Operational Manual for Maternal and Newborn Health Service Accreditation Program

Edition 2022

স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

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Foreword

The Government of Bangladesh (GoB) is committed to achieving its targets for Sustainable Development Goal (SDG) 3:'Ensure healthy lives and promote wellbeing for all at all ages.' The Fourth Health, Population and Nutrition Sector Program (4th HPNSP) has set the target of reaching a maternal mortality ratio (MMR) of 121 per 100,000 live births and reducing the neonatal mortality rate to below 18 per 1,000 live births by 2022.

Improving the quality of care is a fundamental step in achieving these targets, ensuring patient safety, and facilitating mortality and morbidity reductions. To prevent unwanted maternal and neonatal deaths, every pregnant woman, and newborn needs skilled care during pregnancy, at the time of birth, and immediately after birth — all of which should be delivered in a healing and enabling environment. Global evidence has shown that better quality of care at childbirth significantly improves maternal and newborn survival. The majority of maternal and newborn deaths result from complications that require facility-based care. Therefore, improving the quality of facility-based delivery and newborn care can offer unprecedented opportunities to reduce maternal and newborn deaths.

One of the priority areas for the Ministry of Health and Family Welfare (MOHFW) is on improving the quality of health services and strengthening the monitoring and evaluation systems for Maternal and Newborn Health (MNH) by establishing a quality assurance (QA) system.

To ensure appropriate environments for pregnant mothers' wellbeing and quality of services, the Directorate General of Health Services (DGHS) has designed a Service Accreditation Program to recognize public and private facilities that meet Maternal and Newborn Care (MNC) standards. The establishment of the Service Accreditation System and platform acts as first and significant step towards the whole system's accreditation. The standards for MNH Service Accreditation have been developed to support the assessment of facilities covering both the provision and experience of care. Linked to the Hospital Services Management (HSM) Operational Plan and to ensure quality MNC through all health facilities at different levels, both Government and non-government, including private facilities, will be assessed. This program provides the necessary assurances that a minimum set of standards is being maintained for MNH service.

This MNH Service Accreditation Manual and the Program has been designed and implemented with the assistance of USAID's MaMoni Maternal and Newborn Care Strengthening Project (MaMoni MNCSP). During the design phase, USAID provided technical and operational support, liaising with Bangladesh's professional bodies and subject matter experts. MaMoni MNCSP facilitated implementation of the system at facilities throughout the country and provided technical assistance to the steering committee led by HSM and Director Hospitals and Clinics (DHC), DGHS

This process will not only ensure the quality of the services delivered to pregnant mothers and newborns, but will also provide MNC direction to all health service providers.

Acknowledgement

HSM and Director Hospitals and Clinics at DGHS jointly developed this program with the support from a range of stakeholders, including representatives from MOHFW, Health Economics Unit and Quality Improvement Secretariat (QIS), DGHS Maternal, Neonatal, Child & Adolescent Health (MNCAH), Directorate General Family Planning (DGFP) and the Maternal, Child, Newborn, Child, Reproductive and Adolescent Health (MNCRAH).

Special thanks to the leadership and members of professional bodies, including the Obstetrical and Gynecological Society of Bangladesh (OGSB), Bangladesh Neonatal Forum (BNF), Bangladesh Pediatric Association (BPA), Bangladesh Society of Anesthesiologists, Critical Care & Pain Physician (BSACCPP) and Bangladesh Private Clinic Diagnostic Owners Association (BPCDOA) for their valuable contribution to make this document a comprehensive one.

USAID's MaMoni MNCSP provided intense technical guidance and operational support in the designing and developing of this program and operational manual. This support helped HSM move the program forward and HSM recognizes USAID's contribution.

Assessors from across Bangladesh have spent their valuable time conducting visits to the facilities and provided their technical inputs on the design and nature of the standards, the checklists, and the contents of this document.

The MNH Service Accreditation platform would not have been established without the support of members of the steering committee who guided the program's development and provided their valuable opinion. My gratitude to them.

The MNH Service Accreditation Program is the process by which health facilities will be impartially assessed through independent assessors. This will help the facilities to know their areas of improvement, as well as act as an motivation by acknowledging their current status through a certification process. This program is HSM's Operational Plan-level activity, and has been customized to the country context with the assistance of different directorates, professional bodies, and USAID's MaMoni MNCSP.

I believe that the operational manual will be helpful in identifying the process in detail, and I would like to extend my thanks to everyone who was involved in its development. We need to work together to implement the program and move it forward. My wish is that our cohesive thought processes and hard work will help us to attain our objectives.

Dr. Supriya Sarkar
Program Manager
Hospital Services Management
Directorate General of Health Services

Message – Director General Health

The Government of the People's Republic of Bangladesh can be proud of its achievements in the health sector, especially in maternal and child health in relation to the targets set in the Sustainable Development Goals (SDGs). The country has taken significant strides in accomplishing the major MDG targets. The Government is fully aware and committed to ensuring the well-being of mothers and their newborns by ensuring appropriate service provision and clinical care at each and every facility within the public and private healthcare delivery structure.

Bangladesh has already made progress toward the design and development of a national accreditation system as a part of an integrated Quality Agenda. As the MOHFW continues to make progress towards an accreditation system, an opportunity to start with service-level accreditation recognizing quality-focused excellence in particular areas has arisen.

The development of the Maternal and Newborn Health Service Accreditation Program represents a great achievement. A comprehensive, standardized set of evidence-based clinical guidelines for maternal and newborn health is available for providers across Bangladesh. The service accreditation process will ensure the quality of care as well as guarantee the service providers are delivering services according to the national protocol and guidelines.

Our aim is to ensure that both public and private facilities providing maternal and newborn care are focused on improving quality of care and proceed through the service accreditation process.

This "Operational Manual for Maternal and Newborn Health Service Accreditation Program" will provide directions and guidelines for health facilities leaders, services providers, INGOs, NGOs and private sector organizations towards their roles and responsibilities in the provision of quality Maternal and Newborn Care. The implementation of this service accreditation program for maternal and newborn care services invites collaboration with all partners in mobilizing the fundamental assets and making strides get to and utilization of quality maternal and newborn care in Bangladesh.

Professor Dr. Abul Bashar Mohammad Khurshid Alam
Director General
Directorate General of Health Services

Message - Line Director, Hospital Services Management (HSM)

In recent years, Bangladesh has successfully recorded achievements of many of its health-related indicators. The GoB is working intensely to attain Universal Health Coverage (UHC) by 2030 to meet the health-related SDGs. One of the stipulations of UHC is improving the quality of care.

To enhance the quality of health services, the MOHFW has implemented a number of initiatives. Developing an accreditation system in Bangladesh is one of the priorities identified in the 4th HPNSP and is included in HSM's Operational Plans. But developing a well-structured country-based accreditation system takes time, and requires a process. For the interim period, HSM locally developed an accountability system for healthcare facilities that has an MNC focus.

HSM continues to pursue the development of a robust accreditation system for health facilities and the Maternal and Newborn Health Service Accreditation System is a component of that overall system. By addressing service-specific areas, we are encouraging service providers and facilities to focus on quality of care in core services. This program enables and supports HSM to achieve its ambition of introducing the bigger facility-based accreditation system.

The MNH Service Accreditation Program looks impartially at the degree to which the benefit, value, or convenience is accomplished, and then creates feedback on which hospitals can act. It will ensure that certified health facilities have access to quality care, emergency obstetric and newborn care services, strong supervision, and monitoring with the DGHS involvement.

The MNH Service Accreditation Program is the operational plan activities of HSM and customized to the local context in Bangladesh. All standards and guidelines have been designed, developed, reviewed, and validated by the respective professional bodies and subject matter experts.

The Operational Manual has been developed through the endeavors of a huge number of people and resources. I thank all of them for their precious work. I would also like to give special thanks to USAID's MaMoni MNCSP for their great and time worthy technical and financial support for completing this national document. I also extend my thanks to my colleagues at the service, as well as our improvement accomplices, who have assisted with implementing this program.

Professor Dr. Md. Mazharul Hoque
Line Director
Hospital Services Management
Directorate General of Health Services

Message – Director, Hospitals and Clinics

Quality MNC is essential for healthy pregnancies, deliveries, newborns, and infants, as well as family planning. Bangladesh has made remarkable MNH progress since its achievement of its MDG targets. Bangladesh is on track in meeting the target of its Sustainable Development Goals (SDGs).

The DHC manages a large number of both public and private hospitals, which are mandated to provide a wide range of services, including MNC services. A combination of requirements must be met to maintain the Quality-of-Care Services for these facilities, especially in MNC. The MNH Service Accreditation Program will be a special drive to strengthen these health facilities to provide quality services according to the national guidelines and protocols.

I am certain that following the 'Operational Manual for Maternal and Newborn Health Service Accreditation Program' will assist in standardizing the MNH maternal services delivery at both public and private health system facilities. I am particularly thankful to USAID's MaMoni MNCSP for their outstanding guidance and assistance to this program. I would like to express my gratitude to all the contributors and professionals from a variety of national and international development organizations and professional bodies who worked tirelessly to make this program a reality.

Dr. Sheikh Daud Adnan
Director, Hospitals and Clinics
Directorate General of Health Services

Message - Line Director, MNC&AH

Bangladesh has a wide network of hospitals spread across national, district, and upazila levels. Our aim is to ensure that the provision and quality of MNC given at the diverse levels of centers is standardized. Although much work has already taken place ensuring we have safe and effective provision of care for mothers and newborns, this Maternal and Newborn Health Service Accreditation Program will help us to look at the quality of care through a specific lens.

The MNH Service Accreditation Program brings together all of the professional standards and distills them into a set of standards against which a facility's service can be assessed. The assessment process itself is not designed to monitor facilities, rather it creates a system and process for continuous quality improvement.

Through the assessment by the independent assessor team, assurance will be sought from the healthcare facility as to whether they follow essential standards and procedures all of the time. The areas covered through this assessment include the service provision of MNH care, as well as antenatal care, intrapartum care, emergency obstetric care, immediate newborn care, postpartum care, and infection prevention and waste management. Certified facilities will have the necessary expertise, experience, and environment for the safety of women and their newborns.

I am energized to see that the Operational Manual for MNH Service Accreditation Program is ready. I trust this manual will ensure the quality of maternal and newborn well-being and contribute towards the reduction of morbidity and mortality.

The MNH Service Accreditation Program will enhance care services reliability infacilities and influence the promotion of health in the community. My sincere appreciation and gratitude go to the respected professional bodies, my colleagues, and experts from development partner organizations for the development of the program. I would like to take the opportunity to especially thank USAID's MaMoni MNCSP for their relentless support in making the program effective for us to achieve our goals guided by this operational manual.

I am fully committed to ensuring that the MNH Service Accreditation Program will be sustained in Bangladesh.

Dr. Md. Saiduzzaman
Line Director
Maternal Neonatal Child and Adolescent Health
Directorate General of Health Services

Message – Deputy Program Manager, Private Health Care Facility Regulatory and Accreditation, HSM

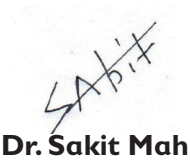
The Government of the People's Republic of Bangladesh is committed to improving the quality of health care in accordance with internationally agreed standards. Bangladesh has already achieved unprecedented success in various health-related indicators in recent years. The Government of Bangladesh is working extensively to prepare and ensure a more effective, universal, consistent, acceptable, cost-effective, and sustainable healthcare system to achieve universal health coverage (UHC) by 2030 to meet the health-related Sustainable Development Goals (SDGs).

Improving the quality of health care is an important precondition of UHC. The ministry of health and family welfare has already implemented a significant number of initiatives to improve the existing quality of health services. Development and introduction of an accreditation system in the health service sector in Bangladesh is one of the priorities in the fourth health, population, and nutrition sector program (4th HPNSP) and is included in Hospital Services Management (HSM) operational plan (OP) as OP level indicator. But developing a well-structured country base accreditation system for the health system takes long time and required to go through prescribed legal procedures. Meanwhile, with cooperation and prescribed suggestions from the international consultant team, HSM has prepared and submitted a draft bill to the health service department of Bangladesh's secretariat related to the accreditation of healthcare institutions in Bangladesh. At the same time, to maintain and continually improve the quality of care, HSM with the help from professional bodies (OGSB, BNF, BSACCPP) locally developed an accountability system for public and private health care facilities according to mandated standards of care that has a focus on maternal and newborn care.

Maternal and Newborn Service Certification system is a component of an overall strategy that pursues by the HSM operational plan to develop a robust accreditation system for both public and private healthcare facilities. Service providers and facilities to focus on the quality of health care in core services by addressing service-specific areas.

The Maternal and Newborn Health Service Accreditation Program looks neutral at the degree to which the benefit and value are accomplished and creates discoveries to be acted upon in a hospital. This system will ensure that an accredited health facility should have access to quality care, and emergency obstetric and newborn care services with the involvement of the Directorate General of Health Services (DGHS). All standards, checklists, and guidelines have been developed and validated by the respective professional bodies.

The operational manual has taken the time of endeavor of a huge number of professionals and experts. I would like to express my gratitude to them for their great work. I also deeply express my respect and thank to the improvement accomplices of the HSM operational plan who have given tremendous support to implement the program.



Dr. Sakit Mahmud
Deputy Program Manager
Private Health Care Facilities and Accreditation
Hospital Services Management
Directorate General of Health Services

Message – President, OGSB

Improving quality of care is a fundamental step in ensuring patient safety and enabling reductions in mortality and morbidity. To prevent unwanted maternal and neonatal deaths, every pregnant woman, and newborn needs skilled care during pregnancy, at the time of birth, and immediately after birth in an enabling environment. The Government of Bangladesh (GoB) is committed to achieving its targets for Sustainable Development Goals (SDGs)3: 'Ensure healthy lives and promote wellbeing for all at all ages'. The Fourth Health, Population and Nutrition Sector Program (4th HPNSP) has set the target of reaching a maternal mortality ratio (MMR) 121 per 100,000 live births and reducing neonatal mortality rate to below 18 per 1,000 live births.

Global evidence has shown that better quality of care at childbirth significantly improves maternal and newborn survival. The greater part of maternal deaths results from complications like PPH/ Eclampsia that require facility-based care. Therefore, improving the quality of facility-based delivery & complication management can offer unique opportunities to reduce maternal deaths.

Maternal and Newborn Health (MNH) Service Accreditation Program assure that a minimum set of standards is being maintained in certified facilities which provides safer and respectful quality care leading to better health outcomes for women and newborn. I am pleased to know that 'Operation Manual for Maternal and Newborn Health Service Accreditation Program' has been formulated by the Hospital Services Management (HSM) which will be a leap forward to advancing the Accreditation agenda for Bangladesh and will improve quality-of-care provision, health outcomes and health-seeking behaviors for the maternal and newborn services.

I understand the development of operational guideline for MNH service accreditation program has taken the time of efforts of a large number of people. My gratitude goes to all of them.

Professor Ferdousi Begum
President
Obstetrical & Gynaecological Society of Bangladesh

Message – President, BNF

The care that people receive during pregnancy, childbirth, postpartum and newborn period should be safe, high-quality, equitable, and respectful. Bangladesh has made great achievement in maternal and newborn health over the last few decades. The Government of Bangladesh is committed in achieving Sustainable Development Goals (SDGs) by 2030. For holding the gains and for further improvement we need to focus on improving the quality of health care services. The 4th Health, Population and Nutrition Sector Program (HPNSP) has set the target for reaching maternal mortality rate (MMR) 121 per 100,000 live births and reducing newborn mortality rate below 18 per 1,000 live births.

It is well recognized that improving quality of care (QoC) is fundamental for ensuring patient safety and enable environment for reducing morbidity and mortality. Global evidence shows that better quality of care at childbirth significantly improves maternal and newborn survival rates. The major portion of newborn deaths results from complications that require facility-based care. So, improving the quality of facility based newborn care offer unprecedent opportunities to cut down newborn deaths.

Institutionalizing Quality Improvement (QI) demands an effective mechanism for continuous learning and sharing and populating evidence-based practices on QoC which should be certified by an external body. And in that case 'MNH Service Accreditation' is a good and effective platform which is external peer assessment process used by healthcare organization to accurately assesses their level of performance in relation to established standards and implement ways to continuously improve.

I'm delighted to know that Hospital Services Management Operational Plan has formulated this 'Operation Manual for Maternal Newborn Health Service Accreditation', which will help the policy makers, subject matter expert, professional bodies, program people and planners to take need-based steps to be scaled up rapidly with high coverage to address MNH Service excellence which is a small step for wider health systems accreditation.

I will be remiss if I didn't acknowledge the efforts of all subject matter experts, clinicians, policy makers, program people who were closely involved in the advancement of this long-waited operational guideline for MNH Service Accreditation platform.

Thank You.

Professor Tahmina Begum
President
Bangladesh Neonatal Forum

Message - President, BSACCPP

In the 4th Health, Population and Nutrition Sector Program (HPNSP), the Government of Bangladesh has set an ambitious goal of attaining an MMR of 121 per 100,000 live births and an NMR of 18 per 100,000 live births by 2022. But it will be difficult to achieve if lack of facility readiness persists specially for maternal and newborn care and it is evident that there are still scopes of improvement in different tiers of health facilities.

Facility readiness always remains one of the vital requirements to ensure quality of care, infection prevention, and reducing operative, and post-operative complications thus minimizing the burden of mortality and morbidity, prioritized by the Government of Bangladesh to be aligned with the SDG goals of health quality assurance by 2030.

From a clinician's point of view, MNH Service Accreditation Program is highly potential as a tailored approach that is adaptable to the country setting enables MOHFW to better understand the current state of quality for MNH services, identify the gaps, address system-level challenges with an outcome of improving care and care provision for mothers and newborns. The MOHFW, Professional bodies and development Partners will be able to coordinate their efforts to address systemic and operational bottlenecks.

I appreciate this standard approach of quality assurance and would like to pledge my sincere gratitude to all the stakeholders for their leadership, coordination, and facilitation to make this program successful.

Professor Debabrata Banik
President
Bangladesh Society of Anaesthesiologists Critical Care and Pain Physicians

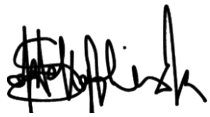
Message – Institute for Healthcare Improvement

The Maternal and Newborn Health Service Accreditation Program takes Bangladesh one step closer to achieving its aim of creating a comprehensive Quality Management System. The Service Accreditation Program for MNH allows the Directorate General of Health Services (DGHS) of MOHFW to understand the current state of quality of its facilities through the observation of care delivery by technical experts. The sharing of honest and transparent feedback with facility leaders creates an enabling environment for improvements in the provision of care, which in turn leads to improved outcomes for mothers and their newborns. In its current form, the program assesses the quality of care for maternal health, newborn health, patient experience and facility readiness. All of these create a strong foundation for system-wide accreditation, the ultimate goal for Bangladesh.

The MNH Service Accreditation program was the culmination of deliberations and discussions between the DGHS, the Professional Bodies, and Development Partners. The significant collaboration and commitment towards this program by these partners will ensure its sustainability.

We would like to thank Hospital Services Management (HSM), Director Hospitals and Clinics, and the Maternal Newborn, Child, and Adolescent Health units within DGHS for their leadership and direction for this program. We also recognize the significant contribution of the Obstetrics and Gynecology Society of Bangladesh, the Bangladesh Pediatrics Association, and the Bangladesh Neonatal Forum. Their technical input during the program design and standards development, together with their ongoing commitment to assessments, have been a major success factor for this program. We would also like to thank the fifty-four assessors who took the time to receive their training and who used their technical expertise to assess facilities in a fair and transparent manner. This program would not have been possible without the direct contribution of all of these groups.

The Institute for Healthcare Improvement, through USAID's MaMoni Maternal and Newborn Care Strengthening Project (MaMoni MNCSP), is proud to have had the opportunity to support the DGHS in designing and developing this program.



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Acronyms

MOHFW	Ministry of Health and Family Welfare
DGHS	Directorate General of Health Services
HSM	Hospital Services Management
MNC&AH	Maternal Newborn Child and Adolescent Health
QIS	Quality Improvement Secretariat
DGFP	Directorate General of Family Planning
MNCRAH	Maternal Newborn Child Reproductive Adolescent Health
OGSB	Obstetrical and Gynaecological Society of Bangladesh
BNF	Bangladesh Neonatal Forum
BSACCPP	Bangladesh Society of Anesthesiologists Critical Care and Pain Physicians
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
MNCSP	Maternal Newborn Care Strengthening Project
SOP	Standard Operating Procedure
ANC	Antenatal Care
PNC	Postnatal Care
BP	Blood Pressure
MNH	Maternal Newborn Health
USG	Ultrasonogram
P/V	Per Vaginal
I/V	Intravenous
QIC	Quality Improvement Committee
Hb	Hemoglobin
UHC	Upazila Health Complex

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Introduction

Improving quality of care is essential and ensures patient safety and contributes to reduction in mortality and morbidity. To prevent avoidable maternal and neonatal deaths, every pregnant woman, and newborn needs skilled care at the time of birth, with evidence-based clinical and non-clinical interventions delivered in a healing and enabling environment. Global evidence has shown that improved quality of care during birth could prevent up to 1.49 million maternal and newborn deaths and stillbirths annually and significantly improve maternal and newborn survival. Most maternal deaths In Bangladesh, (over 51%) result from complications that require facility-based care, such as postpartum hemorrhage, hypertensive disorders, complications related to abortions etc. Most newborn deaths are caused due to birth asphyxia, pre-term, low birth weight etc. Therefore, improving the quality of facility-based delivery care offers tremendous opportunities to impact on access, provision of care and adverse events thus contributing to the reduction of avoidable maternal and neonatal deaths.

