QUALITY IMPROVEMENT SECRETARIAT ACTIVITIES AND ACHIEVEMENTS

নিঃস্বরা পাবে বিনা মূল্যের চিকিৎসা

তৌফিক মারুফ, কালিহাতী (টাঙ্গাইল) থেকে ফিরে ▷

ক্রাচে ভর দিয়ে অনেক কষ্টে কালিহাতী উপজেলা পরিষদ মিলনায়তনের বারান্দায় উঠে এলেন পার্শ্ববর্তী সালেঙ্গা গ্রামের ফরিদ হোসেন (৫২)। বললেন, 'প্রায় ২৫ বছর আগে বাতজ্বরে ধরছিল। তারপর একটা পা আর এক হাতে প্যারালাইসিস হয়। চিকিৎসা করতে করতে জমিজমা, ভিটামাটি যা ছিল, সব বিনাশ হইছে। এমন নিঃস্ব হইয়া মানুষের কাছে হাত পাইত্যা যা পাই, তা দিয়াই সংসার চালাই। পয়সার অভাবে আর চিকিৎসাও ঠিকমতো করাইতে পারি না। এর মইধ্যেই স্বাস্থ্য বিভাগের লোকজন আমার বাড়ি গিয়া আমার নাম লেখাইয়া নিছে। আমার নামে একটা স্বাস্থ্য কার্ড অইছে। আইজকা এই অনুষ্ঠানে আমারে ওই কার্ড দেওয়া অইছে। এইডা দিয়া বাকি জীবন বিনা পয়সায় চিকিৎসা অইবো। আমার আর কোনো চিন্তা নাই। খুব খুশি অইছি।'

ফরিদের পাশেই বসে ছিলেন ঘুণি গ্রামের কার্তিক চন্দ্র দেবনাথ ও চান মাহামুদ। তাঁদের মুখেও খুশির ঝিলিক। দুজনেই বললেন, 'আগে কোনো দিন স্বপ্নেও ভাবি নাই আমাগো দ্যাশে এমন বিনা পয়সার চিকিৎসার সুযোগ অইবো। অসুখের

▶▶ পৃষ্ঠা ৭ ক. ১

June 2015-September 2017

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Table of Contents

ABREVIATIONS/ ACRONYMS

5S:	Sort', 'Set', 'Shine', 'Standardize' and 'Sustain'
BENAP:	Bangladesh Every Newborn Action Plan
BMGF:	Bill and Melinda Gates Foundation
CEmONC:	Comprehensive Emergency Obstetric and Neonatal Care
CQI:	Continuous Quality Improvement
DEPB:	District Evidenced based Planning and Budgeting
DGFP:	Directorate General of Family Planning
DGHS:	Directorate General of Health Services
DN:	Death Notification
DORB:	Discharged on Risk Bond
EHB:	EngenderHealth Bangladesh
eLMIS:	Electronic Logistics Management Information System
EMEN:	Every Mother Every Newborn
FDR:	Facility Death Review
FPCST:	FP Clinical Services Team
GNSP:	Gender, NGO and Stakeholder Participation unit of HEU
ICD:	International Statistical Classification of Diseases
IMCI:	Integrated Management of Childhood Illness
JICA:	Japan International Cooperation Agency
KMC:	Kangaroo Mother Care
KPI:	Key Performance Indicator
MBFFI:	Mother and Baby Friendly Facility Initiatives
MPDR:	Maternal and Perinatal Death Review
MPDSR:	Maternal and Perinatal Death Surveillance and Response
PDCA:	Plan-Do-Check-Act
QIC:	Quality Improvement Committee
QIS:	Quality Improvement Secretariat
QIT:	Quality Improvement Teams
RMNCAH:	Reproductive, Maternal, Neonatal, Child and Adolescent Health
RRQIT:	Regional Roaming Quality Improvement Team
SA:	Society Audit
SBM-R:	Standard Based Management and Recognition
SCANU:	Special Care Newborn Unit
ShSMCH:	Shaheed Suhrawardy Medical College Hospital
SIAPS:	Systems for Improved Access to Pharmaceuticals and Services program
SSK:	ShasthoySurokshaKarmasuchi
TQM:	Total Quality Management
UNFPA:	United Nations Fund for Population Activity
UNICEF:	United Nations Children's Fund
VA:	Verbal Autopsy
WIT:	Work Improvement Teams

QUALITY IMPROVEMENT SECRETARIAT ACTIVITIES AND ACHIEVEMENTS

June 2015-September 2017

1. Introduction

Quality of care is one of the main dimensions of Universal Health Coverage (UHC). Ministry of Health and Family Welfare (MoH&FW) has already initiated a good number of initiatives to achieve the UHC, and quality improvement is one of the prime areas. Quality of care is an integral part of health care service delivery system. MoH&FW is committed to provide quality health care to every citizen. The issue of quality has become more important since when health care financing strategy (2012-2032) has been adopted, which is necessarily a roadmap to achieve the UHC. Ministry of Health and Family Welfare of Bangladesh already developed a strategic plan to improve the quality of health care service delivery.

A number of agencies have been working towards advancing quality issues in the health care system in Bangladesh. These are for instance, the Government DGHS: IMCI, Nutrition, SBTP, NBC, ESD, QAP, Strengthening DH & UHC (MIS), Accreditation, SMPP, A-TQM, CEF-WFHI; DGFP: MYCN, FPCST, Adolescent RH; Local Government: DCC-North, DCC-South; INGO/NGO: GIZ MCH, Save the Children-MaMoni, EngenderHealth-COPE-FP services, Marie Stopes-FP, ICDDRB-Participatory Monitoring, UNICEF/CIPRB: MPDR, WHO/CIRPB: QI-MNH; INHSDP/ Path Finder. Strong coordination appears essential to bring cohesion in these Quality Improvement Initiatives.

The Quality Improvement Secretariat (QIS) housed within the Health Economics Unit (HEU) of MoH&FW serves as a formal management body of National QI committee. The Secretariat supports to accomplish QI initiatives across the country and strengthen and coordinate QI activities in health sector both public and private.

The current document is an attempt to capture the achievements of QIS from its inception in 2015, till September 2017, to be used as a compendium of records.

2. Background and Context

Health situation in Bangladesh: The UN estimates that population of Bangladesh will peak at 203.7 million in 2059 and then start to slowly decline – this being one of the most rapid demographic transitions in the world with replacement levels already met in many parts of the country. Data from the BDHS 2014 shows that the total fertility rate (TFR) for the three years prior to the survey (2012-2014) stands at 2.3 births per woman with TFR in rural areas higher (2.4) than in urban areas (2.0).

Over the period of the MDGs Bangladesh has made remarkable progress in improving health outcomes as demonstrated by the reduction in maternal mortality (MDG 5) and child mortality (MDG 4). This sets the stage from where Bangladesh can now ambitiously look forward towards attaining the Sustainable

Development Goals through ensuring universal health coverage (UHC), meaning – an end to inequity in health care.

Maternal, Neonatal and Child Health: The decline in Maternal Mortality Rate (MMR) between 2001 and 2010 and further projected decline to 170/100,000 live births (UN interagency estimate) indicates remarkable progress. This is linked to fertility reduction, access to qualified maternal health care, and overall care seeking during the antenatal period. The reduction in neonatal mortality is still less than the desired level and stands at around 24 per 1000 live birth. Bangladesh has been able to reduce the under-five mortality below the MDG 4 target, and the rate now stands at 46, against the target of 48 per 1000 live births by the year 2015. Bangladesh has reduced the under-five mortality by 72% since 1990 with an annual rate of reduction of over 5.4%, which stands highest in the SAARC countries. The infant mortality rate is 38 deaths per 1,000 live births, and the child mortality rate is 8 per 1,000 children.

There are significant achievements in health and economic sectors in Bangladesh during recent years. Though there is substantial reduction of maternal, neonatal and child mortality with improvement of utilization of services, quality of health care services is a concern.

3. Health, Nutrition and Population Strategic Investment Plan (HNPSIP)

There is now good consensus on the future direction and focus for the health sector. The Health, Nutrition and Population Strategic Investment Plan (HNPSIP) aims to both consolidate and sustain the achievements gained so far, and strive for more progress on health outcomes through further improvement in access to services, strengthening of core systems and ensuring continuous quality improvement. Expanding and strengthening the country's comprehensive Maternal, Child and Adolescent Health care approach (MNC&AH), including sexual and reproductive health services, is therefore, being maintained as a priority and a crucial part of the Government's efforts to incrementally reduce morbidity and mortality and to ensure the well-being of the population. At the same time, the country has to prepare for addressing demographic transition that will shape the need of the population during this sector program and the subsequent ones. The focus of SDG 3 is to reach Universal Health Coverage, and this calls for strengthening public health care services in order to increase utilization of quality primary health by the poor and those living in geographically challenged areas.

Achieving sustainable levels of financing for the sector will depend on a combination of managing the demand for health care through prevention and effective treatment, seeking efficiency gains based on reducing wastage and introducing better ways of providing care, and through advocacy towards Government and development partners.

As regards to the quality of care, number 5 of the Ten Key Driving Forces of the HNPSIP (2016-21) includes: A focused improvement in quality of care, including ensuring the implementation of a comprehensive health workforce strategy and action plan.

Provision of good quality services for all is at the heart of the program approach, providing the direction to achieve the aims of UHC, equity and quality.

Government of Bangladesh has targeted to achieve the UHC. Accessibility to and quality of health care services are the major challenges to achieve the UHC. In order to address the quality of health care services, MoH&FW has established the Quality Improvement Secretariat (QIS) in 2015 at the Health Economics Unit (HEU). The national strategy for QI including the QI work plan has been formulated by the QIS.

UNIVERSAL HEALTH COVERAGE (UHC)

The goal of Universal Health Coverage has been elevated in the global and national agenda in recent years and is part of the Sustainable Development Goals (SDG) specific to health. Endorsed by the World Health Assembly through a resolution in 2005, UHC is defined as access for all to appropriate health services at an affordable cost. Universal coverage is associated with better health and equity, as well as financial protection. The systemic resilience provided by universal coverage also contributes to poverty alleviation by reducing catastrophic health expenditures. Bangladesh aims to abstain from the current path of increasing out-of-pocket spending (e.g., 63.3% as per NHA 2014) of total health expenditures and moving towards pooling health financing through taxation, social protection or insurance.

3.1 Mechanisms for ensuring quality of care to cover large portions of the population

Universal health coverage is ensuring all necessary care to all people with sufficient quality and within their affordability. To achieve it there is a long way to go and need to work hard. It warrants undertaking innovative ways to improve access, efficiency and quality in the health sector and at the same time there is a need to sustain the previous achievements. Essentially the goal of UHC is a multi-sectoral issue requiring multi-sectoral solutions. The government of Bangladesh firmly determined to address challenges and committed of attain universal coverage by 2032 as stipulated in the Health Care Financing Strategy of 2012.

Like many other countries in the world, Bangladesh has been a great proponent of the global movement for attaining Sustainable Development Goals (SDGs). The health population and nutrition sector of the country with its glorious recent achievements, is fully prepared to take forward the agenda of Universal Health Coverage (UHC), the target which is crucial for attaining not only the health SDG but all other SDGs.

As achieving UHC is a multi-dimensional and multi-sectoral task requiring efforts from multiple stakeholders, Health Economics Unit (HEU) of Ministry of Health and Family Welfare has been coordinating and leading the activities towards the goal as a focal office.

MoH&FW will establish a holistic and sustainable model of establishing and strengthening the national Quality Improvement/ Quality Assurance (QI/QA) system. MoH&FW will work with UNICEF, WHO, UNFPA and other DPs (Development Partners) to develop a common national strategic framework and implementation plan for QI (Quality Improvement) focusing on complementing the existing initiatives.

3.2 Sector program objectives, goals and targets especially related to quality of care

Vision: "To see the people healthier, happier and economically productive to make Bangladesh a middle income country by 2021" (Vision 2021). **Mission**: "To create conditions whereby the people of Bangladesh have the opportunity to reach and maintain the highest attainable level of health". **Overall Goal**: "To ensure that all citizens of Bangladesh enjoy health and well-being by ensuring access to quality and equitable healthcare and a healthy and safe living environment".

The issue of Quality of Care has been extensively addressed/ highlighted in various Components and Strategic Objectives (5, 7 and 8) of the Sector program. These are, for instance:

Strategic objective 5: To establish a high quality health workforce available to all through public and private health service providers

5.1 Ensure availability of competent and adequate number of workforce as per health systems need

5.2 Develop and sustain quality health workforce at all level

5.3 Recruit, deploy and retain health workforce equitably

5.4 Use evidence to support decision making in improving HRM.

Strategic objective 7: To improve equitable access to and utilization of quality health, nutrition and family planning services

7.1 Establish service level integration across tiers of the system including role out of (new) ESP and establishment of effective referral systems

7.2 Achieve effective and equitable coverage of evidence based high impact maternal, neonatal, child and adolescent health (MNC&AH) care interventions

73. Achieve effective and equitable coverage of family planning services

7.4 Improve nutritional status of the population and tackle the dual burden of over and under nutrition

7.5 To reduce mortality and morbidity of NCDs in Bangladesh through strengthening measures for control of risk factors, and health service delivery options for early detection and management

7.6 To reduce mortality and morbidity due to Communicable Diseases in Bangladesh through strengthening of measures for control of risk factors, and health service delivery options for early detection and management

7.7 To provide equitable access to high quality Unani, Ayurvedic and Homeopathic medical service for all citizens of Bangladesh

Strategic objective 8: To promote healthy lifestyle choices within a healthy environment

8.1 Establish legislative framework for healthy lifestyle and healthy environment

8.2 Establish a clear strategy and plan of action for lifestyle choice

8.3 Integrated communication strategy based on new media platforms, including BCC

8.4 Establish inter-scetoral collaboration on healthy environments, including private sector engagement

4. Health Economics Unit (HEU)

Health Economics Unit was established as a project under the Fourth Population and Health Project (FPHP) of the Ministry of Health and Family Welfare (MoH&FW). During the first health sector program HEU was re-organized as Policy Research Unit (PRU), and subsequently was transferred to the revenue setup and was expanded.

The Mission, Vision and Objectives of the Health Economics Unit include: Mission: To improve the performances of the health, population and nutrition sector for increased provision of quality services for the entire population, especially the poor, women and the disadvantaged, through use of resources in economically efficient manner with a focus on equity and participation. **Goal:** To develop overall capacity in the area of Health Economics, Gender, Equity and Participation towards formulation, implementation and monitoring and evaluation of policies, strategies and interventions. **Objectives:** (i)To conduct policy oriented research on Health Economics and Gender, NGO, Stakeholder Participation (GNSP) issues in the HPN Sector and to provide policy guidance for cost-effective, gender responsive, efficient health care service delivery; (ii) To develop health financing framework for the country and explore health financing options; (iii) To develop resource allocation formula and institutionalize health expenditure tracking process; (iv) To strengthen overall capacity of Health Economics and GNSP issues in the country; and (v) To identify and support programs and activities where NGO, stakeholder participation and PPP can be utilized to improve efficiency, enhance accountability and transparency in the health sector.

History: Health Economics Unit was established in 1994 as a project under the Fourth Population and Health Project (FPHP) of the Ministry of Health and Family Welfare with support from the then Overseas Development Administration (ODA) of United Kingdom. The project initiated building capacity in health economics across the health sector and a critical number of personnel were trained overseas. The project successfully produced the 1st National Health Accounts in 1997. In addition, a number of research studies in the area of costing, expenditure, financial tracking and resource allocation were conducted. The Institute of Health Economics was setup in The University of Dhaka to complement the strengthening of health economics capacity in the country.

During the first health sector program (HPSP 1998-2003) HEU was re-organized as Policy Research Unit (PRU) with three constituent arms e.g. Health Economics Unit, Human Resources Development Unit and Gender, NGO and Stakeholder Participation Unit. It contributed to identify and include health related issues in Poverty Reduction Strategy Paper (PRSP) and in disseminating the report of the Commission on Macro-Economics and Health. During this period, International Conference on Health Economics was organized and a number of policy advices were developed. In 2002, the PRU again was renamed as the Health Economics Unit with HEU and GNSP unit. HRD unit was shifted to the ministry's administration wing.

The HEU was transferred to the revenue setup in 2010 and the organization was expanded in 2011.

Organization: Under the Health Economics Unit there are two different units: a) Health Economics Unit and, b) Gender, NGO and Stakeholder Participation.

4.1 Mandate and Responsibilities of the Health Economics Unit

The Health Economics Unit is mainly entrusted with the responsibility of producing research, conducting capacity building and developing policy advice pertaining to health economics and the health financing of the country. The unit also produces the national health accounts and public expenditure review on a routine basis.

The activities of HEU fall into four main areas. These are:

- Policy Advice: In policy advice the health economics unit is playing a central coordinating role and working as focal point of some key activities in the development of the HNP sector. The HEU responds to Ad-hoc policy queries from the MoH&FW as well as other related Ministry /Government Departments (e.g. the Cabinet Division).
- Strengthening Capacity: For capacity building HEU organizes foreign as well as local training/workshops. The broad areas of the training include: Basic Health Economics Principles and its uses in Bangladesh, Health Care Financing, Costing and Economic Evaluation of Health Care, Inequity in Health Care and Poverty, and Health Economics Research Methodology.
- Research and Development: The HEU concentrates on providing and commissioning policy relevant research related to Health Economics. The work encompasses both topics that are traditionally economic, such as the annual health Public Expenditure Review (PER), National Health Accounts (NHA), and also topics that have a broader social-science dimension where the insights of economics can be used together with other disciplines. Research studies were conducted in-house and commissioned to external research organizations. A good number of research/studies have been conducted in the areas of costing, resource/expenditure tracking, benefit incidence analysis, etc.
- Dissemination: Dissemination is one of the main activities of HEU. Through seminars/workshops this activity is done. Specific research findings are disseminated through workshops/seminars. Moreover, to share the experience from the health economists around the world, sometimes HEU organizes Health Economics Conference as well as, experts from home and abroad in health economics present papers in the

conference. GOB policy makers/planners, different stakeholders, NGOs and private sector representatives attend the conference.

4.2 Networking and Partnerships

HEU, in conducting its responsibilities, works in partnership with a network of national and overseas organizations, institutions and faculties. There have been several recent activities of the HEU relating to the Networking and Partnerships. These are, for instance, (i) Review meeting with the Community Participation Committee in Jhenaidah, November 16, 2016; (ii) Community Participation meeting at Chuadanga, November 17, 2016; (iii) Community participation initiative for UHC in Narail; (iv) Dissemination and experience sharing on costing studies in health, September 22, 2016; (v) Training workshop on strategic planning and costing of the essential service package using the OneHealth Tool, September 24-28, 2016.

5. Quality Improvement Secretariat (QIS)

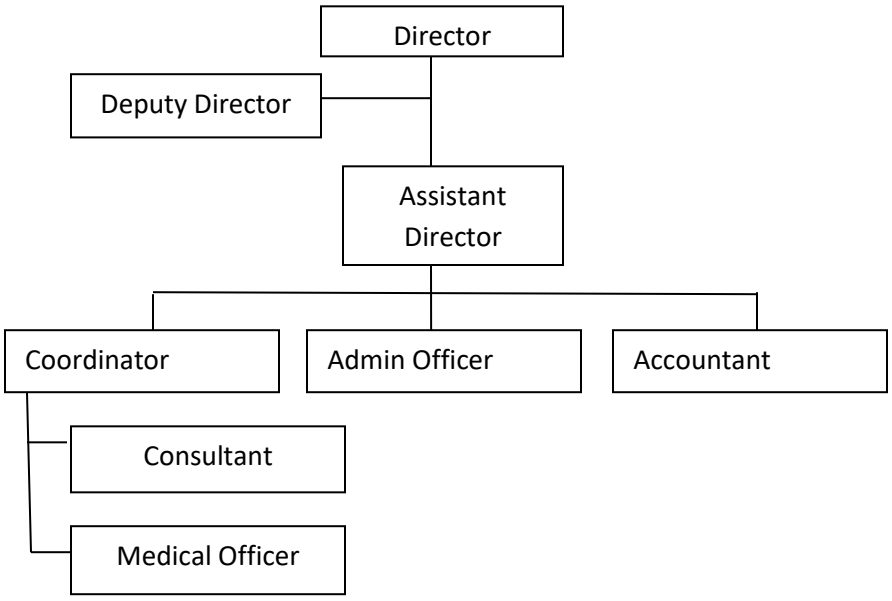
Quality Improvement Initiatives are implemented by various agencies. For instance, the Government DGHS (IMCI, Nutrition, SBTP, NBC, ESD, QAP, Strengthening DH & UHC - MIS, Accreditation, SMPP, A-TQM, CEF-WFHI); DGFP (MYCN, FPCST, Adolescent RH); Local Government (DCC-North, DCC-South); INGO/NGO: GIZ (MCH), Save the Children (MaMoni HSS Project, supported by USAID), EngenderHealth Bangladesh (COPE-FP services), Marie Stopes (FP), ICDDR,B (Participatory Monitoring), UNICEF/CIPRB: (MPDR), WHO/CIPRB: (QI-MNH); Path Finder (INHSDP). Strong coordination appears essential to bring cohesion in these Quality Improvement Initiatives. Quality Improvement Secretariat (QIS) of MoH&FW has been playing a crucial role in coordinating and overseeing the nationwide quality improvement activities of health care service delivery.

The QI Secretariat (QIS), housed within the Health Economics Unit (HEU) of MoH&FW serves as a formal management body of National Quality Improvement Committee (QIC). The Secretariat supports to accomplish QI initiatives across the country and strengthen and coordinate QI activities in health sector both public and private. Quality Improvement Secretariat (QIS) is established in January 2015 led by the Director General of the Health Economics Unit. The major mandate of the secretariat is to: (a) Develop a coordination and monitoring mechanism nationwide among GO-NGO-DPs to ensure quality of care in health service delivery both public and private sectors; (b) Review QI related existing protocols, guidelines, standard operating procedures (SOP), tools and indicators; (c) Develop new tools, guidelines, SOPs, standards, Key Performance Indicator (KPI) and other indicators; (d) Conduct survey on quality of care for health service delivery; (e) Ensure attainment of national health care standards for Quality of Care.

Core Strategic Objectives of QIS are to: (i) Introduce patient-centered services; (ii) Improve patient safety; (iii) Improve clinical practice; (iv) Improve Leadership and Management systems; and (v) Improve public health and preventive services. The Additional Objectives of QIS are to: (a) Ensure all necessary

input for Quality Improvement (QI); (b) Ensure all necessary Support Services for QI; and (c) Develop effective outcome measure system for Quality Improvement (QI).

Following is the Organogram of QIS



6. The main achievements of the QIS

To advocate nationally for addressing quality of care, QIS is implementing a host of activities. These include the following:

i) QIS developed the Strategic Planning on Quality of Care management in health service of Bangladesh;

ii) As part of QI structure and implementation modalities, QIS did help form the Technical Advisory Group (TAG), QI Committees at different levels, Resource Pools, Coordinating QI activities among the development partners, Engaged in Mother and Baby Friendly Facility Initiatives, participate in joint project activities with ICDDR,B;

iii) QIS has helped produce various documents, such as: National Health Care Standards, Clinical Management Protocol, Document on Level-wise distribution of diseases for management in the health service of Bangladesh, Monitoring and Evaluation Framework, key performance indicators and facility level indicators, TQM Operation Module, RMNCAH Framework, MPDSR National Guideline and ToT Manual on MPDSR, EMEN Standards, and SOPs;

iv) QIS initiated implementation of 5S, MPDSR, PDCA, Safe Surgery Checklist;

v) QIS organized a considerable number of training, seminars, workshops, meetings and visits for advocacy, capacity strengthening, and dissemination and sharing of information and learning;

vi) QIS has worked towards promoting community participation along with its video documentation, Piloting EMEN and Model Hospital initiatives, Patient Centered Care (PCC), Patient safety and Clinical Audit;

vii) QIS has also undertaken a Baseline study to establish baseline data set; and

viii) QIS has regularly published e-news letter and other documents.

Following sections has the details.

6.1 Strategic Planning on Quality of Care for Health Service Delivery in Bangladesh

Quality is an integral part of health care in every country and at all time in the history of health care, Quality Improvement remains a major focus. This has become more important with the growth of knowledge and technologies in health care, as well as growing awareness and public pressure for improved services.

Like many other health systems, health sector in Bangladesh is committed to provide quality healthcare to its citizen. As part of its efforts, it has been implementing different initiatives to improve the quality of care. After adoption of the Health Care Financing Strategy (2012-2032) – roadmap to achieve the Universal Health Coverage (UHC) – the issue of quality has become more important as UHC requires optimizing the resource use and expanding coverage with quality care. It essentially necessitates that the process of quality improvement should be based on practical and sound strategy so that the best possible outcomes are achieved.

This Strategic Planning on Quality of Care sets the basis for a focused and coordinated framework for implementing quality improvement activities. It is equally significant to the decision makers and to the health providers as it is designed to guide their actions. QIS has developed the Strategic Planning on Quality of Care management in health service of Bangladesh.

This planning has been developed through a collaborative and participatory process. Based on the available and updated literatures, documents and discourses; and taking the experiences of previous quality assurance initiatives into active consideration, a draft document was prepared. A core committee comprising the main stakeholders of health and population services worked on the draft document for quite some time. It was then put in the web site to reach out to a range of stakeholders for comments.

The planning has attempted to address the issue of quality from both the technical and service oriented perspectives. It suggests combined and continuous efforts of everyone in the system to

make the changes that will lead to better patient outcomes, better system performance and better professional development. This approach is based on the premise that healthcare will not realize its full potential unless change making becomes an intrinsic part of everyone's job, every day, in all parts of the system. This approach of quality improvement involves a substantial shift in idea of the work in healthcare and suggests the use of a wide variety of modern tools and methods.

Drawing everyone actively into the process of change, presumes that everyone will develop a basic understanding of the standards of their work, as well the skills they need to make changes in their work towards achieving the common goal. The strategy also recognizes that making improvement happen also requires leadership that enables connections between the aims of changes and the design and testing of those changes. It also underlines the requirement of linking the performance to the policies and practices of reward and accountability.

The strategy will be implemented throughout the health population nutrition sector, in phases over time, both in public and private sector.

6.1.1 Strategic Planning on Quality of Care: Paradigm shift from QA to QI

MoH&FW took initiatives to develop a strategic framework, i.e., a set of strategic objectives. Based on the experience in implementing quality assurance program in Bangladesh health services, and the comparative advantage among different approaches, this plan has adopted the 'Quality Improvement Approach' and thus, has made a paradigm shift from its earlier approach of quality assurance.

The strategic planning includes:

Vision: Universal Health Coverage with Quality Health Care by 2030

Mission Statement: Achieving an effective health system that provides the highest Quality of Care by Quality Improvement Approach, and

Purpose: To implement and promote better Quality of Care through developing a strategic framework.

The strategic plan comprises five major strategic objectives and three additional objectives. These objectives have intermediate objectives under each category with several indicators. Implementation at all facilities and service delivery points will be measured by these indicators so that there is a standardized approach to the Quality improvement program.

Strategic Objective 1: Introduce consumer and patient-centered services;

Strategic Objective 2: Improve patient safety;

Strategic Objective 3: Improve clinical practice;

Strategic Objective 4: Improve leadership and management systems; and

Strategic Objective 5: Improve public health and preventive services.

This approach of quality improvement involves a substantial shift in ideas of the work in health care and suggests the use of a wide variety of modern tools and methods.

This Strategic Planning for Quality of Care is developed with the dual purposes of promoting the focus on quality in health care and health systems; and guiding the policymakers, planners and providers of care with an opportunity to improve quality in their respective parts in order to enhance the impact on outcomes. This initiative combines and synergizes all the quality improvement and quality assurance efforts in health, population and nutrition sector in Bangladesh and attempts to synchronize with the targets of achieving universal health coverage by 2032 with affordable and quality health care to all citizens.

The plan has taken into account all the dimensions and determinants of quality and attempted to address the issue of quality from both the technical and service perspectives. This document has taken a comprehensive stance on the issue and included both conceptual and practical aspects including the organizational framework for implementation. It is organized over six parts including an introduction which focuses on the vision, mission, purpose and approach that have been adopted in the plan.

The first part deals with the Concept of Quality. The second part describes the strategic framework of the Quality Improvement Plan. The strategic framework comprises five major strategic objectives and three intermediate objectives. Each intermediate objective has several indicators which are set to guide the services and performance at different level of public and private service settings to have quality of care. However, each implementing unit will need to spell out additional details depending on the local situation (availability and expertise of QI team, financial resources, previous experience with the defined cluster of indicators etc). The development of standards, guidelines and policies has been done at the national level but division and districts were responsible for training, dissemination and monitoring compliance.

