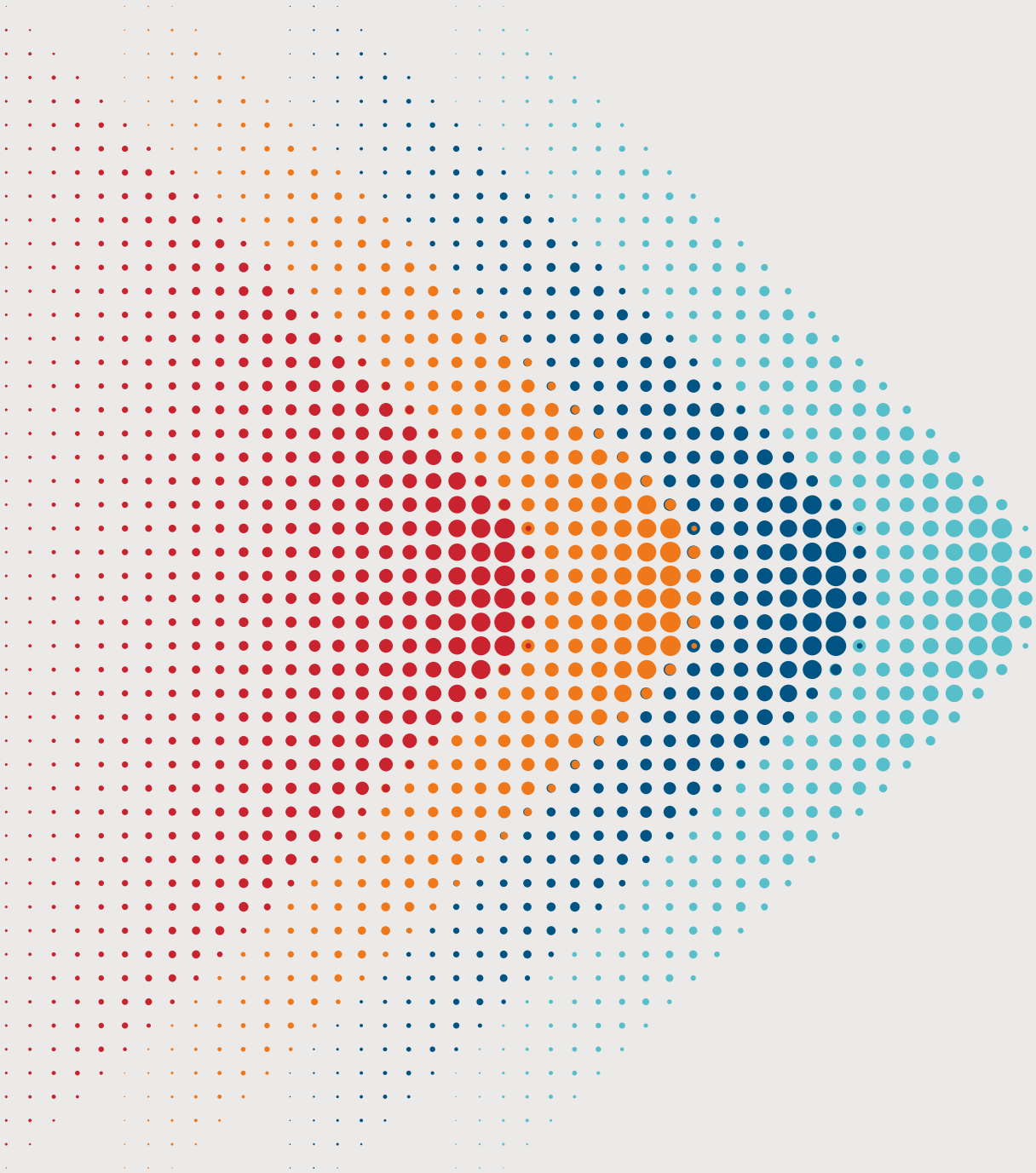
67. SCORE Dashboard [webpage]. Geneva: World Health Organization; (https://www.who.int/data/data-collection-tools/score/dashboard#/; accessed 8 February 2021).

68. Quality of care in fragile, conflict-affected and vulnerable settings: tools and resources compendium. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240018006).

69. Quality of care in fragile, conflict-affected and vulnerable settings: taking action. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240015203).

Photo credits:

cover page, Flickr Creative Commons License/© UNICEF Ethiopia;
page viii, Flickr Creative Commons License/Direct Relief;
page 1, Flickr Creative Commons License/© UNICEF Ethiopia/2014/Tsegaye;
page 2-3, UN Photo/Kibae Park;
page 4-5, Flickr Creative Commons License/H6 Partners/Abbie Trayler-Smith;
page 8-9, Flickr Creative Commons License/DFID - UK Department for International Development/Russell Watkins;
page 16-17, Flickr Creative Commons License/USAID US/MCHIP/Karen Kasmauski;
page 22, Flickr Creative Commons License/Department of Foreign Affairs and Trade;
page 26, Flickr Creative Commons License/MedGlobal Org;
page 30, Flickr Creative Commons License/The White Ribbon Alliance;
page 31, Flickr Creative Commons License/The White Ribbon Alliance;
page 32, UN Photo/UNFPA/Evelyn Kiapi;
page 33, Flickr Creative Commons License/The White Ribbon Alliance;
page 37, WHO/Christopher Black;
page 34-35, Flickr Creative Commons License/The Maternal and Child Survival Program (MCSP)/ Kate Holt;
page 36-37, Flickr Creative Commons License/The World Bank/Dominic Chavez;
page 38, Flickr Creative Commons License/The Global Financing Facility/© Dominic Chavez;
page 39, Flickr Creative Commons License/© UNICEF Ethiopia;
page 40, Flickr Creative Commons License/H6 Partners/Abbie Trayler-Smith.



World Health Organization

ISBN 978-92-4-002374-1