The Maternal and Newborn Health (MNH) Service Accreditation Program has been designed by DGHS and operationalized by Hospital Services Management (HSM) as an integral part of their Accreditation Operational Plan. It has been designed as a bespoke program taking into consideration the local context of Bangladesh. The program is applicable to both Public and Private facilities. This program will enable MOHFW to have the assurance that facilities are adhering to achieving a minimum set of standards and are maintaining these for maternal and newborn care. The aim is to have consistent, standardized care all the time for all mothers and newborns, thus facilitating the right care, at the right time in the right place.

This Operational Manual sets out guidelines and processes to be followed by facilities participating in the program. The document is aimed at facilities going through the process, or ones that are exploring the program. The manual contains information on the program, why it is important, how it will benefit the facilities, the levels, and the process to obtain service accreditation for MNH services. The standards that are included in this manual is the work of extensive consultation and development by subject matter experts and are detailed within this manual. The checklists that are used by the assessors to undertake assessments of the facilities have been included to demonstrate the process through which a facility is assessed.

The MNH Service Accreditation Program acts as a system enabler for the provision of effective care for mothers and newborns at participating facilities.

Context

Bangladesh showed remarkable progress in improving the maternal mortality rate (MMR) and the neonatal mortality rate (NMR) in the era of the Millennium Development Goals (MDGs). The MMR decreased from 322 per 100,000 live births in 2001 to 196 per 100,000 live births in 2016 and the NMR fell from 87 per 1,000 live births in 1990 to 28 per 1,000 live births in 2014. In line with the Sustainable Development Goals (SDGs), the Government of Bangladesh has set an ambitious target of reaching an MMR of 121 per 100,000 live births and an NMR of 18 per 100,000 live births by 2022 in the 4th Health, Population and Nutrition Sector Program (HPNSP), with an emphasis on maternal and newborn care.

The estimated maternal mortality ratio (MMR) in BMMS 2016 was 196 per 100,000 live births; this rate has remained almost unchanged in Bangladesh since 2010. Hemorrhage (31%) is the most common cause of maternal mortality, followed by eclampsia (24%), indirect causes (20%), and abortion-related complications (7%).

The proportion of births delivered by a medically trained provider *(a qualified doctor, nurse or midwife, family welfare visitor (FWV), or community skilled birth attendant) has been increasing rapidly* from 21% in 2007 to 32% in 2011, 42% in 2014, and the current level of 53% in 2017. An increase in facility deliveries has been the major driving factor for the rapid increase in skilled birth assistance.

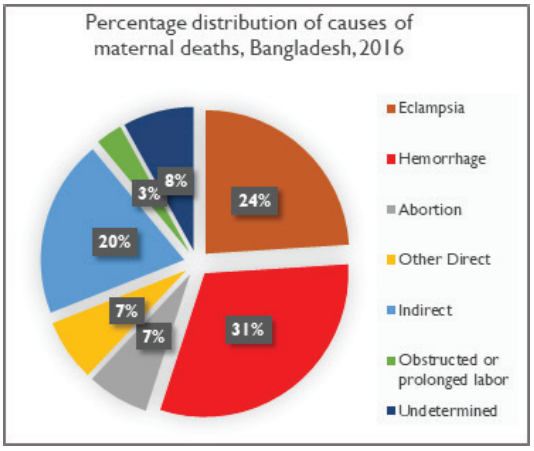


Figure 1: Percentage distribution of causes of Maternal Deaths, 2016

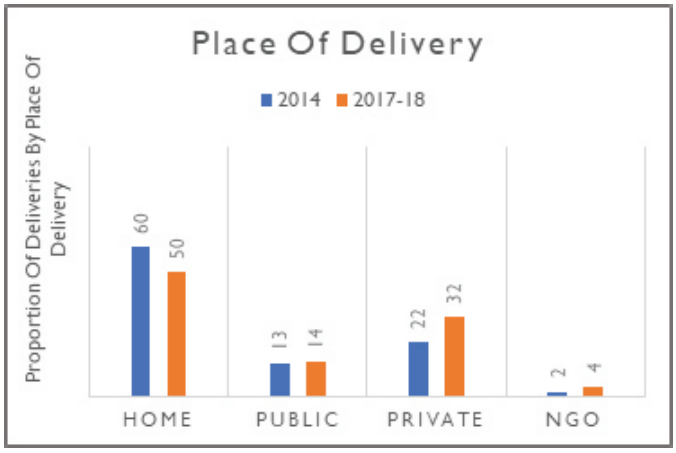


Figure 2: Place of Delivery

Between 2007 and 2017, the proportion of non-institutional deliveries by a medically trained provider remained at 5% or less. The 4th HPNSP aims to attain 65% of deliveries by trained birth attendants by 2022. Between the 2007 BDHS and the 2017-18 BDHS, facility delivery increased from 15% to 50%. This has been possible due to the rapid increase in delivery in private health facilities. Delivery in private facilities increased from 22% to 32%, in public facilities from 13% to 14%, and in NGO facilities from 2% to 4%. Less than 18% of pregnant women receive quality care. Quality care is defined as four or more antenatal visits, with at least one visit from a medical provider, measurement of weight and blood pressure, testing of blood and urine, and receipt of information on potential danger signs during pregnancy (BDHS-2017-18).

With increasing numbers of births in health facilities, attention has shifted to the quality of care, as poor quality of care contributes to morbidity and mortality.

- Overall, 6 in 10 health facilities (excluding community clinics [CCs]) offer normal delivery services. Almost all district hospitals (DHs), mother and child welfare centers (MCWCs), upazila health complexes (UHCs), and private hospitals offer delivery services, as compared with 53% of union-level public facilities, 32% of nongovernmental (NGO) clinics, and 7% of CCs.
- The availability of normal delivery services has increased from 18% in 2014 to 24% in 2017.
- Cesarean delivery services are available in all DHs and private hospitals but only 62% of MCWCs and 24% of UHCs provide Cesarean delivery services.
- Forty-five percent of facilities have at least one staff person trained in delivery care, 12% have guidelines related to basic or comprehensive emergency obstetric care, and 83% have a delivery pack. The percentages of facilities with care guidelines, a suction apparatus, a manual vacuum extractor, a vacuum aspirator or dilation and curettage kit, and a partograph have decreased substantially since 2014.
- One-fourth of facilities have at least one staff member trained in integrated management of pregnancy and childbirth and post-abortion care (Table 7.3). Around 40% of facilities have a staff member trained in routine labor and delivery care or active management of the third stage of labor.
- Essential life-saving drugs and commodities are often not available. For example, injectable magnesium sulphate (for management of eclampsia) is available in only 14% of facilities.
- Overall, only 1% of facilities (versus 2% in 2014) have all of the 13 items (e.g., equipment, medicines) considered to be essential by WHO to provide quality services. Since 2014, there have been declines in the availability of some of these tracer items (e.g., a suction apparatus, antibiotics, magnesium sulphate) and increases in the availability of others (e.g., trained staff, delivery packs, skin disinfectant). There has been little change in the availability of examination lights, gloves, oxytocin, and intravenous solution.
- Only 11% (excluding CCs) of facilities had performed all seven basic signal functions for obstetric care in the last 3 months. In addition, only 5% of facilities had performed all nine signal functions
- Around one-third of providers have received in-service training on newborn resuscitation. Approximately two thirds (excluding CCs) of facilities have a newborn bag and mask for management of birth asphyxia.
- Measurement of birth weight is fundamental in identifying low birth weight babies and providing optimum care. Only 43% of facilities have an infant scale.

DELIVERY AND NEWBORN CARE
Bangladesh Health Facility Survey 2017

Figure 3: Extract Delivery and Newborn Care BHFS 2017

Within the context of Sustainable Development Goal 3, it is essential to focus on the provision of high-quality care during childbirth to reduce adverse maternal and neonatal outcomes. This requires a focus not only on public sector, but also private sector healthcare facilities as well. Both public and private healthcare facilities play an important role in delivering health care services to pregnant mothers and their newborns in Bangladesh.

To address these challenges and better understand the system gaps which need to be addressed, in 2021, MOHFW, Bangladesh designed a new Quality Assurance Platform, MNH Service Accreditation to ensure Quality Maternal and Newborn care in the facilities. This program enables MOHFW to better understand the current state of Quality for MNH services, highlight local gaps and address system level challenges with an outcome of improving care and care provision for mothers and newborns.

Purpose

Ensuring Quality of Maternal and Newborn Care services is one of the main priority areas for MOHFW, with maternal mortality linked to the Sustainable Development Goals (SDG). In the last few years, significant work has been undertaken focusing on improving the standards and Quality of Care for mothers and newborns through capability development, process redesign and the provision of dedicated care pathways. The time is now right to move to the next phase and seek assurance from the system that the investments that have been made to date are working as standardized practices. Through the process the gaps will be highlighted and will allow the MOHFW, Professional Bodies and Development Partners to synthesize efforts to address system and operational challenges. The Maternal and Newborn Health Service Accreditation Program is, therefore, the mechanism through which assurance can be sought on the Quality of Maternal and Newborn Care that is being provided.

This program has been developed as a bespoke program and is customized to the local context in Bangladesh. All standards and guidelines have been established from guidelines and standard operating processes for MNH care provision and validated by the respective Professional Bodies and Subject Matter Experts. The vision and mission for the service accreditation is defined as follows:

Vision

All mothers and newborns have access to safe, effective, and respectful care in Bangladesh.

Mission

Improve quality of maternal and newborn care services in healthcare facilities by training service providers on standards and guidelines whilst optimizing patient experience.

Values

The program will also adhere to the following Values:

- Transparency
- Integrity
- Accountability
- Excellence
- Quality

Maternal and Newborn Service Accreditation Program Explained

A process by which the Directorate General of Health Services (DGHS) will recognize a facility that meets certain predetermined MNH standards specified by the subject matter experts and endorsed by the DGHS. The MNH standards have been built, taking into consideration the Nationally approved strategies, the hospital organogram, MNH guidelines and protocols. For Bangladesh, this includes, for example, the Maternal SOP Vol 1 and 2, National Newborn Health Program Toolkit, Strategic Planning on Quality of Care for Health Service Delivery in Bangladesh etc.

- This program will cover three dimensions of quality including clinical care, facility readiness and patient experience. The opportunity to certify services will be offered by authorities to healthcare facilities providing maternal and newborn care.
- The service accreditation will act as a minimum set of standards which will be maintained consistently within the facility. This will set the seal on constant, safe, and respectful maternal care for women before, during and immediately after delivery at the same time ensuring the provision of essential newborn care in the facility and facilitate safe referrals should this be required

The target of the program will be to recognize and encourage facilities to continuously improve the quality of maternal and newborn care services, manage complications in both public and private health facilities throughout the continuum of care. These continuous improvements should cover all phases of the continuum of care from pregnancy to care during labor or caesarian section, management of obstetric complications and provision of after delivery care to the mother and the newborn as well. All this will be achieved by raising awareness and increasing the capacity and capability of providers on quality clinical service provision, protocols, and guidelines.

The Maternal and Newborn Health Service Accreditation Program is based on the following principles:

- Clinical care practices will be standardized so that every mother receives the right care at the right time in the right place all the time
- Every mother and newborn will be treated with respect and dignity whilst receiving care
- Provides an opportunity for facilities to demonstrate and be recognized for delivering excellence in care

Importance of Maternal and Newborn Health Service Accreditation

There have been focused efforts to improve maternal and newborn care and achieve the SDG targets over the last few years. This has led to improvement in activities being undertaken by all stakeholder groups supported by various development partners. The Service Accreditation program brings together the work that has been undertaken and provides a platform for recognition for facilities that are awarded. Additionally, accredited services will have the necessary expertise, experience, and environment for the safety of women and their newborns. All this will lead to an increase in the credibility of care provision in the facility and therefore impact on health seeking behavior within the community.

Benefits of Maternal and Newborn Health Service Accreditation Program

The Maternal and Newborn Health Service Accreditation Program provides the necessary assurances that a minimum set of standards is being maintained consistently in facilities. Benefits exist for all stakeholders; the principal ones are:

Value for Facility

- Ensures a minimum set of standards for MNH service provision
- Facilitates standardized work processes leading to the elimination of errors
- Delivers respectful maternity care
- Encourages leaders and healthcare managers to undertake regular supervision and monitoring, reporting etc.
- Cohort of skilled staff available in the facility to deal with routine care and complication management
- Ability to review own performance and receive evidence-based assurance that processes are improving
- Motivation to maintain standards to retain Service Accreditation status
- Competitive advantage over other non-certified facility
- Satisfied patient group

Value for Patients

- Improved Experience of Care
- Better quality care leading to better health outcomes for women and newborn
- Safer and respectful care
- Assurance of standards of care
- Patient Satisfaction by reducing patient waiting time, Introducing Client feedback system etc.

Value for Health System – Bangladesh

- Gives MOHFW the assurance that certified facilities are adhering to national quality standards for maternal and newborn care
- Aligns with the Government of Bangladesh's national maternal and newborn health priorities for achieving SDG goals.
- Opportunity to expand the approach to more and more facilities
- Helps to create a pathway to accreditation

Maternal and Newborn Health Service Accreditation Program Model

The MNH Service Accreditation program covers the following areas:

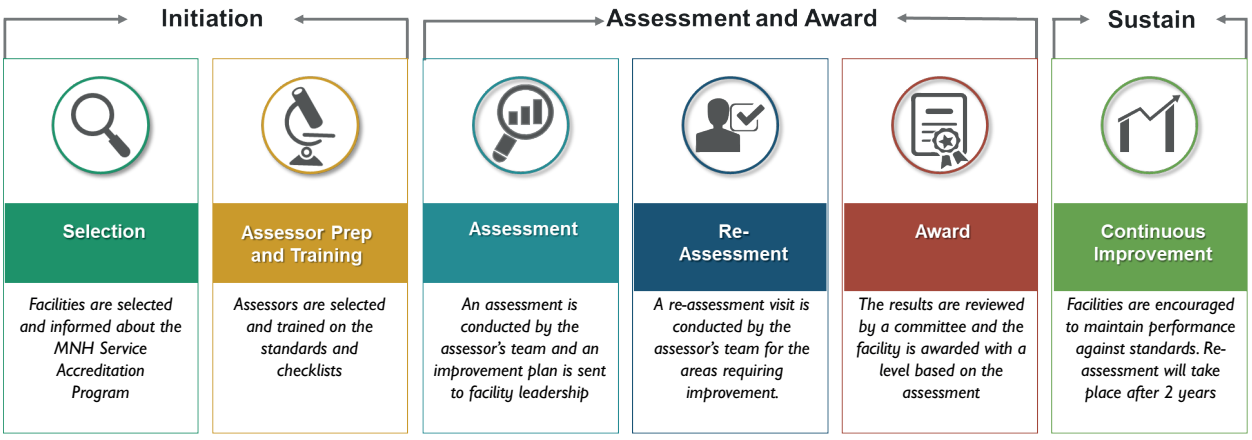
- Maternal Care
- Newborn Care
- Facility Readiness
- Experience of Care

For each area a set of standards has been developed that explains the details of the component and how this can be assessed. The standards are attached at Annex A.

Checklists are also in place for each of the sessions which will be used by the assessors when they undertake the assessment visits.

Overall process

DGHS with the support of multiple stakeholders has designed this program to provide the required assurances to the health system regarding Maternal and Newborn Care. The overall process can be summarized as follows:



The entire process will be overseen by the DGHS QI Cell, and records of service accreditation will be held centrally with them.

Facility Selection

Public or Private facilities can be selected for Service Accreditation in two ways. Firstly, facilities can self-select themselves and approach the DGHS QI Cell to be added to the list for a future phase. Secondly, facilities can be selected by members of DGHS and included in the list. Any facilities that are selected for Service Accreditation are raised at the Service Accreditation Steering Committee. Once endorsed by the committee, the QI Cell will issue a Government Order (GO) to inform the facilities.

Process for service accreditation – Facility

Once the facility has been selected and the DGHS has issued a letter confirming that the facility will undergo the Service Accreditation process, the QI Cell from the DGHS will issue a set of Facility Assessment Questionnaires (FAQs) and this manual would include the standards and checklists for review. If any clarifications are required from the facility, they may approach the DGHS QI Cell for further guidance. The facility may then use the tools that they have been provided with and undertake their own MNH Service Assessment and make any changes that may happen. An assessment visit will be arranged by the DGHS QI Cell for selected assessors to visit the facility to undertake the assessment. A report is prepared and shared with the Steering Committee for confirmation. Once approved by the Chair of the committee, the QI Cell will share a report outlining the recommendation or improvement. Should the assessment team identify a high level of compliance with the standards they may then recommend that the facility is awarded full-Service Accreditation status following the baseline assessment.

The facility will then use an action period to make any internal changes to increase compliance with the standards and guidelines. A second self-review is recommended to prepare the facility team for the final visit of the assessment team. The final assessment visit will be arranged by DGHS QI Cell with the assessors visiting the facility with the checklists to identify compliance following the initial visit. The facility team will then receive the final report which will state the final level being awarded. The facility will then be responsible for ensuring ongoing sustainability and any corrective actions to reach the next level.

Assessment Process

Assessors are selected by the relevant professional bodies for training. Once trained, Assessors are matched by Geographical location and availability to assess a facility. The assessment team is a multi-disciplinary team and is accompanied by members of the DGHS QI Cell. The team of assessors will be composed as follows:

- OGSB Representative
- BPA/BNF Representative
- BSACCPP Representative
- DGHS QI Cell Representative

Assessors will be required to undertake in person visits and use a range of techniques including observations, documentation review and interviews. The checklists are attached at Annex B.

Once assessors complete the baseline assessment, they will collect all the information from the team and collate the scoring. Initially the program used a paper-based system, however this has now been transferred to a mobile based app which can be used to document the outcomes of the assessment visit. Throughout the visit the assessors also note down areas which are of specific importance, and this is issued as guidance.

Once all the sections of the checklists are completed the scores are combined, and the percentage of compliance will be calculated taking into consideration the overall scoring on the checklist. The score is then interpreted and the stars and level are determined and the areas for improvement are identified. A report is then prepared summarizing the information and shared with the steering committee. Once approved by the Steering Committee, the report is then shared with the facility with the plan for areas for improvement.

The Director Hospitals and Clinics will then work with the facilities to follow up progress on the implementation of improvement plans and determine the most appropriate time for reassessment. If the facilities are able to complete the implementation of the plan within the timeframes allocated through the program, then only those components which have scored low will be reassessed. If, however the facility requests reassessment after the date then a full assessment will be required.

All of these activities will be coordinated by the DGHS QI Cell.

Service Accreditation Levels and Ratings

During the assessment visit assessors will use the checklist to determine performance against the agreed set of standards. Once the assessment is completed, scores will be tallied and depending on the scoring a decision will be made on which level the Service Accreditation should take place. The scoring and award system has been designed considering the needs of the system and provides a structure through which facilities can advance through to attain the highest level of Service Accreditation possible.

It is widely accepted that facilities will be at different stages towards their journey to service accreditation. A staged approach will provide a supportive and enabling platform based on improvement for facilities to work towards. The proposed approach is as follows:

The MNH Service Accreditation Scoring, and award matrix is as follows:

Aggregated Percentage	Star Rating after Assessment	Level of Service Accreditation	Final Assessment Timeframe	Outcome
90%	★★★★★	Level 3	N/A	Service Accreditation Awarded – valid for 2 years
80%-89%	★★★★	Level 2	Final Assessment within 3 months	
70%-79%	★★★	Level 2	Final Assessment within 6 months	
60%-69%	★★	Level 1	Final Assessment within 09 moths	
Below 60%	★	Level 1	Final Assessment within 12 months	

It is noted that facilities must score a minimum of 50% in each of the 4 components. If facilities not scoring the minimum 50% will automatically receive a level 1 and 1 star with a recommendation to immediately correct the findings and be reaccredited within 3 months

Guidelines for Facilities seeking Service Accreditation

Following the determination of the scoring against the checklist, facilities will be provided with the outcome and the areas requiring improvement. Facilities will then need to develop action plans to rectify the areas and seek inputs through the QIC as required.

Review, Adjudication and Appeal Process

Should the facility wish to dispute the level at which they have been awarded they should submit in writing their concerns to DGHS who will the consider the contents and if appropriate request the QI Cell to send a different assessment team to conduct a full reassessment.

Re-Assessment of Service Accreditation

A structured reassessment process has been established. Once the report is sent to the facility at the same time a report is shared with the Director Hospitals and Clinics Team who will then see an action plan from the facility in response to the recommendations from the assessors. Once the action plan is in place the Director Hospitals and Clinics will seek updates from the facility and will coordinate efforts with other entities of DGHS and Development Partners to support the facility with their improvement efforts. Work with the facility will be undertaken in a structured manner taking into consideration their current level and the date within which the reassessment must take place. The timelines for this is set out in the table below.

Level	Next Step	Timeline
Level 3	Reaccreditation of Services	2 years
Level 2	Final Assessment	6 months from release of report
Level 1	Final Assessment	12 months from release of report

Service Accreditations that are fully awarded are valid for 24 months or 2 years. After this time facilities will be reassessed against the checklist to determine their level. This will then follow the same process.

Maternal and Newborn Health Service Accreditation Committee

To support the Service Accreditation process, Hospital Services Management have established a committee known as "Maternal and Newborn Health Service Accreditation Committee". This Committee consists of government and independent experts to approve and provide recommendations regarding the names of the facilities selected for Service Accreditation. The committee also reviews the scores from the assessment visits and based on findings and recommendations from the assessors.

The purpose for the committee for as follows:

The role of the committee is to review aggregated facility assessment reports and provide the final decision on the status and level of Service Accreditation to be given to facilities.