In the third part, based on the strategic framework, an action plan matrix has been developed with summary of activities, baseline status, indicators, output and responsibility. Facilities will be responsible to develop their own action plan based on the national implementation plan.

Part four describes the organizational set up for effective implementation, monitoring and supervision of the Quality Improvement (QI) activities across the country which is organized in a cascading pattern starting from national level through division, districts, up to upazila level. In addition, there will be Quality Improvement Committees at all level of service delivery.

The whole process of implementation will be facilitated by Quality Improvement Secretariat (QIS) which will coordinate the activities with Line Director, Hospital Service Management and Line Director, Essential Service Delivery of DGHS and Line Director Maternal and Child Health of DGFP for effective implementation, monitoring and supervision. The National Steering Committee (N-QISC) is headed by the Secretary, MoH&FW, will provide the overall policy directives for QI activities. The facility level committee will play the direct role for QI implementation with the help of different organization level committees.

Implementation modality is described in part five which includes among other things, adaptation of strategic planning, training and capacity building, formation of different facility level team, internal assessment, conduct patient satisfaction survey, development of key performance indicators, conduct clinical audit, introduce Standard Operating Procedure (SOP), External Quality Assessment etc. Part six deals with the incentive issue and how this can be best utilized for improving the performance.

Finally, the strategy takes in view that building a culture of quality needs consistent efforts and investments. It has focused on one of the key initiative for building Quality culture and motivation which receives 'rewards and recognition' and continuing handholding support from the central and district administration.

Part-One: Concept of Quality

Part-Two: Strategic Framework: (i) Strategic objective 1 - Introduce consumer and patient-centered services; (ii) Strategic objective 2 - Improve patient safety; (iii) Strategic objective 3 - Improve clinical practice; (iv) Strategic objective 4 - Improve leadership management system; (v) Strategic objective 5 - Improve public health and preventive services; (vi) Strategic objective 6 - Ensure all necessary inputs for quality improvement; (vii) Strategic objective 7 - Ensure all necessary support services; (viii) Strategic objective 8 - Develop effective outcome measurement system for QI

Part Three: Implementation Plan

Part Four: Organizational Framework: (i) Section A - Overview of the committees; (ii) Section B - Organizational level committees; Section C - Facility level committees

Part Five: Implementation modality, Monitoring and Supervision

Part Six: Pay for performance (P4P).

6.1.2 Improving quality of clinical care services: Experience from the health facilities

As part of QIS initiatives, MaMoni HSS project provided support to the district health managers at Hobigonj, Noakhali, Laxmipur and Jhalokathito improve the quality of clinical care provided by health facilities in stages. The stages are - Stage 1: to improve the cleanliness, infection prevention, and medical waste management; Stage 2: to improve sterilization measures and compliance with antenatal care and newborn care services; and Stage 3: to improve compliance with all range of MNCH/FP/N standards. The project developed, in coordination with district level counterparts, specific district plan of action to ensure that health facilities apply interventions to complete the stages of QI. The following table summarizes the status of health facilities by QI Stage by District.

Number of Health Facilities at Different Stages of QI, by District

Stage of QI	District			
	Habiganj	Noakhali	Laxmipur	Jhalokathi
Stage 1	58	35	50	29
Stage 2	16	8	8	4
Stage 3	4	0	0	0
Total number of health facilities	78	43	58	33

Following is an example of improved health facilities with description of the situation before and after improvement and the interventions that led to improvement.

Binoykhati UH&FWC, Jhalokathi (before and after improvement)

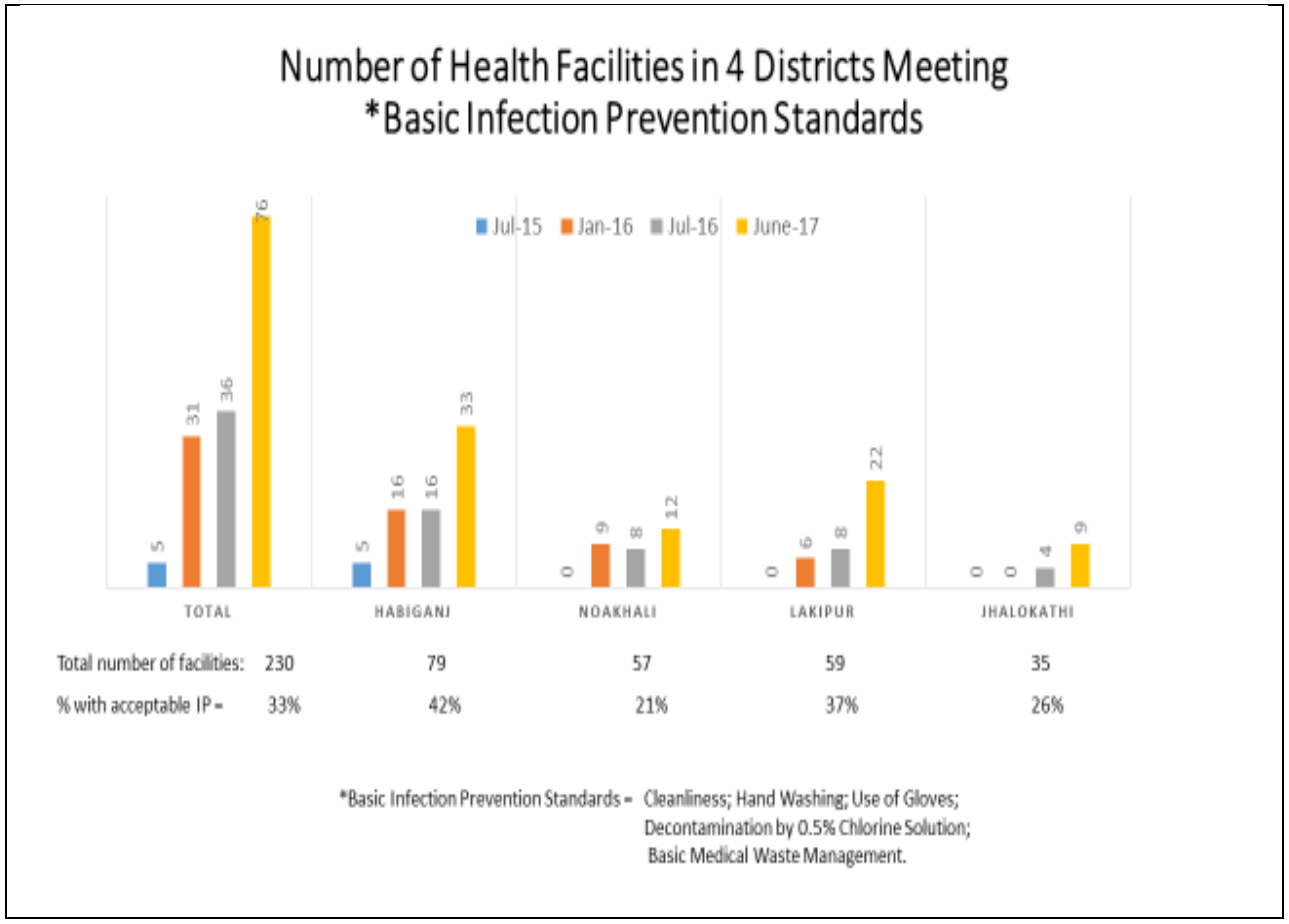
Situation before improvement	Situation after improvement	Intervention led to improvement
Cleanliness is absent in and outside the facility.	The facility is clean around and outside.	Motivation by counseling of service provider through supervision.
No medical waste dumping pits exist in the premises of the facility.	Medical waste dumping pits in place.	Prepared by MaMoni HSS.
Chlorine solution for decontamination of used instrument not prepared.	Chlorine solution prepared and used for decontamination of used instruments.	Motivation by counseling of service provider through supervision.
No color coded medical waste bins in place.	Color coded medical waste bins in place.	Supplied by MaMoni HSS.
Partograph not used during labor.	Partograph is used during labor	Training given and partograph supplied by MaMoni HSS.


Binoykhati UH&FWC, Jhalokathi (before and after improvement)


Saturia UH&FWC, RajapurUpazilla, Jhalokathi (before and after improvement)


UHC Delivery Room, CompaniganjUpzilla, Noakhali, before and after improvement

The following graph summarizes the progress in the number of facilities succeeded in passing the first stage of QI.



Recognition for improving QOS in Hobigonj District, May 11, 2016

6.2 Technical Advisory Group (TAG)

Quality Improvement Secretariat formed a Technical Advisory Group (TAG) composed of experienced public health experts, clinicians, researchers and epidemiologists. The main responsibility of TAG is to advice and guide according to national strategic planning on quality of care for developing tools, guidelines, protocols and SOPs. TAG has already developed some important tools, protocols, monitoring and evaluation framework for the improvement of quality.

Composition of the TAG, as on 01 September 2015 (not according to seniority):
(i) Prof. Dr. Ridwanur Rahman, Head, Department of Medicine, Shaheed Shuhrawardee Medical College (President); (ii) Prof. Dr. M. A. Faiz, Former Director General, DGHS (Member); Dr. Zakir Hussain, Former Director, PHC, DGHS (Member); Dr. S. A. J. M. Musa, Former Director, PHC, DGHS (Member); Prof. Dr. Iffat Ara, Head, Department of Gynaecology and Obstetrics, Dhaka Medical College (Member); Dr. A. B. M. Jamal, Associate Professor, Surgery, Dhaka Medical College (Member); Dr. Ferdousi Begum, Professor of Gynaecology and Obstetrics (Member); Dr. ShimulKoli Hossain, Program Manager – ARH, DGFP (Member); Dr. Iqbal Anwar, Scientist, ICDDRB (Member); Dr. Ziaul Matin, Health Specialist, UNICEF (Member); and Dr. Md. Aminul Hasan, DD, HEU, MoH&FW (Member Secretary).

Terms of Reference of the TAG: (a) Provide support to develop tools, guideline, protocols and SOP for Quality Improvement Strategy; (b) Provide necessary input for further development of existing tools, guidelines, protocols and SOP; and (c) Co-opt members for TAG.

6.3 QI Committees and their activities at different levels

At the national level, in April-June 2016 period, QIS conducted a national mapping exercise to record the geographic coverage of different projects and organizations and their capacity to support the implementation of various aspects of the national QI strategy. QIS and MaMoni HSS project and other development partners participated in a "Workshop on Quality Improvement Initiative for Health Care Service Delivery" held at DGFP on June 20, 2016. The workshop reviewed national progress in FP program implementation and the latest data on main FP indicators such as total fertility rate, contraceptive prevalence rate, unmet need for FP, and proportion of FP method use. The workshop identified challenges to providing quality FP services and the national strategy to improve quality of FP services. QIS and MaMoni HSS project jointly identified inputs to further contribute to the capacity of the QIS. This includes, identifying national level staff to strengthen the technical capacity of QIS to coordinate the implementation of the national QI strategy and monitor progressas well as division staff to facilitate the implementation of QI interventions at the district level. To update guidelines and develop tools for monitoring quality of Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH) services, QIS formed the working group for RMNCAH, and MaMoni HSS project has been included in the working group.

The Quality Improvement Secretariat facilitated the process of formation of different committees at each tire, i.e., district, upazilla and health facility level according to the strategic planning document. At each tire, two types of committees are formed: Organizational and facility level committees. The organizational committees (divisional, district, upazila) is the administrative unit of the particular tire and responsible for monitoring of QI activities of all facilities, including public and private within that tire. The facility level committees are designed for individual facility at any tire and they are responsible for QI related implementation within the respective facility. The two types of committees have separate terms of references that are described in the strategic planning document.

6.3.1 Increasing local ownership of Quality Improvement through establishing QI Committees

Besides formation of the QI committees at district, upazilla and health facility levels, towards increasing local ownership of the QI Committees, MaMoni HSS project's facilitation focuses on making sure that while the counterparts from the MoH&FWare taking the lead and ownership of the process, the meetings of the QI committees are effective in identifying gaps in performance and action plan in response. MaMoni HSS project also facilitates the follow up for the implementation of the action plan and feedback to the QI committee on progress. They also provide facilitation to ensure the engagement of local government in the QI Committee meetings for increasing resources for replenishing supplies, conducting minor renovations, and building waste management pits with local resources.

As an effort towards increasing local ownership of QI through QIC, the number of QI committees formed and active appears in the following table.

Status of Quality Improvement Committee Formed and Active by District, June 2016 & May 2017

Number of QI Committees	District							
	Hobigonj		Noakhali		Laxmipur		Jhalokathi	
	2016	2017	2016	2017	2016	2017	2016	2017
Total to be formed	86	86	43	43	54	54	40	40
Actually formed	73	86	42	42	54	54	35	35
Active (had at least 1 meeting in the last 3 months)	42	86	41	41	49	49	25	25

6.4. Resource Pools

QIS has taken initiative of forming a resource pool for each division with the intent to facilitate and monitor the QI activities nationwide. On an average, ten resource persons have been

selected from each division either from the category of facility managers, consultants or medical officers.

Resource pool is one of the major innovative ideas of QIS to plan for a solution for the decentralization process of implementing the quality of care related health services. A total of 70 doctors (10 from each division) were brought within the resource pool group who have a definitive interest to work in the areas of quality. Resource pool members will be assigned for conducting QI training at divisional to upazila level facilities. The line director of Hospital service management, ESD and MNCAH of DGHS will utilize the resource pool members for conducting training of service providers at different tires.

For supporting Divisional and District level QI Activities, QI Committees were established and activated at Divisional, District and Upazilla levels across the country, and QI district resource pools were formed and supported. The following table presents the district QIC formed and district resource pool developed as part of the QIS initiatives till September 2017.

Division	No. of districts	District QIC formed	District Resource pool developed
Chittagong	11	11	11
Sylhet	4	4	4
Barisal	6	6	6
Khulna	10	10	10
Dhaka	13	13	12
Rajshahi	8	8	8
Rangpur	8	8	8
Mymensingh	4	3	2
Total:	64	63	61

6.5 Coordinating QI activities among the development partners

Quality Improvement Secretariat (QIS) has developed a joint GO-NGO collaboration plan to initiate the QI process nationwide from national to upazila level. The QIS has conducted an exercise to identify the major DPs and NGOs working in different levels. The team designed mapping template for collecting information from different DPs and NGOs which were analyzed to find out the intervening districts and upazilas by them and the staffing pattern. The team then consulted each organization to find out their feasibility for support in coordinating the quality of care initiatives taken by the government. During this advocacy meeting, the detailed terms of references expected from the DPs/ NGOs were discussed. After the consensus from the national level, the QIS conducted divisional advocacy meeting where they talked with the local DPs/ NGOs staffs to explore the real context and feasibility of facilitating the QI activities. The mapping exercise was finalized through a stakeholder's consultation process. The initiative will further explore opportunities for QI implementation at different levels.

6.5.1 Mapping exercise

Background: QI Secretariat (QIS) of HEU planned to improve quality of care in health facilities across the country, both public and private. A high level meeting of National QI Committee (NQIC) was held in 1st week of January 2015 in this regard. The meeting suggested that there should be information about the ongoing, recently completed and planned QI activities in the health sector. Therefore, to record the geographical coverage of different projects and organizations and their capacity to support the implementation of various activities as part of the national QI Strategy, QIS conducted a stock-taking activity or mapping exercise.

The main objectives of the mapping exercise were to: (i) identify QI programs/ initiatives; (ii) map out ongoing, recently completed and planned QI activities; (iii) know about the tools (Monitoring, supervision etc.) which can help QIS developing/ adopting tools for QI initiatives of QIS, MoH&FW; and (iv) bring all ongoing activities under one umbrella in order to be monitored / coordinated by the QI secretariat.

To provide an overall picture on the QI acivities in health arena, a mapping matrix has been developed, indicating (i) implementing organizations, (ii) QI initiatives with period, (iii) main objectives, (iv) method, quality domain focus and tools for monitoring, and (v) location. The detailed mapping matrix appears in Annex-1.

6.6. Engaged in Mother and Baby Friendly Facility Initiatives (MBFFI)

Quality Improvement Secretariat (QIS) is leading GoB-BMGF-UNICEF partnership initiative of 'Mother and Baby Friendly Facility Initiative (MBFFI)' for quality improvement of MNH services. Through this intervention, a comprehensive scalable QI model for MNH will be demonstrated. Under the project initiative, Global EMEN (Every Mother Every Newborn) standards and criteria have been finalized for the country context involving key experts.

Also national and sub-national capacity is being developed for Total Quality Management (TQM) to institute an effective and doable quality improvement system through integrating different quality improvement approaches. Facility level interventions will be piloted in Kurigram district hospital and 4 selected upazila health complexes, while community level interventions will be implemented in only one Upazila. At the facility level, the Quality Improvement Teams (QITs) will be formed and the capacity of the QI teams will be developed to implement QI action plans. The primary outcomes for this project will be:

- Improved leadership, policies, and partnerships to support the scale up of maternal and newborn health care including breastfeeding initiatives programs in Bangladesh;
- Improved quality of facility-based maternal and newborn care including breastfeeding;

- Increased demand and access to quality maternal, newborn and community care including breastfeeding counseling and support services;
- Strengthened accountability framework for maternal and newborn care.

6.7 Supporting Initiatives by EngenderHealth Bangladesh

EngenderHealth Bangladesh became directly involved with the QIS initiatives from November 2016, and as part of the initiative EngenderHealth Bangladesh recruited two consultants who would work with the QIS and provide support in quality improvement initiatives.

EngenderHealth Bangladesh was assigned 14 districts, namely, Panchogarh, Thakurgaon, Naogaon, Natore, Sirajganj, Pabna, Meherpur, Jhenaidah, Magura, Manikganj, Munshiganj, Brahmmanbaria, Comilla and Chandpur. In these districts, QICs were formed and 5S-CQI-TQM and Universal Health Coverage (UHC) was introduced through the district QIC, Modernized Sadar General Hospital QIC and SadarUpazila QIC, making a total of 42 QICs since November 2016. EngenderHealth Bangladesh supported in organizing the monthly meetings by circulating the call-up notice, to the members of the committee, and provided necessary logistics. These QICs did regularly hold their monthly meetings and send the monthly resolution to the QIS. Some important issues discussed in these meetings included, discarding and condemnations of relevant items, training, cleaning the premises through observance of big cleaning days, and the like. Now all of the QICs are organizing their monthly meetings regularly and functioning without external support.

Following changes have been evident in the health facilities supported by EngenderHealth Bangladesh: (i) Neat and clean campus, (ii) all instruments tagged red, yellow and green, (iii) all light and fan switches marked with numbers, (iv) indication/ direction signs put up in all facilities, (v) Citizen's Charter mounted in all facilities, (vi) attendance of staff are strictly observed, (vii) adequate communications are made with the patients as well as other service recipients, (viii) doctors and related staffs are prepared to provide patient-centered services, (ix) private diagnostic centers, hospitals and clinics are gradually included in the QI initiatives, and (x) administrative staffs and local representatives are trying to adapt 5S-CQI-TQM.

6.8 Joint project activities with ICDDR,B

ICDDR,B became involved with the QIS activities, since 2008, when they attended a Regional QOC Workshop, participated by 11 countries, organized by WHO in New Delhi. This workshop focused on the quality improvement of in-patient care for children. Subsequently, ICDDR,B hosted a national workshop in Bangladesh on the same theme, to develop a country road map. Following this, an assessment was conducted on 18 facilities (6 district hospitals, and 12 upzilla health complexes). WHO generic QOC Assessment Tool including ETT (Emergency Triage and Treatment) was utilized in this assessment.

In 2009, ICDDR,B, under the leadership of IMCI, did help adapt the WHO Pocketbook for quality of services for children. In 2013, UNICEF, with support from the Japanese Government fund

initiated programmes for improving newborn care services. Through this programme TQM was introduced in 13 facilities, including 4 medical colleges, 7 district hospitals, and 2 upazilla health complexes. ICDDR,B conducted the baseline and end-line evaluation of the programme. Activities also included periodic monitoring and coaching.By using 5S Implementation Tools performance of the medical officers and QI team members, maternal health service areas includingoperation theatre were assessed and external monitoring and support was provided. End-line assessment of the project conducted in 2014 captured information on the improvement and readiness of services including quality of care.

In 2015, UNICEF, with the involvement and support of the Bill and Melinda Gates Foundation (BMGF) became engaged in TQM and QIS activities. Meanwhile, WHO-UNICEF introduced 10 standards for the EMEN activities in Bangladesh, Ghana and Tanzania. ICDDR,B became the research partner in the EMEN initiatives in Bangladesh. The initiative intended to reduce maternal and neonatal mortality and still birth and focused on the practice of breastfeeding and time around birth. Through the 10 standards consensus was reached on core criteria, indicators and adaptation of tools. The initiative was introduced in the district hospital and 4 UHCs of Kurigram district. The comparison districts were Gaibandha and Lalmonirhat with one district hospital and 4 UHCs selected from each district. ICDDR,B baseline research findings on this initiative was disseminated in April 2017.

ICDDR,B also became involved in the USAID supported Research for Decision Makers program, which has implications for quality of health care services.

ICDDR,B is currently reviewing the licensing status of private for-profit health facilities in 4 MaMoni HSS districts. It is also participating in the RMNCAH Framework piloting in Norsingdi and Moulavibazaar.

A MOU has been signed with ICDDR,B regarding the support for intervention implemented by ICDDR,B on testing the feasibility, acceptability and effectiveness of a participatory stakeholder monitoring and feedback approach in improving the quality of maternal and neonatal health (MNH) care in urban for-profit private sector facilities.

The major interventions are, formation of Quality Improvement Committee, establishing Quality Improvement Cell, development of quality monitoring score-card for monitoring and feedback, periodic visit by QI committee members, and provide on-the-spot QI feedback and periodic feedback through workshops. The study involves a mixed method pre-test post-test controlled design. Eighteen (18) facilities were selected as intervention and 18 as control facilities. The intervention facilities are being quarterly monitored and given feedback.

6.9 National Health Care Standards

Standards are a means of describing a level of quality that the health care organizations are expected to meet or aspire to achieve. The standards have been developed with two principal

objectives. First, they provide a common set of requirements applying across all health care organizations to ensure that health services are provided that are both safe and of an acceptable quality. Second, they provide a framework for continuous improvement in the overall quality of care people receive. The framework ensures that the extra resources directed to the health system are used to help raise the level of performance measurable year-on-year.

To achieve the goal of Universal Health Coverage, QIS has developed the National Health Care Standards for health service delivery. It is a common set of requirements applying across all health care organization to ensure that health services are provided that are both safe and of an acceptable quality, which provide a framework for continuous improvement in the overall quality of care (generic approach) which should be found in all health service delivery level in Bangladesh as a guide to service providers in all levels. Three working groups were formed to develop the document for 3 different tires, Primary level (at Community Clinic UH&FWC/ USC and UHC), Secondary level (District Hospitals) and Tertiary level (at Medical Colleges and Specialized Hospitals). The final draft was validated through a national workshop. Three former Director Generals of DGHS led the three groups for finalization of the National Health care standards.

Initially Health Economics Unit (HEU) developed a zero draft of National Health Care Standards for achieving the Universal Health Coverage (UHC), the next global agenda of WHO. Three working teams were formed with the aim to develop the standards for three different levels under the leadership of three former Director General of Health Service. The three working teams conducted multiple meetings with the members for finalization of the draft. The final draft was validated by a national workshop with the presence of secretary, MoH&FW and DG, DGHS.

National Health Care Standards has been developed for Primary level care (Community Clinic UH&FWC/ FWC/USC and UHC), Secondary level (District Hospitals) of care and the Tertiary level (Medical College and Specialized Hospitals) of care with the aim to achieve the Quality of Care.The generic approach is used for developing the standards of level of services, Primary, Secondary and Tertiary level standards.

Primary Care: Primary Health Care (PHC) is “Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self determination”.

Primary care involves the widest scope of health care, including all ages of patients, of all socioeconomic and geographic origins, individuals seeking to maintain optimal health, and patients with all range of acute and chronic physical, mental and social health issues, including multiple chronic diseases seek help. Consequently, a primary care service provider must possess

a wide breadth of knowledge in many areas. Continuity is a key characteristic of primary care, as patients usually prefer to consult the same doctors for routine check-ups and preventive care, health education, and every time they require an initial consultation about a new health problem.

Common chronic illnesses usually treated in primary care may include, for example: hypertension, diabetes, cough, asthma, COPD, depression and anxiety, back pain, arthritis or thyroid dysfunction as well as abdominal and genito-urinary problems. Primary care also includes many basic maternal and child health services, such as family planning services and vaccinations.

In the context of global population aging, with increasing numbers of older adults at greater risk of chronic non-communicable diseases, rapidly increasing demand for primary care services is expected around the world, in both developed and developing countries. The World Health Organization attributes the provision of essential primary care as an integral component of an inclusive primary health care strategy.

Secondary care: Secondary care is the health care services provided by medical specialists and other health professionals who generally do not have first contact with patients, for example, cardiologists, urologists and dermatologists etc. It also includes acute care, necessary treatment for a short period of time for a brief but serious illness, injury or other health conditions, such as in a hospital emergency department. It also includes skilled attendance during childbirth, intensive care, and medical imaging services.

Tertiary care: Tertiary care is a specialized health care, usually for inpatients and or referral from a primary or secondary health professional, in a facility that has personnel and facilities for advanced medical investigation and treatment, such as a tertiary referral hospital. Examples of tertiary care services are cancer management, neurosurgery, cardiac surgery, plastic surgery, treatment for severe burns, advanced neonatology services, palliative, and other complex medical and surgical interventions.

Allied health professionals, such as physical therapists, respiratory therapists, occupational therapists, speech therapists, and dietitians, also generally work in tertiary care, accessed through either patient self-referral or through physician referral.

6.9.1 Health Care Standards in HPNSDP

Bangladesh has been implementing sector wide approach (SWAp) in the health sector since 1998. The MoH&FW has developed the next sector program (HPNSDP) from July 2011 onwards, without any interruption between current and next sector program. The goal of HPNSDP is to ensure Quality and Equitable health care for all citizens by improving access to,and utilization of, health care services.

To ensure Quality and Equitable health care for all citizens with the aim to achieve the Universal Health Coverage (UHC), development of national health care standards is one of the important objective, which has been developed and will be implemented under the directives of Quality of Care strategy.

Concerns with the quality and delivery of health services have been expressed in the media and public forums with considerable frequency. Challenges that have been identified through the public and private survey, surveillance and monitoring systems, and from reports of other organization's managers and staff as well as patients include: (i) Lack of accountability and ownership of hospital service provider; (ii) Lack of compliance with accepted guidelines or clinical practices; (iii) Instance of failures in technology; (iv) Long queues and waiting time especially in pharmacies and outpatient departments; (v) Inadequate supervision of hospital staff; (vi) Lengthy turnaround times for laboratory tests; and (vii) Sub-optimal management systems and processes in many institutions.

To address this situation, a National Strategic Planning of Quality of Care for Health Service Delivery has been developed. The implementation plan of the Quality of Care strategy will be coordinated by Quality Improvement Secretariat (QIS) under the Ministry of Health and Family Welfare. QIS will have the overall responsibility to implement the QI plan of the strategic document with close cooperation of the line director of Hospital Service Management and Essential Service Delivery.

In Bangladesh informal standards exist in some areas. Roles and accountabilities for establishing levels of performance against standards are also not well defined. Under such circumstances, the availability of comparable and credible information on the achievement of a single set of national core standards becomes imperative. Appraisal will therefore be conducted to assess the performance of health care facilities against the set standards, which will benchmark them against a set of criteria to determine whether performance is good, adequate or poor. Areas of basic patient safety and dignity, and essential management activities, will be weighted in determining poor performance, as these will have the greatest impact on outcomes.

