

Quality of Care Models in the Bangladesh Health Sector: Showcasing the Best Practices

Sk Masum Billah

Shema Mhajabin

Mohiuddin Ahsanul Kabir Chowdhury

Md. Taqbir Us Samad Talha

Nafisa Lira Huq

Shamima Akhter

Shams El Arifeen



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List of Abbreviations

| | |
|--------|---|
| ANC | antenatal care |
| AP | action plan |
| BFHI | Baby-Friendly Hospital Initiative |
| CEmOC | comprehensive emergency obstetric care |
| CQI | continuous quality improvement |
| CSBA | community skilled birth attendant |
| DGHS | Directorate General of Health Services |
| EMEN | Every Mother Every Newborn |
| EmOC | emergency obstetric care |
| FP | family planning |
| FWV | family welfare visitor |
| GOB | Government of Bangladesh |
| JICA | Japan International Cooperation Agency |
| MBFFI | Mother and Baby-Friendly Facility Initiative |
| MDG | Millennium Development Goal |
| MMR | maternal mortality ratio |
| MNCH | maternal, neonatal, and child health |
| MNH | maternal and newborn health |
| MOHFW | Ministry of Health and Family Welfare |
| NMR | neonatal mortality rate |
| OGSB | Obstetrical and Gynecological Society of Bangladesh |
| PDCA | plan-do-check-act |
| PNC | postnatal care |
| QI | quality improvement |
| QIINHC | Quality Improvement Initiative for Newborn Health Care |
| QIS | Quality Improvement Secretariat |
| QIT | quality improvement team |
| QOC | quality of care |
| RMNCAH | reproductive, maternal, neonatal, child and adolescent health |
| SBA | skilled birth attendant |
| SDG | Sustainable Development Goal |
| SMPP | Safe Motherhood Promotion Project |
| SOP | standard operating procedure |
| TFIPP | Thana Functional Improvement Pilot Project |
| TQM | total quality management |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children’s Fund |
| UP | Union Parishad |
| USAID | United States Agency for International Development |
| WFHI | Woman-Friendly Hospital Initiative |
| WHO | World Health Organization |
| WIT | work improvement team |

Executive Summary

The world has achieved significant gains in maternal, newborn, and child health (MNCH) and in the coverage of facility-based MNCH interventions. Still, many women and newborns continue to die during or shortly after childbirth due to a lack of quality of care (QOC) and disparities that persist across countries and groups within countries. Mirroring the global trend, Bangladesh made significant progress towards the targets outlined by Millennium Development Goals (MDGs) 4 and 5. Overall, there have been substantial reductions in maternal and child mortality along with facility delivery improvement during the MDG era. However, facility delivery is used in only half of all deliveries. QOC plays an important role in facilities, contributing to the increased use of MNCH services, better MNCH outcomes, and reduced mortality rates.

QOC has a direct impact on health outcomes and progress. According to the World Health Organization (WHO), quality of maternal and newborn (MNH) health care is defined as 'the degree to which MNH health services (for individuals and population) increase the likelihood of timely, appropriate care to achieve desired outcomes that are both consistent with current professional knowledge and take into account the preferences and aspirations of individual women and their families'. The evidence indicates that increasing the number of facilities alone will not be sufficient to reduce maternal and neonatal mortality and morbidity unless QOC is maintained.

The Government of Bangladesh (GOB) has already implemented a number of QOC models to ensure quality MNCH services. Accordingly, this study takes the opportunity to document the success stories of selected QOC initiatives in Bangladesh so as to disseminate and showcase the best practices of the initiatives that were successful in their impact. A comprehensive methodological approach was employed, including a literature review, stakeholder consultations, and key informant interviews. The report critically examines the different steps taken by particular service providers, which need to be documented to obtain a clear understanding of the existing gaps and take the necessary actions to improve QOC. The following models are explained in the report:

Thana Functional Improvement Pilot Project

The Thana Functional Improvement Pilot Project (TFIPP) was implemented from 1994 to 1999. It aimed to improve the QOC of government health facilities through a fund generated based on collecting user fees, the training of different levels of staff based on their job requirements, and community engagement.

Safe Motherhood Promotion Project

The Safe Motherhood Promotion Project (SMPP) was implemented in Narsingdi District between July 2006 and June 2011 with technical assistance from the Japan International Cooperation Agency (JICA). Its aim was to improve both the use of services and the QOC of health facilities. In particular, it sought to improve the use of maternal and newborn health (MNH) services through the development of a community support system, ensuring safe delivery through a union model approach, and collaboration with local government.

5S-CQI-TQM Approach/Quality Improvement Project for MNH Care at GOB Facilities

The 5S-CQI-TQM project lasted from 2011 to 2014, with the main objective of improving facility readiness through enhancement of the management and functionality of health facilities with limited existing resources. A number of significant steps, such as developing teams, capacity building, and monitoring and supportive supervision were taken to implement the intervention.

Quality Improvement Secretariat of the Ministry of Health and Family Welfare, GOB

The Quality Improvement Secretariat (QIS) was founded in 2015 within the Ministry of Health and Family Welfare (MOHFW), GOB, to improve the quality of services in all types of health facilities (public, private, and non-governmental organizations (NGOs)) throughout the country. Currently, the QIS is working to establish physical structures at health facilities for quality improvement (QI).

Chowgachha Model

The Chowgachha model was established in 1985 based on a self-initiative to improve the QOC in health facilities and ensure safe motherhood for all pregnant women in Chowgachha Upazila under the Jessore District. The Chowgachha model won the annual best performance award in providing quality emergency obstetric care (EmOC) from 2005 through 2014.

Quality Improvement Initiative for Newborn Health Care

The Quality Improvement Initiative for Newborn Health Care (QII-NHC) was a targeted neonatal health care initiative focused on the establishment of Special Care Newborn Units (SCANUs) in district-level government hospitals based on a 5S-CQI-TQM approach. The project was implemented from 2011 to 2016 by the GOB with technical support from UNICEF.

Every Mother Every Newborn Quality Improvement Initiative

The Every Mother Every Newborn (EMEN) QI initiative was undertaken to develop context-specific QI indicators focusing on improving care around birth. The QIS of the MOHFW led this program, with UNICEF providing resources and technical assistance.

Women-Friendly Hospital Initiative

The Women-Friendly Hospital Initiative (WFHI) aimed to improve the quality of health care and the responsiveness of health providers to the needs of women. Originally covering 26 district hospitals (DHs), the initiative was eventually scaled up to 40 districts. The initiative's main components were QOC, a mother–baby service package, the management of violence against women, and gender equity. Gender sensitization was a key challenge in the implementation of the program.

Regional Roaming Quality Improvement Team

The Regional Roaming Quality Improvement Team (RRQIT) was established as a component of USAID's MaMoni Health System Strengthening (HSS) project. MaMoni-HSS project's QI initiative was implemented in four districts (Habiganj, Noakhali, Lakshmipur, Jhalokathi). The objective of the initiative was to improve the quality of MNCH services at GOB health facilities through a local and regional supportive supervision system. The project introduced supportive supervision at the union and Upazila levels based on a monitoring tool jointly developed by local service providers and national-level experts. The challenges faced in the implementation of this project were a lack of retention and/or vacancy on the part of the health care providers in the facilities and a lack of existing logistics among the facilities.

Melandaha Antenatal Care Model

The Melandaha Antenatal Care (ANC) model was developed to improve ANC-seeking practices, ensure minimum ANC contacts, and improve QOC by reinforcing existing regional and local leads. Arranging the mothers' assembly and funding, interpersonal communication, and ensuring client satisfaction were the main components of the model. Generating funding for the mothers' assembly, facility readiness, and time management were the key challenges to the initiative.

Standard-based Management and Recognition

Jhpiego led the Standard-based Management and Recognition (S-BMR) project under USAID's MaMoni-HSS project. The project's objective was to improve the quality of MNCH services at GOB health facilities through a local and regional supportive supervision system. Internal and external scoring assessments, improvement planning, and periodic follow-up were the key project components.