Committee members will be invited to attend award ceremonies as they take place

The membership of the Committee will be as follows:

Details of Member	Role on Committee
Director General, DGHS	Chief Advisor
ADG, Admin, DGHS	Advisor
Line Director, HSM	Chairperson
Director Hospital & Clinics	Vice Chairperson
Director & Line Director, MNC&AH	Member
Director MIS	Member
Deputy Director 1- Hospital & Clinics	Member
Deputy Director 2- Hospital & Clinics	Member
Program Manager, Maternal Health, MNC&AH	Member
Program Manager, Newborn Health, MNC&AH	Member
Deputy Program Manager, QoC, HSM	Member
Deputy Program Manager, Private Health Care Facility Regulatory, HSM	Member
Deputy Program Manager – EOC and Gender issue, HSM	Member
President – OGSB	Member
President – BNF	Member
President - BSACCP	Member
President - BPCDOA	Member
National Consultant, QoC, HSM	Member
Program Manager- HSM	Member Secretary

The process has been supported by USAID's MaMoni MNCSP, who has been present during all meetings to facilitate meetings until such time that the MaMoni project is in situ.

Financial Implications

There are currently no fees required for obtaining the Service Accreditation process. Facilities will, however, need to manage their own costs when it comes to implementing interventions to become compliant against the checklists.

ANNEX

ANNEX A

Maternal and Newborn Health Care Standards

Maternal Health Standards

Antenatal Care

ANC is a service package rendered to pregnant women to ensure normal fetal development and to achieve a healthy pregnancy outcome for both mother and child. It consists of regular, systematic supervision, as per standard protocol, or according to the needs of each woman.

The objectives of ANC include:

- Promote and maintain the physical, mental, and social health of the mother and newborn
- Detect complications during pregnancy, whether medical, surgical, or obstetrical
- Help prepare mother to breastfeed successfully, and take good care of the newborn

Schedule of ANC Visit:

As per Maternal health SOP, at least 4 visits 1st within 16 weeks, 2nd - between 24weeks - 28 weeks, 3rd at 32 weeks, 4th - at 36 weeks - More visits may be required if needed

Standard: Health care providers of ANC services are competent in providing all components of ANC, including counselling.
Verification Criteria
• At least one medically trained provider placed in ANC Corner
• Maternal weight measurement
• Blood pressure measurement
• Hb estimation
• Urine for albumin
• Blood Grouping
• Blood sugar
• Counselling as appropriate for the ANC Visit (Using the Job Aid and Proper counselling technique)
• USG (when and where available)

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 1

Intrapartum Care: Care on Admission

Assessment of the pregnant women with true labor pain and sign-symptom of labor on admission to assess the condition of mother and fetus and to identify any complication or life-threatening condition and to take prompt actions to save the mother and the baby.

The objectives of On Admission Care include:

- Life-threatening conditions can be recognized as soon as possible by a quick check during admission
- Identify any signs/symptoms of labor or if the mother has or recently (in the past 24 hours) had any danger signs.

Standard: All women in labour will be assessed on admission to the health facility and then monitored continuously throughout labour and childbirth.

Verification Criteria/Tasks

Rapid Initial Assessment - Quick Check (Classify and Categorize)

- The person who has first contact with the mother on arrival at the health facility
  - should perform a quick check to ensure that life-threatening conditions are recognized as soon as possible.
  - Classify and categorize for: Emergency care, Labour management Transfer or Routine care
- History taking of the woman in labor
- General Examination - Pulse, BP, Anemia, Temperature, Edema, Jaundice, Respiratory rate
- Per Abdominal: FHR, Fetal presentation, Head descent (Station)
- P/V examination - Cervical dilatation in cm, Membrane- intact/ ruptured, (P/V examination is contraindicated If placenta previa is suspected)
- Assessed for danger Signs –
  - Vaginal Bleeding,
  - High Fever
  - Severe Abdominal Pain
  - Severe Headache or Blurred Vision
  - Difficulty in breathing
  - Convulsions.

Source: Maternal Health Standard Operating Procedures (SOP) Volume - 1

Intrapartum Care: Care During Delivery

Childbirth is a natural process, but sometimes life-threatening complications may occur. If inappropriately managed, these complications can lead to maternal death or disability. Complicated childbirth is also a major cause of death among newborns. Ensuring proper care during labor and delivery is essential to save the lives of mothers and babies.

The objectives of Care during Delivery:

Proper monitoring of the mother and fetus is very important to reduce any unwanted complication. To minimize the complications and reduce maternal mortality rate, quality care to the mother during the process of labor is important.

Standard: A companion of choice is recommended for all women throughout labour and childbirth

Verification Criteria

- Encouraged for birth companion when coming for delivery by counseling the mother/ attendant to keep a birth companion to support mother and orient them on activities to support the mother during labor and delivery.

Standard: All women should be provided appropriate supportive care during labour and childbirth.

Verification Criteria

- Support to change mother's position in which position she feels comfortable during labor and delivery
- Pregnant women should be offered Pain relief including Natural Pain Relief methods (e.g.; Breathing exercise, back massage etc.)

Standard: All women should have a partograph/Labor Care guide started at the beginning of the 1st stage of labour when cervical dilatation reaches ≥5 cm (1st stage/active phase). All assessment information will then be recorded on the partograph/Labor care guide.

Verification Criteria

- Start Partograph/ Labor care guide. when cervical dilatation is ≥5cm to 10cm.

Standard: Active management of the third stage of labour is practiced for all mothers. All midwives and doctors who provide care during labour and childbirth should have the skills to practice active management of the third stage of labour.

Verification Criteria/Tasks

- Active Management of third stage of labor (AMTSL): Perform the following three steps after delivery of the baby:
- Administration of uterotonic drugs (eg; Inj. Oxytocin* 10-unit IM after delivery of the baby)
- Delivery of placenta and membrane by Control Cord Traction (CCT),
- Uterine massage every 15 minutes interval for 2 hours.

* *Maintain optimum Temperature*

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 1
WHO recommendations Intrapartum care for a positive childbirth experience (2018)

Intrapartum Care: Immediate Care After Delivery

After an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours after birth.

The objectives of Immediate Care After Delivery:

Vigilant monitoring of the postpartum mother is vital to averting death from postpartum hemorrhage. Encouraging the mother to initiate early and exclusive breastfeeding helps to stimulate the mother's uterus to contract, decreasing blood loss. The care is essential to help keep the mother and her baby healthy and prevent possible complications.

Standard: All mothers should continue to be monitored for a minimum of two hours after childbirth and provided appropriate support and counselling.

Verification Criteria

For Mother:

- Encouraging and support the mother to initiate early and exclusive breastfeeding
- Record findings and duration of 3rd stage
- Provide supportive care

Every 15 minutes at least for 1st 2 hours (24hrs is recommended)

- For emergency sign/danger sign
- Feel and ensure uterus is hard
- Assess vaginal bleeding
- Monitor pulse, BP

For Baby:

- Asses the baby: Appearance, Breathing, Heart Rate, Color, Tone, Reflex
- Asses for any malformations/birth injury/Birth Defect
- Monitor the newborn for any possible danger signs

Monitor Baby Every 15 minutes 1st 2 hours

- Breathing: listen for grunting, look for chest in-drawing and fast breathing
- Warmth: check to see if feet are cold to touch
- Umbilical stump: look for bleeding
- Observe breast feeding

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 1

Complication Management

Preeclampsia: Occurrence of new-onset hypertension plus new –onset proteinuria after 20wks

Blood Pressure

- Greater than or equal to 140 mm Hg systolic or ≥90 mm Hg diastolic on two occasions at least 4 hours apart after 20 weeks of gestation, at the time or after delivery in a woman with a previously normal blood pressure.
- Greater than or equal to 160 mm Hg systolic or ≥110 mm Hg diastolic, hypertension can be confirmed within a short interval (minutes) to facilitate timely antihypertensive therapy.

And

Significant Proteinuria

- Greater than or equal to 300 mg per 24-hour urine collection or
- Protein/creatinine ratio ≥0.3(each measured as mg/dl)
- Dipstick reading of 1+ (used only if other quantitative methods not available)

Mild preeclampsia/ Preeclampsia without severe features

- Two readings of Systolic BP 140 to<160mmHg and DBP ≥90 to <110mmHg4 hours apart after 20 weeks gestation.
- Significant proteinuria (≥0.3gm in 24 hrs urine) or Protein creatinine ratio 0.3 or≥1+ on Dipstick.
- No evidence of organ dysfunction.

Severe preeclampsia/ Severe features of Preeclampsia (Any of these findings)

- Systolic BP ≥ 160 mm Hg and or Diastolic BP ≥ 110 mm Hg after 20 weeks gestation on 2 occasions at least 4hrs apart
- Significant proteinuria (≥0.3gm in 24 hrs urine) or Protein creatinine ratio 0.3 or ≥1+ on Dipstick.

Or in the absence of proteinuria, new-onset hypertension with the new onset of any of the following:

- Thrombocytopenia- platelet count <100000/microliter
- Renal insufficiency- serum creatinine>1.1 mg/dl or a doubling of serum creatinine concentration
- Impaired liver functions- elevated liver transaminases ≥ twice normal concentration
- Pulmonary edema
- Cerebral or visual symptoms Headache (increasing frequency, not relieved by regular
- analgesics). Blurred vision.
- Oliguria (passing less than 400 mL urine in 24 hours).
- Upper abdominal pain (epigastric pain or pain in right upper quadrant)

Eclampsia

- New onset hypertension after 20 weeks gestation.
- Significant Proteinuria or ≥1+ on Dipstick.

And

- Sometimes altered sensorium or loss of consciousness.
- Other symptoms and signs of severe preeclampsia.
- Along with convulsions

Standard: All women have their BP measured at every antenatal visit and at the prescribed intervals throughout labour and after childbirth. All women who have a diastolic BP of 90 mmHg or higher have their urine tested for the presence of protein. All patient assessment areas have supplies, equipment, and drugs to provide emergency care to women with severe pre-eclampsia or eclampsia. Magnesium sulfate is the drug of choice for the prevention and treatment of eclamptic seizures and is available at every facility that provides basic and comprehensive EmONC. All midwives and doctors who provide care during labour and childbirth have the skills to detect and manage severe pre-eclampsia and eclampsia.

Verification Criteria/Tasks

Initial Stabilization of Severe Pre-eclampsia/Eclampsia at Emergency:

- Vital Signs recorded (Consciousness, pulse, B.P, Respiratory rate, Dehydration,)
- Apply mouth gag (if convulsion)
- Position the woman on her left side (Eclamptic position- If convulsion)
- Inj MgSO4 4gm (8ml) in 12 ml dist.Water=20ml slow IV Injection over a period of 10-15 min,
- Inj MgSO4 (6g=12ml) IM (3gm+3gm) Deep IM Injection 3 gm in each Buttock

OR

- Inj. MgSo4 4gm in 100ml Rapid IV Inj @ 60-75 drops/min over a period of 20 min
- Start IV channel fluid (Hartman solution / Normal saline1000 cc.), very slowly
- Catheterization of Bladder
- O2 inhalation (IF APPLICABLE)

For settings where it is not possible to manage severe pre-eclampsia/eclampsia after initial management or at If the facility does not have appropriate manpower or the facility does not have the provision of C/S, , immediate transfer to a higher level health-care facility or CEmONC Centre.

** *For Functional CEmONC Centre –*

After starting initial stabilization, side by side arrange further management depending on the condition of the patient:

- Prevention/ Control of convulsion:
- Continue maintenance dose of MgSO4 :
- MgSo4 (2.5gm=5ml)- Deep IM Inj. MgSo4 2.5gm every 4-hourly using alternate buttock. Continue for 24hrs after last convulsion or delivery

OR

- I/V MgSo4 4gm (100ml) within next 1 hr 2gm (50ml)- slow IV Inj @12drops/min, within next 4 hrs 4gm (100ml) -25ml/hr @6 drops/min
- Control of BP (Diastolic Pressure ≥ 110 mmof Hg): Hydralazine Regime or Labetalol Regime
- Obstetric Management: Conduction of delivery within 6-8 hrs: Vaginal Delivery/ LUCS (CEmONC)
- Monitor vital signs (Pulse, BP, Respiration), reflexes, Fetal Heart Rate
- Maintain intake output chart

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 1 Standard Clinical Management and Flowcharts on Emergency Obstetric and Neonatal Care

Postpartum hemorrhage (PPH)

It is defined as vaginal bleeding in excess of 500 ml after childbirth within 6 weeks of delivery.

The importance of a given blood volume varies with the mother's hemoglobin level. A mother with a normal hemoglobin level will tolerate blood loss that would be fatal for an anemic mother. Bleeding may occur at a slow rate over several hours, and the condition may not be recognized until the mother suddenly enters shock. Therefore, Active Management of the Third Stage of labour (AMTSL) should be practiced on all women because it reduces the incidence of PPH due to uterine atony.

Immediate or Primary PPH is the increased vaginal bleeding within the first 24 hours after childbirth.

Delayed or Secondary PPH is the increased vaginal bleeding following the first 24 hours after childbirth up to 6 weeks.

Standard: Women with postpartum haemorrhage promptly receive appropriate interventions, according to SOP.

Verification Criteria/Tasks

Initial Stabilization of PPH management:

Initial Stabilization with Call for help and ABC approach with opening the PPH Kit

- Monitoring Vital signs, level of consciousness, skin colour.
- Assess P/V bleeding
- Provide Uterine massage
- Inj. Oxytocin 10-unit IM
- I/V Fluid with Hartman saline solution
- Blood investigations - Hb%, Bedside clotting test, blood grouping and cross matching
- Catheterization of Bladder

For settings where it is not possible to manage PPH after initial management or at If the facility does not have appropriate manpower or the facility does not have the provision of C/S, , immediate transfer to a higher level health-care facility or CEmONC Centre.

Cause Specific PPH Management:

After initial stabilization the cause of PPH should be identified and documented.

If Atonic Uterus

- Massage the uterus to expel blood and blood clots
- Inj. Oxytocin: 10 unit IV/IM, 20 units in 1 liter NS @ 50 drops/min
- Inj. Ergometrine 0.2 mg IM or Tab. Misoprostol 800-1000mcg PR (If necessary)
- Inj. Tranexamic Acid IV (slowly 10cc I/V, Oral 1gm) [1 ampule]
- Bimanual compression/Aortic Compression
- Uterine Baloon tamponade (UBT) / Condom tamponade/ NASG (Antishock garment).
- Blood transfusion (if needed)
- Laparotomy
- If bleeding continues, assess clotting status using bedside clotting test

If Genital tract trauma

- Repair vaginal tear/perineal tear/ cervical tear/Manage Ruptured Uterus
- If bleeding continues, assess clotting status using bedside clotting test
- Transfusion of blood or Blood products (if needed)
- Referral if needed

If Retained Placenta (Full/Partial)

- Remove the placenta if placenta is felt in the vagina,
- If placenta is not expelled, remove placenta manually (Manual removal of placenta)
- If bleeding continues, assess clotting status using bedside clotting test
- Transfusion of blood or Blood products (if needed)
- Referral if needed

*Source: ** Maternal Health Standard Operating Procedures (SOP) Volume – 1*
***Management Protocol of Postpartum Haemorrhage: Standard Clinical Management and Flowcharts on Emergency Obstetric and Neonatal Care*

Postnatal Care

Postpartum care is the care of mothers and newborns from 1 hour post-delivery to 6 weeks post-delivery. Fifty-six percent of maternal deaths occur within 24 hours of birth, indicating the importance of early postpartum care to reduce maternal mortality.

Objectives of Postnatal Care

- Prevent or detect complications arising during the postpartum period, whether medical, surgical, or obstetric
- Promote and maintain physical, mental, and social well-being of both mother and newborn by providing education on danger signs, nutrition, rest, and personal hygiene, and by providing micronutrients, if necessary
- Counsel about major and minor problems of the postpartum period and their management
- Immunize mothers against tetanus (if the 5-dose requirement is not complete then continue as per the schedule)
- Mothers are provided with information to make informed choices on family planning methods.

Standard: If birth is in a health facility, mothers and newborns should receive postnatal care in the facility within 24 hours after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, within day 2-3, within day 4-7, and six weeks after birth.

Source: WHO recommendations on Postnatal care of the mother and newborn

Verification Criteria/Tasks

Mother	Newborn
• Asses for danger signs in mother (high fever, high blood pressure, convulsion, foul smelling discharge and P/V bleeding) • Blood pressure measurement • Hb% test • Examine breasts to exclude any complication. • Counselling as appropriate including PNC Visit and Family Planning. • Iron and Calcium supplementation for mother	• Asses for danger signs in newborn (less movements, not feeding well, convulsion, high fever/low body temperature, umbilical discharge, fast breathing, grunting, cyanosis) • Counselling as appropriate including PNC Visit. • Immunization

Source: Flowchart Postnatal care Standard Clinical Management and Flowcharts on Emergency Obstetric and Neonatal Care

C-Section

Cesarean section is a surgical procedure that can effectively prevent maternal and newborn mortality when used for medically indicated reasons.

Cesarean section may be done as an emergency procedure due to various indications. The woman and her attendant should be counseled regarding the indication, pre-operative preparation and procedure of caesarean section. The objective is to provide evidence-based recommendations on caesarean section.

Standard: The Facility reviews the clinical practices related to C-Section
Verification Criteria
• A pair of Obstetrician and Anesthetist are available during the C-Section. • Ensure C-Sections cases are audited and classified as per Robson's TGCS (Ten group classification system) criteria • Obtain written informed consent from pregnant woman and her family before C-Section

Standard: Facility takes non-clinical interventions to reduce unnecessary caesarean sections.
Verification Criteria
• Collaborative midwifery-obstetrician model of care is in place (i.e., a model of staffing based on care provided primarily by midwives, with 24-hour back-up from an obstetrician who provides in-house labor and delivery coverage without other competing clinical duties). • Implementation of evidence-based clinical practice guidelines (e.g. - Maternal SOP, NNHP toolkit, CNCP guideline, Labor Room Management protocol, Standard Clinical Management and Flowcharts on Emergency Obstetric and Neonatal Care) with cesarean section audits and timely feedback to health-care professionals. • Implementation of evidence-based clinical practice guidelines (e.g.- Maternal SOP, NNHP toolkit, CNCP guideline, Labour Room Management protocol, Standard Clinical Management and Flowcharts on Emergency Obstetric and Neonatal Care) combined with structured, preferably second opinion for cesarean section indication is done to reduce unnecessary caesarean sections in settings with adequate resources and senior clinicians.

Source: WHO recommendations on non-clinical interventions to reduce unnecessary caesarean sections.

Record Keeping

Accurate record keeping is essential for adequate monitoring of the condition of the mother and newborn and for providing continuity of care (over time and across healthcare workers). Records should be complete, accurate, easy to read, and should be written at the time of client/patient contact, whenever possible.

*** All the Recorded Data should be in line with DHIS2/DGHS and DGFP MIS.

Standard: All skilled birth attendants who provide care during labour and childbirth should complete the records required for the mother and her newborn

Verification Criteria/Tasks

The types of information that should be included on each mother's record are as follows:

- Personal information (e.g., mother's name, age, address, etc.)
- Chief complaint (i.e., client's reason for coming to the health facility)
- Findings from the history, physical examination, screening, and other diagnostic tests and procedures
- Details of the care provided
- Referrals made if any

The specific records to be completed for the mother and newborn include the following:

- Registration logbook
- Family card (to be kept by mother)
- Partograph (including delivery record on reverse side)
- Referral form, if necessary
- Obstetric register/EmONC Register
- Discharge form
- Birth certificate
- Baby's Record:
    - Time of delivery
    - Mode of delivery
    - Sex
    - Weight
    - Length
    - Occipito-frontal circumference (OFC)
    - Feeding
    - Passage of meconium/urine
    - Congenital malformation (if any)
    - Birth trauma (if any)

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 2

Newborn Health Standards

Immediate and Essential Newborn Care

Immediate and Essential Newborn Care (ENC) is care that every newborn need, regardless birth place or birthweight.

Standard: Newborns receive routine care immediately after birth.

Verification Criteria

- Immediately dry the baby's body with a dry, warm cloth
- Place the baby in skin-to-skin contact for initial two hours with the mother and cover the baby with a warm cloth including the baby delivered by C-Section and initiate immediate breastfeeding
- Monitor breathing and if needed management of birth asphyxia per protocol
- Delayed Cord Clumping (Clamp or tie and cut the cord within 1- 3 minutes)
- Apply 7.1 percent Chlorhexidine on cord stump for single application soon after birth and inform caregivers with advice not to use anything else
- Initiate breastfeeding within one hour of birth
- Advise mother for delayed bathing after 72 hours of birth for normal healthy baby

Source: National Newborn Health Program Implementation Toolkit

Birth Asphyxia

Between 5 percent and 10 percent of newborns require assistance to begin breathing immediately after delivery, although very few require advanced measures, such as cardiac massage, intubation, or drugs. The Helping Babies Breathe (HBB) protocol elaborates on the steps of life-saving newborn resuscitation for babies who do not breathe just after birth, usually due to birth asphyxia (AAP 2017). The first response for asphyxia includes an immediate newborn assessment along with drying and tactile stimulation for the baby. Through this care, the majority of newborns initiate and sustain breathing within the "golden minute" after birth. Any baby who is not breathing and has not responded to drying and stimulation within the first minute, should receive assistance with a bag and mask following a standard protocol (CNCP Training Manual for Doctors).

Standard: Newborns who are not breathing spontaneously receive appropriate stimulation and resuscitation with a bag-and-mask within 1 min of birth, according to national guideline.