The National core standards reflect: improve life expectancy; improve mother and child health and survival; improve health system effectiveness; and improve Quality of Care. The standards contain five common parts for different level of care. The first part contains Mission, Strategic Planning, General Management, Risk and Quality Management, Financial Management, Human Resource Management, Client/ Patients Right, Information for Client/ Patient, Patient feedback on Services, Privacy and Dignity. Second part contains Standards for Service Delivery on Care Continuum, Access to Health Service, Continuity of Care, Assessment on Care planning, Monitoring and Evaluation, Treatment Documentation of care, Discharge, Transfer and Referral,

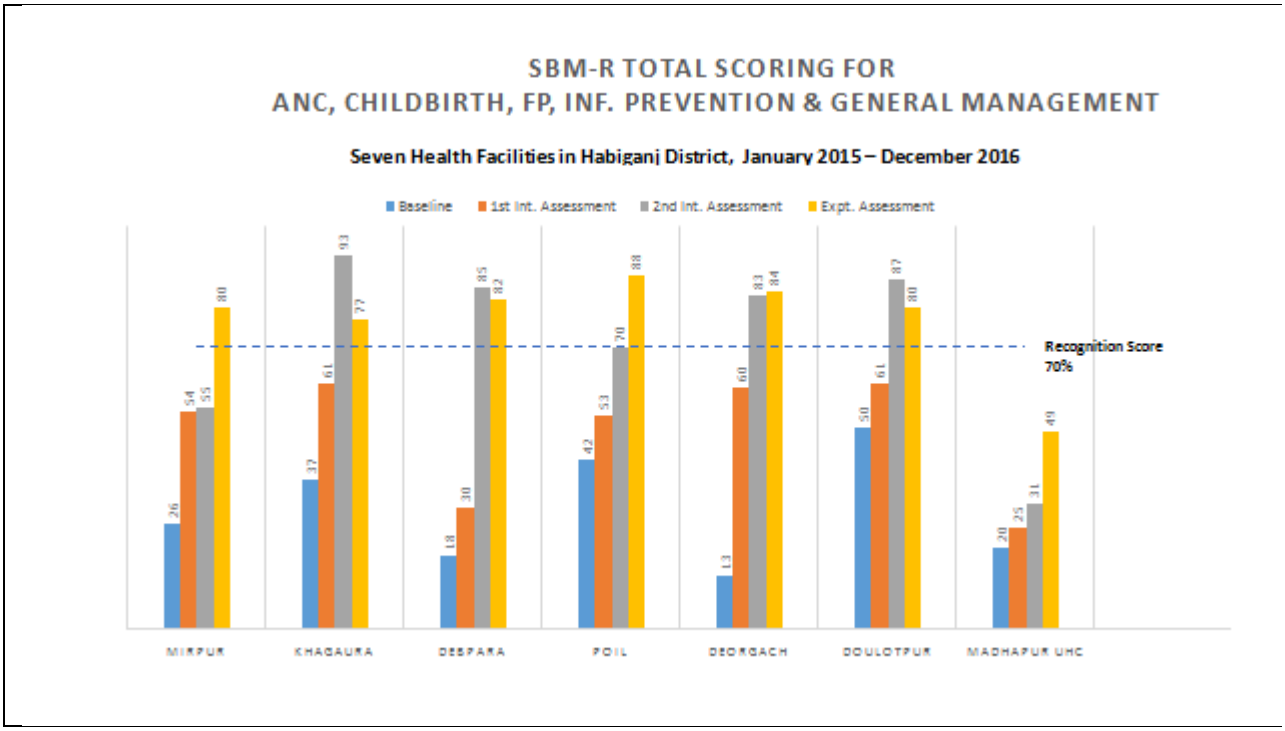
management of Operation theater, management of casualty department, management of intensive care. The third part contains the support services which covers the laboratory services, Radiology and imaging services and pharmacy services. Fourth part contains infection control, hygiene and waste management. Part five contains Safe and appropriate environment.

Standards at each level of services have been set against: (i) Management Standards; (ii) Service Delivery Standards; (iii) Support Services Standards; (iv) Infection Control, Hygiene and Waste Management Standards; and (v) Safe and Appropriate Environment standards. In terms of various levels, Standards have been formulated for Community Clinic, for UH&FWC/USC, for Primary Level (Upazila Health Complex, and for Tertiary level e.g., Medical College Hospital and similar other facilities.

6.9.2 Standard Based Management and Recognition (SBM-R)

SBM-R is a comprehensive approach in application of Standards in health facilities. As part of QIS initiatives, MaMoni HSS project has helped facilitating implementation of different steps of SBM-R, as per work plan, in 35 health facilities in Hobigonj, Noakhali, Laxmipur, and Jhalokathi districts. These health facilities were selected as they were able to achieve a total score above 70% of SBM-R standards as documented by the external assessment conducted in the health facilities.

The following graph presents the SBM-R Total Scoring for Antenatal Care, Childbirth, Family Planning, Infection Prevention and General Management in seven health facilities (Mirpur, Khagaura, Debpara, Poil, Deorgach, Doulotpur, and Madhupur UHC) in Habigonj District, from January 2015 to December 2016.



Additional graphs on (i) Comparison of SBM-R Baseline 1st and 2nd Internal and External assessment at Murakuri-Habiganj, (ii) Comparison of Baseline, 1st and 2nd Internal and External assessment at MCWC-Habiganj, and (iii) Comparison of SBM-R Baseline 1st, 2nd Internal and External assessment at Shibpasha-Habiganjare presented in Annex-2.

Improved ANC Counseling, MCWC, Habiganj.

Improved Infection Prevention measures in Shipasha UH&FWC, Hobigonj

Improved Delivery Room, Murakuri UH&FWC, Hobigonj District.

6.9.3 Clinical Management Protocol

Clinical Management Protocol (CMP) are the steps to be taken to treat or refer a patient based on available best evidence and may have to be country specific based on available local facilities. CMPs are expected to provide a framework to support clinical decisions for the clinical care providers.

CMPs are essential for bringing uniformity in the evaluation and management of illnesses between individuals and between centers, and removing or minimizing errors in management decisions. Clinical care in countries with limited resources like Bangladesh are based on clinical judgment rather than based on definitive laboratory diagnosis. Lack of uniformity in clinical judgment is a factor affecting case management at different levels of care (primary to tertiary), most often due to limited access to updated evidence based clinical decision making process and difficulty in integrating them into clinical care patients. The key questions during clinical management of cases, what should be done, when, where and by who at any local level are expected to be described in the clinical management protocol.

The GoB has taken initiative to develop CMPs for some common diseases and clinical presentations based on prevalence of diseases. The CMPs are required for many/ most diseases and presentations. To begin with, a multi-disciplinary national technical

committee initially short listed 20 diseases/ clinical presentations for preparation of CMP and ended up with 13 in the present module.

The CMPs are mostly intended for primary care physicians in the private chamber, outpatient departments, and emergency departments. Most of the CMPs are now one/ few page flow charts, which will be combined in a module as well as they can be displayed in laminated form in the office duty room. The management after hospitalization is likely to be decided by the consultants. It is difficult to include all possible variations and expectations in disease management in the CMPs and hence, the CMPs cover mostly the generalizations in the management of the conditions. The actual care of the cases may have to be varied in special situations and with co-morbidities, and may have to be individualized by the user or the case may be referred to next level of care. Uniform application of the CMPs for the described illness, expectedly, may help improve patient outcome (including survival), guide referral, reduce unnecessary interventions/ drugs, and reduce cost and complications.

QIS plans to develop a series of clinical protocols which are simple, patient-specific, user friendly to be used for District Hospitals as well as Upazilla Health Complexes. Clinical Management Protocols are basically algorithm which are systematically developed and designed to help physicians to make decisions about appropriate health care for specific circumstances. The key to develop the usable guideline is to identify the most important ones. A core committee has been formed with the aim to develop the protocols by using several methodological techniques, such as desktop reviews, interviews, working group meetings and assessment of the status of available guidelines in accordance with the opinion of the stakeholders of Upazilla and District facilities. As a part of the process, 15 working groups were formed to develop these clinical protocols. A total of 50 Clinical Management Protocols have been developed which will be piloted in SSK piloting facilities.

The content of the CMP has been presented as: Management of Acute Febrile Illness in Children – (i) age 1 day up to 2 months, (ii) age 2 months to 5 years, (iii) age 5 years and over; Management of Acute Chest Pain; Management of Coronary Syndrome; Management of Hypertension; Management of Unconscious Patient; Management of Jaundice; Management of Acute Respiratory Distress; Management of Diabetes Mellitus; Management of Acute Bleeding; Management of Acute Poisoning; Management of Organophosphate Poisoning; Management of Acute Abdomen; and Management of Severe pain in the abdomen (more than 6 hours).

6.9.4 Document on Level-wise distribution of diseases for management in the health service of Bangladesh

The International Classification of Diseases (ICD) is the standard diagnostic tool for epidemiology, health management and clinical purposes. This includes the analysis of general health situation of population groups. It is used to monitor the incidence and prevalence of diseases and other health problems, providing a picture of the general health situation of countries and populations. ICD is used by physicians, nurses, other providers, researchers, health information managers and coders, health information technology workers, policy makers, insurers and patient organizations to classify diseases and other health problems recorded on many types of health and vital records, including death certificates and health records.

QIS developed a document on “Level wise distribution of diseases for management in the health service delivery” through using ICD 10 codes to identify the types of health services at different levels (primary, secondary and tertiary). It is evident that the ICD 10 codes provide a standardized approach to categorize disease, patient conditions and surgical, diagnostic and therapeutic procedures in the inpatient settings. A total of 22 chapters of ICD 10 were divided among 15 working groups for level-wise identification of diseases, considering the human resources, equipment and logistics with three categories ‘most common’, ‘common’ and ‘less common’. The working groups composed of specialists and experts, according to the chapters. A second draft of the document was developed after the compilation of the task of 15 groups. A national validation workshop was held to finalize the document.

In health care, coding system is used to differentiate diagnoses and procedures in virtually all treatment settings. Diagnostic and procedural codes are connected to nearly every system and business process in health plans and provider organizations, including reimbursement and claim processes, worldwide.

The International Statistical Classification of Diseases (ICD) is a diagnosis coding system of diseases and signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or diseases and a procedure coding system for inpatient procedures.

The ICD codes provide a standardized approach to categorize disease and patient conditions and surgical, diagnostic and therapeutic procedures in the inpatient setting. ICD classifications are used to assign codes to diagnoses in virtually all health care settings, including inpatient and outpatient settings and physician offices. ICD codes allow comparison of collection, classification, processing, and presentation of morbidity and mortality statistics globally.

ICD procedure codes are used only on inpatient hospital claims to capture inpatient procedures. Entities that will use the updated ICD-10 codes include hospital and professional billing, registries, clinical and hospital departments, clinical decision support systems, and patient financial services.

Use of ICD 10 would be beneficial to: (i) health service delivery; (ii) improve patient care; (iii) improve research; (iv) lend insight to the setting of health policy; (v) facilitate improved public health reporting and tracking; (vi) improve clinical, financial and administrative performance; and (vii) allow for monitoring of resource utilization.

At present, identification and type of health services in different level (primary, secondary and tertiary) has not been established, which has created a lot of challenges for distribution of human resources, logistics and for developing the health benefit package. MoH&FW has decided to identify the services in different level for effective strategic planning.

Steps of development: In the beginning of the process, review of literature and other necessary documents regarding ICD 10 were conducted for development of the first draft. After development of the first draft, a planning workshop was held with the aim to develop the document.

The health service benefit package will be developed on the basis of ICD 10, level wise distribution, including, (i) Diseases (ICD-10) for primary level, (ii) Diseases (ICD-10) for Secondary level; and (iii) Diseases (ICD-10) for Tertiary level.

6.9.5 Updating National Infection Prevention Guidelines

As part of QIS initiatives, MaMoni HSS project provided support to the National QIS Activities through technical assistance in updating the National Infection Prevention Guidelines. (Source: MaMoni HSS Project Presentation, September 2017)

6.10 Monitoring and Evaluation (M&E) Framework, key performance indicators and facility level indicators

QIS has developed an M&E framework for Quality Improvement initiative. By using this framework all QI activities will be monitored from center to periphery level. The Quality Improvement Secretariat also developed Key Performance Indicators (KPI) and Facility Level Indicators (FLI). The Key Performance Indicators were the national level indicators and developed based on six major dimensions of quality of care: Safe, effective, patient centered, timely, efficient and equitable. The Facility Level Indicators are prepared based on different work areas in a facility and can be used as an internal assessment tool for improvement of

workplace. The framework and the indicators were developed using the technical expertise of the TAG members formed by QIS.

Specific M&E activities include, (i) Strengthening Routine Supervision and Promoting Supportive Supervision; (ii) Establishing and maintaining Regional Roaming Quality Improvement Teams (RRQIT) to strengthen CEmONC; (iii) Monitoring and Improving Availability of Essential MNCH/FP/N Drugs and Commodities; (iv) Monitoring QOC Indicators at Sentinel Sites; and (v) Developing QI Tools (e.g., Checklists).

6.10.1 Strengthening Routine Supervision and Promote Supportive Supervision

For this, QIS did the following: (i) Support developing a district level supervisory visits schedule; (ii) Ensure implementation of supervisory visits according to the schedule; (iii) Use structured checklists on General Facility Management, Maternal Health, Family Planning, Newborn, and Child Health; (iv) Identify gaps, prepare action plan for improvement, and follow up; and (v) Engage local government in QI activities.

As part of the QIS initiatives, the MaMoni HSS project provided support to strengthen the supervision system at the district level. Specifically, the project facilitated establishment of a supervision visits schedule from first line supervisors, from union level staff such as Health Inspectors (HI) and Family Planning Inspectors (FPI) to the community level services provided by the FWAs. The project also facilitated developing supervision plan for second line supervisors, from upazilla level staff such as civil surgeon, DDFP, and MOCS to UH&FWCs. The facilitation includes developing monthly visit plans, participate in conducting Joint Supervisory Visits (JSV) and ensuring effectiveness of the supervisory visits through applying the concepts of supportive supervision where the supervisor plays a role in mentoring, capacity building, problem solving, and quality improvement. Supervisory visits are conducted by using structured supervisory checklists in areas including: infection prevention measures, service delivery management, ANC, nutrition, FP, newborn and child health, IMCI, normal vaginal delivery, and postnatal care. The facilitating of the project ensures that each supervisory visit identifies gaps and action plan for improvement and following up on results.

The table below shows the number of joint supervisory visits planned and conducted by the project districts

Joint Supervisory Visits (JSV) Planned and Conducted by the project Districts for 2016 and 2017 [prepared from MM-HSS quarterly report from April-June 2016 and 2017]

Districts	1st Line (April-June 2016)		2nd Line (April-June 2016)		JSV (April-May 2017)	
	Planned	Conducted	Planned	Conducted	Planned	Conducted
Hobigonj	36	41	48	34	16	32
Jhalakathi	16	16	08	06	08	05
Lakshmipur	30	30	15	10	10	08
Noakhali	19	14	08	12	18	19
Total	**101**	**101**	**79**	**62**	**52**	**64**

1st line = 1 visit/Union/To with HI and FPI /Month

2nd line = 1 visit/Upazilla/District coordinator with CS, DDFP, MOCS /Month

Example of Common Findings of JSV checklists, Lakshmipur District

Findings	Action Plan
New born birth registration not completed.	During BCG period, ensure birth registration of new born.
Citizen Charter not found, FWC management committee Meetings are not held regularly.	Presence of Citizen Charter will be ensured by communicatingwith UFPO. Need to organize FWC Management committee meetings in due time.
The Facility has no color coded bins for medical waste management.	Shared the issue with UP chairman to ensure three color coded bins.
FWA register were not available in cMPM.	Ensure FWA register etc. MPM.
No supply of misoprostol tablets.	Ensure supply of misoprostol tab at pregnancy period and identify the root cause of the stock-out.
DDS kits are not available.	Ensure availability of DDS kits and other essential drug items.
BCC materials are not used in service centre during counselling.	Ensureavailability of BCC materials for use in service centre during counselling.
The facility has no regular medicine supply for the last 4 months.	Share with DDFP and UFPO to ensure medicine supplyregularly.
UH&FWC Performance board was not up to date.	Share with FPI and UFPO for updating the performance board.
There is no infection prevention logistics, such as chlorine solution.	Share with UP chairman to ensure supply of infection prevention logistics.

DDFP 2nd line JSV to a satellite clinic, Rampur Union, CompaniganjUpazilla, Noakhali District.

6.10.2 Establishing and maintaining Regional Roaming Quality Improvement Teams (RRQIT) to strengthen CEmONC

The major activities undertaken to this effect include, (a) RRQIT support Medical Colleges staff, Divisional staff, District staff, (b) Conduct quarterly visits at District Hospitals and MCWCs, (c) Specify findings (gaps), (d) Specify action needed and roles and responsibilities, and (e) Follow up and document improvement.

RRQIT is a specialized supervisory and monitoring team, focused on monitoring and improving the quality of CEmONC provided at the district level in Hobiganj, Noakhali, Laxmipur, and Jhalokathi. Technical capacities available at the regional level, such as medical colleges and professional associations, are used to provide specialized technical support through RRQIT, in line with the national strategy for developing divisional quality improvement teams, in Sylhet and Barisal.

RRQIT include OBGYN and neonatologist from medical colleges close to the project districts as well as district level supervisors. RRQIT visits are conducted using structured checklists to assess general CEmONC infection prevention measures, Child birth services, readiness to provide CEmONC, and neonatal care including SCANU.

Summary of RRQIT follow up findings and changes observed between the first and second visits to Jhalokati and Hobigonj district hospitals

Subject	Positive Changes/observations	Area to Improve	Comments/suggestions
Jhalokathi District Hospital			
Infection prevention	Color coded medical waste management bins in place	Need Dumping pits for waste disposal	Discuss in the QI committee and zillaparishad
Human resource management	Anesthetist has joined 4 cleaners have been provided from the municipality	Need regular monitoring	
Infrastructural Instruments Logistics supplies	Declared as 100 bedded hospital to increase allocation of supplies .	Considering patient load, supplies are in-adequate. Additional needs include: GA machine in OT, Phototherapy machine, Radiant warmer and Incubator in Neonatal ward, autoclave in labor room and X-ray machine.	Need national level advocacy to increase allocation of supplies.
Record keeping, reporting	As a Tertiary facility, record keeping and reporting system is not satisfactory	Patient diagnosis and management information should be improved for detailed reporting	Need orientation on record keeping and reporting.
Referral	Good referral linkage and management	Downward linkage can be improved	
QI committees	Formed and started addressing general cleanliness and infection prevention	Need regular meetings. Should address all aspects of quality 24/7 service delivery.	
Hobigonj District Hospital			
Infection prevention	Color-coded bins are in place and dumping pits for waste disposal havebeen arranged. Cleaners ware protective cloths/ gloves/boots		Discuss in the QI committee and zillaparishad
Human resource management	2 more Doctors joined. For emergency management of the Hospital activity, Doctors from union level and other Upazila are placed at DH by local/verbal order. One Junior Consultant (Gynae and Obs) joined.	No Anaestheologistis available. 2 RMO, trained in Anaesthesia provide Anaesthesia during operation. Vacant posts for Nurses need to be filled immediately.	Advocate at national level to get the needed specialists.
Instruments	All 5 GA machine in OT havebeen repaired. 2 X-ray machines are functioning after repair from Dhaka. USG machine was taken to Dhaka for repair. Radient Wormer is now functioning. SCANU service started operation.	2 OT lights are needed. Autoclave machine needs to be available at Labor room.	Engage local government to provided needed instruments.
Logistics supplies	2 delivery table made of iron have been ensured. For Pediatric word, hand washing basin and hand sanitizer/soap are ensured.	It will be possible to ensure the availability of bed for every patient when it will start its activity as a 250 bedded Medical College Hospital, which is under process.	
Record keeping,	Different Service registers are available	History sheet/Treatment sheet are	Ensure regular monitoring

reporting	and record keeping is done in Pediatric and Gynae indoor.	not properly filled in indoor and record keeping is not properly done due to over burden of patients.	
Referral	Patients are referred to SOMCH with proper documents and after proper Counseling. The patients who are referred to DH receive immediate medical service because of MaMoni HSS facilitation.	As the anaesthetist, Consultant of Gynae and Paediatrics are not available for ensuring 24/7 emergency service, many patients are referred to SOMCH who get admitted to DH after 2:30 pm	
QI committees	Formed and following RRQIT action plan, addressing general cleanliness and IP.	Need regular meetings. Should address quality service delivery for 24/7 CEmONC	

The table below summarizes results of progress in implementation of RRQIT action plan – Jhalokathi district:

Progress in implementing RRQIT action plan – Jhalokathi district:

Major findings from previous visits	Improvement
Dirty environment and Hospital Floor in DH	Basic Cleanliness of District hospital improved
Only one Labor table was available in DH	Two more Labor tables were supplied to DH
OT lights with Fused bulbs	Arrangement of OT light
Autoclave for labor room at DH was not functional	Arrangement of Autoclave for labor room at DH
Inactive QI Committee at DH and MCWC	Functional QI Committee at DH and MCWC
Poor medical waste management at MCWC	Dumping pit at MCWC is under preparation
Only one MO-MCHFP in the district	Posting of 4 new MO-MCHFP for the district
Post for nurses was vacant in DH	Posting of 35 SSN at DH, so a new maternal complex has been designed
No use of partograph and practice of AMTSL for NVD at DH and MCWC	Use of partograph and practice of AMTSL for NVD at DH and MCWC has started
Non Functioning Digital X-Ray and USG Machine at DH	Functional Digital X-Ray and USG Machine at DH
Only on Sunday had the facility for C/S in MCWC with support from DH	Regular C/S in MCWC because the new MOMCH has anesthesia training from the sadarupazilla

RRQIT visiting delivery room – Jhalokathi DH

RRQIT debriefing with MCWC staff

Improving CEmONC through RRQIT

Assessment by checklists, identifying gaps, developing action plan, follow-up on improvement

6.11 Monitoring and Improving the Availability of Essential MNCH/FP/N Drugs and Commodities

It entails following activities: (i) In Coordination with Systems for Improved Access to Pharmaceuticals and Services program (SIAPS) support scaling up e-LMIS at Hobigonj, Noakhali, Jhalokathi, and Laxmipur districts; (ii) Use color-coded system to monitor availability of MNCH essential drug at district and Upazilla stores; (iii) Share data and guide action taking to avoid stock-out; and (iv) Monitor availability of essential drugs at SDP (through JSVs).

6.11.1 Scaling up the implementation of electronic Logistics Management Information System (eLMIS), in coordination with SIAPS

MaMoni HSS project supported the MoH&FW in introducing electronic Logistics Management Information System (eLMIS) in three additional districts in 2016-2017, to improve recording, monitoring and availability of essential drugs, particularly MNCH items. Several activities were undertaken to facilitate implementation of eLMIS. These are, for instance, (i) conducting national level dissemination of results of district level assessment in Lakshmipur district, entitled: "District Level Assessment of Pharmaceutical Management of Life-Saving Commodities" and discussion on "Introduction of eLogistics Management Information System (eLMIS) for priority MNCH commodities under DGHS (on April 4, 2016 at MIS Conference room, DDHS, Dhaka); (ii) conducting orientation to district level stakeholders in Hobigonj, Noakhali, and Jhalokathi districts about the eLMIS (to facilitate linking the eLMIS to the national DHIS2 data system, MaMoni HSS project hired a consultant to input health facility specific data for the three districts into DHIS2); (iii) conducting district level orientation on eLMIS for health managers in Noakhali and Jhalokathi districts (the purpose of this orientation was to refresh the district level GOB managers' knowledge on basic logistics management system, their roles and responsibilities in improving LMIS status, SCMP of MoH&FW and the LMIS activity done so far at each district); and (iv) the project LMIS advisor providing technical assistance to the Sylhet Regional Warehouse, DGFP to review storage conditions, documentation process, and condemnation process of expired drugs.

6.11.2 Improving availability of essential MNCH drugs and FP commodities using color-coded monitoring system

As part of QIS initiatives, MaMoni HSS project provided support to the district and upazillamanagers of Hobigonj, Noakhali, Laxmipur, and Jhalokathi districts in monitoring availability of 25 drugs and commodities essential for MNCH and FP programs. This process engages district managers in using stock information to share with local counterparts and to take action to avoid stock out. To simplify data interpretation and use, this stock data monitoring is conducted by a color coded dashboard where red indicates stock out, green indicates item availability, and yellow indicates available stock with short expiration date.

The following is an example of the color-coded chart for tracking stock status of Misoprostol tablets in DGFP store in Noakhali district from October 2016 to May 2017:

TAB. MISOPROSTOL 200 MCG (2 tab. = 1 dose)									
Sl No.	**Name of the store**	**Oct. 16**	**Nov. 16**	**Dec.16**	**Jan.17**	**Feb. 17**	**Mar.17**	**Apr. 17**	**May. 17**
1	**Begumganj**								
2	**Companiganj**								
3	**Hatiya**								
4	**Senbag**								
5	**Subarnochar**								

Color-coded chart showing availability of Tab.Misoprostol 200 MCG at DGFP stores, Noakhali district.

Green= stock available Yellow = stock avaible, yet expiring within 6 months
Red = stock-out

Examples of Utilization of Data for Minimizing Stock-out of Essential Drugs

- Expedite the distribution of Misoprostol tablets from National level to MaMoni districts where there were a need for the tablets.
- Re-distributing 14,000 units of Chlorhexidine 7.1% solution from the Civil surgeon store at Lakshmipur district to the DFGP stores at Sadar, Raipur, Ramganj, Ramgoti, and Kamal Nagar upazillas, where there was a shortage of this solution.
- Transferring 2790 pieces of Miosprostol tablets from DGHS store of Hobigonj to 8 DGFP upazilla stores for immediate distribution to 24/7 UH&FWCs.
- Initiating local procurement of Gentamycin and re-distribution of stock near expiration, to service delivery point before expiration and to procure new stock locally in Jhlokathi district.

6.11.3 Monitoring availability of MNCH essential drugs at service delivery points

As part of the joint supervisor visits, stock of essential MNCH drugs is checked and action is identified to avoid stock out.

The following box summarizes some of the action taken to improve availability of essential drugs.

Examples of action taken to improve availability of essential MNCH drugs:

- MaMoni HSS facilitated moving Inj. Oxytocin from CS Store to Rajapur and Kathalia UHC whereNVD services are available.
- Facilitated the process of redistribution of 750 bottles of 7.1% Chlorhexidine from Jhalokathi Health store to Barisal Medical College. The expiration date was on 30 May 2017, but as a result of redistribution, the supplied amount of 7.1% Chlorhexidine were used up.
- The food supplement (F-75 and F-100) was inadequate at SAM corners of District Hospital and Rajapur UHC of Jahalakathi district early in the month of April 2017.After raising the issue with CS-Jhalakathi, it was revealed that Pirojpur district had sufficient stock. So with proper coordination with Pirojpur CS office, Zia Nagar UHC, the DNSOs of UNICEF, 1 carton (90 sachets) F-100 and 1 carton (120 sachets) F-75 were distributed to the SAM corners of Jhalakathi DH and Rajapur UHC.

6.11.4 Scale up the national Uniform LMIS for DGHS stores

Scale up activities includes printing and distribution of the uniform ledgers and guidelines, training of store keepers and district managers, and follow up to support implementation. In coordination with SIAPS, MaMoni HSS project has taken the lead in introducing eLMIS in Noakhali, Hobigonj, Jhalokathi and Laxmipur districts.

6.11.5 Coordination with National Warehouse Family Planning on essential drugs and commodities distribution to MaMoni HSS districts

Coordination was made with National Warehouse Family Planning on essential drugs, e.g., Misoprostol tablets, and commodities such as Micro Life Blood Pressure Machine for facilitating diagnosis of Pre-Eclampsia and Eclampsia by services providers, and help facilitate their release to the project covered districts, upazillas and the communities.

6.11.6 Comparing quantities of available stock to essential drug requirement

As part of QIS initiatives, MaMoni HSS project conducted a comparison between the available stock of four essential items (Inj. Oxytocin, Misoprostol tablets, Magnesium Sulphate injection, and Iron/folic acid tablets) and their requirements based on estimation of the need, using population data.

Results from Laxmipur district appears in the table below.

Selected essential drugs annual need against annual supply: June 2015-May 2016,Laxmipurdistrict

Essential drug	Annual Requirement	Annual supply by DGHS, DGFP, and local procurement	Percentage supplied versus required
Inj. Oxytocin	11,996	4,050	34%
Tab. Misoprostol	57,212	17,100	30%
Inj.MgS04	5,168	0	0
Tab. IFA	2,574,529	4,312,600	168%

6.12 Monitoring Quality of Care (QOC) Indicators at Sentinel Sites

Two rounds of QOC survey has been conducted in 4 districts. It included 10 Sentinel sites in each district (1 District Hospital, 1 UHC, 4 UH&FWC and 4 satellite clinics). Data collection was performed by direct observation by trained surveyors. In the third round Exit Interview has been included with a sample of postpartum women who delivered in the health facility to assess the clinical experience of child birth services.

Highlights of the results of the first round of QoC are included below.

- Preliminary results of assessing quality of ANC services show that, data from a total of 27 facilities in the 4 districts, Iron and Folic Acid tables were available in 25 facilities (93%), running water was available in 24/25 facilities (96%), soap for hand washing was available in 23/25 facilities (92%), and latex gloves were available in 25/24 facilities (96%).

- Available results from Jhalokathi and Noakhali show that out of 14 facilities surveyed conducting normal vaginal deliveries, 10 (71% has newborn resuscitation bag and mask, 12 (86 %) had resuscitation mask, and 11 (79%) had penguin sucker.

- Out of a total of 26 facilities conducting normal vaginal deliveries surveyed in the four districts, 18 (69%) had partogragh paper and board, 11 (42%) had Oxytocin injection, and 4 (15%) had magnesium sulphate 5 ml ampoule.