Introduction

Bangladesh has successfully achieved the MDG aimed at reducing the under-5 mortality rate, and it has also made considerable progress towards reducing the maternal mortality ratio (MMR) [1]. To achieve the targets set by the Sustainable Development Goals (SDGs) for MNCH by 2030, Bangladesh needs to continue and reinforce its efforts [2]. The current status of MNCH and health system indicators in Bangladesh upholds the necessity of inputs/efforts for increasing the coverage of health care intervention to ensure adequate levels of QOC, with the aim of reducing mortality and disease burdens. Enhancing QOC is now considered a key strategy to increase the cost effectiveness of services and positively impact health outcomes [3, 4]. The existing quality of health care in Bangladesh is often categorized as low [5, 6], which might be a combined result of insufficient human resources (HR), inadequate supply of essential medicine and equipment, poor hygiene practices, scarcity of water and electricity, and overall poor governance/management systems at health facilities [7–9]. Even the success of several interventions that were part of global initiatives in Bangladesh were challenged by the country's inadequate QOC focus[10].

QOC should thus be at the center of strategies aiming to accelerate the progress of health care [11]. Such strategies should also embrace multiple levels, from the patient to the health system, and multiple dimensions, from personal safety to efficiency. There is much room and many areas for improvement in the QOC of the Bangladesh health system, especially with regard to MNCH care. An example of such an area is improving the QOC during labor and childbirth, which is when most maternal and neonatal deaths occur. This change could have the greatest overall impact on MNCH of any [12-14]. Closing the gaps in QOC also has the potential to provide a triple return on investments in reducing maternal and neonatal mortalities and stillbirths [15]. Another impactful effort could be increasing the awareness and use of standardized protocols and standard operating procedures (SOPs) detailing evidence-based techniques to manage sick newborns and mothers with obstetric complications [16]. In the absence of a universally accepted approach for improving QOC, the GOB could consider adopting the proven and effective 'quality improvement initiative' approach into Bangladesh's health sector [17].

The GOB has emphasized improving QOC as a cross-cutting issue for implementing MNCH interventions to maximize the health gains in its 4th health sector plan—the 4th Health, Population and Nutrition Sector Programme (4th HPNSP), effective from January 2017 to June 2022 [18]. Under the previous and current sector programs, several QOC initiatives have been proposed, implemented, and successfully verified for the country's health sector. The important steps that have been taken in terms of QOC initiatives for the MNCH sector in Bangladesh are shown in **Table 1**, according to a chronological timeline.

This report endeavors to explore and document the in-depth stories and routes to success regarding the implementation of selected QOC initiatives for MNCH in Bangladesh, with the aim of showcasing the best practices in this area.

Table 1: Timeline of QOC initiatives for MNCH services in Bangladesh

| National | Global |
|---|---|
| 1997: Initiation of the TFIPP | 2017: Global QED network for MNH standards established (also compared with 10 EMEN standards) |
| 2006: SMPP initiated in the Narsingdi district by GOB and JICA | 2018 WHO pediatric care standards suggested |
| 2011: TQM initiated by the JICA | 2018 WHO Handbook for National Quality Policy and Strategy (NQPS) guideline |
| 2013: QII-NHC project initiated by UNICEF and the government of Japan using 5S-CQI-TQM in 13 facilities | 2019 MNH QOC strategy expansion |
| 2015 QI strategy approved for Bangladesh | |

2015: EMEN sets 10 standards for MNCH care
for Bangladesh

2015: QOC initiative undertaken by Save the Children

2017: RMNCAH quality of care approach established

2017: National adoption of RMNCAH strategy

2018: RMNCAH strategy piloting at Narshingdi

2018: EMEN progress assessment undertaken and the second phase of EMEN
initiated

2019: MNH QOC strategy expansion

2019: Review of QI strategy

Objective

The objective of this report is to document the success stories of selected QOC initiatives in Bangladesh so as to disseminate and showcase the best practices of the initiatives that have had success.

The primary process of the study included (1) mapping of the key QOC initiatives implemented for MNCH services in Bangladesh and (2) preparing a summary of each of the initiatives. These activities will provide relevant policymakers and stakeholders with a comprehensive narrative on QOC initiatives in the health sector of Bangladesh, including an outline of their success factors and challenges. The findings will enable policymakers to carefully plan for future strategies on improving QOC in Bangladesh. The purpose of this study was not to compare the initiatives but rather to showcase the ones implemented in Bangladesh.

Methodology

The study employed a methodological approach with the three following features to attain the objective mentioned above:

- literature review;
- stakeholder consultation; and
- key informant interviews.

The following conceptual framework (**Figure 1**) details the justification for using each component of the methodology.

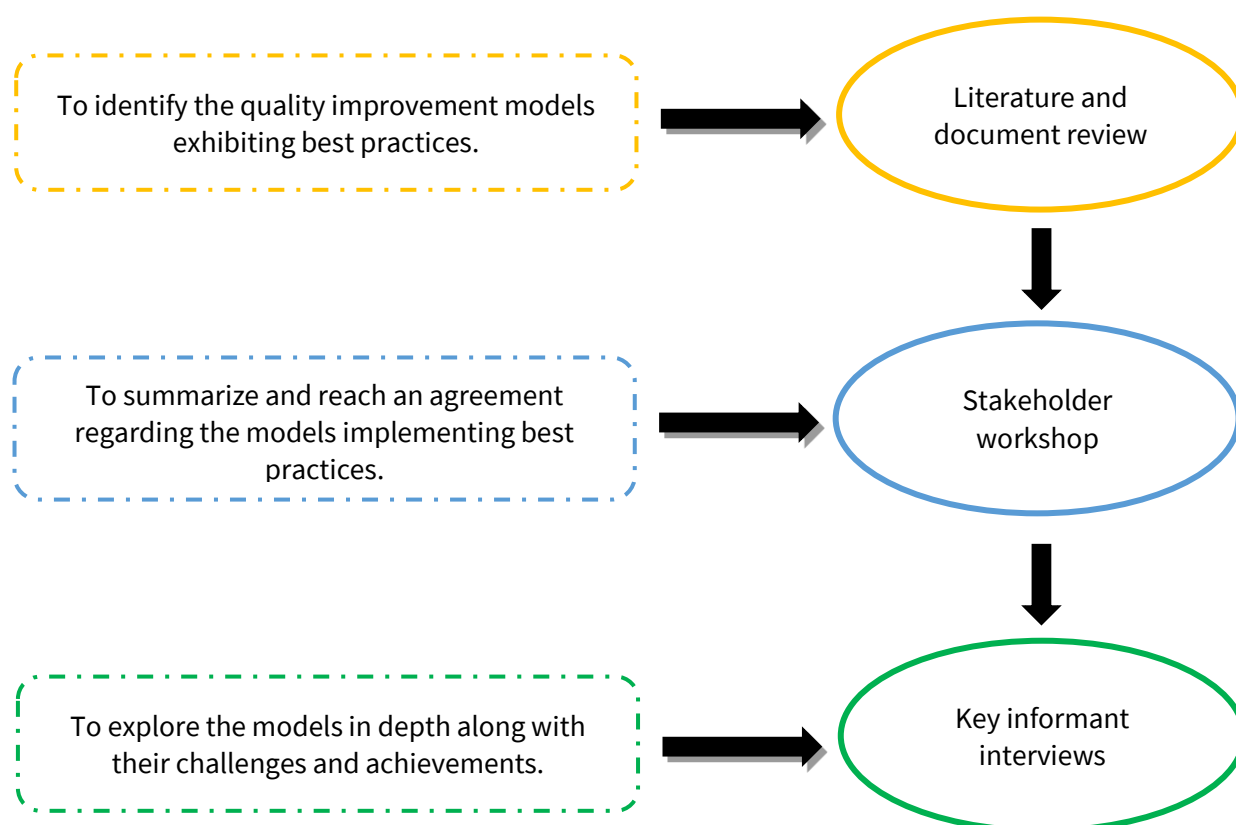


Figure 1: Conceptual framework of the project methodology

Literature Review

An extensive literature review was conducted to identify the successful QOC initiatives in Bangladesh. The review included QOC-related documents from published articles in peer-reviewed journals, published reports, policy and strategy papers, and documents from government and non-government organizations, among others.

Stakeholder Workshop

To finalize the catalogue of successful QOC initiatives in Bangladesh, a stakeholder consultation workshop was conducted on November 7, 2017, under leadership from the QIS of the MOHFW. The stakeholders from the following organizations attended the workshop and provided their input:

- GOB—QIS, MOHFW
- UNICEF
- United Nations Population Fund (UNFPA)
- WHO
- USAID
- Save the Children
- JICA
- Marie Stopes International
- BRAC

Based on the inputs from the stakeholders and considering the comprehensiveness of this study, the following QOC initiatives were selected to explore and showcase their success stories:

- (1) TFIPP;
- (2) SMPP;
- (3) 5S-CQI-TQM approach/Quality Improvement project for MNH care at GOB facilities;
- (4) QIS, MOHFW, GOB;
- (5) The Chowgachha model;
- (6) QII-NHC;
- (7) EMEN QI initiative;
- (8) WFHI;
- (9) RRQIT;
- (10) Melandaha ANC model; and
- (11) S-BMR.