Verification Criteria

- Dry the baby thoroughly at birth
- Baby assessed whether not crying or breathing well
- Baby kept warm
- Positioned the Head and Airway cleared with penguin sucker
- Baby stimulated
- Given ventilation with Bag and Mask (if not breathing despite stimulation)
- Improve Ventilation (If chest is not moving)
- If the baby is not breathing well continue ventilation, evaluate heart rate and breathing to decide on advanced care

  Or
- If the baby responded to ventilation monitor with mother

Source: Helping Babies Breathe, 2nd Edition

Experience of Care Standards

Respectful Maternity Care

Respectful maternity care is defined as care that focuses on the interpersonal aspect of maternity Care that emphasizes the fundamental rights of mothers, newborns, and families, and protects the mother–baby pair. With respectful maternity care, all childbearing women would have the right to respect, choice and preference, when being cared for. In every country and community worldwide, pregnancy and childbirth are momentous events in the lives of women and families and represent a time of intense vulnerability.

Standard: The provider receives the pregnant women and her husband or companion cordially and treats the pregnant women with respectful optimum care.

Verification Criteria

- Greetings, warm welcome with self-introduction
- Treat the woman and her companion with compassion and respect
- Maintain privacy, confidentiality, and dignity of the patient
- Listen carefully to her complaints and respond to her queries
- Respecting women's choice of companions during labor and birth
- Share information with patient and family.

Source: Respectful Maternity Care: The Universal Rights of Childbearing Women (WHO)
National Guidelines for Midwives 2017
Maternal Health Standard Operating Procedures (SOP) Volume – 1 Annexure 10

Discharge Protocol

Standard: Facility has a safe and appropriate discharge procedure of patients considering the patient health status

Verification Criteria

- A written and dated procedure including criteria to determine readiness for discharge of patients is used and specifies who is authorized to do it.
- On discharge, the attending doctor summarizes and explain the patient's records, the diagnosis, any complications, any operative procedures undertaken and any follow up arrangements agreed with the patient/family.
- During discharge the mother received written and verbal information and counselling on the following elements before discharge: nutrition for mother and hygiene, birth spacing and family planning, exclusive breastfeeding in day and night and maintaining lactation, keeping their baby warm and clean, delayed bathing for 72 hours after birth for normal newborn, cord care(7.1% CHX been given, do not use anything else), communication and play with the baby, danger signs for the mother and newborn and where to go in case of complications.
- A discharge certificate containing relevant information including advice on General activities, Breast feeding, Danger signs and Maternal nutrition.
- Service provider explained the contents of the Discharge certificate to the Patient and family with the plan for revisit.

Source: National Health Care Standards, MOHand FW 2015
WHO Standards for improving quality of maternal and newborn care in health facilities,

Referral Protocol

A referral is a coordinated system adopted for transferring a patient when necessary to a higher level of health care in order to reduce morbidity and mortality. Referral may be one way (from bottom to top) or two ways (bottom to top and top to bottom). UHCs are identified as first referral centres, District Hospitals are the second referral centers and Medical Colleges are the third referral centers.

Standard: The basic conditions for referral and transfer are applied for all mothers and/ or newborns requiring referral and transfer for further care.

Verification Criteria/Task

- Proper assessment: A complete history and general examination of the patient is essential for the decision making
- Counselling the patient and her family, explaining the situation to them and the need and importance of referral
- Reassurance to the patient and her family
- Selection of the appropriate, accessible and acceptable place for referral
- Filling up the referral card/form
- Support and arrange transportation if required.

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 1

Queue Management

When visiting healthcare facilities, patients are generally worried, stressed, and sometimes even in pain. Therefore, hospitals need to create a comfortable environment. A common challenge associated with hospitals is long queue. By using just, a ticket approach, this does not minimize crowd in and around hospitals. In the wake of the consciousness of the need to avoid crowd with the emergence of the Corona Virus (COVID-19), it has become important. A queue management system is vital for hospitals to improve the patient experience and staff satisfaction. It will help hospitals to enhance the patient's entire visit, from check-in to post service. With proper queue management, facility can achieve an optimal waiting time, reduce perceived waiting time and increase the quality of service.

Standard: Facility has a queue management system in hospitals for safe patient journeys

Verification Criteria/Tasks

- Manage appointments, arrivals, and queues for pregnant mothers who are getting service.
- Manage the flow of patients in an efficient and structured way
- Reduce the number of people waiting in the lobby or waiting room and ensure adequate waiting space with proper sitting arrangement.
- Usage of signage systems in the facility

Facility Readiness Standards

Infrastructure and Service Readiness

Standard: The health facility has an appropriate physical environment, with adequate water, sanitation and energy supplies, medicines, supplies and equipment for routine maternal and newborn care and management of complications.

Verification Criteria

ANC/PNC Corner/Room

- A separate dedicated ANC/PNC corner is available in the Facility.
- A dedicated service provider (Doctor/Midwife) is placed in the ANC/PNC Corner.
- ANC and PNC SOP/guideline is available.
- Service area is clean (walls, floor and roof/ceiling free from dust and damp), well ventilated and organized.
- A clean water supply and functional light source are available.
- Hand washing facility and clean toilet for mother is available.
- Examination table with mattress and wooden steps for examination table is available.
- Privacy curtains to screen examination table.
- Essential equipment's in working condition and supplies for ANC/PNC room according to SOP is available.
- Separate containers for proper disposal of different kinds of waste should be conveniently located; waste disposal baskets (Black: General wastes, Red: Sharp Yellow: Hazardous wastes)

Delivery Corner/Room

- Dedicated Midwife is placed in the labour room.
- One service provider is desirable in addition to the one conducting the delivery or assisting C-Section (in OT) to provide appropriate care at birth for the newborn.
- Has a separate observation room with enough space for mother to move around freely.
- Has a labour ward and an adequate number of birthing rooms or areas for the estimated number of births in the service area
- Comfortable labor beds, squatting chair, delivery ball, rubber covered mattresses and pillows
- Privacy curtains to screen delivery beds
- Clean, conveniently located trolleys for instruments, supplies, and equipment
- A clean, warm surface for newborn resuscitation
- Newborn Corner for resuscitation with appropriate technology and kits
- Essential equipment and supplies should be available, easily accessible, and ready for use. These should be stored in sufficient quantities to meet the needs of the labor unit for responding to normal and complicated births
- Provision for partograph monitoring

- Refrigerator
- A clean toilet, closed to labor room and delivery room.
- A clean water supply and maintain cleanliness regularly.
- A reliable source of adequate light, which may be artificial or natural.
- A reliable source of heating should be available during the winter months
- Functional Sterilizers/Autoclave/Boiler/Decontamination Jar is available in the facility
- Separate containers for proper disposal of different kinds of waste should be conveniently located; Color coded Waste disposal baskets/bins (Black: General wastes, Red: Sharp Yellow: Hazardous wastes)

Others

- Availability of the "pair" of OBGYN-Anesthetist in the facility if the facility perform C-Section.
- A dedicated OT for Cesarean Section available at this facility
- Operating theatre is adequately equipped for conducting C-Section
- Dedicated Postoperative ward for Caesarian Section patients available at this facility
- Blood transfusion services available at this facility (If CEmONC)
- Grouping and cross-matching services available at this facility
- Screening tests available at this facility
- Laboratory services available at this facility
- Exit client feedback systems available at this facility

Record Keeping and Reporting Registers

- Antenatal care registers/EMR available
- Delivery patient admission register/EMR available
- Delivery/EOC Register/EMR available
- CS registers/EMR available
- Delivery patient admission form/EMR available
- Discharge form/EMR available
- Discharge certificate/EMR available
- Partograph available
- Referral form/EMR available
- Birth certificate/EMR available
- Death Certificate/EMR available
- Postnatal care registers/EMR available

Capacity Development

Standards: Health-care staff in the labour and childbirth areas of the maternity unit receive in-service training and regular refresher sessions at least once every 12 months in the identification and management of obstetric emergencies during labour and childbirth.

Source: WHO Standards for improving quality of maternal and newborn care in health facilities

Verification Criteria

- The health facility has qualified, skilled service provider available at all times, in sufficient numbers to meet the anticipated workload.

Infection prevention and control

Some of the most significant causes of maternal and neonatal death are infections. These account for a large percentage of preventable maternal and neonatal deaths in Bangladesh. Many of these deaths can be prevented through improved standard infection prevention practices, as well as early recognition and treatment of acquired infection.

Standard: All healthcare providers and support staff (e.g., cleaners) involved in maternal and neonatal care use recommended infection prevention practices.

Verification Criteria

- Staff are appropriately inducted and trained in all aspects of infection control and prevention.
- Washing hands before and after all patient or specimen contact.
- Wearing personal protective equipment (PPE) while handling blood or body fluids.
- Safe handling of sharps (includes sharps injury management).
- Handling of the blood of all patients as potentially infectious when dealing with spills.
- Following specific precaution for Infection by direct or indirect contact, Airborne infection and Droplet infection.
- Correctly process instruments and patient care equipment to decontaminate (cleaning, disinfection, and sterilization) them.
- Following proper waste disposal practices and handling all linen soiled with blood and/or body secretion as potentially infectious.

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 2
Hospital Infection Prevention and Control Manual 2018

Waste management

The general cleanliness and hygiene of a facility are vital to the health and safety of staff, clients, visitors, and the community at large. Good housekeeping and waste disposal practices are the foundation of good infection prevention. Housekeeping and waste disposal staff are at a high risk of infection because they are exposed to blood, other body fluids, used sharps, and other contaminated objects as a routine part of their jobs. Facility management should develop and post cleaning schedules where all housekeeping staff can see them, and make sure that cleaning schedules are closely maintained

Steps in the management of hospital waste include:

- Generation
- Segregation/separation
- Collection
- Transportation
- Storage
- Treatment
- Final disposal.

Standard: All healthcare providers and support staff (e.g., cleaners) involved in maternal and neonatal care should use recommended waste disposal practices.

Verification Criteria

- The facility has a waste management plan including an assessment of the current situation which minimizes the amount of waste generated.
- Wear gloves (preferably thick utility gloves) when cleaning
- Segregate clinical (infectious) waste from non-clinical waste in dedicated containers.
- Transport waste in a dedicated trolley.
- Store waste in specified areas with restricted access
- Collect and store sharps in sharps containers.
- Mark the storage areas with a biohazard symbol.
- Have a storage area for waste prior to treatment or being taken to final disposal area.

Source: Maternal Health Standard Operating Procedures (SOP) Volume – 2 Hospital Infection Prevention and Control Manual 2018

ANNEX B

Maternal and Newborn Health Service Accreditation Assessment Checklists

Observation checklist for Delivery Care, Essential Newborn Care, and Immediate Postnatal Care

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the SKIP questions

Information about Assessor			
Name of the assessor: Designation of the assessor: Organization:			
Date of starting observation:	☐☐ ☐☐ ☐☐☐☐ D D M M Y Y Y Y	Time of starting observation:	
Date of ending observation:	☐☐ ☐☐ ☐☐☐☐ D D M M Y Y Y Y	Time of ending observation:	

Information about health facility:		
Name of health facility		
Name of the Facility Leader		
Address of the facility:		
District:	Upazila:	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 1: Initial Patient Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
100	Is this section observed?		1	2	x
101	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data is collected by interviewing the Service Provider.			
102	Who performs the initial assessment for the Patient?	Doctor		1	
		Nurse		2	
		Paramedic/ SACMO/ FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

Record whether the provider carried out the following steps and/or examinations:

(Some of the following steps may be performed simultaneously or by more than one provider)

Introduction and History Taking

No	Questions and filters	Option/Codes		Skip
		Yes	No	
103	Respectfully greeted woman	1	2	x
	Warm welcome with self-introduction done	1	2	x
	Maintained privacy, confidentiality and dignity of the patient	1	2	x
	Listened carefully to her complaints and responded to her queries	1	2	x
104	Asked about ANC history/ Checks woman's current ANC card/record	1	2	x
105	**Asked Patient About**			
	a. Age	1	2	x
	b. Para	1	2	x
	c. Gravida	1	2	x
	d. LMP	1	2	x
	e. EDD	1	2	x
	f. Gestational age	1	2	x
	g. Any Concerns	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
106	**Checked the current pregnancy records**			
	a. Urine R/M/E	1	2	x
	b. USG	1	2	x
	c. Hb% status	1	2	x
	d. Blood group	1	2	x
	e. VDRL status	1	2	x
	f. HBsAg status	1	2	x
	g. Blood sugar	1	2	x
	h. Tetanus immunization status	1	2	x
107	**Checked the Past Obstetrics History** A. Not Applicable in case of Primigravida	1	2	
	B. APH/PPH	1	2	x
	C. PE/Eclampsia	1	2	x
	D. Prolonged/Obstructed labor	1	2	x
	E. H/O IUD	1	2	x
	F. Asked if she had any of complication during **PREVIOUS PREGNANCIES** G. SPE/Eclampsia/PPH/Retained Placenta/3rd Degree Perineal tear/ Gestational diabetes/ Placenta previa/ Obstructed labor/ prolong labor/Other	1	2	
108	Asked about frequency and severity of pain	1	2	x
109	Asked about movement of the baby	1	2	x
110	Asked and assessed if she had any of symptoms/ problems/ complication in **CURRENT PREGNANCY**			No→111
	a. PV bleeding	1	2	x
	b. Headache	1	2	x
	c. Fever	1	2	x
	d. Blurring of vision	1	2	x
	e. Breathing difficulties	1	2	x
	f. Convulsions	1	2	x
111	Provider asked patient about previous pregnancy?	1	2	No→113
112	Asked about mode of delivery in previous pregnancy	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
Examination of the pregnant Woman				
113	Washed hand before examination	1	2	No→116
114	Washes hand **appropriately (with soap and water or using alcohol hand rub)**	1	2	x
115	Wears sterile gloves for Examination	1	2	x
116	Explains procedures before proceeding	1	2	x
117	**Performs the following steps for general examination**			
	I. Observed appearance	1	2	x
	II. Coping well/distressed/pushing	1	2	x
	III. Took temperature by thermometer	1	2	x
	IV. Counted respiratory rate	1	2	x
	V. Counted pulse	1	2	x
	VI. Measured and record the blood pressure	1	2	x
	VII. Edema checked (pedal edema)	1	2	x
	VIII. Dehydration checked	1	2	x
	IX. Anemia checked by checking eye/ tongue/ palm	1	2	x
	X. Jaundice checked	1	2	x
	XI. Urine output checked	1	2	x
	XII. Lung auscultated	1	2	x
	XIII. Heart auscultated	1	2	x
118	**Abdominal examination was performed**	1	2	No→ 119
	I. Previous scar	1	2	x
	II. Fullness of urinary bladder	1	2	x
	III. Contractions number /10-minute, duration, relaxation between contraction	1	2	x
	IV. Checked fetal presentation (Cephalic, breech, transverse, oblique) by palpation of abdomen	1	2	x
	V. Checked fetal heart rate with stethoscope/Doppler	1	2	x
	VI. Foetal movement	1	2	x
	VII. Fetal heart sound	1	2	x
	VIII. Multiple pregnancy	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
119	**Vaginal examination was performed**	1	2	No→120
	If No, write down the reason: Please write if data was collected by Interview			
	Washed hands before examination	1	2	x
	Washed hand **appropriately (with soap and water or using alcohol hand rub)**	1	2	x
	Wears sterile gloves for vaginal examination	1	2	x
	Informed woman about procedure **BEFORE** examination	1	2	x
	Position the woman with legs flexed and apart	1	2	x
	Swabs vulval and perineal area – above downwards	1	2	x
	Informs the woman about findings **AFTER** examination	1	2	x
	Washes hands appropriately **AFTER** examination	1	2	x
	Privacy is well maintained during examination / separate room/ presence of curtain at least	1	2	x
120	Sent patient to do USG of lower abdomen	1	2	x
121	Plan for delivery is discussed with the woman	1	2	x
122	Classified and categorized for: Emergency care, Labour management Transfer or Routine care	1	2	x
End of the section 1; Please go to section 2				

Section 2: Intrapartum Care: Care During Delivery Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
200	Is this section observed?		1	2	
201	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			
202	Who is the main care provider in this stage?	Doctor	1		
		Nurse	2		
		Paramedic/ SACMO/FWV	3		
		Midwife	4		
		Multiple Service Providers Led by Doctor	9		

Record whether the provider carried out the following steps and/or examinations:

(Some of the following steps may be performed simultaneously or by more than one provider)

No	Questions and filters		Option/Codes		Skip
			Yes	No	
203	Respectfully greeted woman		1	2	x
204	Maintained privacy, confidentiality and dignity of the patient		1	2	x
205	Privacy is well maintained during examination / separate room/ presence of curtain at least		1	2	x
206	Encouraged for presence of a birth companion to support the mother		1	2	x
207	Explained to mother and companion what will happen during labour		1	2	x
208	Orient the birth companion on activities to support the mother during labor and delivery.		1	2	x
209	Health provider always listened to woman and was sensitive to her feelings		1	2	x
210	Partograph started to monitor progress of labour (when cervical dilatation is ≥5cm to 10cm.)		1	2	No→213
211	Patient Information was recorded in partograph		1	2	
212	Started Labor care guide when cervical dilatation is ≥5cm to 10cm.		1	2	No→216
213	Patient Information was recorded in Labor care guide		1	2	x
214	What definitive action was taken (multiple answer)	Consulted with senior doctor of same facility		A	x
		Referred to other facility		B	x
		Prepared for Assisted delivery		C	x
		Prepared for C-section		D	*Go To 225 and then Please fill up section 3*
		Others (specify)_____		Y	x
215	Shared information with patient and family.		1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
	During Vaginal Delivery (1st, 2nd Stage of labor)			
216	Ensures woman walks and maintains mobility	1	2	x
	Supports and ensures that woman is changing her position	1	2	
	Supports woman to apply breathing technique	1	2	x
	Ensures woman for touch and massage	1	2	x
	Offered use of birthing ball	1	2	x
	Woman used Birthing Ball	1	2	x
	Administrations of drug for pain relief	1	2	x
	Enema used	1	2	x
	Pubic shaving has been done	1	2	x
	Insertion of I/V cannula (without indication)	1	2	x
	Woman kept in the supine position	1	2	x
217	**AMTSL Done**	1	2	No→219
	Administration of uterotonic drugs (eg; Inj. Oxytocin* 10-unit IM after delivery of the baby)	1	2	x
	Delivery of placenta and membrane by CCT	1	2	x
	Uterine massage every 15 minutes interval for 2 hours	1	2	x
218	Assesses completeness of placenta and membranes	1	2	x
219	Conducts manual exploration of uterus after delivery	1	2	x
220	Uterine message given	1	2	x
221	Checked perineum for tear	1	2	x
222	Estimates blood loss	1	2	x
223	Cleaned perineum and placed sanitary pad or folded cloth on perineum	1	2	x

Record Keeping				
224	Delivery procedure/Delivery note written in case record forms	1	2	No→227
225	Check the delivery note:			
	Health care provider's name	1	2	x
	Date of delivery	1	2	x
	Mode of delivery	1	2	x
	Time of delivery	1	2	x
	Prescribed treatment given	1	2	x
	Sex of the baby	1	2	x
	Weight of the baby	1	2	x

No	Questions and filters		Option/Codes		Skip
			Yes	No	
226	Did the provider fill out patient record form?		1	2	No→229
	Who filled out patient record form?	Doctor		1	x
		Nurse		2	x
		Midwife		3	x
		Other (Specify)_____		7	x
227	Does patient record form / case record form contain following information	Yes		No	x
	Personal information	1		2	x
	Mother's name	1		2	x
	Mother's age	1		2	x
	Mother's address	1		2	x
	Chief complaints	1		2	x
	Findings from history	1		2	x
	Findings from physical examination	1		2	x
	Findings from screening	1		2	x
	Findings from diagnostic tests	1		2	x
	Findings from procedure	1		2	x
228	Status of the mother	Stable		A	x
		Retained Placenta		B	x
		PPH		C	x
		Sepsis		D	x
		Eclampsia/pre-eclampsia		E	x
		Maternal death		F	x
		Referred		G	x
229	Status of the Baby	Stable		A	x
		Birth Asphyxia		B	x
		Sepsis		C	x
		Preterm Birth/Low birth Weight		D	x
		Stillbirth		E	x
		Neonatal death		F	x
		Referred		G	x
End of section 2					

Section 3: Caesarean section

No	Questions and filters	Option/Codes		Skip
		Yes	No	
300	C-Sections cases are audited and classified as per Robson's TGCS (Ten group classification system) criteria	1	2	x
	Nulliparous, single cephalic, ≥ 37 weeks, spontaneous labor	1	2	x
	Nulliparous, single cephalic, ≥ 37 weeks, induced or cesarean before labor	1	2	x
	Multiparous (excluding previous cesareans), single cephalic, ≥ 37 weeks, spontaneous labor	1	2	x
	Multiparous (excluding previous cesareans), single cephalic, ≥ 37 weeks, induced or cesarean before labor	1	2	x
	Previous cesarean, single cephalic ≥ 37 weeks	1	2	x
	All nulliparous breeches	1	2	x
	All multiparous breeches (including previous cesareans)	1	2	x
	All multiple pregnancies (including previous cesareans)	1	2	x
	All abnormal lies (including previous cesareans)	1	2	x
	All single cephalic, ≤ 36 weeks (including previous cesareans)	1	2	x
301	A second opinion for cesarean section indication has been taken	1	2	x
302	Obstetrician is present during C- Section	1	2	x
303	Anaesthesiologist is present during C- Section	1	2	x
304	Pregnant woman and her family have been counselled properly about the need for C- Section	1	2	x
305	Obtain written informed consent from pregnant woman and her family before C-Section	1	2	x