- Out of 122 deliveries observed in Laxmipur district all of them (100%) had oxytocin inj. administered within 1 minute of delivery and out of 172 deliveries observed in Jhalokathi district, due to shortage in stock, only 18% received oxytocin inj. within 1 minute of delivery.

- Family planning data from Hobigonj district show that out of 272 clients, privacy was ensured in 13 cases (3%), client concerns were discussed in 56 clients (27%), job aid was used in 142 clients (47%), and next date of visit was mentioned to 40 clients (15%).

IFA availability in surveyed facilities

District	No. of Facilities Surveyed	No. of Facilities where IFA Tablets were available
Lakshmipur	7	5
Hobigonj	5	5
Jhalokathi	7	7
Noakhali	8	8
Total	27	25 (93%)

Basic Infection prevention indicators in selected sites

District	No. of facilities surveyed	Running Water	Soap for hand washing	Latex gloves
Lakshmipur	7	7	6	7
Hobigonj	3	3	3	3
Jhalokathi	7	6	6	6
Noakhali	8	8	8	8
Total	25	24 (96%)	23 (92%)	24 (96%)

Availability of newborn resuscitation commodities

District	No. of facilities surveyed	No. of facilities offering normal vaginal delivery with:			
		Functioning resuscitation bag	Newborn resuscitation mask size 0	Newborn resuscitation mask size 1	Penguin sucker
Jhalokathi	7	6	7	7	6
Noakhali	7	4	4	5	5
Total	14	10 (71%)	11 (79%)	12 (86%)	11 (79%)

Availability of essential maternal health drugs and supplies

District	No. of facilities surveyed	No. of facilities offering normal vaginal deliveries with:		
		Partograph paper and board	Inj. Oxytocin	Inj. MagnesuimSulphate 5 ml ampoule
Lakshmipur	7	4	4	1
Hobigonj	4	3	3	1
Jhalokathi	7	6	0	1
Noakhali	8	5	4	1
Total	26	18 (69%)	11 (42%)	4 (15%)

Percent of timely use of Inj. Oxytocin after delivery, Laxmipur district

Facility	No. of deliveries observed	No. and % of deliveries where Oxytocin Inj. was administered within 1 minute from delivery
District Hospital	65	65 (100%)
MCH-FP Unit of UHC	50	50 (100%)
UH&FWC	7	7 (100%)
Total	122	122 (100%)

Percent of timely use of Inj. Oxytocin after delivery, Jhalokathi district

Facility	No. of deliveries observed	No. and % of deliveries where Oxytocin Inj. was administered within 1 minute from delivery
District Hospital	124	1 (0.8%)
MCH-FP Unit of UHC	30	30 (100%)
UH&FWC	18	0 (0%)
Total	172	31 (18 %)

Level of Facility	**No. of clients observed**	**No. and % with privacy**	**Client concerns discussed**	**Used Job Aid**	**Informed client about date of next visit**
MCH-FP Unit of UHC	30	8 (27%)	6 (20%)	30 (100%)	12 (40%)
UH&FWC	123	1 (0.8%)	18 (15%)	56 (46%)	18 (15%)
Satellite Clinics	119	4 (3%)	32 (27%	56 (27%)	10 (8%)
Total	272	13 (5%)	56 (21%)	142 (52%)	40 (15%)

Effective Family Planning Counseling Indicators, Hobigonj district

6.13 Developing QI Tools

As part of the QIS initiatives, MaMoni HSS project did help developing various QI Tools, e.g., Checklists (MaMoni HSS project presentation, September 2017).

6.14 TQM Operation Module

QIS initiated the process of developing the TQM operational module in Bangla, designed for training the service providers at all levels especially focusing on the resource pool and the Quality Improvement Committees (QICs). The module will focus on thematic relevant areas, such as motivation, leadership, communication, IPM and AI etc., along with the technical aspect of 5S-CQI-TQM. In this regard, QIS formed a working group consisting of different stakeholders with relevant expertise and experiences. The working group came up with a draft module through successive meetings. QIS organized a pre-testing of the draft module in Tangailinvolving

participants from the district hospital as well as 3 upazila health complexes from the SSK (SasthayaShurokshaKarmasuchi) piloting facilities.

6.15 RMNCAH Framework

QIS initiated the process of development of Reproductive, Maternal, Neonatal, Child and Adolescent Health (RMNCAH) framework with the aim to develop the country action plan for RMNCAH, as a follow up of regional workshop for Improving Quality of Hospital Care for Maternal and Newborn Health organized by WHO, held in New Delhi from May 10-13, 2016. In this regards, with support from several international partners, QIS has started to develop the RMCNAH guideline, standards, QI indicators and tools based on the standards, included in WHO MN QI Framework. The experts will incorporate the existing EMEN Standards into the RMNCAH framework already finalized by the ministry. The developed RMNCAH framework will fit in the comprehensive QI model to be tested in Kurigram.

6.16 Maternal and Perinatal Death Review (MPDR) and Maternal and Perinatal Death Surveillance and Response (MPDSR)

Bangladesh has made encouraging progress in reducing maternal and neonatal mortality over the past two decades. Bangladesh was among the top seven countries around the world to follow the road map to achieve Millennium Developmental Goal (MDG) 4 and 5 by 2015. The Sustainable Developmental Goal (SDG) has been set to be achieved by 2030, in where new goals has been set to reduce maternal mortality 70/100,000 live births and neonatal mortality 12 or below/1000 live births by 2030. To reduce the maternal and neonatal mortality, Bangladesh has introduced Maternal and Perinatal Death Review (MPDR) in 2010 in one district of Bangladesh and gradually scaled up in 14 districts over the last six years period. The Directorate General of Health Services (DGHS) and Directorate General of Family Planning (DGFP), under the Ministry of Health and Family Welfare (MoH&FW), have been working together to implement the MPDR system. The MPDR in Bangladesh covers maternal and neonatal deaths including stillbirths in both the community and at facility level, maintaining anonymity as well as a no blame and non-punitive environment with participation of all levels.

Initially the MoH&FW endorsed MPDR for implementation at a national scale to cover all districts. It strives to improve maternal, newborn, and still birth death notification, map out death incidences to identify Unions with high numbers of death, conduct analysis of the causes and circumstances associated with mortality and use information to take action to avoid future mortality. As part of QIS initiatives MaMoni HSS Project has assisted the MoH&FW in scaling up MPDR in Noakhali, Hobigonj, Laxmipur and Jhalokathi districts.

Capacity Building in MPDR during April-June 2016:

- **Training of the Trainers (TOT):** TOT on Facility Death Review (FDR) was conducted in Jhalokathi. During this TOT, 18 (Male 13 and Female 05) master trainers were developed. And in Habiganj, 14 personnel (11 Male and 03 Female) were trained on Social Autopsy (SA) as follow-on activities of MPDR, technically supported by CIPRB.

- **Training of GOB staff:** As follow-on activities in Hobigonj, the master trainers that were developed during the TOT acted as facilitators for next stage field level training on Death Notification (DN), Verbal Autopsy (VA), Social Autopsy (SA) and Facility Death Review (FDR). Those master trainers trained 175GOB, Project and Other NGO staff on Death Notification, Verbal and Social Autopsy and Facility Death Review (FDR) by batches.

In 2016, the country has shifted from MPDR to Maternal Perinatal Death Surveillance and Response (MPDSR) which has been aligned with the global Maternal Death Surveillance and Response (MDSR) developed by the World Health Organization (WHO). The national guideline on MPDSR has already been approved by the MoH&FW to implement over the whole country. The Government is in the process of its national scale up to establish a comprehensive surveillance and response system to address maternal and newborn deaths. UNICEF-Bangladesh, along with other development partners, is supporting the Government in 13 districts in implementing MPDSR. Save the Children is conducting maternal and perinatal death review in four districts. In addition, UNFPA-Bangladesh is also planning to implement in another five districts, in the new modality of death review system in Bangladesh, capacity development of different health care providers at different level on new version of tools, framework, process etc.

QIS initiated the process of finalizing the national guideline for MPDSR by forming working groups in participation with experts. The major areas on which the groups worked were: verbal and social autopsy, facility death review and response, review and supervision mechanism. Through extensive group work the document has been finalized and approved by the competent authority. QIS further plans for effective M&E plan for MPDSR implementation through expert consultation. QIS is also in the process of finalizing the training manual for MPDSR.

MPDSR related activities of QIS included – various planning meetings, workshops for developing Guidelines and Training Manual.

6.16.1 MPDSR National Guideline and ToT Manual on MPDSR

This Training of Trainers manual has been prepared to develop capacity among the health and family planning staff from national to district and sub-district level on MPDSR for better implementation of death review system in Bangladesh. Following the

trainings, participants will know the implementation process of MPDSR system, reporting, monitoring of the progress and utilization of the MPDSR data. Following this, health care providers at different level at community and facility level will be able to implement MPDSR activities by notifying maternal, neonatal deaths and stillbirths as well as reviewing deaths to prepare action plan based on the findings for reduction of future maternal and neonatal deaths in Bangladesh.

Following is the list of contents of MPDSR ToT.

Training of Trainer's (ToT) Manual on MPDSR

Instruction for the facilitators
Objectives, Methods and Curriculum
Section 1: Introduction to MPDSR
Section 2: Community Death Notification
Section 3: Verbal Autopsy
Section 4: Social Autopsy
Section 5: Facility Death Review
Section 6: Data Entry, Analysis and Reporting
Section 7: MPDSR Review, Response, Monitoring and Evaluation
Annexure: MPDSR Forms

MaMoni HSS continued to support the QIS in scaling up MPDSR in Hobigonj, Noakhali, Laxmipur, and Jhalokathi districts for facility level. The capacity building initiative for Death Notification (DN) and Facility Death Review (FDR) was designed in two steps. In first step TOT on DN and FDR was conducted with the technical assistance of CIPRB, followed by cascading manner training for service providers of District Hospital, Upazila Health Complex and MCWC.During April-June 2017, the following TOT and training was completed.

6.16.2TOT on DN and FDR

District	Category of trainees	Number trained
Noakhali	MOCS, Gynaeand Pediatric Consultant, Sr. Staff Nurse, Sr. FWV, MO-Clinic, RMO/MO	36
Lakshmipur		26
Jhalokathi		26
Hobigonj		49

6.16.3 Training on DN and FDR

District	Category of trainees	Number trained
Noakhali	Staff Nurse, FWV, MO, Statistician	BegumganjandCompaniganj Completed
Lakshmipur		
Jhalokathi		
Hobigonj		

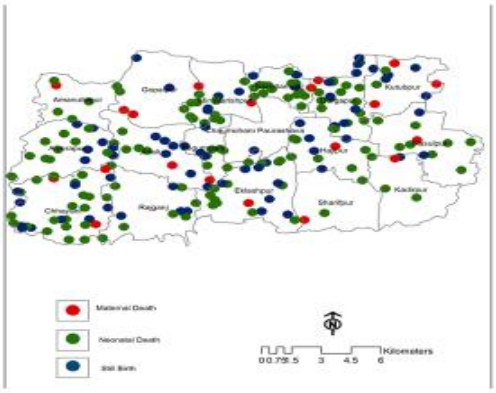
6.16.4 QIS Supported MPDSR at Health Facilities

The major activities relating to implementation of MPDSR at health facilities include: (i) Support implementation of MPDSR at DHs and UHC; (ii) Facilitate data management; and (iii) Facilitate utilization of data.

Following is an example of MPDSR from BegumganjUpazilla, Noakhali District

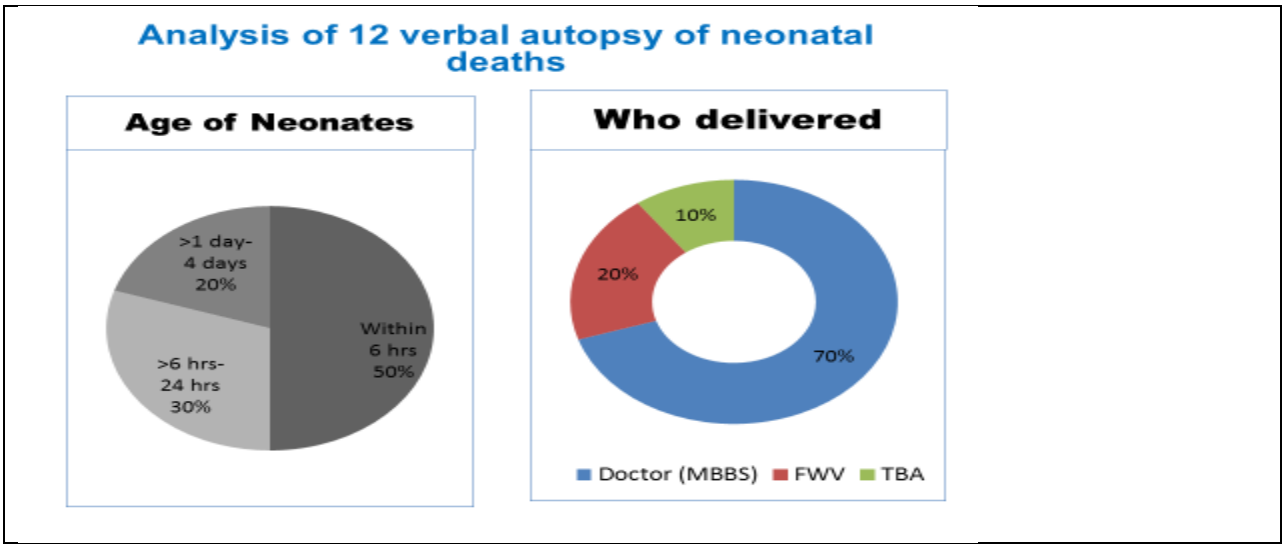
MPDSR

MPDSR - Begumganj Upazilla, Noakhali District, Mapping of Maternal, Newborn Deaths, and Stillbirth, by Union - April 2015 to August 2016

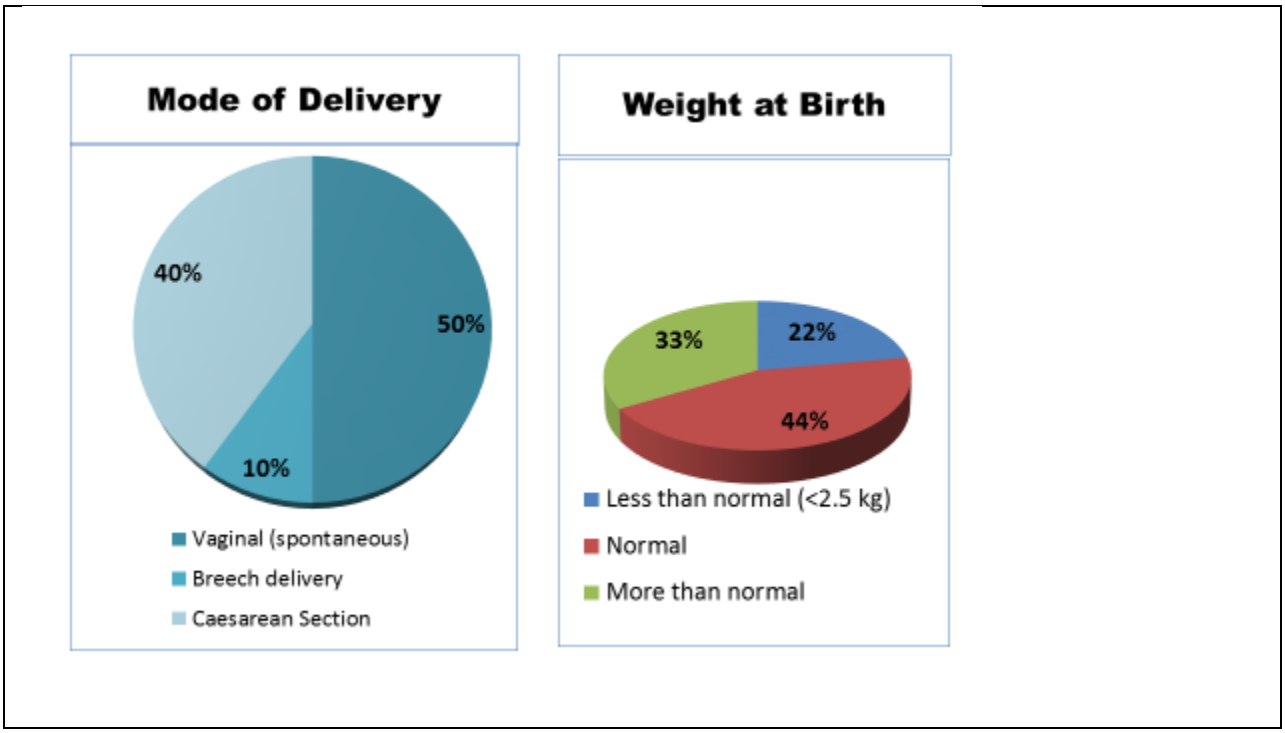


Social Autopsy conducted at the community level around a maternal death. Kutubpur Union, Begamganj Upazila, Noakhali district

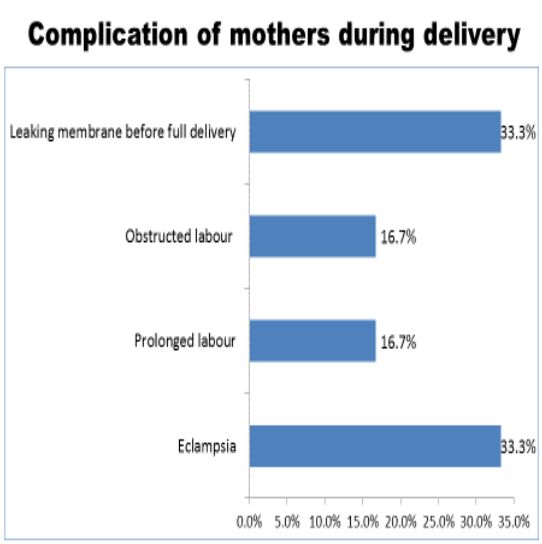
Analysis of 12 verbal autopsy of neonatal deaths

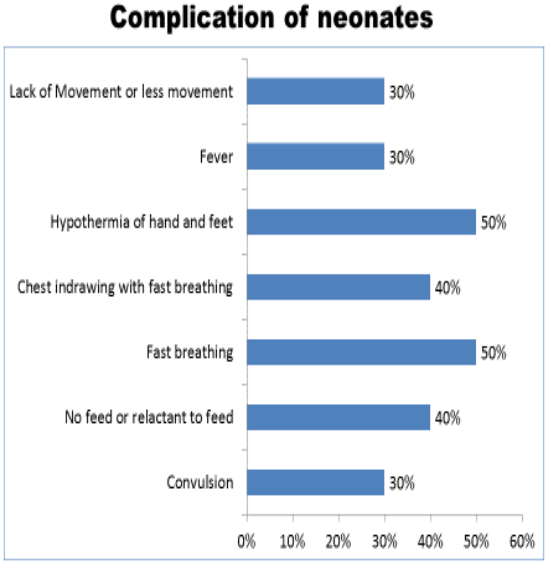


Results of the mode of delivery and the neonates weight at birth is summarized below.



Results related to the complications that occurred to the mother and the neonates before the neonatal death are summarized in the graphs below.





Social Autopsy conducted at the community level around a maternal death, Kutubpur Union, BegamganjUpazilla, Noakhali district.

6.17 EMEN Standards and Piloting EMEN

As a part of the GoB-UNICEF-BMGF initiative, QIS facilitated the finalization of global EMEN standards as per the country context. National level stakeholder's technical consultation meetings were held in presence of global experts in April 2015 to initiate the process. Thereafter, a working group composed of in-country experts closely worked on the global

document and finalized the standards and the core criteria for MNH Bangladesh. These standards will be tested in selected facilities in Kurigram at district and upazila level.

6.18 SOPs

At various stages of the project, about 25 Standard Operating Procedures (SOPs) have been developed under the leadership of QIS. These are, for instance, SOP on Sepsis Management, Kangaroo Mother Care (KMC), Administration of ANC Corticosteroid, Use of Chlorhexidin, Infection Prevention and the like.

6.19 5S/ 5S-CQI-TQM

The 5S-KAIZEN-Total Quality Management (TQM) is the three-step approach to improve hospital management under limited resources. The steps are: a) Application of 5S (Sort, Set, Shine, Standardize and Sustain) for improvement of working environment; b) Continuous Quality Improvement (CQI) or KAIZEN activities for evidence-based participatory problem-solving at the work-place for continuous quality improvement; and c) TQM (total quality management) as an approach to make maximal use of capacity of the entire organization.

Why 5S-CQI-TQM: Inadequate resources are one of the major problems for hospital management. This is true not only for the developing countries, but for developed countries as well. What is truly lacking for effective hospital management is “Positive mind-set” and “Leadership”. Innovative ideas are also required to better manage the hospitals.

The question is how to develop “Positive mind-set” and “Leadership” among the hospital staff under the limited resources. The secret for maximum utilization of available resources is to apply the participatory stepwise approach of “5S-CQI-TQM”. 5S-CQI-TQM is a tool for change management, being used in many developing and developed countries.

Everybody is aware of the importance of safety and quality of care. No health worker wants to provide bad care and commit medical accident. All these things can be minimized by the application of the 3-step approach. But the staff needs to know how to initiate and implement this approach at the workplace. This can be done by the top and middle managers with special care to strengthen capacities of all staff. Careful and meticulous tuning is needed for cultivating positive and upward spiral in quality improvement. However, for successful implementation of the process, it requires commitment from the top level managers and leaders.

Goal of the “three-step-approach, “5S-CQI-TQM”, is not just to introduce 5S or 5S-CQI-TQM at the hospital, but to bring changes in organizational (hospital) culture and management style. Healthcare delivery should be outcome-oriented and patient-centered. Safety and Quality are

the essential features of the outcome. Responsiveness and equity are the core components of patient-centeredness. To achieve those goals participatory approach is essential. Regardless of the categories and ranks of the hospital staff, full participation of the employees should be encouraged through accumulation of small successes in the routine work. Team-building should be vigorously promoted to strengthen continued team work in every work unit of the hospital.

Introduction of 5S-CQI-TQM in Bangladesh: 5S-CQI-TQM activity for improvement of hospital services is under the Hospital Section of Directorate General of Health Services. This activity is technically and financially supported by technical agencies including JICA, GIZ, UNICEF and WHO. Primary objective of this activity is to improve the quality of services to be measured by better patient outcome and client satisfaction.

Fifty two hospitals, including 11 District Hospitals (Pirojpur, Comilla, Chittagong, Meherpur, Narail, Barguna, Netrakona, Jhalokathi, Brahmmanbaria, Jessore) in Chittagong, Barisal, Khulna and Mymensingh Divisions, are currently implementing the process. All these hospitals are at different stages of the long process, and have made some progress in improvement of working environment. It has been planned to scale up the concept throughout the country.

6.20 PDCA Cycle

Plan-Do-Check-Action or PDCA cycle is important in managing KAIZEN activities. Gemba KAIZEN is a basic philosophy for KAIZEN mind. In the hospital, there are a lot of Gemba KAIZEN point and to solve the problems or constrain, those would require to be solved, as soon as possible, utilizing present resources. Systematic approaches are required regarding how to manage KAIZEN continuously.

In managing KAIZEN, the four steps of PDCAinvolve:
Step 1: Plan, preparing how to implement KAIZEN;
Step 2: Do, implementing KAIZEN activities;
Step 3: Check, reviewing the results of KAIZEN activities and achievements;
Step 4: Act, taking countermeasures based on the review in Step 3 (Back to Step 1 for new KAIZEN activities).

Following is a step-wise schematic presentation of PDCAcycle:

PLAN: Step-1 – Selection and prioritization of problem;
Step-2 – Situation Analysis;
Step-3 – Root Cause Analysis;
Step-4 – Identification of countermeasures;
Do: Step-5 – Implementation of countermeasures;
Check: Step-6 – Check effectiveness of countermeasures;
Action: Step-7 – Standardization of effective countermeasures.

Following are the points of each step of PDCA cycle:
Step 1: Plan, preparing how to implement KAIZEN
- Clarify the objectives and decide on the control characteristics (control items)
- Set measurable targets;
- Decide on the methods to be used to achieve the target.
Step 2: Do, implementing KAIZEN activities
- Study and train in the method to be used
- Utilize the method
- Collect the measurable data set up on the plan for decision-making
Step 3: Check, Reviewing the results of KAIZEN activities and achievements
- Check whether the results of implementation has been performed according to the plan or standard
- Check whether the various measured values and test results meet the plan or standard
- Check whether the results of implementation match the target values
Step 4: Act, taking countermeasures based on the review in Step 3
- If the results of implementation deviate from the plan or standard, take action to correct this
- If an abnormal result has been obtained, investigate the reasons for it and take action to prevent it recurring
- Improve working system and methods.

This step-wise PDCA Cycle is the core concept of managing KAIZEN activities and also called Deming Cycle. In the four steps, 'Do' step may be intended as more important than the other steps, because, 'Check' and 'Act' steps are not implemented if it is not done. In business, however, it is the saying that 80% of Success is decided by proper planning and Planning is able to be identified as three components: To Know, To Understand, and Be Able to. It means knowing ourselves and the present situation first, then understanding issues in the present situation deeply, and finally considering the solution what we are able to do. If the plan designates appropriate procedures, as mentioned above, 80% of success may be secured.

Since PDCA cycle consists of four steps only, the cycle may be stopped at 'Act' often. KAIZEN aims to raise the standard of workplace, productivity, quality and safety in a continuous upward spiral through rotating PDCA cycle, reflecting on achievements of KAIZEN and taking action to improve the way for next KAIZEN.

6.20.1 Developing a curriculum and providing training on Plan-Do-Check-Act (PDCA)

QIS has helped finalize PDCA training module and support PDCA training for QIS staff, Divisional coordinators and MaMoni HSS staff and District Hospitals. Residential training on PDCA was held in Rajendrapur, May 7-9, 2017. It targeted 4 district hospitals (Hobigonj, Noakhali, Laxmipur and Jhalokathi) as well as national level facilitators from QIS and MaMoni HSS staff. In addition, MaMoni HSS district level staff, who will facilitate the application of PDCA in their respective districts participated in the training. The outcome of the training was the development of DH specific QI project to be implemented by DH participants, who are members of the DH QIC,

in their respective hospitals. The performance gaps selected by the participating district hospitals to address ranged from increasing service utilization for deliveries and Kangaroo Mother Care (KMC), to improving crown management and sterilization of used instruments. Specific QI projects were developed including identification of the specific "aim" for the improvement, root cause analysis of the selected performance gap, identifying counter measures, indicators to measure progress, and developing a work plan.

There has been support for QIS staff, Divisional Coordinators and MaMoni HSS staff and District Hospitals, and till September 2017, staffs from 9 District Hospitals (Hobigonj, Noakhali, Laxmipur, Jhalokathi, Bhola, Chandpur, Khagrachori, Cox's Bazaar and Moulavibazaar) received PDCA training. Follow up on the implementation of PDCA projects were also developed during the training. Following is an example of PDCA project at Jhalokathi District Hospital.

Aim: to increase number of deliveries in the hospital from 35/month to 60/month in 6 months.
Main Interventions:
- Ensure ANC counseling on birth preparedness
- Engage Local Government and Community

Preliminary Results:
Number of deliveries conducted at the District Hospital:
- June 2017: 35
- July 2017: 55

6.21 Training, Seminars, Workshops, Meetings, Visits

As part of the QIS initiatives, various trainings, seminars, workshops, meetings, visits have been organized and attended to by the QIS officials and the relevant people, both in Bangladesh and abroad. Details of these events, their participants, purposes including venue and date appear in Annex-3.

6.22 Promoting community participation along with its video documentation

Developing a Community Participation Model for ensuring Quality of Care is one of the important initiatives of Quality Improvement Secretariat. In this regards, community participation model has been developed and its piloting started at Jhenaidah District Hospital. The interventions include several steps like identification of the community support group, opening bank account for fund management, functionalize the QI committees of the hospital after formation and their capacity building, necessary linkage with the community stakeholders and also the community. Different stakeholder meetings were organized to initiate the process

and a significant participation of the community stakeholders were observed to develop service delivery process in the hospital.

6.22.1 Video documentation on 'Community Participation'

Quality Improvement Secretariat (QIS) is leading the process of developing a video documentary on the community participation model for improving service quality of the facility. UNICEF is providing support and technical assistance for this activity. A local agency has been assigned for capturing the events. In the video documentation, interview of policy makers, implementers, local leaders, volunteers, social workers was taken regarding the guidance and views of community participation.

The spot of the video documentation was Jhenaidah District Hospital as it's a role example of community participation for improving the health care services of health facility. During the shooting, QIS provided technical support to ensure the objectives of the documentary. There has been a comprehensive guidance and on-the-spot directions for capturing the video by the focal person of the QIS team.

