Quality, Equity, Dignity
A Network for Improving Quality of Care for Maternal, Newborn and Child Health

Bangladesh

A. Background[1–6]

Core demographic data

Population size (thousands)	164,670
Total fertility rate (children per woman)	2.07
Maternal mortality ratio (MMR) (per 100,000 live births)	176
Neonatal mortality rate (NMR) (per 1,000 live births)	18.4
Child mortality rate (per 1,000 live births)	8
Stillbirth rate (per 1,000 live births)	21
Domestic general government health expenditure as percentage of gross domestic product (GDP) (%)	0.4
Domestic general government health expenditure per capita (in US$)	4.7

National coverage of key interventions

	%
Antenatal care (4 or more visits)	31.2
Skilled attendance during delivery	42.1
Institutional deliveries	37
Cesarean section rate	23
Initial breastfeeding (1 hour of birth)	50.8
Exclusive breastfeeding rate (of infants under age 6 months)	55.3
Postnatal visit for baby (within 2 days of birth, medically trained provider)	32
Postnatal care for mother (within 2 days of birth, medically trained provider)	36

B. Implementation milestones

completed · in progress · not started or incomplete · no data

National leadership for quality of care (QoC)
- Supportive governance policy and structures developed or established
- QoC for maternal and newborn health (MNH) roadmap developed and being implemented
- Learning districts and facilities selected and agreed upon
- QoC implementation package developed
- Adaptation of MNH QoC standards

Action: Learning sites identified and prepared
- Orientation of learning districts and facilities
- District learning network established and functional (reports of visits)
- QoC coaching manuals developed
- Quality improvement (QI) coaches trained
- On-site coaching visits occurring in learning districts

Learning and accountability: QoC MNH measurement
- QoC for MNH baseline assessment completed
- 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
- Identification and agreement with an academic or research Institution to facilitate documentation of lessons learned in the implementation of QoC activities

Accountability and community engagement
- Mechanism for community participation integrated into QoC planning in learning districts

C. Progress at the national level (2017–2018)

National overview of QoC for MNH

National quality policy or strategy
- Currently updating "Strategic Planning on Quality of Care for Health Service Delivery in Bangladesh" (2015) in which maternal, newborn, and child health (MNCH) is a priority area

National aims
- To ensure quality of care for reproductive, maternal, newborn, child, and adolescent health (RMNCAH) services

National targets
- To reduce MMR to 121/100,000 by 2022
- To reduce NMR to 18/1,000 by 2022
- To reduce the under-five mortality rate to 34/1,000 by 2022

QoC technical working group (TWG)
- TWG formed in 2016
- Members include Ministry of Health and Family Welfare (MOHFW), Save the Children, Pathfinder International, Management Sciences for Health, Engender Health, Institute for Healthcare Improvement, JICA, USAID, UNICEF, WHO, UNFPA, World Bank, etc.
- Led by the Health Economics Unit
- No meetings have been held in the last several years.

Joint products and activities by the QoC TWG
- RMNCAH National Guideline Strategic Plan developed (2016-2020)
- National Every Mother Every Newborn (EMEN) standards guideline

Learning districts and facilities
- 3 learning districts selected where performance is low, facility managers are motivated, and MMR and IMR are high
- 4-5 learning facilities per learning district

District aims towards national strategy
- To improve the delivery of MNCH services
- To improve the readiness of the facilities
- To test QI interventions in these facilities and assess the impact of the interventions
- To develop these facilities as a model to others in MNCH services
- To reduce neonatal mortality by 15% in five facilities under mother-baby friendly facility initiatives

Clinical improvement aims
- To ensure quality antenatal care (ANC), delivery, postnatal care and newborn care
- Facilities have different aims, such as to:
  - Monitor labour using partograph
  - Administer oxytocin as part of active management of the third stage of labour
  - Provide essential/immediate newborn care
  - Manage maternal complications
  - Manage sick newborns
  - Monitor temperature for low birth weight newborns
  - Increase service of kangaroo mother care (KMC)
  - Ensure 24/7 emergency obstetric and newborn care services
  - Increase the percentage of hand washing from 0% to 70% to prevent infection within 4 weeks
  - Increase the percentage of immediate drying of newborn who are delivered in facility from 50% to 100% to prevent hypothermia within 4 weeks
- Respective service providers and managers of specific wards (work improvement teams (WITs)) identified and prioritized the problem following the Point of Care Continuous Quality Improvement framework

Quality interventions included in the national MNH QoC package

Interventions to build a supportive environment
- An external evaluation will be arranged after the end of the PDSA cycles. An independent research organization will be involved to do the evaluation. USAID's MaMoni Maternal and Newborn Care Strengthening Project will support the evaluation.
- Implementation in progress for public reporting and comparison through Community Support Committee
- Increased training of service providers in capacity development and standard training (EMEN standard training, emergency triage and treatment, KMC, competency-based training, leadership, etc.)
- Best performance award was given to the best facilities by the civil surgeon and Quality Improvement Secretariat (QIS).
- Networking with Network countries to share learning experiences and participating in Network webinars