Section 4: Newborn Care Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
400	Is this section observed?		1	2	
401	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			
402	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SAC-MO/FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

Record whether the provider carried out the following steps and/or examinations:

(Some of the following steps may be performed simultaneously or by more than one provider)

No	Questions and filters	Option/Codes		Skip
		Yes	No	
Delivery Outcome				
403	Live Birth	1	2	x
	Still Birth	1	2	x
	Dead	1	2	x
Immediate and Essential Newborn Care (ENC)				
404	Immediately dried the baby's body with a dry, warm cloth	1	2	x
405	Baby cried immediately after birth	1	2	No→4.1
406	Placed the baby in skin-to-skin contact for initial two hours with the mother and cover the baby with a warm cloth including the baby delivered by C-Section and initiate immediate breastfeeding	1	2	x
407	Clamped and cut the cord within 1-3 minutes	1	2	
408	Applied 7.1 percent Chlorhexidine on cord stump for single application soon after birth and inform caregivers with advice not to use anything else	1	2	x
409	Initiated breastfeeding within one hour of birth	1	2	x
410	Advised mother for delayed bathing after 72 hours of birth for normal healthy baby	1	2	x

Section 4.1: Management of Birth Asphyxia

No	Questions and filters		Options/Code		Skip
			Yes	No	
411	Is this section observed?		1	2	x
412	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			x
413	Who is the main care provider in this stage?	Doctor		1	x
		Nurse		2	
		Paramedic/ SACMO/ FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

No	Questions and filters	Option/Codes		Skip
		Yes	No	
414	Baby assessed whether not crying or breathing well	1	2	x
415	Baby kept warm	1	2	x
416	Baby stimulated by gently rubbing the back	1	2	x
417	Baby cried /breathed spontaneously	1	2	Yes→422
418	Positioned the head (neck slightly extended) and cleaned the airway with penguin sucker	1	2	x
419	Provided bag-mask ventilation (40 breaths per min.) for one min	1	2	x
420	Baby cried /breathe spontaneously	1	2	Yes→422
421	Improved ventilation, evaluate heart rate and breathing to decide on advanced care	1	2	x
422	The baby responded to ventilation or stimulation	1	2	x
422.1	Place the baby with Mother and Monitor the Baby	1	2	x

Section 4.2 Baby's Record

No	Questions and filters	Option/Codes		Skip
		Yes	No	
Baby note written and Recorded in Register		1	2	x
423	Date and time of birth and sex	1	2	x
424	Place of delivery and delivery conducted by	1	2	x
425	Gestational Age	1	2	x
426	Temperature	1	2	x
427	Weight	1	2	x
428	Length	1	2	x
429	Occipital-frontal circumference (OFC)	1	2	x
430	Feeding	1	2	x
431	Passage of meconium/urine	1	2	x
432	Congenital malformation (if any)	1	2	x
433	Birth trauma (if any)	1	2	x
434	Birth attendant note (Describe what was done including immediate care provided and the help provided for baby's breath and the baby's response)	1	2	x
End of section 4				

Section 5: Immediate Care After Delivery

No	Questions and filters		Options/Code		Skip
			Yes	No	
500	Is this section observed?		1	2	Yes →502
501	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			
502	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SAC-MO/FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

No	Questions and filters	Option/Codes		Skip
		Yes	No	
For Mother				
503	**Mothers received care in the facility for at least -**	2 Hours	More than 2 hours but less than 24 Hours	24 Hours
504	Woman had a companion to support her during Postnatal stage	1	2	x
505	Encouraged and supported the mother to initiate early and exclusive breastfeeding	1	2	x
506	**Monitor Mother Every 15 minutes for first 2 hours as per clinician decision**			x
	Monitored pulse	1	2	x
	Monitored BP	1	2	x
	Felt and ensured uterus is hard	1	2	x
	Assessed vaginal bleeding	1	2	x
	Assessed for any emergency sign/danger sign	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
For Baby				
507	**Newborn received care in the facility for at least -**	2 Hours	More than 2 hours but less than 24 Hours	24 Hours
508	Asses the baby for -	1	2	x
	Appearance	1	2	x
	Breathing	1	2	x
	Heart rate	1	2	x
	Color	1	2	x
	Tone	1	2	x
	Reflex	1	2	x
	Any malformations/birth injury/Birth Defect	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
509	**Monitor Baby Every 15 minutes for first 2 hours**			x
	Assessed Breathing: listen for grunting, look for chest in-drawing and fast breathing	1	2	x
	Checked Warmth: check to see if feet are cold to touch	1	2	x
	Checked Umbilical stump: look for bleeding	1	2	x
	Observed breast feeding	1	2	x
End of Section 5				

Section 6: Management of Preeclampsia/Eclampsia

No	Questions and filters		Options/Code		Skip
			Yes	No	
600	Is this section observed?		1	2	
601	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			
602	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SACMO/ FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

Record whether the provider carried out the following steps and/or examinations:

(Some of the following steps may be performed simultaneously or by more than one provider)

No	Questions and filters	Options/Code		Skip
		Yes	No	
603	Is this a BEmONC Facility	1	2	Yes →6.1
604	Is this a CEmONC Facility	1	2	Yes →6.2

6.1: Initial Stabilization of Severe Pre-eclampsia/Eclampsia at Emergency:

No	Questions and filters	Option/Codes		Skip
		Yes	No	
605	**Vital Signs recorded**			
	Consciousness	1	2	x
	Pulse	1	2	x
	BP	1	2	x
	Respiratory rate	1	2	x
606	Applied mouth gag (if convulsion)	1	2	x
607	Positioned the woman on her left side (Eclamptic position- If convulsion)	1	2	x
608	Inj MgSO4 4gm (8ml) in 12 ml dist.Water=20ml slow IV Injection over a period of 10-15 min,	1	2	x
609	Inj MgSO4 (6g=12ml) IM (3gm+3gm) Deep IM Injection 3 gm in each Buttock	1	2	x
610	Inj. MgSo4 4gm in 100ml Rapid IV Inj @ 60-75 drops/min over a period of 20 min	1	2	x
611	Started IV channel fluid (Hartman solution / Normal saline1000 cc.), very slowly	1	2	x
612	Catheterization of Bladder done	1	2	x
613	O2 inhalation (IF APPLICABLE) started	1	2	x
614	**Outcome of the Patient**			
614.1	Patient Stabled	1	2	x
614.2	Obstetric Management: Conduction of Vaginal Delivery within 6-8 hrs	1	2	x
614.3	Immediately transferred to a higher-level health-care facility or CEmONC Centre	1	2	x

6.2: Initial Stabilization of Severe Pre-eclampsia/Eclampsia at Emergency:

No	Questions and filters	Option/Codes		Skip
		Yes	No	
615	**Vital Signs recorded**			
	Consciousness	1	2	x
	Pulse	1	2	x
	BP	1	2	x
	Respiratory rate	1	2	x
616	Applied mouth gag (if convulsion)	1	2	x
617	Positioned the woman on her left side (Eclamptic position- If convulsion)	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
618	Inj MgSO4 4gm (8ml) in 12 ml dist. Water=20ml slow IV Injection over a period of 10-15 min,	1	2	x
619	Inj MgSO4 (6g=12ml) IM (3gm+3gm) Deep IM Injection 3 gm in each Buttock	1	2	x
620	Inj. MgSo4 4gm in 100ml Rapid IV Inj @ 60-75 drops/min over a period of 20 min	1	2	x
621	Started IV channel fluid (Hartman solution / Normal saline1000 cc.), very slowly	1	2	x
622	Catheterization of Bladder done	1	2	x
623	O2 inhalation (IF APPLICABLE) started	1	2	x
	After starting initial stabilization, side by side arranged further management depending on the condition of the patient:			
624	**Continue maintenance dose of MgSO4 :**			
	MgSo4 (2.5gm=5ml)- Deep IM Inj. MgSo4 2.5gm every 4-hourly using alternate buttock. Continued for 24hrs after last convulsion or delivery	1	2	x
	I/V MgSo4 4gm (100ml) within next 1 hr 2gm (50ml)- slow IV Inj @12drops/min, within next 4 hrs 4gm (100ml) -25ml/hr @6 drops/min	1	2	x
625	Control of BP (Diastolic Pressure ≥ 110 mmof Hg):			
	Hydralazine Regime	1	2	x
	Labetalol Regime	1	2	x
626	Maintained intake output chart	1	2	x
627	**Monitored vital signs -**			
	Pulse	1	2	x
	BP	1	2	x
	Respiratory rate	1	2	x
	Reflexes	1	2	x
	Fetal heart rate	1	2	x
628	Obstetric Management (Conduction of delivery within 6-8 hrs)			
	Vaginal Delivery	1	2	x
	LUCS	1	2	x
End Of Section 6				

Section 7: Management of Postpartum hemorrhage (PPH)

No	Questions and filters		Options/Code		Skip
			Yes	No	
700	Is this section observed?		1	2	
701	*If No, write down the reason*	Please write **"Done by Interview"** here if this section's data collected by interviewing the Service Provider.			
702	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SACMO/ FWV		3	
		Midwife		4	
		Others (Specify) _____		9	

Record whether the provider carried out the following steps and/or examinations:

(Some of the following steps may be performed simultaneously or by more than one provider)

No	Questions and filters	Options/Code		Skip
		Yes	No	
703	Is this a BEmONC Facility	1	2	Yes →7.1
704	Is this a CEmONC Facility	1	2	Yes →7.2

7.1: Stabilization of Postpartum hemorrhage (PPH) at BEmONC facility

Initial Stabilization:

No	Questions and filters	Option/Codes		Skip
		Yes	No	
708	**Vital Signs Monitored and recorded**			
	Consciousness	1	2	x
	Pulse	1	2	x
	BP	1	2	x
	Respiratory rate	1	2	x
709	Provided uterine massage	1	2	x
710	Inj. Oxytocin 10-unit IM Given	1	2	x
711	I/V Fluid with Hartman saline solution started	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
712	Blood investigations sent -			
	Hb%	1	2	x
	Bedside clotting test	1	2	x
	Blood grouping and cross matching	1	2	x
713	Catheterization of Bladder done	1	2	x
714	**Outcome of the Patient**			
	Patient stabled	1	2	x
	Immediately transferred to a higher-level health-care facility or CEmONC Centre	1	2	x

7.2: Stabilization of Postpartum hemorrhage (PPH) at CEmONC facility

Initial Stabilization:

No	Questions and filters	Option/Codes		Skip
		Yes	No	
715	**Vital Signs Monitored and recorded**			
	Consciousness	1	2	x
	Pulse	1	2	x
	BP	1	2	x
	Respiratory rate	1	2	x
716	Provided uterine massage	1	2	x
717	Inj. Oxytocin 10-unit IM Given	1	2	x
718	I/V Fluid with Hartman saline solution started	1	2	x
719	Blood investigations sent -			
	Hb%	1	2	x
	Bedside clotting test	1	2	x
	Blood grouping and cross matching	1	2	x
720	Catheterization of Bladder done	1	2	x
721	**Outcome of the Patient**			
	Patient Stabled	1	2	x
	Cause Specific PPH Management done	1	2	x

Cause Specific PPH Management:

No	Questions and filters	Option/Codes		Skip
		Yes	No	
722	**Atonic Uterus**			
722.1	Provided Massage the uterus to expel blood and blood clots	1	2	x
722.2	Inj. Oxytocin: 10 unit IV/IM, 20 units in 1 liter NS @ 50 drops/min Given	1	2	x
722.3	Inj. Ergometrine 0.2 mg IM or Tab. Misoprostol 800-1000mcg PR Given	1	2	x
722.4	Inj. Tranexamic Acid IV (slowly 10cc I/V, Oral 1gm) [1 ampule] Given	1	2	x
722.5	Cause Specific PPH Management done	1	2	x
722.6	Bimanual compression Done: *put one hand (left) on the lower abdomen (uterus) and one hand perveginally in the posterior fornics, then compress both hands*	1	2	x
722.7	Put Uterine Baloon tamponade (UBT) / Condom tamponade/ NASG (Antishock garment)	1	2	x
722.8	Blood Transfusion Needed	1	2	x
722.9	Laparotomy Done, *(If still bleeding continues to explore uterus)*	1	2	x
722.10	Assessed clotting status using bedside clotting test *(If bleeding continues)*	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
723	**Genital tract trauma**			
723.1	Repaired vaginal tear/perineal tear/ cervical tear/Manage Ruptured Uterus	1	2	x
723.2	Assessed clotting status using bedside clotting test (If bleeding continues)	1	2	x
723.3	Blood Transfusion Needed	1	2	x
723.4	Referred the patient to a higher facility	1	2	x

No	Questions and filters	Option/Codes		Skip
		Yes	No	
724	**Retained Placenta (Full/Partial)**			
724.1	Removed the placenta *(if placenta is felt in the vagina)*	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
724.2	Remove placenta manually (Manual removal of placenta) *(If placenta is not expelled)*	1	2	x
724.3	Assessed clotting status using bedside clotting test (If bleeding continues)	1	2	x
724.4	Blood Transfusion needed	1	2	x
724.5	Referred the Patient to a higher facility	1	2	x
End Of Section 7				

Any Specific Observation/Comments/Recommendation

Observation checklist for Antenatal Care

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the **SKIP** questions

Information about Assessor					
Name of the assessor: Designation of the assessor: Organization:					
Date of **start-ing** observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of **starting** observation:	
Date of **ending** observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of **ending** observation:	

Information about health facility:		
Name of health facility		
Address of the facility:		
District	Upazila	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 1: Antenatal Care Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
100	Is this section observed?		1	2	x
101	If No, write down the reason	Please write "Done by Interview" here if this section's data collected by interviewing the Service Provider.			
102	Who perform the antenatal care assessment for the Patient?	Doctor		1	x
		Nurse		2	
		Paramedic/ SACMO/FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	

Record whether the provider carried out the following steps and/or examinations:
(Some of the following steps may be performed simultaneously or by more than one provider)

Introduction and History Taking

No	Questions and filters	Option/Codes		Skip
		Yes	No	
103	Respectfully greeted woman	1	2	x
104	Warm welcome with self-introduction done	1	2	x
	Maintained privacy, confidentiality and dignity of the patient	1	2	x
	Listened carefully to her complaints and respond to her queries	1	2	x
105	Asked Patient About			
	a. Women's age	1	2	x
	b. Menstrual history	1	2	x
	c. H/O previous pregnancy	1	2	x
	d. Family History (DM/HTN/TB)	1	2	X
	e. H/O General disease (allergy, TB, hypertension, diabetes, asthma, heart disease, goitre, Hepatitis etc.)	1	2	X
	f. H/O TT vaccination	1	2	x
	g. H/O Medication	1	2	x
	h. Any prior ANTENATAL VISIT/CHECK-UP(s) during current pregnancy	1	2	x
Examination of the pregnant Woman				
106	Washed hand before examination	1	2	No→109
107	Washes hand appropriately (with soap and water or using alcohol hand rub)	1	2	x
108	Wears sterile gloves for Examination	1	2	x
109	Explains procedures before proceeding	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
110	Performs the following steps for general examination			
	I. Observed appearance	1	2	x
	II. Measured and record the blood pressure	1	2	x
	III. Counted pulse	1	2	x
	IV. Anemia checked by checking eye/ tongue/ palm	1	2	x
	V. Jaundice checked	1	2	x
	VI. Weight Measured	1	2	x
	VII. Height Measured	1	2	x
	VIII. Took temperature by thermometer	1	2	x
	IX. Counted respiratory rate	1	2	x
	X. Edema checked (pedal edema)	1	2	x
111	Abdominal examination was performed (Depends on the visit 1st / 2nd / 3rd / 4th)	1	2	No→ 112
	I. Examine the abdomen for FETAL PRESENTATION	1	2	x
	II. Measure the UTERINE HEIGHT	1	2	x
	III. Listen to the abdomen for FETAL HEART BEAT	1	2	x
	IV. Measure the UTERINE Girth/ Liquor volume	1	2	x
	V. Visually inspect the breast	1	2	x
	VI. Explain the steps of breast examination to the woman	1	2	x
	VII. Examine the woman's BREAST	1	2	x
	VIII. Examine the perineal area	1	2	x

	Routine test				
112	Record whether the provider	(A)	(B)	(C)	(D)
	A) Asked and checked whether the reports were previously done B) Advised for the test C) No action was taken D)Test Not Applicable	Provider ASKED	Provider Advised	NO action taken	Not applicable
112.1	PREGNANCY test	A	B	C	D
112.2	Blood test for HAEMOGLOBIN	A	B	C	D
112.3	Blood GROUPING AND TYPING	A	B	C	D

No	Questions and filters		Options/Code		Skip
			Yes	No	
112.4	Blood sugar (2hABF)	A	B	C	D
112.5	Blood test for VDRL	A	B	C	D
112.6	Blood test for HBsAg	A	B	C	D
112.7	Urine test for ALBUMIN	A	B	C	D
112.8	Urine test for GLUCOSE	A	B	C	D
112.9	Urine test for RME	A	B	C	D
112.10	ULTRASONOGRAM	A	B	C	D
112.11	Other	A	B	C	D

	Provision of medicine							
113	Record whether the provider prescribed or provided the woman any of the following medicine (1) Yes (2) No	Prescribed		Provided		Explained how to use		Was not Necessary
113.1	IRON-FOLATE TABLET (IFA) until next visit	1	2	1	2	1	2	Y
113.2	CALCIUM tablet	1	2	1	2	1	2	Y
113.3	VITAMINS	1	2	1	2	1	2	Y
113.4	MISOPROSTOL for use if delivered at home (only in third trimester)	1	2	1	2	1	2	Y
113.5	7.1% Chlorhexidine for use if delivered at home (only in third trimester)	1	2	1	2	1	2	Y
113.6	OTHER medication	1	2	1	2	1	2	Y
113.7	Deworming medication	1	2	1	2	1	2	Y

No	Questions and filters	Options/Code		Skip
		Yes	No	
114	**Health education & advice given**			
114.1	Importance of routine ANC	1	2	x
114.2	Self-care at home	1	2	x
114.3	Rest, avoid heavy work, lifting heavy weight objects, Ambulation	1	2	x
114.4	Safer sex and healthy lifestyle	1	2	x
114.5	Hand washing	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
114.6	Personal hygiene	1	2	x
115	**Counselling: Maternal Health**			
115.1	Maternal Diet, nutrition and fluid	1	2	x
115.2	Importance of ANC visit	1	2	x
115.3	General cleanliness and self-care	1	2	x
115.4	Danger signs (maternal) & Delivery Complication	1	2	x
115.5	Bowel and bladder	1	2	x
115.6	Exercise	1	2	x
115.7	Postpartum family planning	1	2	x
116	**Counselling: Birth Preparedness**			
116.1	Place of delivery	1	2	x
116.2	Attendant & blood donor	1	2	x
116.3	Money saving	1	2	x
116.4	Transport	1	2	x
117	**Counselling: Newborn health**			
117.1	Essential new-born care	1	2	x
117.2	Immediate and exclusive breastfeeding	1	2	x
117.3	Danger signs (newborn)	1	2	x
117.4	Thermal care (STS, KMC)	1	2	x
118	Provider used any VISUAL AIDS for health education or counselling during the consultation	1	2	x

Observation checklist for Postnatal Care

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the SKIP questions

Information about Assessor					
Name of the assessor:					
Designation of the assessor:					
Organization:					
Date of starting observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of starting observation:	
Date of ending observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of ending observation:	

Information about health facility:		
Name of health facility		
Address of the facility:		
District:	Upazila:	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 1: Postnatal Care Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
100	Is this section observed?		1	2	x
101	If No, write down the reason	Please write "Done by Interview" here if this section's data collected by interviewing the Service Provider.			
102	Who perform the postnatal care assessment for the Patient?	Doctor		1	x
		Nurse		2	
		Paramedic/ SACMO/FWV		3	
		Midwife		4	
		Multiple Service Providers Led by Doctor		9	
Record whether the provider carried out the following steps and/or examinations:					
(Some of the following steps may be performed simultaneously or by more than one provider)					

Introduction and History Taking				
No	**Questions and filters**	**Option/Codes**		**Skip**
		Yes	**No**	
103	Respectfully greeted woman	1	2	x
	Warm welcome with self-introduction done	1	2	x
	Maintained privacy, confidentiality and dignity of the patient	1	2	x
	Listened carefully to her complaints and respond to her queries	1	2	x
104	Prepare the necessary equipment	1	2	x
105	Asked Patient About			
	a. Women's age	1	2	x
	b. History of high fever	1	2	x
	c. History of high blood pressure	1	2	x
	d. History of foul smelling of vagina	1	2	x
	e. History of P/V bleeding	1	2	x
	f. History of convulsion	1	2	x
Examination of the Woman				
106	Washed hand before examination	1	2	No→109
107	Washes hand appropriately (with soap & water or using alcohol hand rub)	1	2	x
108	Wears sterile gloves for examination	1	2	x
109	Explains procedures before proceeding	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
110	Performs the following steps for general examination			
	I. Observed appearance	1	2	x
	II. Measured & record the blood pressure	1	2	x
	III. Counted pulse	1	2	x
	IV. Anemia checked by checking eye/ tongue/ palm	1	2	x
	V. Jaundice checked	1	2	x
	VI. Weight Measured	1	2	x
	VII. Height Measured	1	2	x
	VIII. Took temperature by thermometer	1	2	x
	IX. Counted respiratory rate	1	2	x
	X. Edema checked (pedal edema)	1	2	x
	XI. Visually inspect the breast	1	2	x
	XII. Explain the steps of breast examination to the woman	1	2	x
	XIII. Examine the woman's breast to exclude any complication	1	2	x
	XIV. Checked for vaginal discharge	1	2	x
	XV. Checked perineum	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
111	Newborn Health			
	I. Measure temperature of newborn	1	2	x
	II. Measure weight of newborn	1	2	x
	III. Measure Respiratory rate	1	2	x
	IV. Fast breathing found Examine jaundice	1	2	x
	V. Examine jaundice	1	2	x
	VI. Breast feeding observed	1	2	x
	VII. Took history of poor feeding	1	2	x
	VIII. Took history of high fever or low body temperature	1	2	x
	IX. Took history of umbilical discharge	1	2	x
	X. Took history of convulsion	1	2	x