The QIS-UNICEF team jointly discussed and finalized a set of questionnaire to be asked to different interviewees planned for the documentary. The team arranged a pre-briefing session and technical consultation meeting prior to the shooting event.

On January 9, 2016 the video team conducted a one day shooting at Jhenaidah District Hospital. The objective was to capture the interviews of local stakeholders, service providers and the community elites. The team also captured hospital infrastructure and other related areas of improvement.

At Jhenaidah district hospital the video team captured a joint meeting of the community elites and the service providers and managers of the facility thereby reflecting the role of the community involvement in the documentary.

MrFarid Ahmed, Communication Specialist, UNICEF provided technical directions to the video team during the process.

Dr Md Aminul Hasan, Focal Person, Quality Improvement Secretariat provided comprehensive guidance for capturing the video in line with the objective of the documentary. He provided on-the-spot direction to capture the appropriate objective related events.

The second part of the video shooting event in Dhaka was completed by the same team after interviewing the national level stakeholders. Md Ashadul Islam, DG HEU provided his continuous support and guidance for the documentary for accomplishment as per the objective.

6.23 Model Hospital piloting initiatives

The QI piloting has already been started at Shaheed Suhrawardy Medical College Hospital and Jhenaidah District Hospital with an aim to develop the QI model for future implementation. In these facilities, 5S-CQI-TQM approach has been introduced and through a gradual process other QI interventions will also be introduced. Several work improvement teams (WITs) has been developed in Shaheed Suhrawardy Medical College Hospital for improving quality of care and are being awarded based on performances at regular bi-yearly interval. QIS team is carrying out regular support and follows up the QI teams. In Jhenaidah District Hospital, there are QI committees supporting the QI related activities. These committees are regularly being oriented by QIS team for necessary improvement. On top of this, Jhenaidah District Hospital authority is working on community participation model developed by QIS. Government has selected 16 district hospitals from all the divisions to develop them as model hospitals. The concept paper on model hospital has been developed by the senior advisor (to QIS) indicating the objectives, interventions, indicators and management plan etc. This document has been shared with the focal person of the QIS for his comments and feedback, and was updated accordingly.

The following table presents the distribution of 14 model District Hospitals and their main interventions as part of the Divisional and District level QI activities:

Division	**List of Model District Hospitals**		**Main Interventions**
Chittagong	Cox's Bazaar	Laxmipur	• Establish and activate QIC
	Khagrachari	Chandpur	• Forming Work Improvement Team (WIT)
Sylhet	Moulavibazaar		• Baseline data collection
Barisal	Bhola		• Training on 5S
Khulna	Narail	Chuadanga	• Training on PDCA
Rajshahi	Joypurhat	Sirajganj	• Update on National RMNCH QI indicators
	Natore		• MPDSR
Dhaka	Tangail		• Intensive Monitoring and Supervision
Rangpur	Kurigram		
Mymensingh	Netrakona		

6.24 Quality improvement in SSK Piloting facilities

As an initiative towards implementing the Health Care Financing Strategy, SSK (ShasthyoSurokhshaKarmasuchi) is the social health protection scheme that has been developed by the Health Economics Unit (HEU) of the Ministry of Health and Family Welfare (MoH&FW). QIS has been facilitating the QI process in selected health facilities where the SSK interventions are ongoing. As a part of it they have introduced 5S-CQI-TQM approach in the selected health facilities, namely, Kalihati, Modhupur and Ghatail UHC. In these health complexes, they have formed Work Improvement Teams (WIT) there. These teams have been continuously supported

by QIS for 5S implementation and other QI initiatives. As a part of these initiatives, QIS conducts routine monitoring visits in these facilities to follow up their 5S implementation practices and related areas. The special focus of this monitoring team was to identify the required areas of support by these teams by filling up a monitoring checklist for assessing their activities. Each team are being routinely briefed on process of conducting and documenting the meetings, demonstrated on key issues of settings at the work place and so on.

6.25 Patient (consumer) centered care (PCC)

"Consumer/ Customer (or client) care" is used to describe the process of taking care of consumer/ customers or clients in a positive manner. The term may be used in place of complaint handling and is a reminder that consumer care is a priority. In a well-functioning program, patient involvement in its design is a prime concern. It is not a simple undertaking, especially in the current environment of a public sector social service with limited experience in consumer care, and it requires that marketing and management expertise be engaged to help set up the program. The primary aim of this objective is to promote patient/ consumer satisfaction. Complaint is an expression of dissatisfaction by a consumer. It is therefore useful to design ways of finding out client's complaints and their suggestions about the services provided. This provides a basis for developing an effective consumer care program. The set of resources, procedures and outputs put in place to enable service providers find out and address clients' complaints constitutes a feedback system. Quality Improvement Secretariat (QIS) is designing a patient centered care program for improving Quality of Care which is an integral part of Health System Responsiveness.

6.26 Patient safety

Patient safety is an integral part of quality of care and includes initiatives designed to reduce medical errors, thus making health care safer. Patient safety is also an important indicator of quality of services. Furthermore, good patient safety will enable management to avoid preventable deaths, and unnecessary injuries.

The objective is to raise awareness on patient safety, establish national patient safety standards, system of monitoring and documenting unsafe events and introducing interventions to continuously reduce the incidence of such events during the plan period. Patient safety as a discipline began in response to evidence that adverse medical events are widespread and preventable, and as noted above, that there is "too much harm". The goal of the field of patient safety is to minimize adverse events and eliminate preventable harm in health care.

Patient safety must be an attribute of the health care system. Patient safety seeks high reliability under conditions of risk. Illness presents the first condition of risk in health care and patient applies to the second condition: the therapeutic intervention. Based on QIS request,

MaMoniHSS project recruited a consultant to develop national patient safety guidelines. With the continued input of a consultant, the national patient safety guideline and a draft safe surgery check list has been developed by the QIS. The patient safety guidelines include several domains such as: infection prevention, medication safety, patient identification and procedure matching, clinical handover, blood and blood product handling, and preventing pressure injuries.

The drafts will be validated by holding a national workshop, and Safe surgery checklist was scheduled to be introduced in some selected hospitals by August 2016.

6.26.1 Safe Surgery Checklist

Safe Surgery Check list is one of the important tools of ensuring Patient Safety. Development of Safe Surgery Checklist is an important initiative of QIS. To this effect, as a part of developing Patient Safety tools, QIS did hold a Workshop on "Development of Safe Surgery Check List" by customizing the WHO tool on November 9, 2016 in Dhaka Medical College Hospital conference room.

The checklist aims to minimize mistakes at three points in any surgery: before induction of anesthesia, before incision, and before patient leaves the operating room.Important areas of the check list are: a) WHO Surgical Safety Checklist (Revised 1/2009) will be followed; b) A manual on use and defining key points of the checklist should be developed with the Ministry's initiative; c) Use of ECG and Pulse Oximeter is a must; d) In sign-in stage: Nurse and Anesthetist should play main role. In Time out stage: Nurse, Anesthetist and Surgeon should play main role. In Sign-out stage: Nurse, Anesthetist and Surgeon should play main role; e) A column can be inserted at right side of the checklist to have signature of responsible person; f) To ensure compliance all relevant staff: Surgeon, Nurse and OT boy should have orientation on this.

Participants from Department of Surgery, Urology, Obstetrics, Pediatric surgery, Anesthesia and Other departments were present in the workshop. QIS has developed the user manual and monitoring check list for the Safe Surgery Check List. The Validation workshop of the Safe Surgery Check List was held with the presence of the President and Secretary of the societies of Surgery and allied discipline.

It is necessary to use the checklist for avoiding mistakes. It is decided that OT In-Charge will be responsible for the checklist and one doctor who will work as focal person particularly for it will supervise and monitor it. Departmental Heads requested QIS to supply the checklist in poster form which can be displayed in OTs. This Safe Surgery Check List will be introduced countrywide for ensuring Quality of Care Clinical Services.

Safe Surgery Check List has been launched in Shaheed Suhrawardee Medical College Hospital on June 6, 2017.

6.26.2Clinical Audit

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through a systematic review of care against standards. If well conducted, clinical and death audits are able to identify underlying reasons for unacceptable outcomes of clinical management, e.g., death. It enables the health team to avoid similar events in future, not only on case by case basis, but also provides a basis for defining or adapting policies for overall improved patient care. To be effective it must be conducted regularly as an integral part of patient management and should involve all members of the health team and should avoid the danger of being a fault-finding or finger-pointing exercise. There should also be a commitment by the management to correct problems that emerge from the audit.

QIS is planning to introduce Clinical Audit in some selected tertiary level hospitals in Dhaka city.

A clinical audit document and action plan has already been developed for introduction of clinical audit. External resource persons from NHS will be hired for capacity development of the Clinical Microsystems and clinical audit of tertiary level hospitals.

Implementation of MPDSR guideline is the first step of introduction of clinical audit in some selected districts starting from August 2016.

6.27 Special QI Initiatives

One such initiative included, conducting Situation Analysis of inpatient Care for Newborn and Young Infantswith support from MaMoni HSS, and in coordination with QIS. In this assessment, UNICEF will support assessment at District and above, and MaMoni HSS at MCWC and UHC. MaMoni HSS will commission third party, e.g., ICDDR,Bfor assessment. UNICEF has also developed the tools for the assessment. Sample size of the assessment include 9 facilities, e.g., 3 Medical Colleges, 6 District Hospitals with SCANU and 2 Medical Colleges and 3 District Hospitals without SCANU, and 2 UHC/district. Once endorsement is received from the MoH&FW, data collection will be accomplished in November-December 2017 and data compilation and reporting will be completed in January-February 2018.

6.28 Developing QIS Communication Plan

As part of QIS initiatives, MaMoni HSS project recruited a consultant to work with the QIS to develop a communication plan to help advocate for QI at the national level, increase ownership

and interest in quality of care by service providers, and engaging community and other governmental and private entities in QI.

6.29 Baseline study to establish baseline data set

A baseline study was conducted to assess the existing status of the quality of care in health facilities, and to recommend the corrective measures.

6.29.1 Objectives of the survey

To find out health care quality status by some selected indicators in public and private health care facilities from community clinic level to district hospital level by different units of the health care facilities in terms of (i) responsiveness of the health care providers, (ii) patient centeredness, and (iii) other clinical indicators. It is a cross-sectional study with mixed qualitative and quantitative methods, using In-depth-interview (IDI), key informant interview (KII) and focus group discussion (FGD). A total of 1728 samples from 34 categories of respondents (service recipients, planners, managers, paramedics, nurses, clinicians, community leaders, record keepers, cooks, janitors etc.) from 8 private and public district hospitals to community clinics from eight randomly selected districts participated in the survey.

6.29.2 The results

The study has generated results in terms of (i) patient centeredness, (ii) quality practices in health facilities, (iii) responsiveness, and (iv) management and clinical indicators.

Detailed results of the study has been presented in Annex-4.

6.30 Publication of e-news letter and other documents

HEU and QIS published e-news letter each month since March 2015. Quarterly Reports have been produced for the period October-December 2016, January-March 2017 and April-June 2017. Following are some important publications of QIS-HEU:

(i) Stock taking on QI initiatives: An analysis, June 2015; (ii) Training of Trainer's (ToT) Manual on Maternal and Perinatal Death Surveillance and Response (MPDSR); (iii) National Guideline On Maternal Perinatal Neonatal Death Surveillance and Response (MPDSR); (iv) Minutes of the meeting of District Quality Improvement Committee (Bagerhat: 18/02/2017, Feni 20/02/2017, Natore 16/03/2017, Madaripur 29/05/2017); (v) Government Order regarding Reorganization of Technical Advisory Group (TAG) for Quality Improvement, 01 September 2015; (vi) Trainer's Guide: Implementing Quality Improvement Initiative through PDCA Approach (PDCA 2).

7. Supports to QIS from the Development Partners

Sl. No.	Government DGHS:	IMCI, Nutrition, SBTP (Safe Blood Transfusion Program) 113 Hospital, NBC (New Born Care), ESD (Essential Service Delivery) 7 UHCs in 7 Divisions, QAP 34 district, 270 UHC, Strengthening DH and UHC (MIS), Accreditation, A-TQM, 20 Hospitals, 87 Additional Facilities
1	GoB-UNICEF-BMGF:	UNICEF-WFHI (Woman Friendly Hospital Initiative)/ Mother and Baby Friendly Facility Initiative (MBFFI)
2	GoB-JICA (Japan International Cooperation Agency):	SMPP (Safe Motherhood Promotion Program)
3	DGFP:	MYCN, FPCST (FP Clinical Services Team: 10 regions nationwide), Adolescent RH
4	Local Government:	DCC-North, DCC-South
	INGO/NGO:	
5	GIZ Bangladesh	QIS, Sylhet MCH, Rajshahi MCH, Narayangonj
6	Save the Children in Bangladesh, implementor of USAID-funded MaMoni Health System Strengthening (HSS) Project	(i) Recruit and second to the National Quality Improvement Secretariat (QIS) key human resources, including, two National QI Consultants, eight Divisional Consultant, four Divisional QI monitors, one Administrative officer, and one MIS Officer; (ii) Revise the job descriptions of district-based QI Managers to support implementation of national QI strategy in six MaMoni HSS districts; (iii) Engage global and regional level QI experts to guide and support the development of QI related tools and guidelines, to build capacity of the national QIS and QI facilitators at the national level; (iv) Hire short-term consultants to support the development of QI related standards, guidelines, tools as per strategic framework; (v) Provide logistics support, including travel costs, per diems and allowances for the seconded staff; (vi) Allocate financial and technical resources to support the implementation of the joint annual work plan; (vii) Provide financial and logistics support for joint activities agreed in the annual work plans; (viii) Coordinate and support selected training /orientation of QI Committees at divisional, district and sub-district level QI Committees, including the provision of financial and logistic support; (ix) Under the guidance of the focal person,QISidentify and support areas for implementing of QI standards, protocols, guidelines and monitoring/ supervision tools Support development/adaptation of QI standards, protocols, guidelines and tools in FP/RH, Nutrition; (x) Support implementation of Waste management and Infection prevention in relevant areas; (xi) Contribute to the development of QI standards, guidelines, protocols and tools; facilitate the adaptation of those tools at sub national level, Support implementation of M&E framework, KPIs and other relevant QI indicators for tracking progress on implementation of QI strategy and improvements in the quality of care as per guidance from QIS; (xii) Advocate for the inclusion of quality of care indicators in the national M&E

		strategy and monitoring systems; (xiii) Establish a sentinel site based quality of care assessment system, to contribute to the national M&E strategy for QI; (xiv) Participate in the national QI Committee relevant QI coordination committees; (xv) Participate in quarterly joint review meetings with HEU, USAID, MaMoni HSS and other relevant stakeholders; (xvi) Provide logistics support for the functioning of the QIS, including provision of ICT equipment, and their trouble-shooting support.
7	EngenderHealth	As part of QIS initiatives, EngenderHealthBangladesh (EHB) implements COPE (Client Oriented, Provider Efficient) - FP services. As part of QIS initiatives, EHB was assigned to implement QIC activities in 14 districts of Bangladesh.
8	Marie Stopes	FP
9	ICDDR,B	As part of the QIS initiatives, ICDDR,Bhas introduced Participatory Monitoring by Private Stakeholders.ICDDR,Bis also committed to the principlesof Universal Health Coverage (UHC).
10	UNICEF/CIPRB (Center for Injury Prevention and Research, Bangladesh)	MPDR-MPDSR
11	WHO/CIRPB (Center for Injury Prevention and Research, Bangladesh)	QI-MNH in 2 districts, 10 UHCs
12	Path Finder	INHSDP

7.1 Other DPs and relevant activities

Other DPs/ relevant activities include:

- UNFPA Bangladesh
- World Health Organization Bangladesh
- Global EMEN Standards Finalized as per the Country context
- Joint GO-NGO collaboration for QI Coordination
- Health Finance and Governance (HFG) Project of USAID
- Dr. Hossain Zillur Rahman, Executive Chair, PPRC
- MoH&FW SSK Piloting at three upazila Health Complex
- WHO development of RMNCAH Framework, as part of the GoB-UNICEF-BMGF Initiative
- KOIKA

8. Challenges

QIS and its activities at various levels of implementation have encountered many challenges. Some of those are listed below:

Contextual

- Lack of involvement of political and community leaders for improvement of the quality of services

QIS related

- Diversified models of QOC practiced by different agencies would create confusion in scaling up
- Facilities are still deficient of readiness and behavior change environment
- Presence of all members in a weekly meeting is sometimes not feasible
- Lack of standard evaluation process and cumbersome rules and regulations for condemnation and discarding of unnecessary items at the health facilities
- The number of KPIs needs to be reduced especially for the 'Patient Centeredness' and 'Responsive' domains
- Some of the indicators mentioned in numbers should be replaced by indicators that reflect quality
- Needs to spell out clearly the linkage of the monitoring teams at different levels with the national-level committees
- Challenges related to conducting regular WIT meetings and its documentation process (meeting minute preparation and action plan development). Presence of all members in a weekly meeting is sometimes not feasible. There could be needs for holding urgent meetings at times, if required this can be communicated through QIC focal person to Chairperson and Member Secretary

Infrastructure related

- Shortage of space for storing unused items before these are finally discarded

Administrative, financial and logistics

- Constraint of financial resources and financial autonomy (barriers and timely access)
- Avoiding tendency of the administrative supervisors
- None takes responsibilities to clean the facility and always depend on others
- Head of the district level health system, particularly the Civil Surgeon is very much busy with administrative issues from CMSD
- Unnecessary supply of less important instruments and drugs
- Controlling visitors in a health facility becomes a challenge for quality of care. For instance, an indoor women's ward of 25-30 bed in a district hospital would attract about 100 persons at any point in time. This would immensely affect the quality of services.

Coordination and network

- Poor coordination with the authority of maintenance and user

Human resources management and capacity building

- Lack of positive mind-set
- Lack of appropriate skilled personnel, to match the requirements of the facilities in terms of readiness and behavioural change. Provision of feasible reward and punitive measures are also deemed essential.
- The difficulties in terms of managing the HR shortage and patient load has gross impact on the quality of services
- Random transfer of administrative personnel impedes quality initiatives
- There is no training on QIS for all the staff at district and upazila level

Record keeping

- There could be needs to maintain all records including the admission, discharge, death, absconding, DORB (Discharged on Risk Bond), referred in and out. There could be needs to introduce and ensure recordkeeping for the adverse events in different wards.

9. Documents Consulted

Health, Nutrition and Population Strategic Investment Plan (HNPSIP) 2016-2021, Planning Wing, Ministry of Health and Family Welfare, Government of the Peoples Republic of Bangladesh

Clinical Management Protocol, Hospital Services Management, DGHS, May 2014

Strategic Planning on Quality of Care for Health Service Delivery in Bangladesh, Quality Improvement Secretariat (QIS), MoH&FW, January 2015

National Health Care Standards, Health Economics Unit, MoH&FW, January 2015

Total Quality Management in Hospital Services, TQM Unit, Hospital Service Management, DGHS

Manual for Implementation of 5S in Hospital Setting, TQM Unit, Hospital Services Management, DGHS, MoH&FW, April 2015

Stock taking on QI initiatives: An analysis, June 2015

Level Wise Distribution of Diseases for Management in the Health Service of Bangladesh, Health Economics Unit, MoH&FW, 2015

Training of Trainer's (ToT) Manual on Maternal and Perinatal Death Surveillance and Response (MPDSR)

National Guideline onMaternal Perinatal Neonatal Death Surveillance and Response (MPDSR)

Minutes of the meeting of District Quality Improvement Committee (Bagerhat: 18/02/2017, Feni 20/02/2017, Natore 16/03/2017, Madaripur 29/05/2017)

Government Order regarding Reorganization of Technical Advisory Group (TAG) for Quality Improvement, 01 September 2015

Trainer's Guide: Implementing Quality Improvement Initiative through PDCA Approach (PDCA 2)

Improving the quality of care in the public health system in Bangladesh: building on new evidence and current policy levers, Policy Note, Bangladesh Health Systems in Transition, on behalf of the Asia Pacific Observatory on Health Systems and Policies, World Health Organization, June 2017

Hoque et al. BMC Pediatrics 2012, 12:197, An assessment of the quality of care for childrenin eighteen randomly selected district and subdistricthospitals in Bangladesh

Annex-1: Mapping in matrix

Sl. No.	Implementing organization	Name of QI Initiative with period	Main Objective	Method, Quality domain focus and tools for monitoring	Location
A.QI Initiatives by MoH&FW,DGHS and DGFP					
1.	DGHS-QAP	Quality Assurance Program (2011-2016)	To develop QA system in primary and secondary health services under MoH&FW.	**Method:** QA (Input-Process), Client satisfaction **Quality focus:** Non-specific, general **Tools:** Baseline assessment-Standard development-Indicator development-Monitoring-Evaluation	Nationwide
2.	DGHS-ESD	Strengthening Upazila Health System and Referral System (2011-2016)	To provide equitable, efficient and effective health services and establish a well functioning, effective and structured referral system in different tiers of existing health system.	**Method:** QA (Input), **Quality focus:** Equitability, efficiency and effectiveness **Tools:**Baseline assessment-Standard development-Indicator development-Monitoring-Evaluation	7 Upazilas from 7 divisions Bhairob, Kaligonj, Charghat, Shadullapur, Debiddar, Srimongal, Gournadi
3.	DGHS-MIS	Strengthening UHC and DH	Improvement of the health system performance with existing resources and delegated authorities to public health organizations through motivation of the relevant health workforce and supported by proactive role of respective organization heads and local and central health system leaders.	Method: Not clear Focus: Patient centeredness Tools: Assessment, Patient satisfaction rate	Three year effort (2014-2016) in 49 districts
4.	DGHS-TQM	5S/ Kaizen/ TQM program (under OP-HSM, DGHS) July 2011 to June 2016	To improve the quality of hospital services by application of 5S/ Kaizen/ TQM approach	**Method:** 5S/ Kaizen/ TQM program **Q. Focus:** Equitability, efficiency and effectiveness **Tools:** Baseline assessment-Standard development-Indicator development-Monitoring-Evaluation	SMPP2 provides TA to 20 hospitals directly and to additional 87 hospitals indirectly (through partner organizations). The program is collaborated by UNICEF, WHO and GIZ
5.	DGHS-SMPP2	Safe motherhood promotion program, 2011-2016	Monitoring quality of services at facilities	**Method:** 5S/ Kaizen/ TQM program **Q. Focus:** Equitability, efficiency and effectiveness **Tools:** Baseline	Supported by JICA

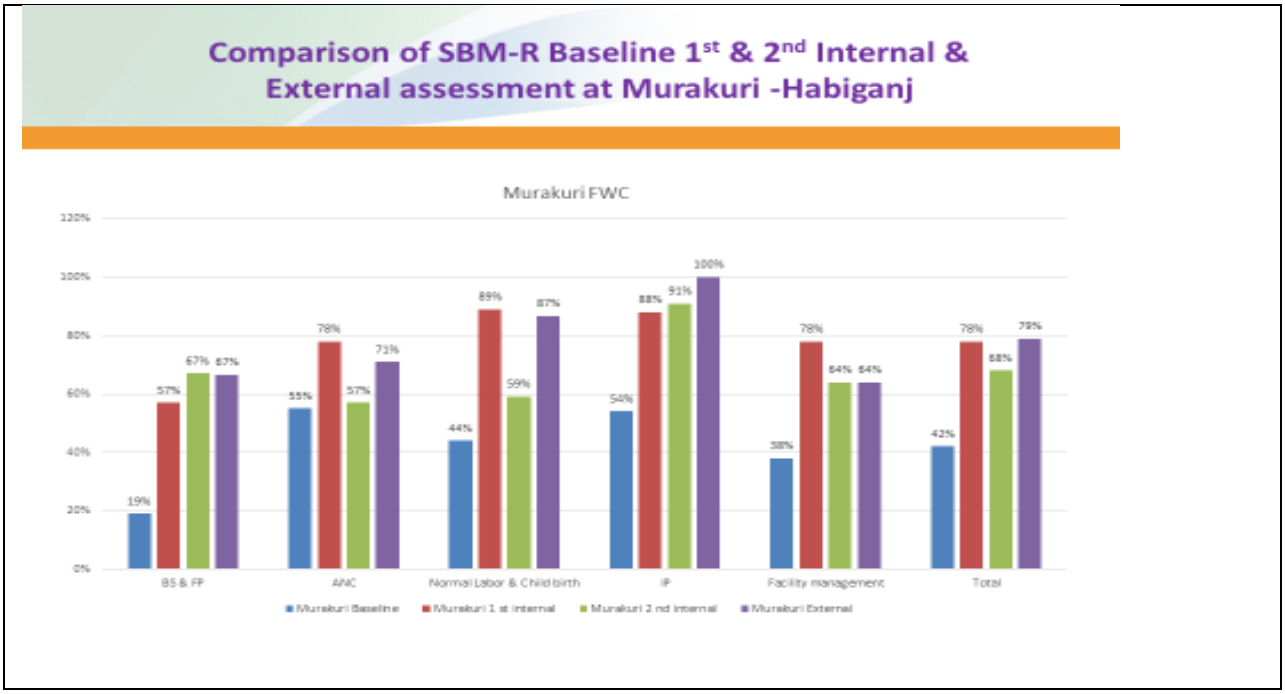
				assessment-Standard development-Indicator development-Monitoring-Evaluation	
6.	DGHS-NBC	QA Approach for new born care, 2011-2016	Setting up stabilization units at UHCs, setting up newborn care corners in the labor room and Obs OT, Clinical management protocols for newborn care	**Method:** QA approach-Input and Process **Focus:** Effectiveness and Safety Tools: Not found	Supported by UNICEF, TA from WHO
7.	DGHS- WFHI (UNICEF)	Woman friendly Hospital Initiative (WFHI)	To ensure availability of services for women and creating suitable environment for women	**Method:** Accreditation, PDCA **Focus:** Client centeredness, Appropriateness, timeliness **Tools:** National WFHI accreditation check list, WFHI protocol	24 districts, 5 UHCs Supported by UNICEF
8.	UNICEF/ MPDR	Maternal, Neonatal and Perinatal Death review	To notify Maternal and Neonatal deaths as well as still births from community and facility	**Method:** Assessment by 'Agreed Standard procedures', Data review and action taken. **Focus:** Effectiveness **Tools:** Agreed Standard procedure, Guideline on death notification, Verbal Autopsy, Social autopsy	14 districts, DFATD and KOICA funded
9.	DGHS-SBTP	Safe Blood Transfusion Program, 2011-2016	-Blood screening -Safe blood transfusion -Training of doctors and technologists	Method: QA Focus: Safety Tools: SOP	OP-HPNSDP
10.	DGHS-Accreditation	Accreditation of hospitals and diagnostic centers, Under process	Developing hospital accreditation system	* Takes care of the basic preparedness for quality services, not an hospital QI intervention	Supported by FHI 360
11.	DGHS-IMCI	Integrated Management of Childhood Illnesses	Improving childhood illness services in hospitals	Method: QA (Input-Process) Focus: Effectiveness Tools: Supervision checklist, Treatment Protocols	Supported by GOB, UNICEF, JICA etc.
12.	DGHS-Nutrition	Nutrition services with integration to IMCI Corners at health facilities	Improving nutritional status of Children	Method: Intervention Focus: Effectiveness Tools: Supervision checklist, SOP	Supported by GOB, UNICEF
13.	DGFP-FPCST	QA-FPCST, July 2011 to June 2016	To improve FP services	**Method:** Not Clear **Focus:** Effectiveness, Safety **Tools:** Supervision and monitoring checklist for FPCST-QAT	Nationwide, dividing into 10 regions
14.	DGFP-MYCNSIA	Maternal and Young child Nutrition Security	-To improve infant and young Child feeding practices and preventing anemia among pregnant	**Focus:** No specific QI focus identified. **Tools:** No tools supplied	17 Upazillas of 8 districts