Interventions to support change at facilities
- On-site clinical training/mentorship is planned through OGSB and BPA or the neonatal society. Representatives from this organization have visited and made suggestions to improve service delivery and management.
- Standard operating protocol on maternal and neonatal health care has been introduced including the safe surgery checklist, PDSA training manual, and infection prevention
- In the process of planning to involve professional bodies in audit and feedback. Service providers were oriented on maternal and perinatal death surveillance review (MPDSR).
- Have practiced 5S and initiated PDSA cycle for QI with demonstrable improvements made across a number of focus areas
- Organized frequently experience sharing visits among the facilities (both internal and external)
- Developed EMEN/MNH protocol and assessment checklist

Interventions involving people, families and communities
- While community engagement committees are not yet formed in all districts, initial community support was made available from different sources (i.e. LGRD).
- One community participation group formed and met quarterly.
- Plans made for further strengthening of existing health communication program
- Shared decision-making through QI committees and community participation committee meetings
- Facilities have a health education corner where visitors can access a range of printed and audio-visual materials to aid in their care journeys.

*Interventions have started since the last update.

D. MNH QoC baseline data for learning facilities

Baseline common indicators

Challenges
--

Opportunities and progress made
--

Planned activities
--

E. Implementation progress in learning districts

On-site support for clinical skills and QI

Support for clinical skills

Who provides on-site support for clinical skills
- International mentor from regional office
- National team (OGSB, BNF, BSMMU, regional team), including the team from the QIS and MOHFW
- District level: civil surgeon, hospital superintendent, Health and Family Planning Officer, consultants
- Each person supports 2-5 facilities
- Visits may be weekly or monthly
- Quarterly progress meetings

Challenges solved implementing on-site support for clinical skills
- Engagement and involvement of managers and consultants was resolved with interpersonal communication
- ANC corner functioning: fixation of SSN & midwives involvement
- Site selection of KMC corner set up: Site visited by senior government staff members from QIS & DGHS
- The understanding among the team members of the national assessor team was not the same. We solved it by providing training of trainers for all team members and by supporting them with a clear understanding of standards and tools.

Unresolved challenges implementing on-site support for clinical skills
- Adherence to clinical standards
- Shortage of human resources in the facility specially cleaner and supporting staff is a huge challenge that could not be solved
- Logistics

Support for QI

Who provides on-site QI coaching
- On-site support may be provided by the doctor, QI trainers, consultants, senior staff nurse, international mentor from the regional office, national team, civil surgeon, and superintendent.
- Each person supports 1 to 5 sites, providing support on a weekly, monthly, or quarterly basis
- Coaches provide facilitation, monitoring, mentoring, on job training, and support to front line teams to develop others

Challenges solved implementing QI coaching
- Formation of QI committees: After giving orientation of staffs
- Staff turnover and an inadequate number of service providers hampered recordkeeping and reporting timely due to workload. The timely supply of registers and reporting tools was also a challenge. We minimized these problems by local-level recruitment of medical officer, nurses, and supporting staff as required by the district manager and by persuading the national level to stop the transfer of a few staff members.

Unresolved challenges implementing QI coaching
- Sustaining regular meetings of QI committees and WITs
- Repeated withdrawal of service providers for training hampers services

Learning for QI

Tools for capturing learning from facilities
- Data collected to assess impact of specific interventions
- Review of data at regular interventions
- Storyboards capturing the improvement journey

Tools for sharing learning between facilities
- Quarterly coordination meeting at the QIS for all 4 learning facilities to share and learn from other facilities.
- MPDSR coordination through video conference from DGHS
- Exchange visits
- Review meeting presentations
- National- and district-level QI festivals
- Social media
- Poster presentations
- Conferences

Challenges solved implementing a learning system
--

Unresolved challenges implementing a learning system
--

Measurement system for QI

Patient-level common indicator data
- Number of live births
- Number of maternal and newborn deaths
- Number of mothers receiving ANC 1+ and postnatal care 1+
- % of pregnant women who received quality ANC check-up
- % women with eclampsia or severe pre-eclampsia who were treated with appropriate dose of inj. magnesium sulphate
- % of all preterm babies born between 24-34 weeks of gestation whose mother received at least one dose of inj. antenatal cortico-steroid when indicated
- % of women with preterm labour rupture of membrane in the facility received prophylactic antibiotics
- % of all deliveries at the hospital where partograph was used
- % of women delivered at the facility received injectable oxytocin within 1 minute of delivery
- % of all newborns delivered at the hospital who received all four elements of essential newborn care:
  - immediate and thorough drying
  - immediate skin to skin contact
  - delayed cord clamping
  - initiation of breast feeding within 1 hour of birth
- % of babies born alive whose birth weight was taken and documented
- % newborns received 7.1% Chlorohexidine on umbilical cord

Programme-functioning data
- # of monthly QIC meeting held
- # follow-up actions
- # of relevant QI training held for SP
- MNCH Task Group functional with biannual meetings conducted and minutes available
- # of assessment visits held with post assessment corrective actions
- At least 80% of service providers from selected facilities are trained on QI guidelines and tools
- Monthly QIC meeting with minutes and follow- up actions
- EMEN facility assessment checklist
- EMEN standards dashboard
- District Health Information System 2 (DHIS2) visits with feedback
- Field monitoring report
- Training and coaching reports
- Quarterly progress report

Availability of data system for measuring QoC
- DHIS2 has provision for most data, as per given indicators.
- An individual dashboard has been created to report on BMFFI and QI in DHIS2. The reporting registered had been modified from the national register to capture all QI data. New indicators include ENC and quality aspect of services (like hand washing, temperature monitoring, counselling, etc.)
- Facility data come from registers, health management information systems, and direct observation.
- Observational data is kept to a minimum and is used to mainly inform improvement work.