No	Questions and filters	Options/Code		Skip
		Yes	No	
112	Counselling: Maternal & Newborn Health			
112.1	Advised on Maintaining Personal Hygiene	1	2	x
112.2	Advised on Maternal diet, Nutrition and supplementation	1	2	x
112.3	Advised on the importance of immediate and exclusive breastfeeding of the child	1	2	x
112.4	Counseled on the importance of birth spacing and family planning, and refer for family planning counselling and services	1	2	x
112.5	Advised the woman to bring her husband (or a family member or friend) to later postpartum visits so that they can be involved in the activities and can learn how to support the woman through her motherhood	1	2	x
112.6	Advise on Rest and other activities	1	2	x
112.7	Advised on Bowel & bladder care	1	2	x
112.8	Advised on Postpartum family planning	1	2	x
112.9	Informed about Maternal Danger Signs • Profuse vaginal bleeding or vaginal bleeding that increases • Moderate to severe hypertension • Convulsions • Severe abdominal pain with foul smelling discharge with fever • Severe pain in chest or shortness of breath • Urine or feces leaking out of the vagina • Something coming out of the vagina	1	2	x
112.10	Informed about Newborn Danger Signs • Not feeding well • Low body temperature (less than 35.5°C or 95.5°F) or Fever (37.5°C or more than 99.5°F) • Fast breathing (60/min or above) • Severe chest in-drawing present • Movement only when stimulated or no movement at all • History of convulsion • Umbilical redness extended to skin	1	2	x
112.11	Importance of Immunization was discussed including COVID Vaccination of Mother	1	2	x
112.12	Prescribed Iron Supplementation for mother	1	2	x
112.13	Prescribed Calcium Supplementation for mother	1	2	x
112.14	Prescribed Vitamin A Supplementation for mother	1	2	x
112.15	Schedule appointments for 2nd, 3rd and 4th visits as appropriate	1	2	x
112.16	Provider used any VISUAL AIDS for health education or counselling during the consultation	1	2	x

Observation checklist for Facility Readiness

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the SKIP questions

Information about Assessor			
Name of the assessor:			
Designation of the assessor:			
Organization:			
Date of starting observation:	D D M M Y Y Y Y	Time of starting observation:	
Date of ending observation:	D D M M Y Y Y Y	Time of ending observation:	

Information about health facility:		
Name of health facility		
Address of the facility:		
District	Upazila	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 1

Infrastructure and services info (when applicable, ü as appropriate)			
Well-equipped labor room i.e. spacious, birthing ball and stool, necessary equipment, etc.?	Y / N	ANC/PNC services provided?	Y / N
Is labor room in charge a midwife?	Y / N	24/7 BEmONC services provided?	Y / N
Designated labour observation room?	Y / N	24/7 CEmONC services provided?	Y / N
A dedicated OT for cesarean Section?	Y / N	Partograph used for all deliveries?	Y / N
Dedicated Postoperative ward for CS patients?	Y / N	Labor Care Guide Available	Y / N
Pre-Referral management of obst. Emergencies to higher facilities?	Y / N	Labor Care Guide used for all deliveries?	Y / N
Name of the referral center for obstetric emergencies_____	Y / N	Assisted vaginal delivery services available?	Y / N

Blood transfusion services provided?	Y / N	Manual removal of placenta available?	Y / N
Grouping and cross-matching done at this facility?	Y / N	Removal of retained products of conception (MVA)	Y / N
Screening tests done at this facility?	Y / N	Laboratory services provided?	Y / N
USG done in the facility	Y / N	Exit client feedback systems available?	Y / N
Doppler ultrasound done in the facility	Y / N	Complaints services available?	Y / N
CTG machine available in the facility	Y / N	Neonatal resuscitation services available?	Y / N

Service Provider Information						
SL.	Provider Type	Sanctioned	Posted	Training (Midwife/ CEmONC)	What and when	Dedicated at LR or facility? (check roster)
1	OBGYN					
2	Anesthesiologist					
3	Pediatrician					
4	Midwife					
5	Midwifery trained					
	Nurse					
6	OT Nurse					
7	SSN					

Section 2

ANC/PNC Corner

Status: Y (Yes), N (No), P (Partially Available), NA (Not Applicable)

SL	Indicator	Status				Remarks
		Y	N	P	NA	
A.	Facility readiness					
1	Service providers have got any training on Antenatal and Postnatal care in last one year?					
2	Is there any standard ANC and PNC SOP/guideline in the room?					
3	Have any dedicated room/corner for antennal / postnatal care?					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
4	Category/Type of service provider					
	· Doctor					
	· Nurse					
	· Midwife					
	· SACMO					
	· FWV					
5	Service area is clean (Walls, floor and roof/ceiling free from dust and dam) and organized					
6	Continuous running water supply					
7	Functional Light Source					
8	Well ventilated					
9	Hand washing facility (Running water and Soap / Chlorhexidine Gluconate + Isopropyl alcohol					
	0.5%+70% / Spirit					
10	Toilet for pregnant mother					
11	Examination Table with mattress					
12	Wooden steps for examination table					
13	Sitting arrangement for companion of mother					
14	Following equipment in working condition and supplies/ commodities available					
	Ø Stethoscope					
	Ø BP Machine					
	Ø Thermometer					
	Ø Adult weighing machine					
	Ø Functional height meter/measuring tape					
	Ø Facility for detecting Urine Albumin					
	Ø Facility for measuring hemoglobin percentage					
	Ø Iron and Folic acid tablet					
	Ø Calcium tablet					
	Ø ANC/PNC Card					
	Ø ANC/PNC register					
	Ø Referral slip					
	Ø Poster on ANC Checkup					
	Ø Poster on PNC Checkup					

	Indicator	Status				Remarks
		Y	N	P	NA	
	Ø Poster on Maternal Danger Signs					
	Ø Poster on Newborn Danger Signs					
	Ø Poster on Birth/Emergency preparedness					
	Ø PPFP Job aids					
	Ø Screening SPE/Eclampsia algorithm					
	Ø Tiahrt Banner					

Section 3

Delivery and Newborn Care

Status: Y (Yes), N (No), P (Partially Available), NA (Not Applicable)

SL	Indicator	Status				Remarks
		Y	N	P	NA	
A.	Facility Readiness					
1	Did the service provider receive any training on Delivery Care during last one year?					
2	Is there any standard guideline for providing delivery care?					
3	Is there any area/room designated as labor observation?					
4	Category/Type of service provider					
	· Doctor					
	· Nurse					
	· Midwife					
	· SACMO					
	· FWV					
5	Is the delivery area clean?					
6	Is the source of light natural?					
6.1	Is the source of light is artificial (an IPS or Generator available)					
7	Is safe water supply (Tape, pump or portable container with tape) available?					
8	Is a usable toilet available for pregnant mother?					
9	Are the following arrangements available in Labor Observation Room?					
	· Bed and chair with arm for mother					
	· Bed side table for keeping mother's belongings					
	· Curtain for privacy when using bed or chair					
	· Sitting arrangement for companion of mother					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
10	Are the following arrangements available in Delivery/ Labor Room?					
	· Delivery bed complete with rods and stirrups with rubber covered mattress with pillow					
	· Stairs (for climbing onto delivery bed)					
	· Materials to support delivery progress (Delivery chair, Birthing ball)					
	· Water pot with glass					
	· Curtain to cover labor table					
	· Bin for waste disposal (Red, Green, Blue)					
	· Clean trolley to keep instruments					
	· Spot light and stool (For episiotomy and tear repair)					
	· Washing facility with water supply					
	· Clean surface for newborn resuscitation					
	· Table for baby management					
	· Almira for keeping medicine, instruments and equipment?					
	· Shoe rack outside the labor room					
11	Is there any Partograph board available?					
11.1	Is there any Partograph paper available?					
12	Is there Labor Care guide available?					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
	Are all necessary instruments and equipment available for vaginal delivery of mother in the facility?					
	Logistics					
	· BP machine					
	· Stethoscope (adult and fetal)					
	· Jar for lifter and lifter					
	· Disposable syringe					
	· IV cannula					
	· Butterfly cannula					
	· Tourniquet					
	· Micropore					
	· Cotton					
	· Gloves					
	· Napkins/towel					
	· Drapes and sheets					
	· Clean clothes (1meter x 1meter) 2 pieces					
13	· Clean gauze, swab or cloth for wiping baby's eyes					
	· Clean perineal pad					
	· Clean plastic sheet					
	· Injection Oxytocin (kept in 2-80 C)					
	· Sponge Holding Forceps					
	· Gully Pot					
	· Long Curve Artery Forceps					
	· Mayo's Scissor					
	· Cord cutting Scissor					
	· Kidney Tray					
	· Umbilical Cord Clamp					
	· Sim's Speculum					
	· Episiotomy Set					
	· Episiotomy Scissor					
	· Needle Holder (Medium)					
	· Toothed Dissecting Forceps					
	· Suturing Materials-Needle, Catgut, Silk					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
14	Is there Emergency Trolley with Medicine box, Eclampsia Kit and PPH Kit available in the labor room?					
	Emergency Trolley					
	Inj. Adrenaline					
	Inj. Amoxicillin					
	Inj. Calcium Gluconate					
	Inj. Diazepam					
	Inj. Tranexamic Acid					
	Inj. Labetalol					
	Inj. Hydralazine					
	Inj. Lidocaine 2%					
	Inj. MgSO4					
	Inj. Pethidine					
	Tab. Misoprostol					
	Tab. Nifedipine					
	Tab. Paracetamol					
	Topical Antibiotic Ointment					
	Tab. Labetalol/ Methyldopa					
	I.V Cannula 16-18 g(4 each)					
	I.V Infusion set					
	Adhesive Tape					
	Ambu Bag					
	Airway Tube					
	Examination Gloves 4 pair					
	Eclampsia kit					
	Airway Tube (adult different size)/Mouth Gag 3 pieces					
	Inj. MgSO4 (2.5 gm in 5 ml))-4 amp / Inj. Nalepsin 100 ml 7 bottle					
	Inj. Hartman's Solution 1000 ml- 1 bag					
	Inj. Normal Saline 1000 ml-1 bag					
	Disposable Syringe 20 cc- 1, 10 cc-2, 3 cc-2					
	Distilled water 5 cc, 10 ampules					
	Inj. calcium gluconate (1 gm= 10% solution of 10 ml)					
	Folly's Catheter 14 size with Urobag-1 piece					
	Sterile Gloves 6.5/7 inch- 2 pair					
	PPH Kit					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
	Inj Oxytocin 5 IU-6 ampule should be kept in the refrigerator within 2-8 degree Celsius					
	Tablet Misoprostol (200 microgram)-4					
	Inj. Hartman's Solution 1000 ml- 1 bag					
	Inj. Normal Saline 1000 ml-1 bag					
	Inj. Tranexamic Acid 500 mg-4 ampule					
	Folly's Catheter 14 size with Urobag-1 piece					
	Plain Rubber Catheter-1					
	Condom-2					
	Sterile Silk – 1 leaf					
	Sterile gloves 6.5/7 inch- 2 pair					
	Saline Set-3					
	I.V Cannula 18 G-1, 20 G-1					
	Disposable Syringe 10 cc- 1, 5 cc -4					
	Airway Tube (adult different size)/Mouth Gag 2 pieces					
	Caesarean section					
	OT table					
	OT light					
	Anesthesia machine					
	Oxygen					
	Caesarean section instruments set					
	Monitor for vital sign assessment					
	Bupivacaine Injection					
	Spinal needle					
15	Are all necessary Instruments and equipment available for Newborn Care?					
	Gloves					
	Two or more clean cotton cloth					
	Cap					
	Scissor					
	Sterile thread or cord clamp					
	7.1% Chlorohexidine solution					
	Suction device					
	Ventilation bad and mask (0 and 1 size)					
	Stethoscope					
	Timer					
	Weighing scale					
	Warmer					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
16	Drugs for routine care:					
	Ø Inj. oxytocin					
	Ø Inj. ergometrine					
	Ø Inj.TT/TIG					
	Ø Inj.Amoxicillin					
	Ø Vitamin A supplements					
	Ø Vitamin K1					
	Ø Iron/folate tablets					
	Ø Antimicrobial eye prophylaxis (1% silver nitrate solution, 2.5% povidone iodine or 1% tetracycline eye ointment)					
	Ø Chlorhexidine Gluconate + Isopropyl alcohol 0.5%+70%					
	Ø Povidone iodine ointment					
	Ø Jasocaine jelly					
	Ø 7.1% chlorhexidine					
17	Drugs for emergency care/services					
	Ø Inj. Oradexon					
	Ø Inj.Amoxicillin					
	Ø Inj. Hydralazine					
	Ø Inj. Diazepam					
	Ø Inj. Ergometrine					
	Ø Inj.Adrenaline					
	Ø Inj. Magnesium sulfate					
	Ø Lidocaine 2% (for dilution to 0.5%)					
	Ø Inj. Pethidine					
	Ø Tab. Paracetamol (Acetaminophen)					
	Ø Tab. Phenobarbital					
	Ø Inj. Calcium gluconate					
	Ø Tab. Misoprostol					
	Ø Tab. Nifedipine					
	Ø Topical antibiotic ointment					

Record Keeping and Reporting Registers (when applicable, ✓ as appropriate)			
	YES	NO	Remarks
Antenatal care registers/EMR available	Y	N	
Delivery patient admission register/EMR available	Y	N	
Delivery/EOC Register/EMR available	Y	N	
CS registers/EMR available	Y	N	
Delivery patient admission form/EMR available	Y	N	
Discharge form/EMR available	Y	N	
Discharge certificate/EMR available	Y	N	
Partograph available	Y	N	
Referral form/EMR available	Y	N	
Birth certificate/EMR available	Y	N	
Death Certificate/EMR available	Y	N	
Postnatal care registers/EMR available	Y	N	
Safe Surgery Checklist (SSC)	Y	N	

Section 4

Infection Prevention and Waste Management

SL	Indicator	Status				Remarks
		Y	N	P	NA	
A.	Facility Readiness					
1	Staffs are appropriately inducted and trained in all aspects of infection control and prevention.					
2	Infection Prevention Committee (IPC) formed					
3	IPC committee meeting held regularly and reviewed the status of infection prevention					
4	Is the inside and outside of the facility clean?					
5	Is there water available for handwashing of the provider?					

SL	Indicator	Status				Remarks
		Y	N	P	NA	
6	Do the provider use soap during hand washing?					
	· Is there arrangement for 0.5% chlorine solution?					
	· Is there provision (running water, plastic boule, detergent powder, tooth brush, utility gloves, plastic rack, towel, clean cloth, mackintosh, musk) for cleaning reusable instrument and equipment?					
	· Autoclave machine available?					
	· Autoclave tape available					
	· Are all the necessary instruments for delivery regularly HLD/autoclaved?					
	· Are different color containers (black container-general, yellow-contaminated, red-sharps waste) used for waste segregation?					
7	Are all waste collection containers covered or have lid?					
8	Are there various bins available in places for proper waste management?					
9	Are all the bin labelled?					
10	Is safety box used for collecting sharp waste like needle, syringe?					
11	Is there one/two pit available inside the facility for waste disposal?					
12	Is there a storage area for waste prior to treatment or being taken to final disposal area?					
13	Is there a pit specified for dumping the placenta?					
14	Is the waste collection pit covered/closed by a lid? (Cement cover/Iron sheet/other coating)					
15	Staffs are appropriately inducted and trained in all aspects of infection control and prevention.					

Observation checklist for Experience of Care

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the SKIP questions

Information about Assessor					
Name of the assessor:					
Designation of the assessor:					
Organization:					
Date of starting observation:	D D	M M	Y Y Y Y	Time of starting observation:	
Date of ending observation:	D D	M M	Y Y Y Y	Time of ending observation:	

Information about health facility:		
Name of health facility		
Address of the facility:		
District	Upazila	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 1

Respectful Maternity Care

From Overall Observation from the Facility Please Fill up the below Points (when applicable, as appropriate)

SL	Indicator	YES	NO	Remarks
1	Service provider of this facility greet warm welcome with self-introduction to the patients	Y	N	
2	Service provider of this facility treat the woman and her companion with compassion and respect	Y	N	
3	Service provider of this facility maintain privacy, confidentiality and dignity of the patient	Y	N	
4	Service provider of this facility listen carefully to her complaints and respond to her queries	Y	N	
5	Service provider of this facility respect women's choice of companions during labor and birth	Y	N	
6	Service provider of this facility share information with patient and family.	Y	N	

Section 2

Discharge Protocol

From Overall Observation from the Facility Please Fill up the below Points (when applicable, as appropriate)

Sl	Indicator	YES	NO	Remarks
1	A written and dated procedure including criteria to determine readiness for discharge of patients is used and specifies who is authorized to do it.	Y	N	
2	On discharge, the attending service provider summarizes and explain the patient's records, the diagnosis, any complications, any operative procedures undertaken and any follow up arrangements agreed with the patient/family.	Y	N	
3	During discharge the mother received written and verbal information and counselling on the following elements before discharge:			
	Ø Nutrition for mother and hygiene	Y	N	
	Ø Birth spacing and family planning	Y	N	
	Ø Exclusive breastfeeding in day and night and maintaining lactation	Y	N	
	Ø Keeping their baby warm and clean	Y	N	
	Ø Delayed bathing for 72 hours after birth for normal newborn	Y	N	
	Ø Cord care (7.1% CHX been given, do not use anything else),	Y	N	
	Ø Communication and play with the baby	Y	N	
	Ø Danger signs for the mother and newborn and where to go in case of complications.	Y	N	
	Ø Vaccination for newborn			
4	A discharge certificate containing relevant information including advice on General activities, Breast feeding, Danger signs and Maternal nutrition.	Y	N	
5	Service Provider of this Facility Respect women's choice of companions during labor and birth	Y	N	
6	Service provider explained the contents of the Discharge certificate to the Patient and family with the plan for revisit.	Y	N	
7	Service provider written and explain about drug doses clearly in Bangla language (example: not TDS, Three Times Daily)	Y	N	

Section 3

Referral Protocol

From Overall Observation from the Facility Please Fill up the below Points (when applicable, as appropriate)

SL	Indicator	YES	NO	Skip
1	Referral Slip is available (if every point is covered in discharge paper or any piece of paper will consider as referral slip)	Y	N	If No →go to Section 4
2	Proper assessment has been written in the Referral Slip A summary of examination, investigations with findings, drugs given and diagnosis of the patient	Y	N	
3	Counselling the patient and her family is done with explaining the situation to them and the need and importance of referral	Y	N	
4	Reassurance to the patient and her family is done	Y	N	
5	Selection of the appropriate, accessible and acceptable place for referral is done	Y	N	
6	Filling up the referral card/form	Y	N	
7	Support and arrange transportation if required.	Y	N	

Section 4

Queue management

From Overall Observation from the Facility Please Fill up the below Points (when applicable, as appropriate)

SL	Indicator	YES	NO	Remarks
1	Manage appointments, arrivals, and queues for Pregnant mothers who are getting service with maintaining emergency triage.	Y	N	
2	Manage the flow of patients in an efficient and structured way	Y	N	
3	Reduce the number of people waiting in the lobby or waiting room and ensure adequate waiting space with proper sitting arrangement.	Y	N	
4	Usage of Signage systems in the facility	Y	N	

Observation checklist for Newborn Care

[This Assessment Part is Extracted from The Checklist 01 and Checklist 03]

Instruction for the Assessors:

- The data will be collected principally by observation
- If the assessor faces difficulty in collecting information regarding any specific indicator, they will talk to the facility managers and/ any person nominated by him/her or review relevant documents
- The assessor should pay specific attention to the SKIP questions

Information about Assessor					
Name of the assessor:					
Designation of the assessor:					
Organization:					
Date of starting observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of starting observation:	
Date of ending observation:	☐☐ D D	☐☐ M M	☐☐☐☐ Y Y Y Y	Time of ending observation:	

Information about health facility:		
Name of health facility		
Name of the Facility Leader		
Address of the facility:		
District:	Upazila:	
Type of the facility	District hospital (GoB)	1
	Private Health Facilities	2
	NGO Hospitals	3

Section 4: Newborn Care Assessment

No	Questions and filters		Options/Code		Skip
			Yes	No	
400	Is this section observed?		1	2	
401	If No, write down the reason				
402	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SACMO/ FWV		3	
		Midwife		4	
		Others (Specify)_____		9	
Record whether the provider carried out the following steps and/or examinations:					
(Some of the following steps may be performed simultaneously or by more than one provider)					

	Questions and filters	Option/Codes		Skip
		Yes	No	
Delivery Outcome				
403	Live Birth	1	2	x
	Still Birth	1	2	x
	Dead	1	2	x
Immediate and Essential Newborn Care (ENC)				
404	Immediately dried the baby's body with a dry, warm cloth	1	2	x
405	Baby cried immediately after birth	1	2	Noà4.1
406	Placed the baby in skin-to-skin contact for initial two hours with the mother and cover the baby with a warm cloth including the baby delivered by C-Section and initiate immediate breastfeeding	1	2	x
407	Clamped and cut the cord within 1-3 minutes	1	2	
408	Applied 7.1 percent Chlorhexidine on cord stump for single application soon after birth and inform caregivers with advice not to use anything else	1	2	x
409	Initiated breastfeeding within one hour of birth	1	2	x
410	Advised mother for delayed bathing after 72 hours of birth for normal healthy baby	1	2	x