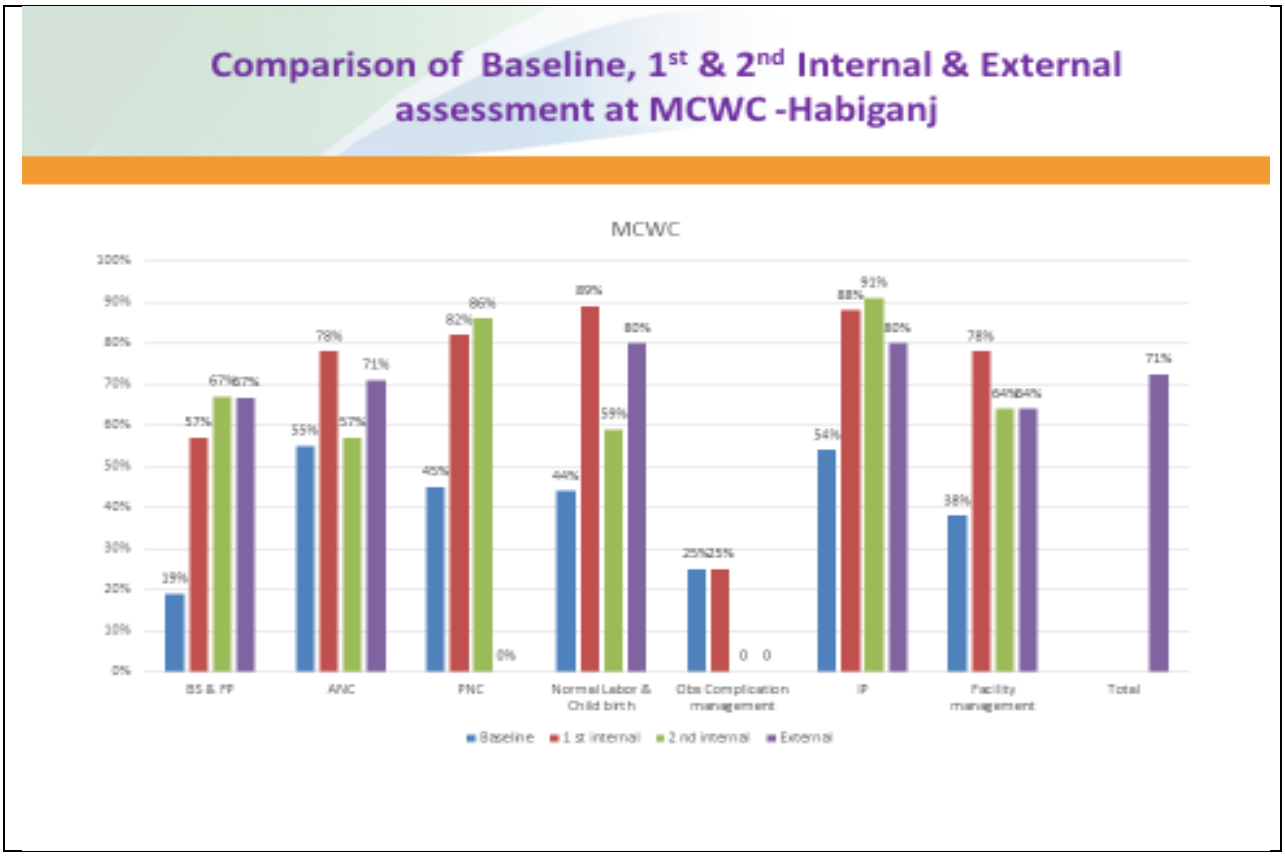
		Initiatives in Asia	and lactating women.		
15.	DGFP-ARH	Adolescent reproductive health	-To educate adolescents on healthy reproductive health and preventing STIs and early marriages	**Focus:** No specific QI focus identified **Tools:** No tools supplied	Nationwide in MCWCs, UHCs, UH&FWCs etc.
B.QI Initiatives by the development partners and Key NGOs					
16.	GIZ	Institutional foundations for the adoption of mechanisms to ensure health services quality, and occupational health and safety are developed at the national level	Ensuring health care quality through adopting uniform quality standards at all tiers and instituting regulatory authority being approved by the Government (July 2014 – June 2016)	* It's a policy level action, not a facility level intervention	
17.	GIZ	- Institutional foundations for the adoption of mechanisms to ensure health services quality, and occupational health and safety are developed at the national level -QI intervention in Narayangonj, Sylhet MCH, Rajshahi MCH	- Adopting uniform quality standards and guidelines for primary, secondary and tertiary health care -Establishing a functional regulatory authority to ensure the quality of health services under MoH&FW -To improve QOC at all PHC Centre of Sylhet /Rajshahi and N. Gonj City Corporation	**Method:** 5S/Kaizen/TQM program **Q. Focus:** Equitability, efficiency and effectiveness **Tools:** Baseline assessment-Standard development-Indicator development-Monitoring-Evaluation	Narayangonj DH, Sylhet MCH and Rajshahi MCH
18.	ICCDRB	Participatory stakeholders monitoring and feedback (PSMF) to improve quality of MNH care in Urban for-profit private sector facilities following a district health system approach	Quality of MNH care with objective of the feasibility test of PSMF	A study designed to test private sector monitoring by GO-Private combined participation	Sylhet City Corporation Area

		(March 2015-March 2017)			
19.	DCC-South	UPHC-SDP (2013-2017)	The project aims to improve access, equity, quality, utilization and institutional sustainability of urban primary health care (PHC) services in all city corporations and selected municipalities, particularly for the poor, women and children.	**Method:** QA (Input-Process) **Focus:** Access, Equity, Effectiveness **Tools:** QA manual, Checklist for PHCC/CRHCC visit, Checklist for Quality of Care, QA checklist for PHCC, Satellite Clinic observation checklist.	DCC-South area
20.	DCC-North	UPHC-SDP (2013-2017)	Objectives of the project are to improve: -Access to and use of urban PHC services in the project area, with a particular focus on services provision for free to the poor; -The quality of urban PHC services in the project area; and -The cost-effectiveness, efficiency, and institutional and financial Sustainability for the urban primary health care delivery system to meet the needs of the urban poor.	**Method:** QA (Input-Process) **Focus:** Access, Equity, Effectiveness **Tools:** QA manual, Checklist for PHCC/CRHCC visit, Checklist for Quality of Care, QA checklist for PHCC, Satellite Clinic observation checklist	DCC-North area
21.	Save The Children	MaMoni HSS Project (2014-2017)	Improve utilization of integrated maternal, newborn, child health, family planning, and nutrition (MNCH/FP/N) services	Method: Strengthening MNCH intervention Focus: Effectiveness Tools: Facility level indicators	6 districts: Habigonj, Noakhali, Laksmipur, Jhalokhati, Pirojpur, Bhola
22.	NHSDP/Path Finder International	NGO Health Service Delivery Project	To improve MNCH & FP status of poor and underserved enabling NGOs	Method: CQI Focus: Not clear Tools: Checklist and guidelines	Nationwide
23.	WHO/CIPRB	QI of facility based MNH services (Pilot) (2013-2014)	Facility based QI for MNH services * Supported by UNFPA, UNICEF andTA from WHO	Method: 5S-CQI-TQM Focus: Effectiveness, Equity Tools: Assessment, Standard-Indicator, Supervision-monitoring	Two DHs, two MCWCs, 10 UHCs
24.	EngenderHealth	COPE approach improve quality of FP services, on-going	To improve and sustain FP services The basic essence of COPE is to satisfy client needs and involving providers in the problem assessment process	Method: COPE Focus: Effectiveness Tools:	Own regular effort
25.	Marie Stopes	Quality of Care at the clinics for FP,RH and	MS ensures internationally established clinical standards in all its clinics	Method: QA (Input-Process) Focus: Effectiveness, safety	Regular activity [141 clinics including 3

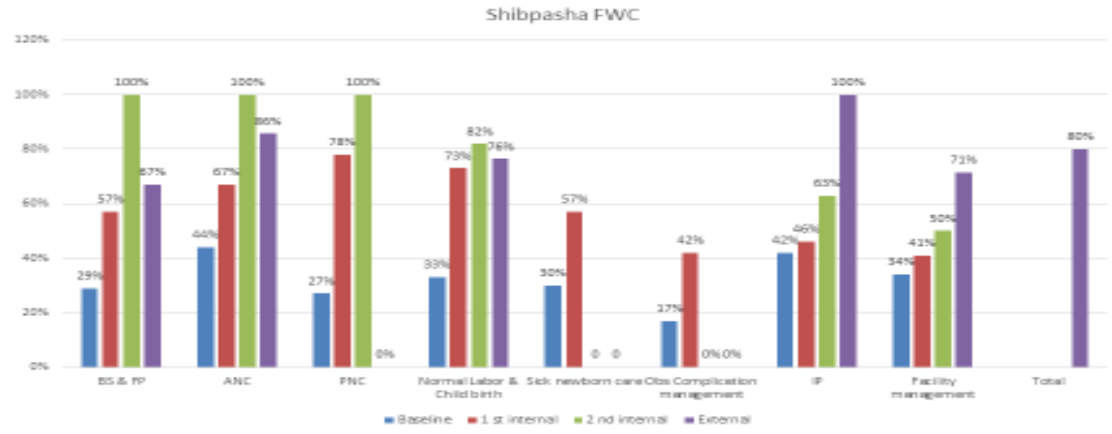
		MNH services, on-going	and outreach services and focused on client preferences.	Tools: Standards-indicators	maternities]

Annex-2: Additional graphs on comparison of SBM-R Baseline 1st, 2nd Internal and External assessment





Comparison of SBM-R Baseline 1st, 2nd Internal & External assessment at Shibpasha -Habiganj



Annex-3: Training, seminar, workshops, meetings and visits conducted as part of the QIS activities

Sl	Event	Participants	Purpose	Venue and Date
Strategic planning on quality of care for health service delivery in Bangladesh				
1	Divisional Dissemination Workshops (Khulna, Chittagong, Rajshahi) held on Strategic Planning on Quality of Care forHealth Service Delivery in Bangladesh and provide direction on committee formation at different levels of health facilities.	Participants from different levels of health facilities	Sharing the recently formulated Strategic Planning on Quality of Care for Health Service Delivery in Bangladesh and also to guide committee formation at different levels of health facilities	Conference Rooms in Medical College hospitals. Khulna June 6, 2015; Chittagong June 11, 2015; and Rajshahi June 17, 2015.
2	Review the 5S implementation practices that are being carried out at Jhenaidah District Hospital	The local leaders and elites	To meet the local leaders and elites to discuss their interest and commitment for developing the health facility as an outstanding health institute	Jhenaidah District Hospital. June 7, 2015.
3	Planning meetings prior to beginning 5S program	Members of individual Work Improvement Teams (WIT) of Shaheed Suhrawardy Medical College Hospital (ShSMCH).	Planning for 5S orientation for the individual Work Improvement Teams (WIT)	Shaheed Suhrawardy Medical College Hospital. June 23, 2015.
4	Dissemination workshop on 'Strategic Planning on Quality of care for Health Service Delivery in Bangladesh'	Key stakeholders	Launching of the strategic planning and sharing of the stock taking findings	Lakeshore Hotel, Dhaka. July 2, 2015.
5	Basic Orientation of Shaheed Suhrawardy Hospital QI committees	Shaheed Suhrawardy Hospital (ShSMCH) QI committees	Share National Strategic Planning and its implementation plan; timelines related to specific activities to be completed by the teams with necessary co-ordination and support from the QIS; basic concept of the 5S-CQI-TQM with visual orientation of few examples of 5S implementation	ShSMCH conference room. July 6-13, 2015.
6	Workshop on Maternal and Perinatal Death Review (MPDR) national guideline development	Key stakeholders	To finalize the working groups, their TORs and mode of further working process for the development of the national guideline.	August 26, 2015
7	Meeting on MPDR National Guideline Preparation	Relevant working group members	Group work on the 'verbal autopsy' section	Conference room, HEU. September 21, 2015.
8	QIS participates in the 32nd International Conference on 'Building Quality and Safety in the Healthcare System' organized by the International Society for Quality Healthcare (ISQua)	Experts and leaders from around the world shared their experiences	Dr. Md. Aminul Hasan, Deputy Director, HEU and Focal Person of QIS, represented the QIS in the conference. The title of his abstract was: "Quality of Care: A key challenge for Universal Health Coverage in Bangladesh".	ISQua. Oct 4-7, 2015.

9	MPDR National Guideline Development Working Group Meeting	Three Working Groups	Three working groups have been formed to work on specific areas of the guideline: 'Verbal Autopsy', 'Facility Death Review' and 'Reporting, supervision and monitoring'/ Review, response and Supervision	Conference room MIS. October 1, 2015; October 11, 2015; October 29.
10	MPDR national guideline preparation meetings	Three working groups	Work on specific areas of the guideline: 'Verbal autopsy', 'Facility death review' and 'Reporting, Supervision and Monitoring' mechanism.	November 2015
11	MPDR National Guideline Validation workshop	Working group composed of relevant stakeholders	MPDR National Guideline Validation workshop to share in the broader group.	December 7, 2015
12	Workshop for "Universal Health Coverage and Quality of Care"	Principal, Head of the departments and senior physicians of Khulna Medical College.	To discuss: "Universal Health Coverage and Quality of Care" and "Modality of formation of Quality Improvement Committee at different level"	Khulna Medical College conference room. January 11, 2016.
13	MPDR planning meeting	Key partners who have been involved in the process of MPDR implementation	To plan for necessary steps for developing action plan based on MPDR guideline, and to identify way forward in regards to further strengthening the MPDR initiatives.	April 24, 2016
14	Workshop on sharing experiences of learning visit with the Work Improvement Teams (WIT), Shaheed Suhrawady Medical College Hospital	The team leaders of the Work Improvement Teams (WITs) in the hospital	To share the experiences of learning visit in Norsingdi Hospital on 5S implementation practices there	Shaheed Suhrawady Medical College Hospital conference room. April 20, 2016.
15	Participation in a meeting organized by Community based health care program, convened by WHO	Quality Improvement Secretariat team	Consultative meeting on Quality of Service Delivery at Community Clinics	Lakeshore Hotel, Dhaka. April 24, 2016.
16	Regional Workshop for improving quality of Hospital care for MNH	A country team led by QIS focal person from the MoH&FW	To develop the capacity building for improving quality of hospital care for mother and newborn.	Hotel Le Meridian, New Delhi. May 10-13, 2016.
17	Visiting "Malaysian Society for Quality Health (MSQH)"	Members from the Quality Improvement Secretariat, professionals, district level managers and consultants	To receive an orientation on Hospital Accreditation system in Malaysia	"Malaysian Society for Quality Health (MSQH)", Kualalumpur, Malaysia. June 1-3, 2016.
18	Meeting on "Development of QIS Dash Board"	Dr Md Aminul Hasan, Focal person QIS, Consultants QIS, UNICEF team and ICDDR,B team.	QIS has developed the list of Key Performance Indicators (KPI) which will be measured real time by the service providers in each and every facility.	UNICEF-BD. August 4, 2016.
19	Meeting with WHO QI expert, Dr Krishna Hort	Dr Md Aminul Hasan, Consultants QIS, and Dr Murad Sultan.	To discuss the challenges of Quality of Care and priority action	QIS conference room. September 2016
20	Workshop on "Development of Safe Surgery Check List" by customizing the WHO tool	Participants from Dept. of Surgery, Urology, Obs, Pediatric surgery,	Development of "Safe Surgery Check List" as a part of Patient Safety tools	Dhaka medical College hospital conference room. November 9, 2016.

		Anesthesia and Others.		
21	Divisional workshops for implementation of National Strategic Planning on Quality of Care	Health and family planning managers of Sylhet and Khulna division, key persons of different QI committees, and district and divisional resource members.	To orient the service providers regarding the QI initiatives, QI action plan of next 6 months and orientation on 5S.	November 24 and 30, 2016.
22	Finalization of Safe Surgery Checklist	Dr Md Aminul Hasan, focal person QIS was present as a key moderator. Two Consultants of QIS, medical officers and Prof. Dr. ABM Jamal, Member, Technical Advisory Group (TAG) were present as facilitators in the workshop.	To customize WHO safe surgery checklist that fits in Bangladesh context, and to have consensus that in all surgical procedures the checklist will be followed.	Dhaka Medical College Hospital. January 15, 2017
23	Meeting on QIS dashboard	Dr. Md Aminul Hasan (QIS), Dr. Tajul Islam (QIS), Dr. Harun Or Rashid (QIS), Dr. Riad Mahmud (UNICEF), Dr. Shayma (QIS).	Developing a dash board for Key Performance Indicators (KPI) that could be displayed in the dashboardof DHIS 2 and to discuss the modality of connectivity with Primary, Secondary, Tertiary and national level.	UNICEF-BD. January 17, 2017.
24	Post Malawi conference meeting	Representatives from WHO, UNICEF, SCI, USAID, ICDDR,B and HEU.	To discuss about the prospects of RMNCAH QI framework	HEU Conference room. February 22, 2017.
25	Planning meeting in Shaheed Shurawradee Medical College for PDCA	Prof Dr Uttam Kumar Barua, Director, ShSMCH, Dr Md Aminul Hasan, focal person, QIS, Dr Md Harun Or Rashid, consultant QIS, Dr Ansari, and Head of the department of plastic surgery.	To develop the modalities for developing 5 model wards in the hospital.	ShSMCH, Plastic Surgery Department. March 2017.
26	Participation in the conference arranged jointly by BMJ and IHI.	Paper of Dr. Md Aminul Hasan, Focal Person of QIS, MoH&FW was selected in the conference for poster presentation and he participated in a panel discussion session on Community Participation.	Connecting 3,000 healthcare leaders and practitioners from over 70 countries and providing an inspirational setting to meet, learn and share knowledge in a common mission to improve the quality and safety of care for patients and communities across the world.	London, UK. April 26-28, 2017.
27	Workshop on Implementing Quality Improvement	Participants on PDCA approach	To enhance capacity of the participants on PDCA approach so	BRAC CDM, Rajendrapur, Gazipur. May 7-9, 2017.

	Activities through PDCA		that they can use the approach to improve quality of hospital services.	
28	Safe surgery checklist	All the unit heads of the Surgery departments and dept. of Anesthesia. HEU and President and Secretary of the societies of Surgery and allied discipline.	Safe surgery checklist launching and validation	DMCH Conference room. May 9, 2017.
29	QI festival and Award giving ceremony	QI festival and Award giving ceremony in Kurigram	To display the QI innovations by the implementing facilities and share their QI experiences	Kurigram. May 21, 2017.
30	Launching of Safe Surgery Checklist in Shaheed Suhrawardee Medical College hospital (ShSMCH)		Launching of Safe Surgery Checklist	ShSMCH. June 6, 2017
31	Meeting on Universal Health Coverage (UHC)	Representatives from UNICEF, UNFPA, MaMoni HSS Project, ICDDR,B and other organizations.	To update the service package of UHC	BMA Bhaban conference room. June 11, 2017.
Technical Advisory Group (TAG)				
32	Technical Advisory Group meeting on 'Key Performance Indicator' development	5th TAG meeting	'Key Performance Indicator' (KPI) selection. The purpose of selecting KPIs, a way forward for measuring the status of quality in health facilities.	QIS conference room. July 23 and 25, 2015.
33	TAG Meeting	TAG Members	To exchange their opinions on different indicators; share the outline of Monitoring and Evaluation Framework; and discuss on level-wise formation of different teams and their mode of work.	QIS, TAG meeting. August 19, 2015.
34	Technical Advisory Group meeting on Monitoring and Evaluation framework	TAG Members	Finalization of three sets of monitoring tools: 5S activity monitoring tool, Facility level standard (FLS) monitoring tool, and Key performance indicators (KPI) monitoring tool	Conference Room, QIS. October 11, 2015.
35	TAG Meeting	TAG Members	To finalize Key Performance Indicators (KPIs) and the Facility Level Indicators (FLIs) to be used for QI monitoring	HEU Conference Room. December 2, 2015.
36	TAG Meeting	TAG Members	To discuss the monitoring framework	QIS conference room. April 24, 2016.
37	TAG Meeting	TAG Members	To (i) finalize the composite index of field service quality on care and (ii) finalize the TQM operational module	QIS Conference Room. July 13, 2016.
38	TAG Meeting	TAG Members	To develop the draft of Patient Safety Guideline, and Safe Surgery check list	QIS. February 28, 2017.
39	TAG Meeting	TAG Members	To develop the draft outline for	QIS. March 14, 2017.

			patient safety guideline	
QI committees and their activities at different levels				
40	QI committee activity	QI committee	Collection of list of recently formed committees from the Specialized Hospitals and Medical College Hospitals in Dhaka city as a continuation of introducing QI activities in their facilities.	June 2015.
41	QIcommittee activity	QI committee	Develop different checklists for assessment by QI committees in Shaheed Suhrawardy Medical College Hospital.	July 2015.
42	QI committee activity	QI committee	Facilitate assessment process and action plan development by the QI committees in Shaheed Suhrawardy Medical College Hospital	Shaheed Suhrawardy Medical College Hospital. July 13-31, 2015.
43	QI committee activity	QI committee	Facilitate assessment process and action plan development by the QI committees in Shaheed Suhrawardy Medical College Hospital	Shaheed Suhrawardy Medical College Hospital. August 2015.
44	QI committee activity	QIC (Quality Improvement Committee) and the WIT (Work Improvement Teams) at Jhenaidah District Hospital.	To discuss Jhenaidah hospital QIC issues.	Conference Room of Jhenaidah District Hospital. September 4, 2015.
45	ShSMCH Quality Improvement Committee Meeting	ShSMCH Quality Improvement Committee Meeting	Review progress on action plan	Assistant Director's Room of ShSMCH. September 15, 2015.
46	National Quality Improvement Committee (NQIC) Meeting	National Quality Improvement Committee (NQIC) Members	To update the committee members on the recent initiatives on quality of care activities.	QIS. November, 2015.
Resource pool				
47	Resource pool orientation workshop on quality of care	Resource pool group members. Ten resource persons selected from each division either from the category of facility managers and medical doctors.	To sensitize the group members on overall QI concept and recent initiatives of Bangladesh Government on QI; their future role and responsibilities for QI initiative and its opportunities and challenges; monitoring and supervision framework for quality of care activities; and the 5S-CQI-TQM approach to be used for the quality of care activities in facilities.	December 8-9, 2015
48	Training on "Capacity development of national resource pool for quality improvement in health service delivery"	Resource pool members.	To achieve the capacity of Resource pool members for specific QI competency	Platinum suits, Banani, Dhaka. July 28-August 1, 2016.
49	Review workshop of resource pool member	Resource pool members	Reviewing 6 action plans.	HEU conference room. August 18, 2016.

50	Refreshers training of QI National Resource Pool	QI National Resource Pool	After receiving the training, the Resource pool members will start PDCA in their own facilities and in future they will act as National Resource Pool members.	October 3 and 4, 2016.
51	TOT for Divisional QI Resource Pool	23 Divisional QI Resource Pool members from Dhaka, Chittagong, Rangpur and Sylhet divisions, divisional coordinators, district monitors and MIS Officer of QIS	To prepare the participants with necessary knowledge and skills to train the district resource pool members to introduce 5S at district hospitals.	BRAC CDM, Savar. December, 18-20, 2016.
52	3rd TOT of QI divisional resources pool	29 resource pool members from Dhaka, Chittagong, Khulna, Rangpur, Mymensingh and Sylhet divisions. The workshop was also attended by the divisional coordinator of Khulna and district monitor of Chittagong.	To prepare the participants with necessary knowledge and skills to train the district resource pool members to introduce 5S at district hospitals.	BRAC CDM, Savar. January 8-10, 2017.
53	TOT for district resource Pool on QI Initiative and 5S	29 district resource pool members from Sylhet, Moulavibazar, Sunamganj and Habiganj districts.	To prepare the participants with necessary knowledge and skills to train the Work Improvement Team (WIT) members of district hospital and MCWC to implement 5S at the hospitals.	Hotel Metro, Sylhet. January 24-26, 2017.
54	TOT for District Resource Pool on QI initiative and 5S in Khulna Division.	District resource pool members.	To (i) prepare the participants (divisional resource pool) with necessary knowledge and skills to train the district resource pools in order to introduce 5S at the district hospitals; (ii) improve knowledge and understanding on leadership, communication, motivation and team-building to improve quality of hospital services; (iii) orient the participants on National Strategic Planning on Quality of Care and recent MoH&FW initiatives on QI; (iv) improve knowledge on basic concept of 5S-CQI-TQM; (v) orient the participants about the process/steps of implementation of 5S at hospital setting; and (vi) improve facilitation/ communication skills of the participants.	CSS AVA Center, Natun Bazaar in Khulna City. January 30-31 and February 1, 2017.
55	Refresher's Training of Divisional Resource pool on	Divisional Resource pool members	The workshop covered topics on National Quality Improvement (QI)	QIS Conference room. March 6-7, 2017.

	Quality Improvement Initiatives (5S)		strategy, leadership, motivation, communication, team building and 5S.	
56	Refresher TOT for Divisional resource pool on QI initiative and 5S (2nd Batch)	Divisional Resource pool members	The workshop covered topics on National Quality Improvement (QI) strategy, leadership, motivation, communication, team building and 5S.	March 15-16, 2017.
57	ToT for District Resource pool for quality improvement initiative in Chittagong Division	Deputy civil surgeons, UHFPO, ADCC, MO(C/S), RMO, Gynae Consultant, district Public health nurse, Nursing supervisors, representative of civil surgeon /hospital in-charge, MO (MCH) and MO Clinic of MCWCs of Chandpur, Laxmipur, BrahmmonBaria, and Chittagong.	To improve knowledge and understanding on leadership, communication, motivation and team-building to improve quality of hospital services; to orient the participants on National Strategic Planning on Quality of Care and recent MoH&FW initiatives on QI; to improve knowledge on basic concept of 5S-Kaizen (CQI)-TQM; to orient the participants about the process/steps of implementation of 5S in district hospitals; and to improve facilitation/communication skills of the participants.	Hotel Lord's Inn, Chittagong. March 20-22, 2017.
58	ToT for District Resource pool for quality improvement initiative in Khulna Division	District Resource pool	To develop capacity of the district resource pool members for conducting 5S training with leadership and management skills.	Khulna. March 21-23, 2017.
Coordinating quality improvement activities among the development partners				
59	Develop templates for 'Mapping Exercise' on implementation of QI activities nationwide by different organizations.			July 2015
60	Participation in 'International Training course on Universal Health Coverage (UHC)'.	Dr. Md. Anwar Sadat, Medical Officer, QIS attended along with 30 participants from Bangladesh and 20 other participants from 13 other countries.	To share experience of Thai UHC Scheme (Thai UC Scheme) in terms of policy formulation along with the process of implementation, monitoring and evaluation, in particular designing and application of provider payment methods, i.e., capitation contract model, Diagnostic Related Groups (DRGs) with global budget and information system; and to exchange country experience on steps towards achieving UHC as well as building network among participants.	Bangkok, Thailand. August 24-28, 2015.
61	QIS participation in a workshop on 'Participatory Quality of Care monitoring visit' in private sector hospital care.	Representatives from private hospitals owners' association, BMA and Sylhet Medical College.	To share the basic standards of quality to be attained in a hospital for consensus development; formation of a joint monitoring team with mixed participants including member of QIS; and to decided on the date for starting monitoring activity, including	Sylhet MAG Osmani Medical College Conference Room. September 10, 2015.

			baseline and end line evaluation for the project activities.	
62	Meeting with Development Partner – GIZ.	Dr. Md. Aminul Hasan (Focal Person), Dr. Harun-Or-Rashid, and Dr. Shayema Khorshed (Consultants) along with Dr. Md Nazmul Haque, Dr. Tonamy Chakma, Dr. Pranab Kumar Roy, and Dr. Md. Anwar Sadat (Medical Officers of QIS) attended from QIS side. Kelvin Hui, Principal Advisor of GIZ shared with QIS about their implementation of 5S approach.	To share the orientation, training and medical audit activities conducted by the GIZ team in both Sylhet and Rajshahi Medical College Hospitals; the indicators used by them for quality management of Primary Health Care Centers in Narayanganj City Corporation; to discuss about the 5S monitoring tools, Key Performance Indicators (KPIs) tools and Facility based Indicator/ standard tools to be used for monitoring and evaluation of health care qualities of hospitals in Bangladesh. To share GIZ and QIS future plans regarding quality of care.	QIS room, HEU. September 15, 2015.
63	Joint planning and Co-ordination meeting with DGHS and partners.	DGHS and partners.	To discuss the implementation plan of QI strategy and the mechanism of co-ordination, the national strategic outline to emphasize the intervening areas of DGHS for the process of implementation, and the recently initiated GoB-UNICEF-BMGF project implementation activities to come to a consensus on the key responsible partners for each work areas.	HEU conference room. October 1, 2015.
64	Workshop on "Introduction to Systemic Quality Improvement – The Role of Evaluating Healthcare Quality" by GIZ Bangladesh.	Instructor: Dr. Sylvia Sax, International Consultant, Quality Management, Institute of Public Health, University of Heidelberg, Germany. QIS team.	To build an understanding on the systemic approach for quality improvement of health care services, role of evaluation, and critical analysis of strengths and weaknesses of common internal and external Methods for evaluating healthcare quality of care; strategies to strengthen the use of different healthcare evaluation methods within Bangladesh context (with focus on the 5S Approach and Medical Audit); surveyor methods based on a Case study Setting in Bangladesh; skills to lead teams in evaluating healthcare quality in primary and secondary health Sectors and skills in using evaluation results.	Hotel Nascent Gardenia, Dhaka. October 18- 21, 2015.
65	Visiting LAMB Hospital	Dr Md Aminul Hasan, focal person Quality Improvement Secretariat.	To meet Dr. Antje, Hospital Medical Director, and Mrs. Keiko Butterworth, LAMB Board Member, and to hold in-depth discussion on areas to improve	LAMB Hospital, Parbatipur. January 29, 2016

			responsive health services and quality of care in this hospital.	
66	Divisional Meeting with DP/ NGO representatives for Quality Mapping.	National level, and local DP/ NGO representatives.	To conduct a mapping exercise to identify the DPs and NGOs supported areas, through one to one advocacy at national level, and dialogues with the local DP/ NGO representatives to understand opportunities and challenges of the process.	January 2016.
67	Award giving ceremony at Shaheed Suhrawardy Medical College Hospital WITs.	Members of the hospital QIC and 43 Work Improvement Teams (WITs).	To share the modalities that QIS adopted for the overall process of selecting the teams as the best ones based on their performances.	Shaheed Suhrawardy Medical college Hospital. February 07, 2016.
68	Visiting Marie Stopes Maternity Clinic, Sylhet.	Dr Shayema Khorshed, consultant QIS.	To see their modalities of working and exploring mechanism for coordination.	Marie Stopes Maternity Clinic, Sylhet. April 10, 2016.
69	Briefing meeting with UNICEF HQ representative.	Senior Health Adviser from UNICEF HQ Ms Debra Jackson.	As part of GoB-UNICEF-BMGF initiative to test a comprehensive QI model in selected facilities in Kurigram.	April 25, 2016.
70	Joint GO-NGO planning meeting on QI collaboration process.	Local development partners/ NGOs at Chittagong Division.	To plan and discuss with local partners on QI coordination of districts and selected upazilas of Chittagong division, as a follow up event of a national sharing workshop held in April 2016 in which QIS shared their country QI coordination plan through a joint GO-NGO collaboration mechanism.	UNICEF Chittagong Office. May 25, 2016.
71	QI Planning meeting with fistula stakeholders.	Mr. Md Ashadul Islam, Director General HEU, Dr. Md Aminul Hasan, Focal Person, QIS, Prof. Sayeba Akhter, Asian Representative, ISOFS and Senior Fistula Surgeon, Dr. Nazmul Huda, Country Project Manager, Fistula Care Plus Project.	To hold discussion about the options and issues of fistula care; forming a working group for providing technical assistance and developing clinical indicators related to Quality Improvement of female genital fistula patients to be inserted in the national QI dash board.	Quality Improvement Secretariat, Health Economics Unit, MoH&FW. June 5, 2016.
72	Workshop on joint collaboration plan for quality improvement for health service delivery.	Health Managers of all divisions of the country. Divisional Directors (Health and FP), Civil Surgeons, Hospital FP, Hospital superintendant, DDFP and DP members of selected districts.	To share the joint collaboration plan.	BMA conference room, Dhaka. August 28, 29, 30 and September 1, 2016.
73	Meeting with the Development partners for joint collaboration plan of QI.	Selected DPs.	For finalization of working guidelines and modalities.	QIS. November 02, 2016.