Key Informant Interviews

Key informants were identified from the stakeholder consultation workshop and with the consultation of the QIS as a focal point. The key informant interviews (KIIs) were conducted with the selected personnel (with at least one for each selected QOC initiative) to explore the stories behind their success. The interviews were conducted with the following individuals:

- Dr Aminul Islam for the QIS, GOB;
- Ms Yukie Yushimura (JICA) for the SMPP and 5S-CQI-TQM approach;
- Dr Tajul Islam for the 5S-CQI-TQM approach;
- Dr Emdadul Hoque for the Chowgachha model;
- Dr Sabbir Ahmed (Save the Children);
- Dr Ziaul Matin (health advisor, UNICEF) for all initiatives where UNICEF was either involved or provided support;
- Dr Syed Abu Jafar Md. Musa (UNFPA; ex-director, primary health care; line manager, MNCH, Directorate General of Health Services (DGHS), QIS, GOB);
- Dr Md Mushahir-Ul Islam (deputy director and program manager of maternal health, directorate general of health services) for Melandaha ANC Model; and
- Joby George (senior manager for health, Save the Children).

In addition to these key informants, we also interviewed Dr Md. Iqbal Anwar of icddr,b to learn about the organization's first project in Bangladesh (TFIPP), which aimed to improve the health sector's QOC.

Success Stories of Selected QOC Initiatives in Bangladesh

Based on the information from the KIs and literature review, we summarized the success stories for each of the selected QOC initiatives in Bangladesh to showcase the particular features that might have resulted in their success. The summary of each QOC initiative will include a short description of its approach, its origin, how it was adopted in Bangladesh, its initial implementation, its expansion (if any), its result/outcome (if any), and the challenges it faced (if any).

1. Thana Functional Improvement Pilot Project

Background (Why Introduce a New QOC Initiative?)

The TFIPP was planned for health facilities below the district level. It was the largest investment in health system strengthening at that time.

Duration

The TFIPP was implemented from 1994 to 1999.

Design of the QOC Model/Intervention

Objective

The objective of the project was to assess the impact of user fee collection from health facilities on the use of care (the number of patients visiting for health care), enabling health facilities to use a fund collected through local-level planning to improve the QOC.

It was assumed there might be a reduction in the number of patients using health care in the initial phase of the project due to the newly introduced user fees. However, the number of patients seeking health care increased at a later stage due to improved QOC, essentially balancing out the health care use.

Components

The TFIPP had three main components:

- (1) local-level planning;
- (2) collecting user fees at a local level; and
- (3) improving the QOC using funding collected at the local level.

Expected Outcomes/Changes

The project's findings initially revealed a gradual decrease in the number of patients due to the introduction of user fees. After a certain time of project implementation, the number of patients then gradually increased as the QOC improved. Many factors affected this process. For instance, the slow introduction of local-level planning delayed the entire process and the improvement of QOC.

Implementation Process

The TFIPP planned to invest the estimated amount of user fees (estimated from an average number of patients per month and set fee level) towards local-level planning in improving the QOC. Later on, the project organizers found it was impossible to collect the estimated amount through user fees and use those funds at the local level.

Under the TFIPP, the user fee level was determined through stakeholder consultation. Additionally, a safety net system was created to exempt the poor from paying fees. The exemption was given through a 'safe selection' process. However, the pilot project results revealed a very high misuse of the safe selection process, and most of the exempted individuals were not poor. Further, the dynamics of the power structure at the local level primarily determined who benefitted from the

exemption. The TFIPP thus recommended not maintaining any exemption system for user fees at a local level, as such a system would not safeguard the poorest.

Challenges Faced

The major challenge to this project was the inability to use locally collected funds at local-level hospitals due to limitations in the national public financial management process.

Next Steps/Expansion

After many years of pilot project implementation, an important positive change occurred when the MOHFW took the initiative to enable local-level managers to use the locally collected funds for hospital improvement.

2. Safe Motherhood Promotion Project

Background (Why Introduce a New QOC Initiative?)

Before this project, the GOB had initiated basic and comprehensive emergency obstetric services in DHs and selected Upazila Health Complexes (UHCs). However, the use remained low, and there was poor QOC. Thus, the GOB implemented the SMPP in the Narsingdi District, with technical assistance from the JICA, to improve both the uses of services and the QOC at health facilities.

Aspects of QOC this Model/Intervention Intended to Address

The SMPP intended to increase the use of services through community involvement and participation (which would also increase awareness) and improve the QOC at health facilities through needs-based intervention facilities and the involvement of local government and community leaders to ensure accountability.

In addition, the SMPP supported the GOB's national skilled birth attendant (SBA) program, jointly implemented by the UNFPA, WHO, and Obstetric and Gynecologic Society of Bangladesh (OGSB). According to this program, private community-based SBAs (P-CSBAs) were introduced for women residing in areas that were difficult to access to fill the human resource gaps in these areas.

Duration

The SMPP was implemented from July 2006 to June 2011.

Design of the QOC Model/Intervention

Objective

The objective was to establish a safe and effective motherhood service delivery system by improving the availability and use of quality services during pregnancy and childbirth.

Components

The project had two main components:

- (1) Hospital-level interventions were used to enhance the quality of safe delivery and EmOC services, including comprehensive EmOC (CEmOC) services where applicable. A hospital improvement cycle based on the plan–do–check–act (PDCA) cycle (**Figure 2**) was adopted by the project to continuously improve and maintain the QOC.

(2) Community-based interventions were implemented, with a focus on community mobilization through community support groups.

Baseline and Endline Surveys

The SMPP was not designed to include baseline or endline assessments.

Expected Outcomes/Changes

The SMPP aimed to increase the use of MNH services and improve the quality of the services given by health care providers. Another important outcome of the SMPP was to ensure the active involvement of local governments and communities in MNH activities through collaboration, which would also increase the accountability among service providers.

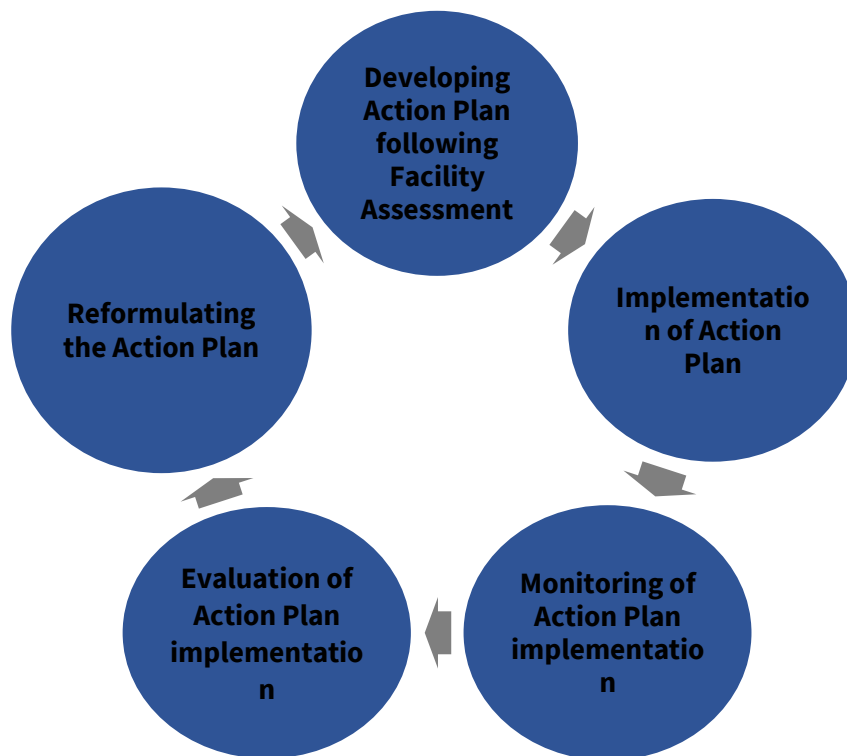


Figure 2: PDCA cycle used in the SMPP

Implementation Process

For the SMPP, hospital- and community-based interventions were bridged by local government bodies. The project was implemented through various subsectors to impact the QOC at the facility level and within the community. The following major activities were conducted under this project:

- Improving the quality of services
 - Strengthening the health system and capacity development included minor renovations of the facility, the supply and maintenance of necessary equipment, need-based training of service providers, and the setup of mechanisms for internal monitoring and support.
- Advocacy and documentation
- Enhancing partnerships among stakeholders

- Community empowerment
- Developing a community support system that offered a systematic and structural approach for assuring the health and survival of all pregnant women in the community: Under this project, 145 community groups were established by 2011, covering an estimated 36,750 households and 184,000 individuals. These community groups were responsible for:
 - Identification and tracking of all pregnant women in the community
 - Management of community resources to provide support for emergency transport
 - Assistance with birth planning
 - Promotion and support for delivery at a facility with assistance from a skilled birth attendant
 - Reinforcing the links between community members, their local government representatives, and the local health care providers at the facilities
- Ensuring safe delivery through the model union approach: By 2011, 29 model unions had been established by the SMPP based on a holistic approach to address the factors of the three-delay model of maternal mortality. This approach included:
 - Development and implementation of a model union action plan (AP)
 - Union health facility improvement
 - ANC/postnatal care (PNC) and midwifery training for family welfare visitors (FWVs) and CSBAs
 - Community mobilization activities
 - Orientation sessions for trained birth attendants/village doctors for the prevention of harmful practices
 - Open budget sessions and allocation of Union Parishad (UP) budget to MNCH activities

Collaborating with the local government: This was reflected through effective collaboration among community groups, local government bodies (especially UPs), and health facilities for the emergency referral system of the Narsingdi district.

Challenges Faced

The SMPP was implemented successfully over a five-year period. However, it faced the following major challenges during implementation:

- lack of adequate monitoring and supervision;
- low use of partographs at health facilities;
- difficulties ensuring round-the-clock provision of care;
- interrupted supply of essential medicines;
- lack of leadership at the health facilities; and
- low motivation and ownership among the service providers.

Next Steps/Expansion

The next step is to introduce phase 2 of the SMPP.

3. 5S-CQI-TQM Approach/Quality Improvement Project for MNH Care at GOB Facilities

Background (Why Introduce a New QOC Initiative?)

The 5S-CQI-TQM approach has been successfully applied to the health sector in many developing countries weakened from a chronic shortage of health resources. Findings on this approach emerged around 2010–11 [19]. The GOB eventually tested this approach with technical support from UNICEF and icddr,b, as maintaining QOC is a major challenge in resource-poor settings.

Aspects of QOC this Model/Intervention Intended to Address

The GOB intended to implement the 5S-CQI-TQM approach to improve the QOC at the health facilities through the improvement of the management and functionality of facilities with limited existing resources.

Duration

The project began in 2011 and continued until 2014. It was conducted in 11 facilities across the country, including two medical colleges (MC) hospitals, seven DHs, and two UHCs.

Design of the QOC Model/Intervention

Objective

This project's main objective was to improve facility readiness and provide quality care to patients seeking care from public health facilities in Bangladesh. This project aimed to create an enabling environment in public health facilities by implementing the 5S and continuous quality improvement (CQI) process of problem-solving, with the ultimate goal of total quality management (TQM).

Components

The 5S-CQI-TQM approach includes a stepwise process to QI. The five 'S's (5S) stand for sort, set, shine, standardization, and sustainability [20]. CQI methods are based on small steps to improve productivity, efficiency, quality, and generally excellent service [16]. 5S works as a predecessor tool to develop CQI, which in turn leads to TQM.



Figure 3: 5S-CQI-TQM approach to quality improvement

Baseline and Endline Surveys

Both baseline and endline assessments were conducted. The baseline assessment was conducted in 2011 to measure the status of health facilities in terms of management, functionality, and overall QOC. The endline evaluation was conducted in 2014 to assess the improvements in each area of focus.

Expected Outcomes/Changes

The expected outcomes included improvement in the overall functionality of the health facility working environments and improved QOC, which it was assumed would affect clinical management indicators.

Implementation Process

The intervention was implemented in three consecutive steps: team development, capacity building, and monitoring and supportive supervision.

Team development

One quality improvement team (QIT) and a small number of work improvement teams (WITs) were formed in each health facility. The number of WITs depended on the extent of the workload and the number of departments in the facility directly or indirectly related to MNH care. Each WIT was composed of key service providers of all levels and cadres of the respective departments. Each WIT had one facilitator, one team leader, and three to six team members. The WITs were responsible for conducting regular meetings, preparing an AP, adhering to the AP, and actively participating in the respective departments' QI processes. The QIT was a larger team led by the facility manager and coordinated centrally by a single person. The team was responsible for meeting monthly, monitoring adherence to the AP, and solving the problems encountered by the WITs during the QI process.

Capacity building

After the initial baseline assessment, workshops were arranged in each of the selected facilities to train the WIT and QIT members on the 5S-CQI-TQI approach. The teams were also trained and supported during AP development and implementation. The QIT (specifically, the facility manager) was supported in conducting an internal audit based on QI indicators.

Monitoring and supportive supervision

Once every two months, an assessment on supportive supervision and monitoring was conducted. The assessment was based on monitoring the progress of the implementation of the intervention, observing the QIT and WIT meetings, assisting the WITs in developing the APs, and assessing the progress towards previous APs.

Challenges Faced

The major challenges faced by this project were:

- The short duration of the intervention was not sufficient to produce any measurable impacts. For example, there was an insufficient number of newborn emergencies to assess the improvement in clinical QOC with statistical significance.
- The absence of a comparison area weakened the study design.
- A shortage of HR was an important challenge faced at all the facilities. A huge number of vacant posts resulted in additional workloads for the existing staff.
- There was a lack of leadership in many of the health facilities.
- There was a lack of documentation process maintenance as well as a lack of awareness among hospital staff.

Next Steps/Expansion

The GOB took account of a few key lessons from this project and has implemented a few initiatives, including the following:

- The champions of positive leadership have been recognized and awarded.
- The initiative has been taken towards the involvement of service providers of different cadres, who have also been empowered for quality improvement. This should increase the levels of understanding and intercommunication among the service providers of facilities and enhance the overall QOC.
- The GOB is improving its capacity for solving problems faced by health facilities that are within their reach.

4. Quality Improvement Secretariat of the MOHFW, GOB

Background (Why Introduce a New QOC Initiative?)

The QIS was established in 2015 within the MOHFW, GOB, to improve the quality of services at all health facilities throughout the country (public, private, and NGO). This was a crucially important initiative, with the GOB establishing long-lacked national ownership and stewardship of QOC-related activities for the health sector in Bangladesh.

The QIS has initiated and developed the National Strategic Plan for Quality Improvement and its associated AP. Currently, it is working as per the AP and establishing governance at health facilities for quality improvement.

The QIS has established various quality improvement committees at different tiers of health facilities, as per the strategic document. The QIS has also developed various QI tools, protocols, and guidelines for each type of health facility. Further, the QIS has developed a monitoring and evaluation framework for quality improvement interventions along with a number of appropriate indicators. The QIS is attempting to implement the 5S-CQI-TQM approach as its basic strategy.

Currently, the QIS is working towards QI in secondary- and tertiary-level hospitals, with a primary focus on district-level hospitals. The QIS also has a plan to extend its activities to Upazila-level hospitals.

There are two QI committees in each of the 64 districts. One is for facility services and is headed by the head of the health facility (local monitoring team), and the other is for field services and is headed by the civil surgeon (CS). The field-level committee supervises and monitors the activities and achievements of the UHCs, family welfare centers, and community-level services. The QIS is also working towards including all reports from the field and hospitals in the DHIS2 system as opposed to conducting manual reporting.

Challenges Faced

The QIS has faced the following major challenges:

- a lack of HR at health facilities and during field services;
- rapid turnover of HR (transfer);
- difficulty establishing supportive supervision at all levels and in all areas;
- poor leadership
- low motivation and ownership among service providers; and
- an overburden of patients for the quality initiatives (200% bed occupancy rate in all DHs).

Next Steps/Expansion

The next step for the QIS is to continue its current efforts and find solutions to the challenges mentioned above.