Section 4.1: Management of Birth Asphyxia

No	Questions and filters		Options/Code		Skip
			Yes	No	
411	Is this section observed?		1	2	x
412	If No, write down the reason				x
413	Who is the main care provider in this stage?	Doctor		1	x
		Nurse		2	
		Paramedic/ SACMO/FWV		3	
		Midwife		4	
		Others (Specify)_____		9	

	Questions and filters	Option/Codes		Skip
		Yes	No	
414	Baby assessed whether not crying or breathing well	1	2	x
415	Baby kept warm	1	2	x
416	Baby stimulated by gently rubbing the back	1	2	x
417	Baby cried /breathe spontaneously	1	2	Yesà422
418	Positioned the head (neck slightly extended) and cleaned the airway with penguin sucker	1	2	x
419	Provided bag-mask ventilation (40 breaths per min.) for one min	1	2	x
420	Baby cried /breathe spontaneously	1	2	Yesà422
421	Improved ventilation, evaluate heart rate and breathing to decide on advanced care	1	2	x
422	The baby responded to ventilation or stimulation	1	2	x
422.1	Place the baby with Mother and Monitor the Baby	1	2	x

Section 4.2 Baby's Record

	Questions and filters	Option/Codes		Skip
		Yes	No	
Baby note written and Recorded in Register		1	2	x
423	Date time of birth and sex	1	2	x
424	Place of delivery and delivery conducted by	1	2	x
425	Gestational Age	1	2	x
426	Temperature	1	2	x
427	Weight	1	2	x
428	Length	1	2	x
429	Occipital-frontal circumference (OFC)	1	2	x
430	Feeding	1	2	x
431	Passage of meconium/urine	1	2	x
432	Congenital malformation (if any)	1	2	x
433	Birth trauma (if any)	1	2	x
434	Birth attendant note (Describe what was done including immediate care provided and the help provided for baby's breath and the baby's response)	1	2	x
End of section 4				

Section 5: Immediate Care After Delivery

No	Questions and filters		Options/Code		Skip
			Yes	No	
500	Is this section observed?		1	2	Yes 502
501	If No, write down the reason				
502	Who is the main care provider in this stage?	Doctor		1	
		Nurse		2	
		Paramedic/ SACMO/FWV		3	
		Midwife		4	
		Others (Specify)_____		9	

Immediate Care After Delivery for Baby				
503	Newborn received care in the facility for at least -	2 Hours	More than 2 hours but less than 24 Hours	24 Hours
504	Asses the baby for -	1	2	x
	Appearance	1	2	x
	Breathing	1	2	x
	Heart Rate	1	2	x
	Colour	1	2	x
	Tone	1	2	x
	Reflex	1	2	x
	Any malformations/birth injury/Birth Defect	1	2	x
505	Monitor baby every 15 minutes for first 2 hours			x
	Assessed Breathing: listen for grunting, look for chest in-drawing and fast breathing	1	2	x
	Checked Warmth: check to see if feet are cold to touch	1	2	x
	Checked umbilical stump: look for bleeding	1	2	x
	Observed breast feeding	1	2	x
End of Section 5				

Postnatal Care Assessment : For Baby

No	Questions and filters		Options/Code		Skip
			Yes	No	
100	Is this section observed?		1	2	x
101	If no, write down the reason				
102	Who perform the postnatal care assessment for the Patient?	Doctor		1	x
		Nurse		2	
		Paramedic/ SACMO/FWV		3	
		Midwife		4	
		Others (Specify)_____		9	
Record whether the provider carried out the following steps and/or examinations during Post Natal Care Visit :					
(Some of the following steps may be performed simultaneously or by more than one provider)					

No	Questions and filters	Options/Code		Skip
		Yes	No	
103	Newborn Health			
	I. Measure temperature of Newborn	1	2	x
	II. Measure weight of newborn	1	2	x
	III. Measure Respiratory rate	1	2	x
	IV. Fast breathing found Examine jaundice	1	2	x
	V. Examine jaundice	1	2	x
	VI. Breast feeding observed	1	2	x
	VII. Took history of poor feeding	1	2	x
	VIII. Took history of high fever or low body temperature	1	2	x
	IX. Took history of Umbilical discharge	1	2	x
	X. Took history of convulsion	1	2	x
104	Counselling: Maternal & Newborn Health			
104.1	Informed about Newborn Danger Signs • Not feeding well • Low body temperature (less than 35.5°C or 95.5°F) or Fever (37.5°C or more than 99.5°F) • Fast breathing (60/min or above) • Severe chest in-drawing present • Movement only when stimulated or no movement at all • History of convulsion • Umbilical redness extended to skin	1	2	x
104.2	Importance of Immunization was discussed	1	2	x
104.3	Provider used any VISUAL AIDS for health education or counselling during the consultation	1	2	x

Glossary/Definitions

Antenatal Care: ANC is a service package rendered to pregnant women to ensure normal fetal development and to achieve a healthy pregnancy outcome for both mother and child. It consists of regular, systematic supervision, as per standard protocol, or according to the needs of each woman.

Schedule of ANC Visit: As per Maternal health SOP, at least 4 visits 1st within 16 weeks, 2nd - between 24weeks - 28 weeks, 3rd at 32 weeks, 4th - at 36 weeks - More visits may be required if needed

Postnatal care: PNC is the care of mothers and newborns from 1 hour post-delivery to 6 weeks post-delivery. Fifty-six percent of maternal deaths occur within 24 hours of birth, indicating the importance of early postpartum care to reduce maternal mortality.

Schedule of PNC Visit: Mothers and newborns should receive postnatal care in the facility within 24 hours after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, within day 2-3, within day 7-14, and six weeks after birth.

Danger signs in mother: High fever, high blood pressure, convulsion, foul smelling discharge and P/V bleeding

Danger signs in newborn: Less movements, Not feeding well, convulsion, high fever/low body temperature, umbilical discharge, fast breathing, grunting, cyanosis

Essential Newborn Care: ENC is care that every newborn needs, regardless birth place or birthweight.

Immediately dry the baby thoroughly with a dry & clean cloth : Just after birth Dry the baby thoroughly at birth Means : Dry the head, body, arms, legs and back by gently wiping with a dry & clean cloth. Remove the wet cloth.

Place the baby skin-to-skin contact with the mother for 2 hour : After drying (before cutting the cord) place the baby between mothers breast and cover the mother and the baby with a clean, dry cloth or blanket. Cover the baby's head with a cap, and both hands and feet with socks; (According to CNCP Module, Bangladesh the STS time is 2 hours).

Cut cord: The baby receives blood from the placenta in the first few minutes after birth. Clamp or tie and cut the cord within 1- 3 minutes.1st clamp- two fingers away from abdomen, 2nd clamp- one finger from the first clamp and 3rd clamp- four fingers from the second one. Cut the cord between 2nd and 3rd clamps or ties, one finger away from the second one. Apply 7.1% Chlorhexidine (CHX) once at the umbilical cord immediately after cutting the cord. Then keep the cord open and dry

Application of 7.1% Chlorhexidine: Chlorhexidine is a safe antiseptic for newborn. 10 ml bottle of 7.1% Chlorhexidine for single use. Provider/caregiver must wash hands before applying 7.1% Chlorhexidine. 7.1% Chlorhexidine should be applied Immediately after cutting the cord (If not applied immediately, apply within 48 hours of birth) by pressing the dropper bottle over umbilical stump, body and base so that the umbilical cord is fully soaked. The cord should be kept clean and dry (Dry cord care).

Initiate breastfeeding Do not separate the mother and baby for weighing until after the baby has breastfed. Help the mother begin breastfeeding within the first hour of birth. Do not limit the time the baby feeds; early and unlimited breastfeeding gives the newborn energy to stay warm, nutrition to grow, and antibodies to fight infection.

To initiate breathing of the newborn:

Keep warm: Place the baby skin-to-skin on the mother's chest/abdomen. If that is not possible, place the baby beside the mother on a warm, dry cloth/blanket and cover the head.

Position the head: Position the baby with the neck slightly extended to help keep the airway open.

Clear the airway: Clear the mouth first and then the nose with a clean sucker. Clear the mouth to remove the largest number of secretions before the baby gasps or cries. Suctioning the nose first may cause inhaling of secretions of mouth. When using a bulb sucker (penguin sucker), squeeze the bulb before inserting the tip in the mouth or nose and release the bulb, then withdraw. Stop suctioning when secretions are cleared, even if the baby does not breathe. Suctioning too long, too vigorously, or too deeply can cause injury, slow heart rate and prevent breathing. When using a sucker with a tube and chamber, insert the tube into the side of the baby's mouth no more than 5 cm beyond the lips. Apply suction while withdrawing the tube. Insert the suction tube 1 to 2 cm into each nostril and apply suction while withdrawing the tube. The sucker needs to be cleaned before use.

Stimulate breathing: Gently rub the back two to three times. Move quickly to evaluate breathing and decide if the baby needs ventilation with bag & mask. If a baby is not breathing well or crying after clearing the airway and brief stimulation, the baby needs ventilation with bag and mask. Drying, clearing the airway, and stimulating breathing should take less than 1 minute. Your actions in The Golden Minute can help many babies begin to breathe.

If the baby is breathing well, no further intervention is required. Continue to check the breathing. Clamp or tie and cut the umbilical cord. Encourage breastfeeding in the first hour.

If the baby is not breathing well (gasping or not breathing at all) begin ventilation with bag and mask. Quickly place a single clamp or tie around the cord about 10 to 12 finger breadths from the baby's abdomen, put another clamp and tie 1 finger breadth away from the tie and then cut the cord in between the ties, then move the baby to the area for ventilation. Delay in ventilation may result in brain damage or death.

- Move the baby to the area of ventilation Place the baby on a clean, warm, flat, hard and dry area with good light to assess the baby. Prepare this area prior to the birth.
- Stand at the baby's head end To control the position of the head and observe chest movement
- Position the head slightly extended Help to keep the baby's airway open by positioning the head slightly extended and supporting the chin.
- Select the correct mask The mask should cover the chin, mouth, and nose, but not the eyes. The mask should make a tight seal on the face, so air will enter the baby's lungs. A large mask will not seal well on the face and air will escape under the mask. A small mask will not cover both the mouth and nose and may block the nose.
- Position the mask on the face Position the rim of the mask to rest on the tip of the chin, then place the mask over mouth and nose.
- Ensure firm seal Make a firm seal between the mask and the face while squeezing the bag to produce a gentle movement of the chest. Hold the mask on the face with the thumb and index finger on top of the mask. Use the middle finger to hold the chin up toward the mask. Use the 4th and 5th fingers along the jaw to lift it forward and help keep the airway open. Form a tight seal by pressing lightly on the top of the mask and gently holding the chin up toward the mask. If the

seal is not tight, you will not move air into the lungs as you squeeze the bag. The air will escape under the rim of the mask. Do not push the mask down onto the face. This may change the head position and interfere with air entering the lungs.

- Start bag-mask ventilation Squeeze the bag to produce a gentle movement of the chest, as if the baby were taking an easy breath. Make sure there is no leak between the mask and the baby's face. Squeeze the bag harder if you need to deliver more air with each breath.
- Give 40 breaths per minute Count aloud, "One thousand one, one thousand two, one thousand three, …..four, ….." You will need to ventilate at a rate that helps air move into and out of the lungs well.
- Monitor the baby who is breathing after ventilation.
- Continue ventilation and seek advanced care ifthe baby is not breathing or breathing with difficulty.
- A baby who has received continued ventilation (longer than 5 minutes) needs close monitoring and special consultation or referral to tertiary level facility. Warmth and assistance with feeding will be necessary.

Birth Asphyxia A baby who is not breathing well will be:

- Gasping - taking a single deep breathe followed by a long pause or several deep, irregular breaths followed by a pause, or
- Not breathing at all

Some babies will have shallow, irregular, slow, or noisy breathing immediately after birth. Others may have chest in-drawing (retractions). These babies will require close monitoring of their breathing, heart rate, and colour to decide if they need more help to breathe.

Grunting: Grunting is an expiratory sound caused by sudden closure of the glottis during expiration. This is a sound made by a baby who is having trouble breathing. The baby grunts to try to keep air in the lungs to help build up the oxygen level

Chest indrawing is the inward movement of the lower chest wall when the child breathes in, and is a sign of respiratory distress.

Criteria of a Normal Newborn

- Respiratory rate: 30-59 breaths/min
- Heart rate: 100-160 beats/min
- Temperature:36.50-37.50C/97.50-99.50F (axillary, recorded over 3 minutes)
- Birth weight: 2500 gm to 4000 gm
- Color: Pink but slight peripheral cyanosis for a few hours after birth
- Movement: Spontaneous, equal, arms and legs are flexed
- Cord stump: No bleeding or drainage
- Feeding: Able to breastfeed soon after birth
- No apparent congenital malformation
- No birth trauma
- Passes meconium within 24 hours of birth
- Passes urine within 48 hours of birth

- Breastfeeding – A baby should breastfeed 8 to 12 times per day

Congenital anomalies/Birth Defects: are also known as congenital disorders or congenital malformations. Congenital anomalies can be defined as structural or functional anomalies (for example, metabolic disorders, club foot, Cleft palate, Cleft lip, Syndactyly/ Polydactyly,Vascular malformation etc.) that occur during intrauterine life and can be identified prenatally, at birth, or sometimes may only be detected later in infancy, such as hearing defects. In simple terms, congenital refers to the existence at or before birth.

Birth planning/place of birth: A personal plan to determine the place of delivery and level of care provider needed made with the pregnant women and her husband/family.

First Stage of Labour: (WHO 2018)

- **Latent First stage:** It is period of time characterized by painful uterine contractions and variable changes of cervix including some degree of effacement and slower progressive of dilatation up to 5cm for first and subsequent labours. Median duration of first stage of labour is 6 to 7.5hrs
- **Active first stage:** It is a period of time characterized by regular painful uterine contractions, a substantial degree of cervical effacement and more rapid cervical dilatation from 5cm until full dilatation for first and subsequent labours. Median duration of active first stage is 4hrs in first labour and 3hrs in second and subsequent labour.

Induction of labour is the initiation of uterine contractions after the period of viability who is not in labour with an aim to achieve a vaginal birth within 24 to 48 hours.

Partograph: The partograph is the graphic representation of progress of labour and condition of mother and foetus during labour. The partograph is a record of all of the observations made on a woman in labour, the central feature of which is the graphic recording of the dilatation of the cervix as assessed by vaginal examination.

Labour Care Guide: The WHO Labour Care Guide is a tool that aims to support good-quality, evidence-based, respectful care during labour and childbirth, irrespective of the setting or level of health care.

Postpartum Family Planning (PPFP) Postpartum family planning (PPFP) is a critical component of any maternal, newborn and child health program. PPFP helps to reduce the number of unwanted pregnancies and maternal and infant deaths that could result from these pregnancies. PPFP helps to reduce the number of births to women and assists women to space their births at least two years apart, thus increasing the health and survival prospects of women and infants. There are multiple opportunities to provide birth spacing and family planning information and services in the context of maternal, infant and child health care services. These opportunities include antenatal care, early postpartum and extended postpartum visits, as well as during immunization days.

Following are the essential functions that define obstetric first aid, BEmONC, and CEmONC:

A. Functions used to define Obstetric First Aid:

- Administer parenteral oxytocic drugs to control hemorrhage
- Administer parenteral antibiotics to control infection
- Administer parenteral anticonvulsant drugs to control eclamptic fits

B. Functions used to define Basic EmONC:

- All functions included in obstetric first aid
- Manual removal of placenta
- Manual vacuum aspiration (MVA) and Post-Abortion Care (PAC)
- Assisted vaginal delivery (e.g., vacuum extraction or forceps)
- Essential Newborn Care

C. Functions used to define Comprehensive EmONC:

- All those included in Basic EmONC
- Surgery (e.g., caesarean section)
- Blood transfusion

Foetus distress in labor is characterized by abnormal foetus heart rate (less than 100 or more than 180 beats per minute) and thick meconium-stained amniotic fluid.

Preeclampsia: Occurrence of new-onset hypertension plus new –onset proteinuria after 20wks

Eclampsia: New onset hypertension after 20 weeks gestation, Significant Proteinuria or ≥1+ on Dipstick, and sometimes: Altered sensorium or loss of consciousness, other symptoms and signs of severe preeclampsia Along with convulsions.

Postpartum Haemorrhage Excessive vaginal bleeding (>500 ml) or prolonged moderate bleeding or any bleeding which deteriorates maternal condition after childbirth.

Retained placenta can be defined as lack of expulsion of the placenta within 30 minutes of delivery of the infant

Genital tract trauma can be caused by episiotomy, spontaneous lacerations, or both.

Atonic Uterus Uterine atony is the failure of the uterus to contract adequately following delivery

Ruptured Uterus is characterized by intra-abdominal and/or vaginal bleeding and severe abdominal pain that may decrease after rupture

Referral: A referral is a coordinated system adopted for transferring a patient when necessary to a higher level of health care in order to reduce morbidity and mortality. Referral may be one way (from bottom to top) or two ways (bottom to top and top to bottom). UHCs are identified as first referral centers, District Hospitals are the second referral centers and Medical Colleges are the third referral centers.

Annexure 1 - Identification of Pregnancy

Symptoms	Investigations:
Amenorrhoea, morning sickness, nausea, vomiting, generalized malaise, frequency of micturition, breast tenderness, swelling of abdomen (usually by 12 weeks), feeling of foetus movement (usually by 18 -20 weeks).	• Urine for pregnancy test • Blood test for Beta-hcG • USG for early detection of pregnancy Transvaginal ultrasonography (TVS) - diagnosis of pregnancy by 4-5 weeks Transabdominal ultrasonography (TAUS) - 5.5-6 weeks' gestation, a double decidual sac sign; At 6-7 weeks' gestation, the cardiac movement is visible
Signs	
At 6 - 8 weeks - Enlarged uterus and other changes of the cervix (hegar's sign, venous congestion etc.) are palpable only with a bimanual examination At 12 weeks – A gravid uterus may be palpable low in abdomen At 24 weeks – A gravid uterus is palpable in umbilicus level of the women. Palpation of foetus part and hearing foetus heart sound on physical examination.	

Annexure 2 - Risk Screening in Pregnant Women: Bangladesh

Antenatal
Height < 145 cm
In previous pregnancies, history of APH/ PPH/ Retained placenta Prolonged/ Obstructed labor IUCD/ Neonatal death
Bleeding from vagina
Severe anemia (< 7.5 gm/dl)
DM/ Jaundice/ Heart disease
Hypertension (140/90 mmHg) or one or more signs of pre eclampsia
Weight gain less than expected level (After 1st trimester <1kg/month)
Excessive weight gain (>2.5kg/month)
Abnormal fetus position after 36 weeks
Intranatal
Excessive PV bleeding
Hypertension (>140/90mmHg)
Severe headache
Convulsions
Premature rupture of membrane and fever

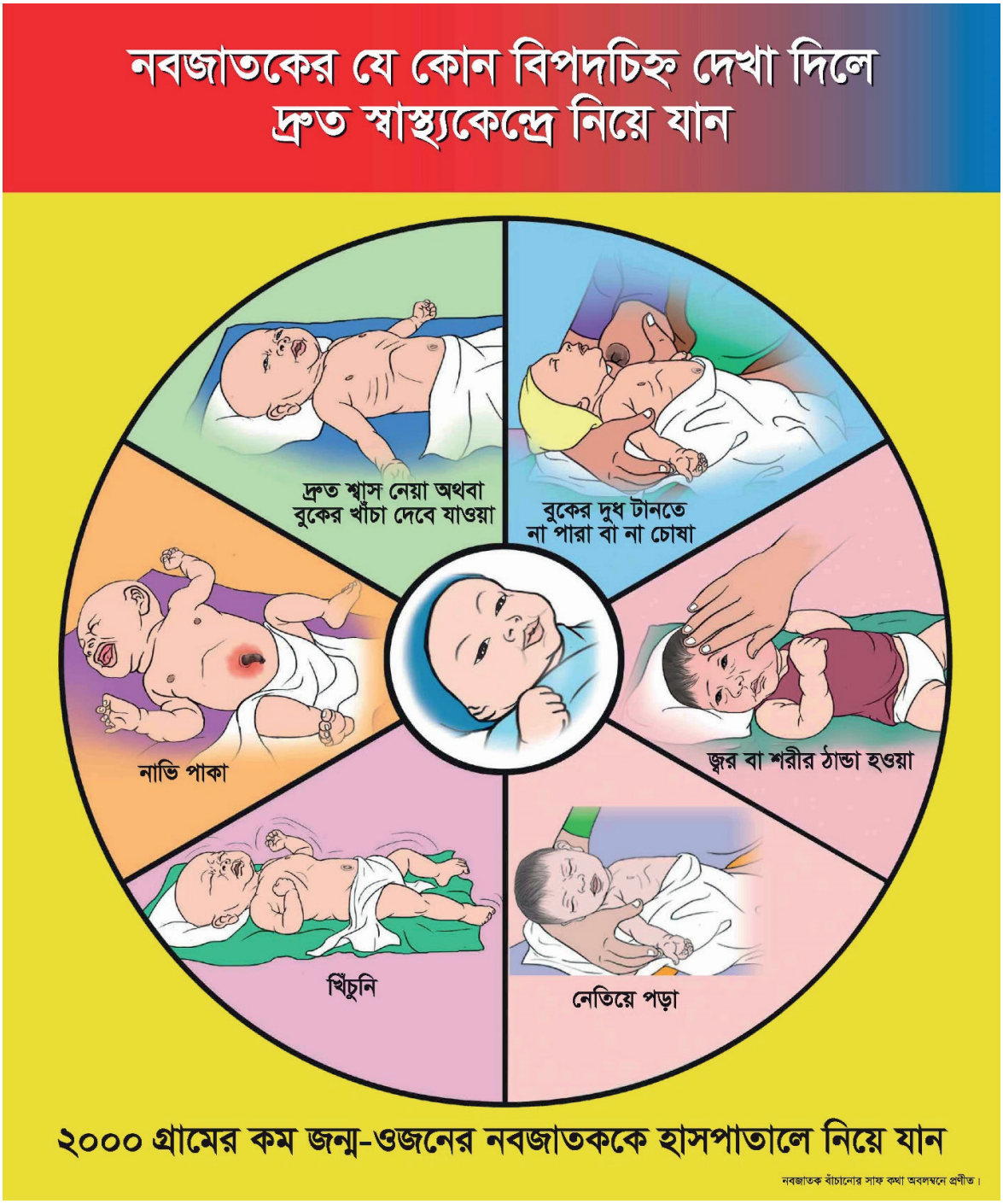
Prolonged/ Obstructed labour
Breech or shoulder presentation
Cord prolapse
FHR >160/min or <120/min
Bleeding per vagina >500 ml
Retained placenta
Excessive perineal tear and cervical tear
Ruptured uterus (Persistent severe pain and hemorrhage)
Maternal blood group Rh negative
Postnatal
Excessive vaginal bleeding
Severe anemia
Jaundice and fever
Foul smelling vaginal discharge
Hypertension >140/90 mmHg/convulsions
Neonatal
Umbilical sepsis
Congenital anomaly
Birth asphyxia even after primary management
Birth injury
Neonatal jaundice
Convulsion
Hypothermia
Prematurity
Ophthalmia neonatorum
Ophthalmia neonatorum