Challenges solved implementing a measurement system
--

Unresolved challenges implementing a measurement system
- It is challenging to capture the process indicators. We are still struggling to include these indicators.

Community and stakeholder engagement

Approaches for community/ stakeholder engagement
- Community support groups meet quarterly to review community participation and support.
- Local stakeholders have been involved in supporting prior infrastructure developments and provision of logistics.
- Patients and members of the public can obtain educational materials at the district hospital and the Mother and Child Welfare Centres.

Roles of community stakeholders or patient representatives
- They provide demands or requirement on behalf of patient's perspective and support hospital committee to identify service gap in facility.

Challenges solved engaging communities and stakeholders
- The challenge is for hospital management to fulfil some of the community stakeholders' and patient representatives' requirements (e.g., reduce waiting time; crowd control at hospital entrance; clearing the entrance by moving crowded vans, rickshaws, etc.)

Unresolved challenges engaging communities and stakeholders
--

Programme management

Programmatic responsibility
- Facility level: The operational lead for each facility is responsible for the QoC program in their facility. In other facilities, the UH&FPO and QI focal point at the sub-district level are responsible.
- District level: The civil surgeon is responsible, but the district superintendent and resident medical officer play a significant role and have received extensive training in quality work. Divisional QI coordinators are responsible at the divisional level (beyond two staff allocated for the district).
- National level: QIS focal person for quality

Challenges solved implementing programme management
--

Unresolved challenges implementing programme management
- The QoC intervention involves multiple players in the ministry. At times, the focus on QI and the level of interest can be low.
- Lack of ownership, leadership, and coordination in other districts

Lessons learned implementing a QoC program

- Facility readiness plays a critical role in QI. A few settings required interventions to improve facility readiness.
- QoC interventions need close monitoring and supervision. Orientation of stakeholders at different levels ensured ownership and smooth implementation of the QoC program. However, the coordination among different players has remained challenging throughout the intervention.
- An early systematic assessment helped show the real picture on the ground. It helped to identify the gaps and motivate the staff for improvement. The service providers and staff could make an informed decision on the basis of the assessment's findings.
- Having some early demonstrable improvements can be used to motivate teams and demonstrate that it is possible to deliver improvements. Results that are shared can also be used to encourage others to join the improvement journey.
- Developing analysis and presentation skills is useful for facility-based teams to ensure that they can share their stories and successes in a way that demonstrates the level of improvement that has been made.
- Information gathering and the development of skills to interpret data at the facility level help teams to support the improvement journey.
- Digital solutions (e.g. supply chain management) also helped staff to ease the process of service delivery.
- Motivation of the managers and service providers are also pre-requisite for the stewardship of QI programme at sub-national level.
- One or two dedicated service providers can bring substantial changes and lead the whole team on quality.
- Adequate human resources are crucial to provide quality services and to implement QI activities.
- Close contact between mentors and facilities is essential at the initial stage for implementation of QI interventions.
- Continuous coaching and mentoring are required of facilities on both QI and clinical skills.
- Service providers must be empowered to make their own decisions regarding QI.
- The relationship between the facility and community can ease the process of implementing QI interventions.
- An internal assessment and monitoring can bring good changes.
- Recognition of achievements and positive competition between teams bring positive changes among teams.

Design: Ines Communication – www.inescommunication.com

References

1. United Nations Population Division, World Population Prospects: 2017 Revision, New York, United Nations, 2017.
2. WHO, UNICEF, UNFPA, World Bank Group, and the UN Population Division. Trends in Maternal Mortality: 1990 to 2015. Geneva, WHO, 2015.
3. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division), childmortality.org, 2017.
4. Bangladesh Demographic and Health Survey: 2014. Dhaka, Bangladesh, 2016.
5. WHO Global Health Expenditure database, apps.who.int/nha/database, 2015.
6. All other data received from the relevant Ministry of Health and WHO Country Offices.

Acronyms

ANC	antenatal care
DHIS2	District Health Information System 2
EMEN	Every Mother Every Newborn
GDP	gross domestic product
KMC	kangaroo mother care
MOHFW	Ministry of Health and Family Welfare
MMR	maternal mortality ratio
MNCH	maternal, newborn, and child health
MNH	maternal and newborn health
MPDSR	maternal and perinatal death surveillance review
NMR	neonatal mortality rate
QI	quality improvement
QIS	Quality Improvement Secretariat
QoC	quality of care
RMNCAH	reproductive, maternal, newborn, child, and adolescent health
WITs	Work Improvement Teams