5. Chowgachha Model

Background (Why Introduce a New QOC Initiative?)

The motivation for this model was low use of services from the UHC as well as low quality of maternal care.

Duration

The project began around 1985 based on self-initiative.

Design of the QOC Model/Intervention

Objective

The objective was to ensure safe motherhood for all the pregnant women in Upazila and to improve the QOC in health facilities.

Components

Under the leadership of Dr Emdadul Haque, the ex-gynecological consultant of Chowgachha Health Complex, this UHC became a model UHC for EmOC services across the country. Based on its provision of quality EmOC, Chowgachha won the best UHC performance award for 10 consecutive years from 2005 through 2014, recognizing the tireless efforts of Dr Emdad and his staff to improve the facilities and provision of care.

Baseline and Endline Surveys

This project included no baseline or endline surveys.

Expected Outcomes/Changes

The expected outcomes included increased use of services from UHCs along with improved quality of services.

Implementation Process

The following steps were taken to implement this project:

- Pregnancy cards were provided to create a record management system for all pregnant women in Upazila.
- Services were provided without any out-of-pocket expenditure.
- Collaboration was undertaken with UNICEF as a donor organization, which supported the Chowgachha health facility by training the physicians and nurses on EmOC and anesthesia and providing the necessary equipment.
- Community support was given through 500 community members who volunteered to donate blood.
- Efforts were made to increase women's confidence in the facility. The improved care and services successfully boosted their overall confidence in the health complex.

Challenges Faced

The major challenges were as follows:

- initially winning the trust of the underserved population;

- inadequate resources to render services; and
- ensuring community participation and involvement of community stakeholders through demonstration of motivation, dedication, and devotion towards the community.

Next Steps/Expansion

The GOB is taking the initiative to scale up this model to 10 DHs.

6. Quality Improvement Initiative for Newborn Health Care

Background (Why Introduce a New QOC Initiative?)

The QII-NHC was implemented by the GOB with technical support from UNICEF. The project was primarily funded by the Government of Japan and partially by the Korea International Cooperation Agency (KOICA). The initiative employed the 5S-CQI-TQM approach, launching an intervention to improve the quality of newborn care at public health facilities.

Aspects of QOC this Model/Intervention Intended to Address

The project intended to address all aspects of the quality of newborn health care through the establishment of special care newborn units (SCANUs) in district-level government hospitals, with the aim of improving newborn health care in Bangladesh. Thus, it began by developing an SOP for SCANU services at district-level hospitals. This was followed by the training of health care providers for facility-based newborn care; the establishment of physical infrastructure for SCANUs; the provision of logistics and supplies (including medicines) for newborn care; and the ensurance of monitoring, evaluation, and quality assurance activities. The project also supported the formation of DH teams for SCANU services.

Initiation and Implementation

The project was implemented in government health facilities in 36 districts under MOHFW as part of the 3rd health sector plan for 2011–2016 and as a component of the Integrated Management of Childhood Illness (IMCI) program of the DGHS.

Duration

The project was implemented from 2011 to 2016.

Design of the QOC Model/Intervention

Objective

The project objective was to improve the quality of newborn care at government health care facilities by establishing SCANUs and thereby improving newborn QOC.

Components

The project intended to strengthen the overall health system to achieve better newborn care. To do so, it focused on three areas:

- Infrastructure improvement:
 - The building of physical structures for the SCANU was supported in each of the DHs.
 - The availability of all essential equipment for the SCANU and newborn care was ensured.
 - A standard mechanism for the maintenance of the SCANU and its equipment was established.
- Development of a standard guideline for SCANU services:

- The process of developing an SOP for the SCANU was initiated and supported in collaboration with national-level experts and stakeholders.
- Capacity-building of providers:
 - Training modules were developed for the training of different cadres of health care providers for their relevant responsibilities in the SCANU.
 - Collaboration with the BSMMU was undertaken for the training of health care providers.
 - The training of different cadres of health care providers was provided to achieve skill-building regarding SCANU operation and services.

Baseline and Endline surveys

Both baseline assessment and endline evaluation were conducted.

Expected Outcomes/Changes

This project's expected outcome was a reduction in the newborn case fatality rate at government health facilities.

Implementation Process

The project was implemented in multiple phases (at least three).

Challenges Faced

The project faced three major challenges:

- When it began in 2011, there was no stewardship of QI activities within the GOB health system at either the national or local levels. This absence of a QI system in the GOB health system led to many obstacles during project implementation.
- The lack of skilled HR at health facilities to assign and train for the SCANUs was another barrier to the successful implementation of the project.
- The project faced poor leadership, both at the national and the facility level. The service providers should have had adequate knowledge and motivation for their assigned responsibilities, but they required monitoring and supervision.

7. Every Mother Every Newborn QI Initiative

Background (Why Introduce a New QOC Initiative?)

From 2013 to 2014, the WHO and UNICEF were working on the formulation of a global MNCH standard, which would represent the minimum standards for MNCH care that every country should ensure at its health facilities. This global MNCH standard, called EMEN, ended up including 30 indicators. Each country then selected its own set of EMEN standards, of which Bangladesh included 10. In 2015, the Bill and Melinda Gates Foundation funded the validation of the country-level MNCH standards and assessed how to introduce the EMEN standards into the health system. The implementation of the EMEN project in Bangladesh is discussed here.

The EMEN QI initiative supported the development of context-specific QI models focusing on improving the care around the time of birth [22]. Overall, 10 standards (see **Table 2**) and several criteria for facility-based maternal and newborn care in Bangladesh were developed to set expectations for implementing evidence-based interventions and reducing the number of maternal and neonatal deaths within the first 24 hours of birth.

Aspects of QOC this Model/Intervention Intended to Address

The EMEN project aimed to validate the 10 standards selected for the Bangladesh health system and to ensure improved QOC during pregnancy and childbirth (both for mothers and neonates), including breastfeeding.

Initiation and Implementation

The project was initiated by UNICEF and implemented in the GOB health facilities using existing resources and technical assistance from UNICEF. The QIS of the MOHFW led the project implementation along with other relevant line managers under the 4th HPNSP.

Duration

The project was implemented from 2015 to 2018.

Table 2: Standards set for MNCH care in Bangladesh

| EMEN Standards |
|---|
| Clinical Care |
| 1. Evidence-based safe antenatal care is provided. |
| 2. Evidence-based safe care is provided during labor and childbirth. |
| 3. Evidence-based safe postnatal care is provided for all mothers and newborns. |
| Patients' Rights |
| 4. Human rights are observed, and the experience of care is dignified and respectful for every woman and newborn. |
| Cross-cutting |
| 5. A governance system is in place to support the provision of quality maternal and newborn care. |
| 6. The physical environment of the health facility is safe for providing maternal and newborn care. |
| 7. Qualified and competent staff is available in adequate numbers to provide safe, consistent, and quality maternal and newborn care. |
| 8. Essential drugs supply and functional equipment and diagnostic services are consistently available for maternal and newborn care. |
| 9. Health information systems are in place to manage patient clinical records and service data. |
| 10. Services are available to ensure continuity of care for all pregnant women, mothers, and newborns. |

Design of the QOC Model/Intervention

Objective

The project intended to validate the EMEN standards for Bangladesh and set a target of all intervention health facilities achieving 75%–80% of the standards. Another objective of this project was to develop a simplified checklist for Bangladesh to assess the MNCH quality standards (based on the global checklist, considering system development and contextualization) to determine the MNCH QOC in Bangladesh health facilities.

The project's long-term aim was to create a holistic and sustainable model for establishing and strengthening the national QI system under the stewardship of the GOB by enabling GOB facilities to consider and improve all aspects of QOC (structures, processes, and outcomes).

Baseline and Endline Surveys

A baseline assessment was conducted at the beginning of project implementation in 2015 and published in 2016. A progress assessment was conducted in mid-2018 (August to November). The report was published in 2019.

Expected Outcomes/Changes

The project expected to reduce the case fatality rate (neonatal and maternal) by 15% in all intervention facilities.

Implementation Process

The project was initiated in five public health facilities (one DH and four UHCs) in the Kurigram district. The intervention was designed based on the 10 EMEN standards and emphasized each of the associated criteria with the aim of achieving an overall improvement in QOC.

The project strategically focused at the national level, working with the QIS of the MOHFW and the TQM unit of the DGHS to improve facility-based MNH services. It employed the PDCA approach, breaking down the main targets and tasks into smaller components and simpler language. In each health facility, a WIT was formed for each unit. Each member of the WIT was given small responsibilities that would add up to attain the overall goal.