74	Meeting with Key development partners on joint Go-NGO collaboration plan.	The identified partners and relevant staffs from UNICEF and Marie Stopes.	Hold discussion on the modalities of activities by QIS and expected input from the identified partners.	HEU Conference Room. November 27, 2016.
75	Meeting with EngenderHealth for Collaboration plan.	Those who will be working with divisional and district level Quality Improvement Committee (QIC).	To share the areas applicable for QI collaboration: (i) Selected DP/NGO members will be responsible to support the selected division /district QIC (both organizational and facility level); (ii) Facilitate holding regular QIC monthly meeting by contacting meetings with the president /member secretary/ focal person of the QIC according to TOR in a coordinated way; (iii) Promote structured coordination with the divisional coordinator for holding QI meeting, capacity development of the different service providers on QI and also holding different QI workshop orientation; (iv) Proper engagement in reviewing the decision of previous QI committee meeting and performance review including the implementation of decision; (v) Provide secretarial and technical support especially analysis of the statistical data and other desk review; (vi) Sending performance review findings in their specific areas / institution in a designed format at a regular interval (3 month) on the basis of observation with the service providers and clients through exit interview; (vii) Assist /Facilitate member secretary of the committee; (viii) Liaise with the divisional Resource pool members to conduct Quality Improvement related training; (ix) Regularly sending the monitoring report to QIS/ DGHS/ divisional director/ Super/ CS by using specific report template.	December 1, 2016
76	Coordination Meeting with the Development partners on Quality improvement initiative	Development partners	To discuss progress of Quality improvement initiative.	BMA Conference room. May 25, 2017.
Engaged in Mother and Baby Friendly Facility Initiative (MBFFI)				
77	National committee meeting for Mother and Baby Friendly Facility Initiatives (MBFFI) under GoB-UNICEF-BMGF.	Members of the National Committee for MBFFI.	To share the detailed work plan of the implementation modalities; brief on the BMGF project background and relevant activities; discuss on the individual roles of	November 09, 2015.

			the National Committee members in the context of the implementation plan	
78	National committee meeting for Mother and Baby Friendly Facility Initiatives (MBFFI) under GoB-UNICEF-BMGF	Members of the Coordination Committee for MBFFI.	Sharing of BMGF project background and relevant activities, and action plan of the BMGF implementation.	November 22, 2015.
79	Working group meeting for Mother and Baby Friendly Facility Initiatives (MBFFI) under GoB UNICEF-BMGF.	Members of the MBFFI Working group.	To discuss the background of the working group formation for the comprehensive QI model and describe the conceptual framework of the model; to share the names of the working group members for the comprehensive QI model; and to discuss the 'terms of references' of the working group.	November 22, 2015.
80	National advocacy and sensitization workshop on Mother and Baby Friendly Facility Initiatives (MBFFI).	Key stakeholders	To share the project outline with the key stakeholders.	CIRDAP Conference room. January 25, 2016.
81	District Advocacy and Sensitization workshop on Mother and Baby Friendly Facility Initiatives	Local stakeholders and providers.	To share the MBFFI project outline with the local stakeholders and providers.	Kurigram District Hospital. January 30, 2016.
82	National committee meeting for Mother and Baby Friendly Facility Initiatives (MBFFI).	Members of the National Committee.	To conduct discussion on the project planning and the follow up activities.	January 2016
83	Joint monitoring visit (GoB-UNICEF) in MBFFI project implementation site.	GoB-UNICEF MBFFI Joint Monitoring Team.	The team jointly visited the Kurigram district hospital as well as all 4 selected Upazila Health Complexes of MBFFI project implementation site. The team also visited community clinics to watch the nutritional services provided from there and the MIS related activities.	Kurigram District. January 31-February 02, 2016.
84	Joint Monitoring Visit in MBFFI piloting facilities.	QIS and UNICEF team, including Technical experts of UNICEF from NY-HQ and ROSA, with the local GoB team.	To observe existing available services for specific maternal, newborn service areas; and to conduct discussion with the facility managers on existing scenarios related to human resources and other areas.	Kurigram District Hospital and UlipurUpazila Health Complex. March 29-30, 2016.
85	Kurigram visit to implement improved maternal and child health services according to the Mother and Baby Friendly Facility Initiative (MBFFI).	QIS Team	To select upazila health facilities; to discuss on the approach of 5S-CQI-TQM; to guide about how to form WIT for different areas of their respective health facilities.	Kurigram District. July 19-21, 2016.
86	Workshop on QI model for MNH initiative in Kurigram district	Working Group to develop a comprehensive QI model.	To identify and discuss important components of the QI model.	Kurigram district. January 17, 2017.
87	Dissemination workshop on	Participants from the	To share the experiences and	QIS. January 18, 2017.

	Mother and Baby Friendly Facility Initiative for Quality Improvement of MNH Services.	implementation sites including managers and key providers.	issues of the participants from the implementation sites.	
88	Training workshop on 5S and clinical EMEN standards for providers from selected facilities under MBFFI.	Newly recruited doctors and nurses from the selected facilities.	To orient these providers on basic quality improvement approaches and important clinical standards that needs to be practiced in the respective facilities.	HEU conference room. April 3, 2017.
89	Dissemination Seminar on the Baseline Assessment of Quality of care Under MBFFI. AGoB-BMGF-UNICEF initiative Situation Analysis and Findings Sharing Workshop.	Invited stakeholders.	To disseminate the findings of that baseline survey by ICDDR,B.	April 12, 2017.
Joint project initiatives with ICDDR,B				
90	Participation in workshop on medical waste management by ICDDR,B in Sylhet.	35 participants.	To learn the present situation of Medical Waste Management (MWM) in private hospitals and clinics and to know views about how MWM can be done better.	CS office, Sylhet. February 27, 2016.
91	ICDDR,B intervention site visit	QIS Consultant.	To oversee the project activities.	Intervention site. April 10, 2016.
92	Meeting with ICDDR,B for development of leadership module.	Dr Iqbal Anwar and his team from ICDDR,B.	To develop contents of the module and a draft outline.	HEU Conference Room. February 27, 2017.
93	Meeting with UNICEF and ICDDR,B for Kurigram piloting	ICDDR,B, UNICF and QIS	To develop a coordination mechanism with ICDDR,B, UNICEF and QIS	QIS Conference Room. February 27, 2017.
Monitoring and Evaluation Framework, Key Performance Indicators and Facility Level Indicators				
94	Ongoing analysis of quality initiative related information by different agencies as a part of stock taking		Ongoing analysis of quality initiative related information by different agencies as a part of stock taking	June 2015.
95	Jhenaidah Hospital Visit.	All 16 WITs	To validate recently formed Work Improvement Teams (WIT), 5S implementation activities and its monitoring system, hospital MIS activities, adverse event registry etc.	Jhenaidah District Hospital. August 01, 2015.
96	Workshop on M&E framework for Quality of Care in health service delivery.	Key stakeholders.	To share the outline of the M&E framework, Key Performance Indicators (KPIs), facility level indicators (FLIs) and mapping analysis with the key stakeholders.	QIS. October 14, 2015.
97	Monitoring and supervision Visit to KalihatiUpazila Health Complex, a pilot site both for ShasthoySurokshaKarmasuchi (SSK) and Quality Improvement (QI).	A team from QIS	To observe how the Work Improvement Teams (WITs) are performing, to re-emphasize on 5S activities and to give on-the-spot feedback and guidance	Kalihati UHC. November 17, 2015.
98	Joint monitoring visit (GoB-UNICEF) at MBFFI project	QIS and UNICEF team jointly participated in	To observe existing available services for specific maternal,	Kurigram district hospital and all 4 selected Upazila

	implementation site	a monitoring visit with the local GoB team	newborn services and nutritional component.	Health Complexes of MBFFI project implementation site. January 31-February 02, 2016.
99	Award giving ceremony for Shaheed Suhrawardy Medical College Hospital WITs.	QIC and WIT members of Shaheed Suhrawardy Medical College Hospital.	Organizing an award giving ceremony for the WITs, following the findings from a checklist for assessing the status and the progress of the team over time. Analysis of the collected data did help select six teams as the best ones based on their best performances.	Shaheed Suhrawardy Medical College Hospital. February 07, 2016.
100	Joint Monitoring Visit in MBFFI piloting facilities	QIS and UNICEF team, including Technical experts of UNICEF from NY-HQ and ROSA, with the local GoB team.	To observe existing available services for specific maternal, newborn service areas.	Kurigram District Hospital and UlipurUpazila Health Complex. March 29-30, 2016.
101	Workshop on M&E framework and joint collaboration plan on quality of care for UHC	Health managers from hospitals, districts and the Members of the DPs and NGOs who are involved in health care quality improvement in Bangladesh.	To share the joint monitoring and evaluation framework for ensuring quality of care in health service delivery and to discuss on modalities of joint collaboration for necessary coordination with quality of care activities.	CIRDAP auditorium. April 19, 2016.
102	Visit Jhenaidah District Hospital.	Jhenaidah District Hospital staff.	Orientation and sensitization on facility level indicators to be used for measuring the current status of performances in terms of quality.	Jhenaidah District Hospital. May 14, 2016.
103	Orientation workshop of Assessor team for an assessment checklist.	Members of the Assessor's Team	Orientation for assessment checklist.	HEU Conference Room. November 26, 2016.
104	Orientation of Data Collection for Quality Survey	Data collector and data supervisor	i) To explore the patient centered service situation of both public and private sector, i.e., explore the existing patient feedback system, consumer care plan, a system of accountability to patients etc.; ii) To find out the status and initiatives of patient safety, i.e., the present status to raise awareness on patient safety, existence and implication of national patient safety standards, system of monitoring and documenting unsafe events and introducing interventions to continuously reduce the incidence of such events during the planed period; iii) To identify the measures taken for improvement of clinical services area, i.e., health indices	QIS. December 11, 2016.

			and outcomes, and essential management practices (e.g., clinical audit, EMB, protocols, guidelines and in-house supervision) that lead to improved clinical care; and iv) To find out the status of Health system responsiveness.	
105	Monitoring visit at DMCH to review the progress of QI Initiative.	Work Improvement Teams (WITs) and monitoring teams (MTs), composed of different level of service providers.	To review the progress of QI Initiative	DMCH. February 05, 2017.
106	Monitoring visit at DMCH on QI Initiative.	Ward 215, 216, 214 and 507 of DMCH	To discuss the challenges and further actions to be taken.	DMCH. February 13, 2017.
107	Monitoring visit at ShSMCH on QI Initiative.	QIS team including Dr. Harun Or Rashid, Dr. Pranab Roy and Dr. Nazmul Haque who had a discussion meeting with Dr. Ansary, RS, Dr. Tanvir, RP, and Mr. Saiful Islam, AO, and the QIS team members.	The meeting agreed about the importance of creating monitoring teams and proposed three teams, 5 persons in each team.	ShSMCH. February 14, 2017.
108	Monitoring meeting with Divisional QI Coordinator	Divisional QI Coordinators.	To share the Divisional QI Coordinators' initiatives, working modalities, reviewing of action plan, DP partners' coordination mechanism and monitoring andsupervision activities.	QIS. March 5, 2017.
109	Meeting with National Assessor Team for Kurigram Pilot intervention	National Assessor Team for Kurigram Pilot intervention	To finalize the modalities of training module that has been developed for training of the service providers in the piloted facilities.	March 16, 2017.
110	QI Monitoring meeting in DMCH	7 QI monitoring team that has been formed in the DMCH for monitoring of 103 WIT.	To provide orientation and necessary feedback to theQI monitoring team that has been formed in DMCH for 5S activities.	DMCH Conference Room. March 20, 2017.
111	Quarterly Monitoring Meeting	Divisional QI Coordinators	To review (i) Model Hospital activity; (ii) Community Participation in model Hospital; and (iii) Enhancement of DP's coordination.	QIS, HEU. May 24, 2017.
TQM operational module				
112	TQM workshop in Srilanka, June 08-13, 2015	QIS staffs along with participants from the DGHS, BSMMU, different health facilities ranging from tertiary to upazila level and NGOs/ agencies.	Participants to be oriented on the conceptual and practical components of 5S-CQI-TQM implementation and get an overview of the Srilankan Health system in general.	TQM workshop in Srilanka. June 08-13, 2015.

113	Follow-up meeting on TQM training on Srilanka.	QIS and national level participants.	To review the Sri Lanka TQM workshop held in June 2015 and also to obtain feedback from the participants for future improvement areas.	UNICEF Bangladesh, BSL Office Complex. July 5, 2015.
114	TQM workshop at Sher-E-Bangla Medical College Hospital (SBMCH), Barisal.	Participants from SBMCH.	Formation of committees at the hospital with necessary validation; Orientation of the participants on the assessment checklist and the process of action plan development; reviewing and assessing the individual workplaces using checklist; and developing the action plan.	Conference Room, SBMCH. July 26-28, 2015.
115	Orientation of 5S-CQI-TQM at 'SarkariKormochari Hospital' and 'Mugda Medical College Hospital' of Dhaka city.	Staffs of the selected hospitals.	To orient the staffs of the hospitals about 5S implementation process, the concept of quality and quality improvement and monitoring indicators.	SarkariKormochari Hospital, Mugda Medical College Hospital. August 5, 8 and 12, 2015.
116	Jhenaidah hospital Quality Improvement Committee (QIC) meeting.	Facility staffs and consultant from QIC. Members of the hospital QIC and the WIT.	To discuss QIC implementation issues and challenges.	Conference Room of Jhenaidah District Hospital. September 4, 2015.
117	ToT on 5S-CQI-TQM workshop facilitation	Participants from the selected Upazila Health Complex.	Providing ToT on 5S-CQI-TQM Hospital Action Planning Process on Quality Improvement of MNCH Services.	DGHS Hospitals and Clinics Section. December 2, 2015.
118	Pre-testing of TQM Operation Module.	Participants from the district hospital and 3 upazila health complexes from the ShasthayaShuroksha Karmasuchi (SSK) piloting facilities.	Pre-testing of the draft TQM Operation Module	BURO Tangail. January 17-19, 2016.
119	Workshop on sharing experiences of learning visit with the Work improvement Teams, Shaheed Suhrawady Hospital	The team leaders of the Work Improvement Teams (WITs) in the hospital.	To share the experiences of learning visit in Norsingdi Hospital on 5S implementation practices there.	Shaheed Suhrawady Hospital Conference Room. April 20, 2016.
120	TQM operational module review meeting.	Working Group	To review the draft of TQM operational module.	QIS conference room. April 24, 2016.
121	Participation at workshop on maternal health voucher scheme and 5S-CQI-TQM.	Civil Surgeons, UHFPOs, Nursing supervisors from selected places.	The UHFPOs from all upazilas to share the 5S scenario in their hospitals, and the status of the maternal health voucher scheme.	SrimongolUpazila Health Complex. April 25, 2016.
122	Participation in zonal workshop on maternal health voucher scheme and 5S-Kaizen-TQM.	The Civil Surgeon, UHFPO, Zonal Quality Supervisors, DSF Quality Managers, and Nursing Supervisors of selected UHCs under DSF program.	To (i) Refresh the knowledge of the participants regarding DSF program; and to (ii) Motivate the participants to own the program and ensure systematic implementation of 5S-Kaizen-TQM in their respective hospitals.	Upazila Health Complex, Khetlal, Joypurhat. May 2, 2016.
123	Participation in 5S-CQI-TQM workshop	QIS.	To refresh the knowledge of the participants regarding 5S-Kaizen-	Mymensingh Medical college Hospital,

			TQM, and to motivate the participants to own the program and ensure systematic implementation of 5S-Kaizen-TQM in their hospitals.	Mymensingh. May 11, 2016.
124	5S orientation workshop of Work Improvement Teams (WIT) in Dhaka Medical College Hospital.	488 participants from 104 WITs, from different Work Improvement Teams (WITs) of Dhaka Medical College Hospital.	To provide orientation on 5S implementation and validation of WITs.	Dhaka Medical College Hospital. June 11-21, 2016.
125	Orientation workshop on 5S-CQI-TQM at Kurigram.	Service providers of Kurigram district hospital and 04 Upazila health complexes (Ulipur, Nageshwari, Fulbari and Rowmari).	To focus on 5S, and develop the capacity on developing the 5S action plan for those who are working in Work Improvement Team (WIT).	Kurigram district hospital and 04 Upazila health complexes (Ulipur, Nageshwari, Fulbari and Rowmari). September 25-29, 2016.
126	Workshop on 5S orientation of WIT members of Shaheed Shamsuddin Ahmed Hospital	53 members of 10 WITs.	To develop an action plan for the hospital to improve the quality of services through application of 5S.	Shaheed Shamsuddin Ahmed Hospital Conference Room. March 12, 2017.
127	Orientation on 5S at Shaheed Suhrawardee Medical College Hospital.	155 participants (70 Doctors 185 Nursing staff).	To orient new medical officers and nurses on 5S approach; To share 5S implementation plan; and To orient regarding Monitoring and Evaluation tools.	Shaheed Suhrawardee Medical College Hospital. April 2-4, 2017.
128	Refresher's workshop on 5S-CQI-TQM	86 Members of the WIT.	To improve knowledge and understanding of WITs on 5S; to share baseline assessment findings with the hospital staff; to improve understanding on responsibilities (TOR) of WIT; and to develop action plan by WITs for the hospital.	District Hospital Cox's Bazaar. 7-8 June, 2017.
129	5S Orientation to WIT members in Bhola district.	WIT members in Bhola district.	To improve awareness of the participants on Quality Improvement Initiative of QIS as part of Universal Health Coverage; to improve understanding on basic concept of 5S-Kaizen-TQM for improvement of quality of hospital services; to make an implementation plan for 5S at the district hospitals in the division; to train the WITs of the hospital; and introduction of 5S at the hospital.	Bhola district. June 11-12, 2017.
130	Orientation of WIT Members in Sadar Hospital Chuadanga on 5S	A total of 146 participants in two batches, including Consultants, Medical Officers, Nursing Superintendant, Senior Staff Nurses, Medical	To improve knowledge and understanding of WITs on 5S; to share baseline assessment findings with the hospital staff; to improve understanding on responsibilities (TOR) of WIT; and to develop action plan by WITs for the hospital.	Sadar Hospital Chuadanga. June 14-15, 2017.

		Technologists, Office Staffs, ward boy, Aya and cleaners.		
131	Orientation on 5S in Adhunik 150 Bedded Hospital Joypurhat	Hospital staffs.	To share 5S presentation for hospital quality improvement; to share the video presentation on 5S-Kaizen-TQM; to share the current situation of the hospital based on the baseline assessment to portray the gaps regarding 5S and what could be done to improve the situation; and area- and WIT-wise picture.	Adhunik 150 Bedded Hospital, Joypurhat. June 17-18, 2017.
132	Workshop on 5S in Natore District Hospital	Hospital staffs.	To share 5S presentation for hospital quality improvement; video presentation on 5S-Kaizen-TQM; WIT organogram and TOR; the action plan format of the WIT; the priority areas where they should implement 5S and try to improve the current situation; help prepare an action plan for each WIT.	Natore District Hospital, June 19-20, 2017.
RMNCAH Framework				
133	Planning meeting on RMNCAH framework.	Quality Improvement Secretariat (QIS) team and representatives from professional groups and development partners.	To finalize the country action plan as a follow up meeting of WHO regional workshop	HEU Conference room. May 21, 2016.
134	Workshop on Development of RMNCAH framework.	Md Ashadul Islam, DG HEU, Dr Md Aminul Hasan, Deputy Director and focal person of QIS, Prof Dr Md Shahidullah, Dr SAJ Md Musa, Representatives from WHO, UNICEF, USAID, SCI, UNFPA, and QIS.	To discuss the modalities of developing the Framework, Guideline, Standards and Tools	HEU conference room. June 29, 2016.
135	Meeting of working group A and also four subgroups for development of the RMNCAH Framework.	Members of the working groups.	For development of guideline of RMNCAH QI framework according to the group TOR (Subgroup 1: Reproductive and Adolescent health; Subgroup 2: Maternal health; Subgroup 3: Neonatal health; Subgroup 4: Child health)	HEU conference room. July 14, 2016. Three working subgroups' meeting was held at OGSB on July 20, 2016.
136	RMNCAH working group meeting	Members of the 2nd working group.	To discuss draft standards developed by the 2nd WG (Working Group) on Reproductive Health.	HEU conference room. February 23, 2017.
137	RMNCAH working group meeting.	Members of the working groups.	To finalize the draft standards of RMNCAH.	QIS meeting room. March 2, 2017.
138	RMNCAH 2nd round	Members of the	Finalization of RMNCAH standards.	HEU conference room.

	working group meeting.	working groups.		March 20, 2017.
139	RMNCAH working group meeting.	All of the working group members of RMNCAH framework.	Revision of draft RMNCAH QI tool.	HEU Conference room. June 5, 2017.
Maternal and Perinatal Death Review (MPDR) and Maternal and Perinatal Death Surveillance and Response (MPDSR)				
140	Planning meeting on MPDSR.	UNICEF, Save the Children, UNFPA, QIS.	QIS's role for M&E for overseeing the MPDSR implementation; formation of a working group to finalize the MPDSR TOT module.	HEU conference room. May 22, 2016.
141	Divisional Workshop on MPDSR National Guideline sharing: Chittagong	The managers (both Health and Family Planning) of all districts in Chittagong division.	To share the MPDSR guideline with the managers (both Health and Family Planning) of all districts in Chittagong division.	Chittagong Medical College (CMC) Conference room. May 25, 2016.
142	Meeting on developing MPDSR Training manual.	The group members.	To initiate the discussion and finalize the working modalities on developing MPDSR Training manual.	June 2016.
143	MPDSR review meeting.	Representatives of UNICEF, UNFPA, SC and QIS.	Reviewing the MPDSR implementation plan.	QIS meeting room. November 9, 2016.
144	Validation of MPDSR training manual.	Working group composed of relevant stakeholders.	To share the draft training manual with a wider stakeholders group for finalization.	HEU conference room. November 22, 2016.
145	1st batch TOT on MPDSR training module.	Selected Trainers.	As part of the initiative to implement MPDSR activities in 22 districts.	December 10-12, 2016.
146	2nd TOT of MPDSR.	Participants from seven districts. Deputy Civil Surgeon, MO, CS, AD CC, MO, MCH from each district.	As part of the initiative to implement MPDSR activities in 22 districts.	BRAC CDM, Savar. December 19-20, 2016.
147	3rd batch TOT for The MPDSR Implementation.	24 selected service providers from 7 Districts: Rangamati, Noakhali, Lakshmipur, Jhalokathi, Sunamganj, Barguna, Patuakhali and Kumudini Medical College, and the Divisional coordinators from UNICEF and SCI.	To prepare the trainers with necessary knowledge and skills to train the participants to introduce and implement MPDSR in the whole District.	BRAC CDM, Savar. January 3-5, 2017.
148	Workshop on MPDSR Audit (3 Batches)	Members of MPDSR subcommittee in the Medical College Hospitals who would be responsible for identification of the causes of death.	To identify the causes of maternal death, by reviewing the social and verbal autopsy form.	HEU conference room. March 21-23, 2017.
EMEN standards and Piloting EMEN				
149	Participation in Every	Dr. Aminul Hasan,	To provide an overview of country	Dar es Salaam, Tanzania.