UNICEF supported the MOHFW in developing a common national strategic framework and implementation plan for an integrated QI model embracing previously learned lessons from existing QI approaches, evidence generation, and scale-up. Initially, the quarterly assessments were done manually, and later on they were converted into digital data.

Challenges Faced

The common challenges faced during the implementation of this project were as follows:

- It was challenging to motivate the service providers in relation to the new EMEN standards. This issue was mitigated through meetings, training sessions, and workshops organized with different cadres of service providers in the Kurigram district.
- Ongoing construction activity of new hospital buildings for DHs created difficulties in determining how to upgrade old building infrastructure.
- A lack of skilled HR at the health facilities to train regarding EMEN standards and assign the related services was a major barrier.
- Poor leadership was present both at the national and facility level. Stronger leadership could have maintained motivation among the service providers for assigned responsibilities and providing adequate monitoring and supervision.
- During project startup, the stewardship role of the GOB in QI activities was minimal, both at the national and local levels. The establishment of the QIS within the MOHFW was a positive step towards solving this issue. However, it was only established and not fully enabled.

Next Steps/Expansion

After successful implementation in one district, the GOB considered the lessons learned from the project (the documented best practices and positive lessons) and scaled it up to six more districts to improve QOC for maternal and child health.

In addition, UNICEF received its second phase of funding from the Bill and Melinda Gates Foundation to expand the project into the remaining four UHCs of the Kurigram district.

8. Women-Friendly Hospital Initiative

Background (Why Introduce a New QOC Initiative?)

The purpose of the WFHI was to improve the quality of health care for women and the responsiveness of health providers to women's needs. UNICEF's WFHI aimed to create an environment for women to receive any health care treatment in which their privacy, dignity, and respect were prioritized. In addition, violence against women was recognized, diagnosed, and treated through the WFHI.

Aspects of QOC this Model/Intervention Intended to Address

This initiative intended to address various issues at health facilities to improve the quality of the hospital environment for women. In other words, the WFHI intended to make the health interventions/services of health facilities gender-sensitive. The initiative also developed an accreditation guideline to implement the WFHI along with emergency obstetric and neonatal care services (EmONC), and hospitals are required to go through the accreditation process every two years. The OGSB and the hospital service management team of the DGHS are responsible for the hospital accreditation system for women-friendly services.

Initiation and Implementation

UNICEF initiated this project in GOB health facilities, and the GOB later included this initiative as part of its regular program under its 4th sector plan.

Duration

The WFHI initiative began to broaden its activities in 2007, after beginning collaboration with Naripokkho as a technical and facilitating agency and implementing its guidelines in over 26 hospitals. At present, the WFHI has been operationalized and scaled to 40 DHs as one of the health sector's gender-responsive activities.

Design of the QOC Model/Intervention

Objective

The main objectives of the WFHI were to:

- accredit hospitals based on standard service delivery to women; provide a woman and child care package;
- manage victims of violence; and
- ensure justice in the delivery of services to men and women.

Components

The WFHI addressed four key areas at the hospital level to make hospitals more responsive to women's needs. These included QOC, mother-baby service packages, management of violence against women, and gender equity.

Baseline and Endline Surveys

In each selected hospital, a baseline assessment was conducted according to the accreditation guideline, after which work was undertaken in collaboration with the hospital management team to support the hospital in becoming accredited by the WFHI. Re-evaluation/reassessment was conducted every two years as part of the renewal of the WFHI accreditation.

Expected Outcomes/Changes

The WFHI intended to increase service use by women by creating a women-friendly environment at hospitals along with improved QOC.

Implementation Process

In the first phase, seven public health facilities (four DHs and three UHCs) were assessed for women-friendly hospital accreditation. The initiative adopted a decentralized approach that took local needs and demands into account through participatory local planning processes. District- and Upazila-level health and family planning (FP) teams developed their plans, identified needs, and obtained the adequate funding. Provided with training and planning tools, service providers as well as the community and local authorities were encouraged to implement the locally identified solutions, with the aim of making hospitals women-friendly.

Challenges Faced

The initial project was successful, and the GOB scaled it up within the national health system. However, the project faced (and is still facing) the following major challenges:

- Gender sensitization is a challenging topic for many health managers, as they often do not focus on any areas other than clinical management.
- The short duration and limited sessions of training on gender sensitization are often inadequate to bring about the level of awareness required to accomplish the desired outcome.
- This project requires the active participation of health care providers, which can be very difficult to attain.
- There is an absence of professional expertise in psychosocial counseling at all levels.
- Bringing different stakeholders under a common umbrella is a key component of the road to success. Sensitizing local female leaders and including them within the local AP has been a major challenge.

Next Steps/Expansion

The GOB has expanded the initiative to 30 facilities [21], and it is included within the national health system as part of its operation plan for hospital services management under the 4th HPNSP (21). It has financial and technical support from UNICEF and a partnership with the OGSB and Naripakkha.

To reduce gender disparities and ensure rights-based approaches, the focus should be on behavioral change activities regarding promotional, preventive, and curative activities, such as breastfeeding and childcare practices.

The establishment of a rigorous administrative system and a clear and transparent certification process is also a prerequisite for implementing the WFHI.

9. Regional Roaming Quality Improvement Team

Background (Why Introduce a New QOC Initiative?)

The RRQIT was an initiative undertaken by USAID's MaMoni HSS project and Save the Children to address the gap in supportive supervision and improve the MNCH care in DHs, maternal and child welfare centers, and UHCs.

Aspects of QOC this Model/Intervention Intended to Address

The project intended to achieve better QOC through improved supportive supervision and monitoring of MNCH services for both the technical and non-technical aspects of care, based on the establishment of regional and local teams. It has now evolved into a mentoring program.

Initiation and implementation

The RRQIT worked closely with the QIS of the MOHFW to establish the approach and plan future scale-up.

Duration

The project began in 2016 and is ongoing.

Design of the QOC Model/Intervention

Objective

This project's objective is to improve the quality of MNCH services at GOB health facilities through local and regional supportive supervision systems.

Components

In terms of health care services, this project considers the quality status of ANC, childbirth, PNC, newborn care, nutrition, FP, and overall management services. It has also introduced supportive supervision at the union and Upazila levels based on a monitoring tool jointly developed by local service providers and national-level experts.

Expected Outcomes/Changes

The expected outcome is improved QOC of MNCH services in intervention health facilities.

Implementation Process

The implementation process included the following steps:

- A QI AP for facilities and each of their units was jointly developed.
- The RRQIT was formed along with experts from the national level and Medical College Hospitals (MCHs), who visited DHs, maternal and child welfare centers, and UHCs once every three months to supervise the technical skill of service providers, provide feedback, support the preparation of an AP for each unit and follow up with the previous AP.
- A quality performance review meeting (QPRM) was organized every three months in 10 districts, with health and FP managers as participants. This meeting has a data-driven approach, bringing together health and FP facilities for improvement. Detailed discussions take place on performance and QOC at each meeting. The meetings also address all the non-technical issues related to health services.
- To address the technical/clinical management-related issues, a joint supervisory visit (JSV) was created, headed by the medical officer (MO) of maternal and child health and family planning. The unit conducts sudden visits to any health facility within the district to ensure the quality of technical services. The JSV also works on improving capacity and provides recommendations for the capacity building when any major capacity gaps are identified.
- The FWV and Expanded Program of Immunization registers were compared to track children who had dropped out from Expanded Program of Immunization sessions.
- The supply of essential medicine and logistics and was monitored, and support was provided to improve the supply and distribution system.
- Capacity building on MNCH care was undertaken through hands-on training at DHs and MCHs, such as the training of FWVs and CSBAs.
- Learning exchange visits of health care providers from one area to another were organized.
- Local governments were involved, especially those of UPs, which included advocacy for allocating/using UP budgets for MNCH services.

- A referral system from lower- to higher-level health facilities was established.

Challenges Faced

This project has faced the following challenges:

- interrupted supply of forms, such as ANC forms;
- a lack of trained staff for partograph use and poor interpretation of partograph indications;
- a lack of HR, including huge vacancies in positions at all tiers of the health facilities; and
- retaining obstetricians and anesthesiologists in health facilities for CEmOC services.

10. Melandaha ANC Model

Background (Why Introduce a New QOC Initiative?)

When Dr Musahair ul Islam, Ex-Program Manager of Maternal Health at the DGHS, began working at Melandaha Upazila Health Complex at the end of June 2018, he found that only a few mothers came in for ANC, and only 15–20 normal vaginal deliveries (NVDs) occurred monthly. Accordingly, he conducted an evidence-based study in his health facility to explore the reasons for this. He held discussions with the health care providers (doctors, nurses, and paramedics), who shared the following reasoning with him. Because Melandaha Upazila was quite close to the Jamalpur district (approximately 7–10 km), where a communication system had been developed, mothers would, in most cases, seek care at the DH or other private hospitals in the Jamalpur district.

Aspects of QOC this Model/Intervention Intended to Address

This model was developed to improve ANC care-seeking practices, ensure minimum ANC contacts, and advance QOC by reinforcing existing regional and local leads.

Duration

The project began around the end of June 2018 and is ongoing.

Design of the QOC Model/Intervention

Objective

The objective of this model was to motivate pregnant women to obtain ANC and increase the number of deliveries occurring at GOB health facilities. A further aim was to collaborate with the relevant stakeholders, including health care providers at all levels, policymakers, and local politicians.

Baseline and Endline Surveys

A baseline survey was conducted at the end of June 2018. Though an endline survey was not among the planned activities, the last survey was conducted in July 2019.

Expected Outcomes/Changes

The strategy has been effective, as evidenced by the increase in normal deliveries from 20 to 120 per month. The number engaging in ANC and ultrasound has increased as well, from 50–100 to 500–700 per month. This model is routinely reviewed and updated. However, visits to the mothers' assembly have decreased over time from once per week to once or twice per month. It will require attention to once again make this a weekly visit. An EmOC-trained doctor is the main health care provider performing normal deliveries and caesarian sections while maintaining the WHO guidelines by avoiding unnecessary caesarian sections. The normal-delivery-to- caesarian sections ratio of 100 to 15 proves this has been effective. The ANC, intranatal care, and PNC guidelines of the WHO are also followed.

Implementation Process

Dr Islam first arranged a number of meetings with concerned stakeholders, including MOs, consultants, paramedics, union health and family planning officers (UH&FPOs), midwives, and 'Ayas' (caregivers), every Saturday. He found that in 10 unions, 400–500 NVDs occurred, while among those NVDs, only 15–20 NVDs occurred in their UHC. Accordingly, Dr Islam decided to attempt to provide care to these mothers and increase the number of deliveries in the facility. As a means of achieving this, he aimed to increase the QOC in the facility, and the health care providers working in the facility committed to providing the necessary support. He planned to encourage mothers to come to the facility for health care and ensure service satisfaction. One of his aims was that all labor would be monitored using partographs to identify any obstetric emergencies early on. However, in the UHC, there remained only 17 nurses, two midwives, and five MOs, and there was no consultant. As nurses were the ones performing the NVDs, Dr Islam arranged a meeting with the nurses. Next, he arranged a meeting with the policymakers of the Upazila, such as the Upazila nirbahi officers, social service officers, women affairs officers, and primary education officers, to ensure their support. He then arranged a meeting with local politicians, from whom he received a positive response. Thus, he informed them that he planned to go to one union each Saturday to arrange a mothers' assembly. Next, he arranged meetings with health assistants who provided ward-level services in those unions and requested their support in arranging the assemblies. In this way, he attempted to engage every health care provider in health and FP, along with local NGOs.

The health care providers of Melandaha Upazila arranged a mothers' assembly at a union every Saturday. To begin with, they arranged the assemblies at community clinics. Around 300–400 mothers attended the first assembly, after which they decided to arrange the assemblies at primary or high schools, initially using three rooms of a high school. Mothers were placed in classrooms according to their ward of residence. In total, 100–150 pregnant mothers from each ward attended these assemblies. Further, two SSNs, two midwives, two paramedics, and two to three CSBs usually went to the assemblies, providing ANC to the mothers from 10 am to 1 pm. From 1 pm to 2 pm, Dr Islam, UH&FPOs, the headmaster of the school, local political leaders, and the CS provided motivational speeches. During the ANC, they checked each mother's weight, height, and blood pressure and registered these along with their name, husband's name, address, and mobile number. They identified any high-risk pregnancy indicators among these mothers, such as high blood pressure, low weight, anemia, or edema. They provided red tick marks to identify the mothers who were positive for high-risk indicators. At first, they did not provide ANC to the mothers, though eventually, they did provide these to them. They then attempted to convince the mothers to come to the UHC for NVD free of cost. The CS assured them that if any complication occurred and they could not provide a caesarian section at the UHC, they would provide ambulance support to bring the patient to the DH. They then provided a date for pregnant mothers to attend the UHC for blood and urine tests, such as blood sugar, blood group, urine RME, and hemoglobin tests. They also provided services from gynecologists and MOs to the mothers who faced a high risk of pregnancy.

Further, they attempted to collect funding from local elites, health staff, and others to arrange refreshments for the mothers attending the assemblies. To promote normal delivery, Dr Islam also arranged gifts for the mothers and the newborns, such as soap and napkins. In addition, they provided 500 taka as a gift after deliveries.

Green flags were hung in the houses of women less than seven months pregnant, and red flags in the houses of women more than seven months pregnant. This was done to make family members alert, develop ownership among health care providers, and foster respect among mothers towards the health system.

Challenges Faced

This project faced a number of issues, including time management, securing funding for the mother's assemblies, facility readiness, and UH&FPO training to develop ownership capacity. Fortunately, the UH&FPOs were very helpful. Overall, the main obstacle to achieving QOC was the shortage of HR in the health care delivery system, which includes only 8.3% of the population and is the lowest in the region. This problem needs to be addressed to ensure proper use of resources and necessary budget allocation. Further, the success of the training relies heavily upon appropriate supervision and monitoring.

Next Steps/Expansion

The team wishes to replicate this model and is conducting a series of meetings and video conferences with policymakers on the process.

11. Standard-based Management and Recognition

Background (Why Introduce a New QOC Initiative?)

Jhpiego developed the SBM-R approach for QI. It aims to address common challenges faced by health care systems in low-resource settings, including poor pre-service education, lack of resources for conventional supervisory models, and weak health information systems. Since its introduction in Brazil in 1997, SBM-R has been implemented in approximately 30 countries and continues expanding to new locations and service delivery areas. Its development began based on a known connection but a slightly novel technological step, and it was first implemented by USAID's MaMoni HSS project in 2000. SBM-R consists of the systematic use of detailed performance standards for rapid and repeated assessments of health facilities, including both clinical and support systems; the identification of gaps in compliance with these standards; the implementation of corrective interventions; and the rewarding of achievements through recognition mechanisms.

Aspects of QOC this Model/Intervention Intended to Address

This project's quality assurance component is a patented Jhpiego approach. It includes standard clinical topics as well as a number of cross-cutting issues, such as facility management and health information. A facility assessment is conducted to understand the QOC of the facilities, and the maternal health score is calculated to categorize the facility. The scores help to understand the readiness of the facilities to achieve the standard level of care.

Duration

The SBM-R model was implemented in Bangladesh from 2013 to 2014 with the help of Jhpiego and USAID's MaMoni HSS project.

Design of the QOC Model/Intervention

Objective

This model aimed to improve MNCH services at GOB health facilities through local and regional supportive supervision systems.

Components

The RRQIT is the main component of the SBM-R model. It was derived from the FP model, which was embedded in the GOB system. The scoring system is based on a combination of internal and external assessments. A periodic follow-up assessment is done through regular internal assessment and periodic external assessment.

A number of key steps followed by the SBM-R model are as follows:

- organizing the standards into a checklist tool that can be used for performance assessment;
- implementing the standards through an initial assessment, measuring performance, and pinpointing gaps in compliance with standards;
- developing APs to correct these gaps by comprehensively addressing all performance factors;
- measuring progress through repeated periodic assessments (mainly internal) at each participating facility using the same checklist tool; and
- recognizing achievements, both in terms of fulfilling the APs and improving compliance with performance standards.

Baseline and Endline Surveys

The first internal assessment was carried out after six months. The second internal assessment was carried out after another six months and was followed by an external evaluation. This helped to identify the areas that needed improvement and possible pathways towards achieving improvement. The necessity of training to address the gaps in service delivery was also determined

Expected Outcomes/Changes

The main expected outcome was intervention among health facilities to improve the QOC in MNCH services.