	Mother Every Newborn (EMEN) 'Care around the time of Birth' MNH Quality Improvement Workshop in Tanzania.	Deputy Director, HEU and the Co-ordinator and Focal Person of QIS, along with other participants from Bangladesh.	QI initiatives and discuss the strategic focus of their Bill and Melinda Gates Foundation (BMGF) project plans; review the MNH QI standards; agree on core criteria and common elements to be included in all country implementation plans; develop a common design and methodology to conduct the baseline and end-line assessments; agree on a joint work plan in line with the country plans and map the areas for technical support; and identify areas and opportunities for south-to-south collaboration, cross country exchange and learning.	August 10-14, 2015.
150	Participation in Bangladesh Every Newborn Action Plan (BENAP) consultation workshop.	Different stakeholders.	To have discussion on different areas of the draft planning.	IMCI, DGHS. August 29-30, 2015.
151	QIS participation in Global Maternal Newborn Health Conference.	Dr. Shayema Khorshed, Consultant, QIS, participated in the conference to present the abstract as a marketplace idea.	To present the abstract from QIS, entitled: "A triggering idea of a comprehensive country strategic plan on quality improvement in developing country context: The National Strategic document on quality of health care in Bangladesh", that was accepted at the Global Maternal Newborn Health Conference, 2015.	Hotel Hilton, Mexico City. October 18-21, 2015.
152	Workshops on facilitators guide and training modules on EMEN standards implementation and assessment.	Key experts and EMEN working group members.	To hold discussion on criteria and competency level for selecting the assessor team based on shared 'Training needs assessment tool'.	UNICEF office. March 27, 2016. Health Economic Unit. March 31, 2016.
153	Validation meeting for finalization of assessor checklist on EMEN Standards.	Assessor teams with an expert team of obstetrician, gynecologist and public health experts.	To finalize the assessment checklist in participation with an expert team of obstetrician, gynecologist and public health experts.	QIS Conference room. November 23, 2016.
154	Orientation workshop for the Assessor team on assessment checklist	Assessor's team	To share the detailed terms of references and visit modalities, and the tools.	HEU Conference Room. November 26, 2016.
155	Training workshop on EMEN clinical standards	Assessor's team	To conduct a clinical orientation workshop, facilitated by a team from national level comprising of gynecologists and neonatologists.	Kurigram District Hospital. January 08-11, 2017.
Promoting Community participation along with its video documentation				
156	Workshop on community participation model	The service providers of the hospital and the community leaders.	Developing a Community Participation Model for Quality of Care as one of the important initiatives of Quality Improvement Secretariat (QIS).	Jhenaidah District Hospital. January 09, 2016.
157	Workshop on "Universal Health Coverage and Quality of Care"	The service provider of the hospital	Developing a Community Participation Model for Quality of Care	Jhenaidah District Hospital conference room, Jhenaidah. January

				10, 2016
158	Participation in a meeting by Community based health care program	Quality Improvement Secretariat team	To emphasize technical quality of services, supervision and monitoring	Lakeshore Hotel. April 24, 2016.
159	Workshop on community participation.	Civil Surgeons, Hospital super and Mayor of selected 10 districts.	To achieve scale up of Community Participation for another 10 districts, following the model of Jhenaidah.	Conference room of MoH&FW. October 4, 2016.
160	Community participation QI model for UHC in Narail.	Members of the formed Community Support Committee (CSC).	To develop action plan to extend the community Participation model in additional 10 districts.	Narail. November 16, 2016.
161	Review meeting with the Community Participation Committee in Jhenaidah	Community Participation Committee in Jhenaidah	To explore mechanisms for further development of the model.	Jhenaidah district hospital. November 16, 2016.
162	Community Participation meeting in Chuadanga	Members of the formed Community Support Committee (CSC).	To develop action plan to extend the community Participation model in additional 10 districts.	Dream unlimited, Chuadanga. November 17, 2016.
163	Video conference for community participation.	Civil Surgeon, Hospital superintendant and Mayor of the pourosava of10 districts.	Sharing the main objective of the model piloting in 10 districts to ensure Quality of Care by community mobilization at local level, with support from the already formed committee on "Community Support Group" in all 10 districts and develop action plan.	MoH&FW conference room. February 27, 2017.
164	Workshop on Community Participation for Quality Improvement in Hospital Services	Superintendent, RMO, representatives of corresponding district's Mayor like Cox's-Bazaar, Khagrachari, Chandpur, Lakhsmipur, Natore, Narail, Chuadanga, Kurigram, Sirajgonj and Joypurhat.	To discuss about MoH&FW planning, sharing objectives of the workshop, challenges and future planning.	BMA conference room, Dhaka. April 10, 2017
165	Monitoring workshop on Community Participation and Quality Improvement Initiative for Universal Health Coverage	Mayor of the Pourosova, Hospital Super and Civil Surgeon of each district.	To review the activities of the 10 model hospitals for community participation.	Conference room of MoH&FW. June 8, 2017.
Quality improvement in ShasthyoSurokshaKarmasuchi (SSK) piloting facilities				
166	Orientation workshop at KalihatiUpazila Health Complex.	Doctors and nurses of KalihatiUpazila Health Complex.	To orient the doctors and nurses on the SSK and quality improvement initiatives at the national level, including the development of the 'NATIONAL STRATEGIC PLANNING ON QUALITY OF CARE in HEALTH SERVICE DELIVERY in Bangladesh'.	KalihatiUpazila Health Complex. August 23, 2015.
167	Meeting of SSK steering	Representatives from	To form an inter-ministerial	Conference room,

	committee	the Ministry of Finance, Local Govt., Trade, Social Welfare. Planning division etc. was present in the meeting. Presided over by: Mohammad Nasim, MP, honorable Minister, MoH&FW. State Minister of Health Md Zahid Maleque MP, Secretary MoH&FW Syed Monjurul Islam were also present in the meeting. Md Ashadul Islam, DG, HEU, presented on the present status of SSK piloting and challenges for implementation.	Steering committee with the aim to provide necessary direction for implementation of Health Care Financing strategy and SSK piloting.	Ministry of Health and Family Welfare, Dhaka. January 12, 2016.
168	Capacity building of SSK Upazila Health Complex facility providers	The managers and providers of the SSK facilities.	QIS team visited the three UHCs. The team validated the team members for each team and re-orients them on 5S and related areas. The teams shared different issues related to the 5S implementation including team composition and action plan development.	KalihatiUpazila Health Complex. February 10, 2016.
169	Meeting with UNICEF on strengthening quality of care in SSK piloting facilities.	The managers and providers of the SSK facilities.	To discuss the modalities of strengthening the QI efforts in the selected upazila health complexes.	QIS conference room. February 04, 2016.
170	Launching of SSK.	The ceremony was presided over by Syed Monjurul Islam, Secretary, MoH&FW and Mr. Ashadul Islam, DG, HEU presented the outline of the program. DG-Health, DG-Family Planning, and Deputy Commissioner-Tangail also spoke at the occasion.	ShasthoySurokshaKarmasuchi (SSK), a social health protection scheme for the poor was launched at KalihatiUpazila Health Complex of Tangail district. Mr. Mohammed Nasim, MP, Honorable Minister, MoH&FW inaugurated the program as the Chief Guest while Dr. Abdur Razzak, MP (former Minister for Food) was present as the Special Guest.	KalihatiUpazila Health Complex of Tangail district. March 24, 2016.
171	Validation workshop on empanelling private facilities for SSK services.	Directors, Deputy Director Hospital of DGHS, Civil Surgeon Tangail, Superintendent of	To finalize the criteria for empanelment of private facilities for procuring health services for the poor.	HEU conference room. February 4, 2016.

		Tangail District Hospital, UHFPO of Kalihati, Ghatail and ModhupurUpazilla Health Complex, members of SSK Cell and QIS of HEU were present.		
172	Monitoring visit to SSK facilities	QIS Team of the Quality Improvement Secretariat (QIS), As a part of the regular follow-up of the quality improvement initiative visited the SSK facilities in Tangail	To orient the healthcare providers on issues for ensuring quality in SSK services. The Team met with the members of the Work Improvement Team (WIT) at KalihatiUpazila Health Complex and also organized workshop for all types of health care professionals.	KalihatiUpazila Health Complex. February 2016.
173	Capacity building of SSK Upazila Health Complex facility providers	QIS team visited the three UHCs at Kalihati, Modhupur and Ghatail, to re-orient the managers and providers of these SSK facilities on QI related activities.	The team validated the team members for each team and re-orients them on 5S and related areas.	KalihatiUpazila Health Complex. February 10, 2016.
174	Meeting with UNICEF on strengthening quality of care in SSK piloting facilities.	UNICEF, QIS officials.	For planning to foster quality of care activities in these facilities, the meeting was organized to discuss the modalities of strengthening the QI efforts in the selected SSK upazila health complexes.	QIS conference room. February 04, 2016.
175	Meeting on finalizing criteria for empanelling private hospitals for SSK service	QIS officials and SSK service related officials and stakeholders.	To review and finalize the criteria for empanelling private hospitals and clinics for purchasing services for SSK beneficiaries.	April 21, 2016.
176	Monitoring visit in SSK piloting facilities	QIS officials and SSK service related officials.	To follow up on the participating UHCs' 5S implementation practices and related areas; and especially to identify the required areas of support by these teams.	KalihatiUpazila Health Complex. April 22, 2016.
177	Workshop on SSK Quality improvement	Members of the WITs in KalihatiUpazila Health Complex	To conduct a Refreshers Training workshop for the WITs in KalihatiUpazila Health Complex.	KalihatiUpazila Health Complex. June 23, 2016.
178	Monitoring visit for SSK piloting facilities.	Members of the WIT, and QIS officials.	To appraise the activities of the Work Improvement Teams (WITs).	Kalihati UHC. August 2016.
179	5S workshop for SSK piloting facilities	The medical officers, resident medical officers and nursing supervisors of the	To train the medical officers, resident medical officers and nursing supervisors of those health facilities on 5S.	BURO Tangail resort. March 12-13, 2017.

		participating health facilities.		
180	Workshop on inclusion of Reproductive and Adolescent health cases in SSK benefit package	ICDDR,B, UNFPA and QIS officials.	To check and review the cases of Sexual and Reproductive health for SSK benefit packages.	BMA conference room. June 11, 2017.
Patient (Consumer) Centered Care (PCC)				
181	Meeting on Questionnaire development.	QIC and WIT members	To develop questionnaire for conducting 'Client Satisfaction Survey'.	Shaheed Suhrawardy Medical College Hospital. July 2015.
182	Meeting on Appreciative Inquiry	Md Ashadul Islam, DG HEU presided over the meeting. Dr Ziaul Matin and MrFarid Ahmed from UNICEF, Dr SAJ Md Musa, Dr Tajul Islam, Dr Gazi Masum Ahmed, Mr Zafar and Dr Shayema from QIS were present in the meeting.	On exploring the possibility of introducing Appreciative Inquiry (AI) for Quality of Care.	HEU conference room. April 24, 2016.
Patient Safety				
183	Meeting with Institute of Healthcare Improvement (IHI) USA.	QIS		QIS. June 11, 2017.
Clinical Audit				
184	Clinical Audit Workshop	QIC and WIT members.	To hold discussion on "Introduction of Clinical Audit".	Shaheed Shurawardy Medical College Hospital. December 28, 2016.
185	Workshop on clinical audit.	Prof Dr Md Kamrul Hasan, Vice Chancellor, BSMMU presided over the session. Pro-VC, Prof Dr Sharfuddin Ahmed, Prof Dr ShahidullahSikder and Secretary General of Bangladesh Medical Association Prof. Dr. Iqbal Arsalan were the special guests. Md Ashadul Islam DG, HEU welcomed the participants and briefed on the mandate of QIS. Dr Md Aminul Hasan, Focal person of QIS, presented on "Clinical audit".	"Introduction of Clinical audit in BSMMU".	BSMMU conference room, Shahbagh, Dhaka. January 07, 2016.
186	Workshop on introduction of clinical audit	Dr Uttam Kumar Barua, Director, ShSMCH, Prof. Dr.	Sharing the process of "Introduction on Clinical Audit", and development of action plan.	Surgery conference room of Shaheed Suhrawardee Medical College Hospital.

		Md RidwanurRahman, Head, Department of Medicine, ShSMCH and other faculties were present in the meeting. Dr. Md. Aminul Hasan, Deputy Director, HEU and the Co-ordinator and Focal Person of QIS made presentation on "Introduction on Clinical Audit".		July 28, 2017.
Baseline study of Quality of Care				
187	Orientation of Data Collection for Quality Survey.	Data Collectors and Data supervisors.	To provide training to the Data Collectors and Data supervisors on the design, methodologies and relevant issues of the survey.	QIS. December 11, 2016.
Strengthening capacity of division and district staff in quality improvement				
188	Orientation and follow-up activities in Shaheed Suhrawardy Medical College Hospital.			Shaheed Suhrawardy Medical College Hospital. August 2015.
189	Staff orientation on 5S-CQI-TQM.	Providers and staffs of the hospital.	To give the providers and staffs an overview on Work Improvement Team (WITs) of the hospital on 5S activities, to validate WIT, and to see the activities of the teams physically.	Kalihati UHC, Tangail. September 2, 2015.
190	QIS meets Work Improvement Team (WIT) at Kalihati UHC.	Members of QIS and the facilitators of WIT along with the team leaders.	To review the work plans that the WITs have prepared and to provide feedback as required; Visiting individual work areas for observing the QI activities; Review of current action plans of WIT.	KalihatiUpazila Health Complex. October 13, 2015.
191	Orientation of focal person for Quality Improvement Committee (QIC) of Dhaka city hospital.	QI Focal persons from different facilities of Dhaka city.	To sensitize the focal persons for further scaling up of the QI initiatives in their respective facilities.	QIS. December 2015.
192	Refreshers training for Work Improvement Teams of ShSMCH.	Members of the WITs of ShSMCH.	To revitalize the WITs' efforts and refreshing 5S concepts and work modalities.	ShSMCH conference room. January 04-07, 2016.
193	Divisional Workshop on "Universal health Coverage and Quality of Care".	For Khulna and Barisal divisions, the workshop was held in Khulna Medical College with participation from both divisional and district managers, consultants and Principal from the tertiary Medical college hospitals and	For developing awareness on QI initiatives.	Khulna Medical College Hospital. January 10, 2016.

		representatives from local DPs and NGOs.		
194	Participation in a training on KAIZEN	Quality Improvement Secretariat (QIS) officials participated as observers in a KAIZEN training organized by the DGHS. The training was participated by different level of staffs from Government, UNICEF and JICA.	To introduce systematic KAIZEN at eight targeted hospitals successfully practicing 5S activities and is currently in good condition in terms of managing the quality.	Manikganjprashika office. February 15-17, 2016.
195	QI Orientation of the District and Upazila managers and providers in Kushtia District.	The Kushtia district and its upazila managers and the key service providers of the health facilities.	To orient the Kushtia district and its upazila managers and the key service providers of the health facilities on recent national QI initiatives and the specific QI related roles to be adopted by the district and upazila level facilities.	Kushtia District Hospital Conference Room. March 08, 2016.
196	QIS Facilitation of learning visit by ShSMCH QIC team.	The focal person of ShSMCH and five senior nurses participated in the tour.	A learning visit of the hospital QIC.	NorsingdiSadar Hospital. March 13, 2016.
197	Workshop on 5S Orientation of WIT members of 250 bed Moulavibazar District Hospital	86 members of 13 WITs (Work improvement Team) in two batches.	To discuss topics on National Quality Improvement (QI) strategy, leadership, motivation and 5S, and to develop an action plan for the hospital to improve the quality of services through application of 5S.	Moulavibazar District Hospital conference room. March 13-14, 2017.
198	QI Training of WITs at Kalihati UHC, the SasthyoSurokshaKarmasuchi (SSK) piloting facility.	Members of the 9 Work Improvement Teams (WIT).	To provide training on the 5S implementation at the SSK piloting facility where 9 WITs were formed. The special focus of this training was to orient the team on the conceptual part required for the 5S implementation.	Kalihati UHC. March 21-22, 2016.
199	Workshop on sharing experiences of learning visit with the Work Improvement Teams (WITs) of SahheedSuhrawardy Hospital.	The team leaders of the WITs in SahheedSuhrawardy Hospital.	To share the experiences of learning-visit in Norsingdi Hospital on 5S implementation practices there.	SahheedSuhrawardy Hospital. April 20, 2016.
200	Divisional Workshop on UHC and Quality of Care: Dhaka and Sylhet.	The divisional and district managers of Dhaka and Sylhet.	To share the QI planning and modality to be implemented for health care service delivery with the divisional and district managers of those divisions.	DGHS Conference Room. May 19, 2016.
201	Participation in a QI Workshop at Hobigonj District Hospital.	QIS team participated in a QI workshop organized by MaMoni HSS intervention of Save the Children in	To recognize the significant improvement in the quality of clinical care provided by 3 health facilities in Habiganj district.	District Hospital, Habiganj. May 11, 2016.

		Bangladesh.		
202	Divisional Workshop on UHC and Quality of care: Chittagong.	The divisional and district managers of Chittagong Division.	To share the QI planning and modality to be implemented for health care service delivery with the divisional and district managers of Chittagong Division.	Chittagong Medical College (CMC) Conference Room. May 26, 2016.
203	Sharing meeting with DGFP on quality improvement initiatives.	Directors, consultants and other officials from DGFP attended the meeting.	To share the recent initiatives of the MoH&FW regarding Quality Improvement (QI); quality related activities of the participants; different indicators for quality improvement of family planning services to be set and finalized in the meeting.	DGFP conference room, Dhaka. June 20, 2016.
QIS deployed staff at divisional level.				
204	Chittagong Divisional workshop.	The district managers of DGHS (Civil Surgeon, n=10) and DGFP (DDFP, n=9) and the QI Committee members of Chittagong division, making a total of 47 participants.	To form the district resource pools and share their role for introduction of 5S at the district hospitals.	Conference room of Divisional Director (Health), Chittagong. December 27, 2016.
205	Training for Quality Improvement in Hospital Services (Plan-Do-Check-Act: PDCA cycle).	Thirty six participants from Narsingdi Sadar Hospital and six Upazila Health Complexes (Raipura, Monohardi, Belabo, Palash, Shibpur and Narsingdi Sadar), mostly the consultants (Obs-Gynae, Medicine and Anesthesia), medical officers and nurses. A few participants from MaMoni HSS Project also attended the training as observer.	To enhance the understanding and skills of the participants to solve day-to-day hospital problems using the PDCA cycle approach.	Narsingdi. April 11-13, 2017.

206	Training for Quality Improvement in Hospital Services at AID Complex, Jhenaidah.	Thirty three participants from JhenaidahSadar Hospital and six Upazila Health Complexes (JhenaidahSadarUpazila, Horinakundu, Soilokupa, Kaligonj, Kortchandpur and Mohespur).	To enhance the understanding and skills of the participants to solve day-to-day hospital problems using the PDCA cycle approach.	AID Complex, Jhenaidah. April 11-13, 2017.
207	Refreshers training of WIT team leaders and monitoring team members on 5S in DMCH.	A total of 122 participants attended the training, among them 108 were senior nursing staff and 14 doctors.	a) To reinforce 5S implementation in DMCH; b) To make monitoring teams more active; and c) To communicate 5S monitoring tools.	DMCH. April 19, 20 and 23, 2017.
208	Orientation of WIT members on 5S at Sunamganj District Hospital.	88 members of 10 WITs (Work improvement Team) in two batches.	To develop an action plan for the hospital to improve the quality of services through application of 5S.	Sunamganj District Hospital. April 24-25, 2017.
209	Advocacy Workshop on QI and 5S: Barisal Division	The participants were the district managers of DGHS (Civil Surgeon, n=6), DGFP (DDFP, n=6), members of district QICs and development partners of QIS of Barisal division. In total 45 participants attended the workshop.	The overall objective of the workshop was to improve understanding of the district managers, key QIC members and divisional resource pool members on national QI strategy and application of 5S for improvement of Quality of Hospital Services. The specific objectives were, to a) Orient theparticipants on National Strategic Plan on Quality Improvement (QI) and recent MoH&FW initiatives on QI including formation and developing TOR of QI committees; and b) Improve understanding on basic concept of 5S-CQI-TQM for hospital management.	The conference room of Health Departmental Training Centre, Barisal. May 3, 2017.
210	WIT orientation on 5S at Khagrachari DH.	The Civil Surgeon of Khagrachari and Divisional Director of Health, Chittagong Division (as Chief Guest) along with RMO and members of the WITs. In total 87 participants attended the workshop.	To: (i) Improve awareness of the participants on Quality Improvement initiative of QIS as part of Universal Health Coverage; (ii) Improve understanding on basic concept of 5S-KAIZEN-TQM for improvement of quality of hospital services; (iii) Make an implementation plan for 5S at the district hospitals in the division; and (iv) Train the WITs of the hospital and introduction of 5S at the hospital.	Khagrachari DH. May 3-4, 2017.
211	5S orientation of WIT members at Adhuniksadar hospital, Habiganj.	95 members of 16 WITs (Work improvement Team) in three batches.	To develop an action plan for the hospital to improve the quality of services through application of 5S.	Adhuniksadarhospital conference room, Hobigonj. May 21-23, 2017.

212	Orientation on 5S for WIT of 250 Bedded General Hospital, Gopalganj	A total of 45 members of 17 WITs including the district Civil Surgeon, AD Hospital, key members of the District Resource Pool (DRP) and Quality Improvement Committee (QIC) among others. Representative (Asst. Director) from the Divisional Health office, Dhaka participated in the workshop as well.	The overall objective of the staff (WIT) orientation workshop was to develop an action plan for the hospital to improve the quality of services through application of 5S. The specific objectives were to: (i) Improve knowledge and understanding of WITs on 5S; (ii) Share baseline assessment findings with the hospital staff; (iii) Improve understanding on responsibilities (TOR) of Work Improvement Team (WIT); and (iv) Develop action plan by WITs for the hospital.	250 Bedded General Hospital, Gopalgonj. May 22, 2017.

Annex-4: Results of the Baseline study

Patient centeredness

Reasons for choosing a particular hospital/ clinic (Better Treatment 39.7%, Near 51%, Don't know 6.5%, Cheaper 0.4%, Referred 0.2%, Government facility 4.2%, No doctor available 0.2%);

Satisfaction with accessibility (Extremely unsatisfactory 5.5%, Very unsatisfactory 19.5%, Satisfactory 67.2%, Very satisfactory 7.4%, Extremely satisfactory 0.5%);

Ease of receiving treatment (Yes 78%, No 6.9%, Soso 15.1%);

Direction available to go to a doctor's room (Yes 79.2%, No 18.5%, Do not know 2.3%);

Availability of medicine (Yes 26.5%, No 36.6%, Some 36.9%);

Waiting time at OPD (Very good 13.7%, Good 54.2%, So so 23.3%, Bad 7.3%, Very bad 1.6%);

Physician's behavior: respectful (Very good 12.7%, Good 63.4%, So so 22.7%, Bad 1%, Very bad 0.2%);

Scope to put question for information to physician (Very good 7.9%, Good 40.6%, Somewhat 39.3%, Bad 8.2%, Very bad 4%);

Privacy: convenience maintained (Very good 7.9%, Good 35%, So so 35.8%, Bad 7.8%, Very bad 13.6%);

Could get service from physician of choice (Yes 10%, OK 41.2%, So so 35.5%, Not so much 12.8%, Not at all 0.5%);

Can choose service providers (Never: KII 31.3%, Experts 12.5%, Policy makers and planners 0.0%, Sometimes: KII 31.3%, Experts 12.5%, Policy makers and planners 20.0%, Almost always: KII 25%, Experts 12.5%, Policy makers and planners 40.0%, Always: KII 12.5%, Experts 62.5%, Policy makers and planners 40.0%);

Friends and relatives allowed to accompany (Yes 19%, Somewhat 50%, So so 27.8%, Not much 3%, Not at all 0.3%);

Cleanliness: comfort of the treatment area (Very good 22.5%, Good 44.4%, So so 26.9%, Bad 4.9%, Very bad 1.3%);

Separate toilet for females: convenience (Very good 5.3%, Good 36.8%, So so 31.1%, Bad 20.4%, Very bad 6.5%);

Availability of waste management system (Yes 77.8%, No 7.5%, Somewhat 14.6%, Not applicable 0.2%);

Availability of clean linen (Yes 76.2%, No 3.6%, Average 20.2%);

Availability of service departments: UHC to district level (Orthopedic unit available 56.5%, Cardiac surgery unit available 9.2%, Cardiology unit available 38.7%, Oncology unit available 4.3%, Pediatric unit available 79%, Gynae and obstetric unit available 82.5%, Throat and Ear unit available 50.5%, Eye unit available 46.2%, Skin and STD unit available 35.5%, Medicine unit available 79%, Surgery unit available 72%);

Quality practices in health facilities

Waiting time for surgery is logical (Never: IDI 12.5%, Experts 25.0%, Policy makers and planners 0.0%, Sometimes: IDI 43.8%, Experts 6.3%, Policy makers and planners 10.0%, Almost always: IDI 6.3%, Experts 31.3%, Policy makers and planners 20.0%, Always: IDI 37.5%, Experts 37.5%, Policy makers and planners 70.0%);

Quickness (timeliness) of treatment (Very very unsatisfied 4%, Very unsatisfied 23.7%, Satisfied 63.7%, Very satisfied 7.9%, Very very satisfied 0.8%);

Satisfaction on waiting time (Very very unsatisfied 3.1%, Very unsatisfied 22.7%, Satisfied 61.7%, Very satisfied 11.1%, Very very satisfied 1.3%);
Behavior (respectful) of service providers (Very very unsatisfied 5.1%, Very unsatisfied 19.3%, Satisfied 67.8%, Very satisfied 6.8%, Very very satisfied 1.1%);
Answer to patient's questions given by service providers (Very very unsatisfied 0.8%, Very unsatisfied 20.8%, Satisfied 59.9%, Very satisfied 17.4%, Very very satisfied 1.1%);
Illness condition explained (information given) to patients (Very very unsatisfied 1.2%, Very unsatisfied 14.3%, Satisfied 66.4%, Very satisfied 15.8%, Very very satisfied 2.3%);
Treatment steps (plan) explained to patient (Very very unsatisfied 1.6%, Very unsatisfied 11.9%, Satisfied 67.1%, Very satisfied 16.1%, Very very satisfied 3.4%);
Prescription explained (information) to patient (Very very unsatisfied 2.5%, Very unsatisfied 22.8%, Satisfied 65.6%, Very satisfied 6.5%, Very very satisfied 2.6%);
Life style advice (information) given by physician (Very very unsatisfied 1.0%, Very unsatisfied 7.1%, Satisfied 67.6%, Very satisfied 12%, Very very satisfied 12.3%);
Satisfaction with hospital timing (Very very unsatisfied 7.9%, Very unsatisfied 21.7%, Satisfied 64.4%, Very satisfied 5.1%, Very very satisfied 0.8%);
Satisfaction with signboards available in health facility (Very very unsatisfied 12.1%, Very unsatisfied 39.2%, Satisfied 43.1%, Very satisfied 4.8%, Very very satisfied 0.7%);
Percentage of expenditure by service (Medicine 5.6%, Ticket 96.9%, Ultrasonography 3.9%, X-ray 4.2%, Blood test 7%, Don't know 0.2%, Others 9.2%);
Affordability of treatment cost (Very very high 5.8%, Very high 11.1%, OK 76.4%, Affordable 5.8%, Quite affordable 0.7%);
Satisfaction with treatment received (Very very unsatisfied 4.6%, Very unsatisfied 14.5%, Satisfied 67.9%, Very satisfied 10.3%, Very very satisfied 2.6%);
Quality of food (Very good 6.1%, Good 23.7%, Not that good 60.1%, Bad 7.1%, Very bad 2.5%);

Responsiveness
Inquiry by physician about previous treatment (Yes 5.8%, Somewhat 26.6%, Not much 34.9%, Little 31.3%, Not at all 1.4%);
Quality of emergency treatment (Very good 15.8%, Good 45.4%, Not so good 25.8%, Bad 12.4%, Very bad 0.5%);
Doctor visited IPD right after admission (Yes 6.1%, Not bad 25.7%, Not much 64.9%, No 2%, Not at all 1.5%);
Quality of discharge advice (Very good 2.1%, Good 25.4%, Not that good 70.3%, Bad 0.51%, Very bad 1.53%);
Quality of clinical examination (Extremely unsatisfactory 1.3%, Very unsatisfactory 23.7%, Satisfactory 63.5%, Very satisfactory 10.2%, Extremely satisfactory 1.3%);
Attentiveness to diagnostic reports (Extremely unsatisfactory 1.4%, Very unsatisfactory 8.6%, Satisfactory 76%, Very satisfactory 8.7%, Extremely satisfactory 5.4%);
The reasons for poor quality (by service providers) (Do not know 8.7%, General people are not supportive 49.5%, Poor mindset of managers 39.1%, Not sufficient money 13.2%, Not enough service provider 42.5%, Others 6.4%);
Challenges to positive decisions for improving quality (Political impact 38.6%, Poor carrier ladder 22.6%, No training 45.4%, Others 15.7%);
Challenges to creating effective organizational culture (Nothing 0.2%, Poor education 7.2%, Shortage of human resources 24.6%, Political influence 17.1%, Lack of equal

opportunity 2.3%, Lack of positive influence 9.1%, Dependence on the hierarchy 15.9%, Poor training 11.6%, Lack of monitoring 0.8%, Inadequate medicine/ money 0.8%, Poor awareness of people 3.9%, Increase awareness 0.8%, Poor hierarchical communication 4.8%, Poverty 0.8%);
Reasons for poor cleanliness (No sweeper available 52.5%, Patients not attentive 63.9%, No cleaning materials available 20.9%, No money 4.4%);

Management and Clinical indicators
Recording and reporting system (Records kept show that in 51.7% HFWCs and 14.3% CCs clinical seminars are held, Reporting on performance is given by 37.5%, 80%, and 66.7% DHs, PHs, UHCs and none from HFWCs and CCs, Complaint boxes were seen in 87.5% DHs, 20% PHs and 55.6% UHCs, 100% of complaints are addressed in DH and PH, 77.8% complaints are addressed at UHC, Attendance sheets for service providers are kept in 87.5%, 80%, 100% 71.4% and 100% DHs, PHs, UHCs, HFWCs and CCs respectively, ANC registers are maintained universally in 100% DHs, UHCs and CCs but 60% and 88.7% HFWCs and PHs, List of medicine is available in all health care facilities, in HFWCs – 71.4%, PNC register is not cent percent in UHCs, HFWCs or CCs, Register for child delivery is 87.5%, 100%, 88.9%, 42.9% and 71.4% in DHs, PHs, UHCs, HFWCs and CCs, History of patients is available for all cases in all levels of health care facilities – HFWCs 57.1%);

Clinical Services: logistics (All required medicines were available at District Hospitals or DHs, Private Hospitals or PHs, and CCs but in 88.9% and 85.7% UHCs and HFWCs, All the district hospitals and private hospitals were ready for surgical services but only 22.2% UHCs to provide surgical services, whereas all the important surgical equipment were present in DH, PH and UHC, Clinical seminars are organized in 75% DHs, 40% PHs and 89% UHCs). Detailed findings are also available on Equipment in OT, Other advance equipment, Days in hospital after C-section, and The rate of post-operative infection.