Implementation Process

USAID'S MaMoni HSS began work with a single facility and conducted a baseline internal assessment. They worked with the facility staff to conduct the assessment and determined the facility's scores. This was followed by an independent external assessment performed by the project staff. The differences among the internal and external assessments were identified. Overall, this helped the team determine the areas that needed improvement and how they could be improved. They could then request improvement inputs and training work with the facility to address the gaps, after which periodic internal assessments were undertaken.

Many other inputs were included to support the initiative, which was based on a complementary approach, including a regional team of clinical quality experts. The experts were regionally placed in the FP department, and some of them were supported by the government. A number of regional people worked for various facilities and assessed various aspects of quality to provide feedback. The facilities were located at prominent regional medical colleges, such as Sylhet and Chittagong. Sylhet was selected as the Habigonj site, and Chittagong for Noakhali, Laxmipur. The regional team was built with 8 to 10 people, including a number of professors from the medical college and the project staff. They periodically visited the districts, mainly focusing on reproductive, maternal, neonatal, child, and adolescent (RMNCAH) services in DHs. Afterward, they visited the maternal health service areas. Thus, they were able to establish a clinically standard checklist and then identify the improvements that could be made.

The SBM-R was implemented in 35 different health facilities, including DHs, UHCs, and union health facilities. With the help of training, capacity development, and RRQIT, 25 health facilities finally reached quality standards.

Challenges Faced

The following challenges faced this project:

- Intensive resources and project support were required to implement the SBM-R model in Bangladesh.

- After seemingly successful SBM-R interventions, a decrease in levels of client satisfaction was found.
- The negative consequences of performance linked to the concept of accountability have a place in the SBM-R model. However, the team faced difficulties in enforcing them effectively and equitably in the absence of a well-developed national regulatory quality assurance system.

Next Steps/Expansion

PDCA Cycle

This project adapted the PDCA improvement cycle model around 2015 as a simple improvement approach. It was mostly focused on clinical standards and maternal health.

RMNCAH Framework

The RMNCAH QI Framework of Bangladesh was developed through a QIS-led consultative process involving a wide range of stakeholders. This framework is linked with a regional framework created by the WHO that proposes a QI system across the MNCAH continuum at all care levels. This framework envisions a Bangladesh where no preventable deaths of women, newborns or children and no avoidable stillbirths occur; where every pregnancy is wanted; every birth is celebrated and accounted for; and where women, babies, children, and adolescents are free of HIV/AIDS, survive, thrive, and reach their full social and economic potential.

Current Phase of USAID's MaMoni MNCSP

This was a USAID MaMoni HSS-supported activity, with QOC activities being enabled through project support and the associated resources. In 2018, MaMoni MNCSP continued its focused efforts on QOC in four divisions: Dhaka, Sylhet, Chottogram, and Khulna. Divisional coordinators were appointed, who were responsible for ensuring that the governance structures in each of the four divisions were established, and WITs were formed to work on small improvement projects. The capability was developed in core areas, such as the 5Ss, infection control, patient safety, and safe surgery checklists. SBM-R acted as a good entry point, and the concept of quality not only for maternal health but also for overall health care was introduced and implemented in 2016–17.

In the new phase of USAID's MaMoni MNCSP, the focus was given to QOC, with interventions occurring at the national and district levels. At the national level, the development of the National Quality Policy and Strategy (NQPS) is underway, along with development standards for facility accreditation and MNH certification programs.

At the district level, a series of clinical and operational bundles have been developed based on the MNH continuum of care to improve clinical practices, promote standardization, and focus on the experience of care for mothers, newborns, and their families. The bundles are implemented at the facility level using the model for improvement as the methodology for clinical process training, and a data-driven approach with clear indicators is used to measure the impact and success of interventions. These intervention packages have already been rolled out in 97 facilities across six districts (based on need), and a plan is in place to roll them out in other MaMoni MNCSP districts. Facilities share and learn through the existing governance structures within their communities. The data from Manikganj, the QOC prototype district, is being uploaded to the WHO's central QOC database.

In addition, a model for engaging the private sector in QOC has been established in Manikganj and is being replicated in other MaMoni MNCSP districts.

Lessons Learned

Based on the stories of the nine initiatives summarized here, we can determine a number of common factors for success as well as common challenges faced by such initiatives. The following are a few important perspectives to consider for future QI initiatives in Bangladesh.

Governance and Leadership

The overall governance of the health system at the national and local levels (at health facilities) is quite weak. Without strengthening the governance system, we will not achieve an efficient and high-quality health care system.

Leadership is an important factor in QI initiatives. These success stories reveal that several initiatives were successful only because of an individual leader. However, the replication of effective and efficient leadership is difficult.

Accountability and Professionalism

Health managers and service providers have had a low level of accountability towards the system and their profession.

HR for the health sector is a national concern, and the gap to overcome is huge. The problem is made even more intense by absenteeism, frequent transfer, and deputation mechanisms. Hospitals in Dhaka are oversaturated with doctors and nurses, while DHs and UHCs have extreme HR shortages. A lack of adequate HR is one of the challenges that most of the QI initiatives reported.

There are also gaps in gender sensitization among health care providers and the general population.

Collaborative Efforts and Local Involvement

Several of the QI success stories highlighted the importance of collaborative efforts, especially the collaboration with local government and local communities. Involving community members and local stakeholders increases the services providers' accountability and supports the improvement of QOC. Collaboration with local government bodies also leads a project towards better acceptability to the end-users.

Following Standard Processes

In Bangladesh, there are many SOPs and clinical guidelines to follow during patient management at health facilities. However, most service providers are not aware of these SOPs and guidelines. Further, service providers are often unable to follow them due to gaps in supportive amenities. The GOB should consider focusing on this area and working towards further improving the environment at health facilities by increasing awareness of SOPs and guidelines.

Readiness of Health Facilities

Health facilities are often unaware of the gaps they face in terms of adequate QOC of MNCH services. Regular assessment of health facilities' readiness using a simplified checklist that facility managers could analyze and interpret would be an important initiative towards improved QOC in health facilities.

Financial Ability

If health facilities were being allocated an adequate budget, it would be easier for facility managers to ensure all the supplies/logistics/tasks necessary to ensuring the quality of service were in place. In addition, many small issues could be taken care of if health managers were allowed to use funds locally generated at health facilities. The financial status of patients and health facilities affect the quality of service.

Recommendations

The following are a number of recommendations for future practice to help achieve QOC:

- A clear path forward is important, which should be based on defining what we are trying to achieve and why. It should also be ensured that there is a consensus on this strategy at the highest level in the health care delivery structure.
- Alignment in purpose and process needs to be ensured. Once developed, the strategy must be implemented throughout the health care delivery structure, both in the public (health and FP) and private spheres.
- MNH processes should be standardized across the board. Mothers receiving treatment at a DH level should experience no differences in clinical care.
- Waste needs to be eliminated. Waiting times should be reduced, queues should be shortened, and there should be clear instructions for expectant mothers regarding out-of-hours care provision.
- Access to information should be a priority, and standards, practices, and guidelines need to be available in an easy-to-understand format for all providers.
- The focus should be given to providing an experience of care. Mothers, newborns, and their family members should be treated with respect throughout their care journey. Guidelines and aids need to be in place throughout the health care delivery system to ensure that this is maintained throughout.
- The regular arrangement of WIT and QIT meetings should be confirmed. Further, QI follow-up meetings should incorporate systematic analysis and the use of data for performance monitoring, and periodic feedback on service quality should be provided.
- A national monitoring and evaluation system needs to be established to monitor the progress of QOC and share lessons and challenges nationally and globally among the QED countries.
- The availability of HR, especially midwives, gynecologists/obstetricians, and anesthesiologists need to be ensured and monitored.
- The focus should be given to building local-level leadership to supervise and monitor QOC.
- Strong leadership along with a governance system and strong coordination at the MOH and DGHS/DGFP levels are key to moving the QII forwards.
- Two-thirds of MNC services should be provided by the private sector. It is important to engage private health facilities in adopting QOC standards and reporting to the national system.
- SOPs for the referral of sick newborns should be available in all facilities to maintain Kangaroo care practices for premature or low-birth-weight babies.
- Quality documentation should be ensured.
- A long-term plan is needed to strengthen the health system and ensure comprehensive quality management in the health sector.

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