Annexure 3 - Danger Signs of Pregnancy

Annexure 4 - Antenatal Care Counselling


মায়েদেরকে অবশ্যই বিভিন্ন রকমের পুষ্টিকর খাবার খেতে হবে
বাড়ির আশেপাশে অথবা কমদামেই পুষ্টিকর খাবারগুলো পাওয়া যায়
লাল শাক
পুঁই শাক
কলমী শাক
মিষ্টি কুমড়া
গাজর
লাউ শাক
শিম
বরবটি
ডাঁশা কচুশাক
হেলেঞ্চা শাক
পালং শাক
যে কোন ডাল
যে কোন মাছ
যে কোন মাংস
কলিজা
শিমের বীচি
ডিম
দুধ
ভাত
রুটি
আলু
খাবার তেল
পাকা পেঁপে
পাকা আম
পাকা কাঁঠাল
কলা
পেয়ারা
জাম
যে কোন মৌসুমী ফল
গর্ভবতী ও বুকের দুধ খাওয়াচ্ছেন এমন মায়েদেরকে প্রতিদিন প্রতিটি ভাগ থেকে অন্তত একটি খাবার খেতেই হবে
৬ মাস বয়স পর্যন্ত শিশুদের শুধুমাত্র মায়ের বুকের দুধ খাওয়াতে হবে, আর কিছুই না; এমনকি একফোঁটা পানিও না
ভাত দিয়ে পেট না ভরে শাক-সব্জি ও অন্যান্য পুষ্টিকর খাবারও খেতে হবে
আয়োডিনের অভাবে
- গলগন্ড (ঘ্যাগ) হয়
- শারীরিক ও মানসিকভাবে বিকলাঙ্গ শিশুর জন্ম হতে পারে
- গর্ভের শিশু মারাও যেতে পারে
তাই, পরিবারের সবাইকে প্রতিদিন আয়োডিনযুক্ত লবণ খেতে হবে
আয়োডিনযুক্ত লবণ
শিশু তখনই মায়ের দুধ থেকে পরিপূর্ণ পুষ্টি লাভ করবে যখন মা নিজে বিভিন্ন ধরণের পুষ্টিকর খাবার গ্রহণ করবেন

Annexure 5 - Newborn Danger Signs



Annexure 6 - Essential Equipment and Supplies for Routine Childbirth Care

Records and Forms	· Birth certificates Discharge forms
	· Family card (to be kept by mother) Identity bracelets for mother and baby Obstetric register
	· Partographs Referral forms
	· Registration logbook
For Mother and Newborn	· Adult and fetus stethoscopes adult blood pressure apparatus Baby weighing scale
	· Clean clothes or sanitary pads
	· Clean clothes or towels to dry mother
	· Clean, dry cloths to dry baby and to wrap after drying Collection tubes appropriate for samples (e.g., blood, urine) Container for placenta
	· Delivery kit containing the following:
	· Kidney basin
	· Kelly's forceps (2)
	· Scissors
	· Umbilical cord clamp(s) and/or tie(s)
	· Clean cloth, 1 meter x 1 meter (2 pieces)
	· Clean gauze, swab, or cloth for wiping baby's eyes
	· Clean perineal pad
	· Diagrams/Flow charts or wall charts (for explaining labour and childbirth) Diapers/napkins
	· Drape or blanket to cover mother Gestational age calculator or calendar Gown
	· Hat or covering for baby's head Suction device
	· Ventilation bag and mask (sizes 0 and 1) Stethoscope
	· Timer (clock /watch)
	Laboratory equipment/supplies for conducting hemoglobin, syphilis, HIV, blood group (ABO, Rh) tests
	Syringes and needles Thermometer

Annexure 7 - Essential Equipment and Supplies for Obstetric Emergency/ Complication Care

For Mother and Newborn	· Inj. Oxytocin (10 IU in 1 ample)
	· Inj. Ergometrine (200 mcg)
	· Inj. 10% dextrose Saline
	· Inj. 25% glucose
	· Inj. 5% dextrose saline
	· Inj. Hartman's solution/ 0.9% Normal saline
	· Inj. Dexamethasone (4mg)
	· Inj. Diazepam (5mg)
	· Inj. Dopamine
	· Inj. Atropine
	· Inj. Pethidine (15 mg)
	· Inj. Metronidazole (500 mg)
	· Inj. Gentamycin (10 mg in 2ml vial)
	· Inj. Ciprofloxacin (500 mg)
	· Inj. Ceftriaxone (500 mg)
	· Inj. Hydralazine (20mg)/ Labetalol 200 mg
	· Inj. Hydrocortisone (100 mg)
	· Inj. Ketamine (50 mg)
	· Inj. Lidocaine and Adrenaline
	· Inj. Lidocaine (1% and 2%)
	· Cap. Amoxicillin (250 mg and 500 mg)
	· Cap. Doxycycline (100 mg)
	· Tab. Metronidazole (250 mg)
	· Tab. Misoprostol
	· Tab. Metoclopramide
	· Oxygen
	· Oxygen tubing, nasal cannula, and face masks1
	· Ambu self-inflating bag and face masks (adult size and newborn sizes 0 and 1)
	· 16- to 18-gauge IV cannulas
	· IV administration sets/ blood transfusion set
	· Ringer's lactate or normal saline
	· Adhesive tape
	· Bandage scissors

	· Thermometer (adult oral thermometer and low reading rectal thermometer
	· for newborn)
	· Suction device
	· Ventilation Bag and mask (sizes 0 and 1)
	· Stethoscope
	· Timer (clock /watch)
	· Tourniquet
	· Urinary catheter and bag
	· Closed bag or container for catheter drainage
	· Vaginal speculum
	· Water-based lubricant
	· Manual vacuum aspiration kits
	· Amniotic hook or Kocher clamp

For Mother and Newborn	Ring or sponge forceps
	Vulsellum
	Tenaculum
	Blade with handle
	Needle holder
	Absorbable, nonreactive sutures (e.g., polyglycolic, chromic catgut) and suture needles
	Scissors (for cutting sutures or episiotomy)
	Oral rehydration solution
	Radiant warmer, incubator, or covered hot water bottle to keep newborn warm
	Suction apparatus (e.g., DeLee mucus trap with catheter)
	Vacuum extractor
	Insecticide-treated (bed)nets (in malaria-endemic areas only)
	Labouratory equipment/supplies for conducting nitrazine and ferning tests

- Uterotonic drugs—particularly oxytocin, misoprostol, and ergometrine—are beneficial for certain obstetric indications.
- Oxytocin is used for labour induction, labour augmentation, active management of the third stage of labour, and management of PPH.
- Oxytocin should only be used for induction/augmentation of labour in a facility where caessarean section is available and only by skilled attendants (midwives, doctors, nurses with midwifery skills). For active management of the third stage of labour the dose is 10 units IM.
- Oxytocin should be available at health facilities providing labour and childbirth care. Oxytocin should also be available from pharmacies but only with a prescription from a doctor or a midwife Oxytocin should be stored at 4–8°C but can be kept at room temperature for up to 48 hours before use

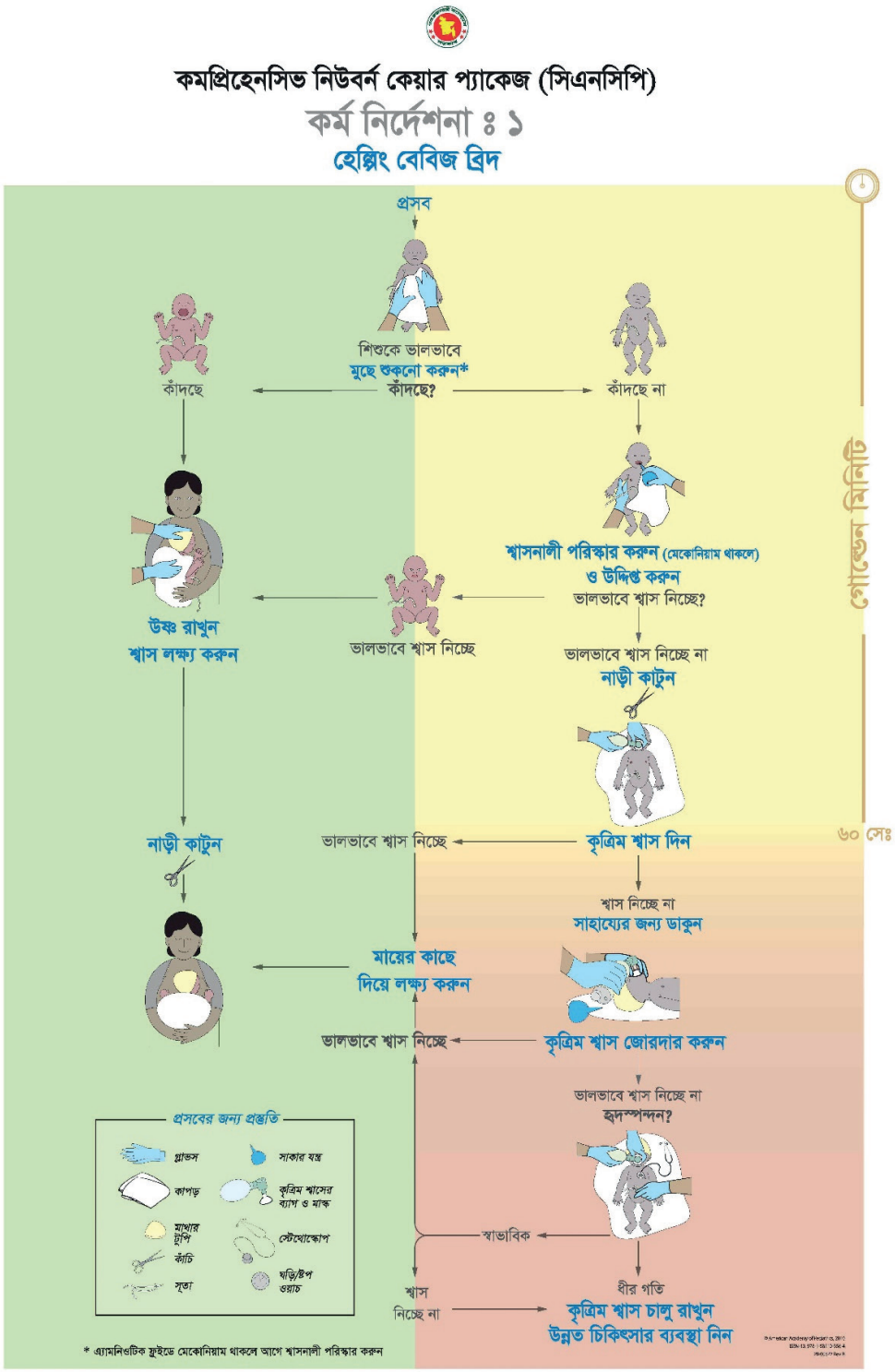
Annexure 8 - Essential Equipment and Supplies for Emergency Obstetric Surgery, Anesthesia, and Blood Transfusion

Basic Equipment	16 to 18-gauge IV cannulas
	Absorbable, nonreactive sutures (e.g., polyglycolic, chromic catgut) and suture needles
	Adhesive tape
	Adult and infant laryngoscope tubes
	Adult and infant laryngoscope with spare bulb and batteries
	Ambu self-inflating bag and face masks (adult size and newborn sizes 0 and 1)
	Dextrose solution (5%)
	IV administration sets
	Oxygen
	Oxygen tubing, nasal cannula, and face masks
	Ringer's lactate, normal saline
	Sphygmomanometer (aneroid) and stethoscope (binaural)
	Suction tubing and catheters
	Surgical scrub brushes
	Tourniquet
	Urinary catheters and closed bag or container for catheter drainage
Obstetric Laparotomy and/or Cesarean Section	Abdominal retractors, double-ended (Richardson) (2)
	Curved operating scissors, blunt-pointed (Mayo), 17 cm (1)
	Hysterectomy forceps, straight, 22.5 cm (4)
	Mosquito forceps, 12.5 cm (6)
	Needle holder, straight, 17.5 cm (1)
	Round-bodied needles, No. 12, size 6 (2)
	Sponge forceps, 22.5 cm (6)
	Stainless steel instrument tray with cover
	Straight artery forceps, 16 cm (4)
	Straight operating scissors, blunt-pointed (Mayo), 17 cm (1)
	Surgical knife blades (4)
	Surgical knife handle, No. 3 (1), No. 4 (1)
	Tissue forceps, 19 cm (6)
	Towel clips (5)
	Triangular-point suture needles, 7.3 cm, size 6 (2)
	Uterine hemostasis forceps, 20 cm (8)

Craniotomy	Cranial perforator (Simpson) (1)
	Decapitation hook (1)
	Scalp forceps (Willet) (4)
	Obstetric forceps
Anesthesia	Anesthetic face masks
	Laryngoscope
	Airway tube
	Endotracheal tube connectors, 15 mm, plastic (3 of each tube size)
	Endotracheal tubes with cuffs (8 mm and 10 mm)
	Intubating forceps (Magill)
	Oropharyngeal airways
	Spinal needles (range of sizes, 18-gauge to 25-gauge)
	Lignocaine
	Bupivacaine
	Adrenaline
Blood Transfusion (crossmatching, collecting donor blood, transfusion)	20% bovine albumin
	37°C water bath (or incubator)
	8.5 g/L sodium chloride solution
	Airway needle for collecting blood
	Artery forceps and scissors
	Blood Transfusion Set
	Centrifuge
	Compound microscope and slides
	Microscope illuminator
	Pilot bottles (containing 1 mL ACD solution)
	Pipettes, volumetric (1 mL, 2 mL, 3 mL, 5 mL, 10 mL, 20 mL)
	Sphygmomanometer cuff
	Test tubes (small and medium size)

Annexure 9 - Cesarean Section : Robson TGCS Classification System

Annexure 10 - Helping Babies Breathe

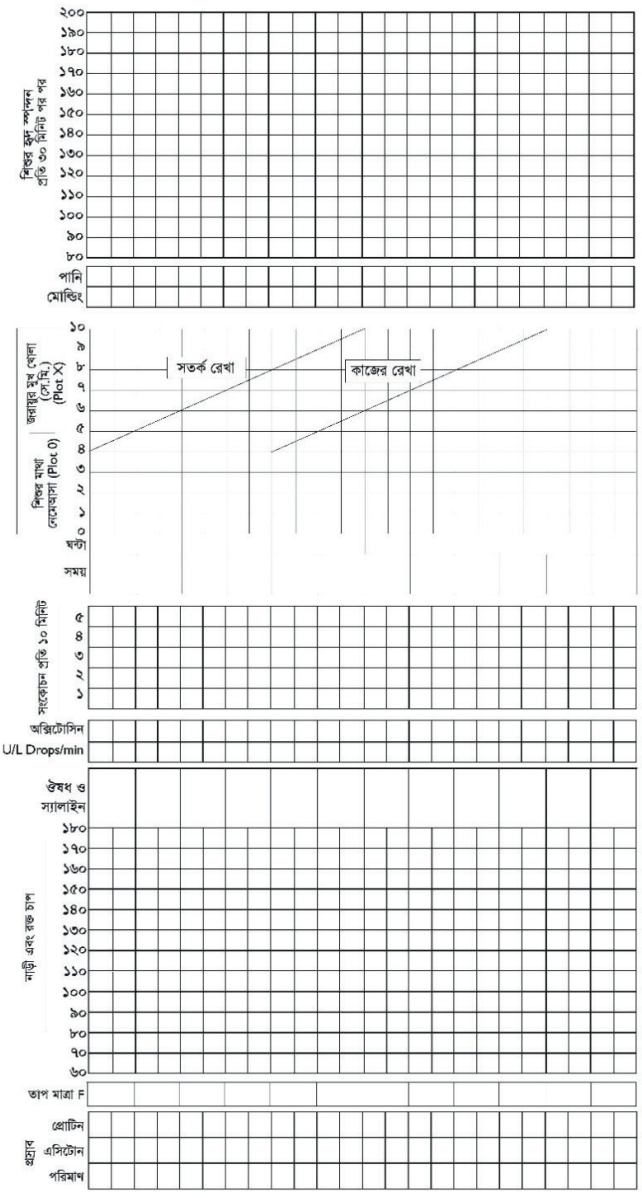


Annexure 11 - Partograph

The modified WHO partograph

নাম:.....বয়স:.....ভর্তির তারিখ ও সময়:.....রেজি: নং:.....

গ্রাভিডা:.....প্যারা:..... গর্ভ ঝিল্লী ছিন্ন:.....ঘন্টা:.....



প্রসবকালীন সময়ে প্রসবের কার্যকরী পর্যায়ের অগ্রগতি এবং মা ও শিশুর শারীরিক অবস্থা লেখচিত্রের মাধ্যমে প্রকাশ করাকে পার্টোগ্রাফ বলে। পার্টোগ্রাফের বিভিন্ন অংশঃ

১. মায়ের সাধারণ তথ্য
২. শিশুর অবস্থা
৩. প্রসব অগ্রগতি রেকর্ড
৪. মায়ের অবস্থা

শিশুর অবস্থাঃ

১. শিশুর হৃদস্পন্দনের হার (Fetal heart rate): এটি প্রতি আধ ঘন্টা অন্তর রেকর্ড করা হয়। প্রত্যেক চতুর্ভুজ প্রতি আধ ঘন্টা সময় বুঝায়।

২. গর্ভঝিল্লী ও লাইকার (Membrane and liquor): নিম্নলিখিত কোড ব্যবহার করে এসব রেকর্ড করা হয় -

- (I) ইনট্যাক্ট মেমব্রেন এর জন্য (গর্ভপর্দা অক্ষত)
- (C) ক্লিয়ার লাইকারের জন্য (লাইকার পরিষ্কার)
- (M) মেকোনিয়াম ষ্টেইন্ড লাইকার (মেকোনিয়াম মিশ্রিত লাইকার অর্থাৎ সবুজ রং/পীত বর্ণের লাইকার)
- (A) এ্যাবসেন্ট লাইকার (লাইকার নাই)
- (B) রক্ত মেশানো লাইকার (লালচে রং এর লাইকার)

৩. শিশুর চাঁদির (মাথার) মোল্ডিংঃ শিশুর চাঁদির মোল্ডিং রেকর্ড করার ব্যাপারে ০,+, ++, +++ কোড ব্যবহার করা হয়।

প্রসব অগ্রগতি রেকর্ডঃ

১. জরায়ুর মুখ (Cervical dilatation): কার্যকরী পর্যায়ে জরায়ুর মুখ স্বাভাবিক নিয়মে প্রতি ঘন্টায় ১ সে.মি খোলে। জরায়ুর মুখ খোলা রেকর্ড করবার জন্য ক্রস (x) চিহ্ন ব্যবহার করে সতর্ক রেখা বা (Alert Line) এর উপর রেকর্ড করা হয়।

২. শিশুর মাথা নেমে আসা (Descend of the present part): প্রসবের কার্যকরী অগ্রগতির জন্য জরায়ুর মুখ খোলার সাথে সাথে শিশুর মাথা নিচের দিকে নেমে আসা প্রয়োজন। " ০ " চিহ্ন ব্যবহার করে নির্দিষ্ট সময় রেখা বরাবর (Descend) রেকর্ড করা হয়।

৩. জরায়ুর সংকোচন (Uterine Contraction):
- ফোটাগুলি ২০ সেকেন্ডের কম মেয়াদের হালকা সংকোচনের জন্য
- কোনাকোনি লাইন ২০ থেকে ৪০ সেকেন্ড মেয়াদের মাঝারী ধরনের সংকোচনের জন্য
- পুরাপুরি রং করা ৪০ সেকেন্ডের বেশী মেয়াদের শক্তিশালী সংকোচনের জন্য

প্রসূতি মায়ের অবস্থা (Maternal condition):

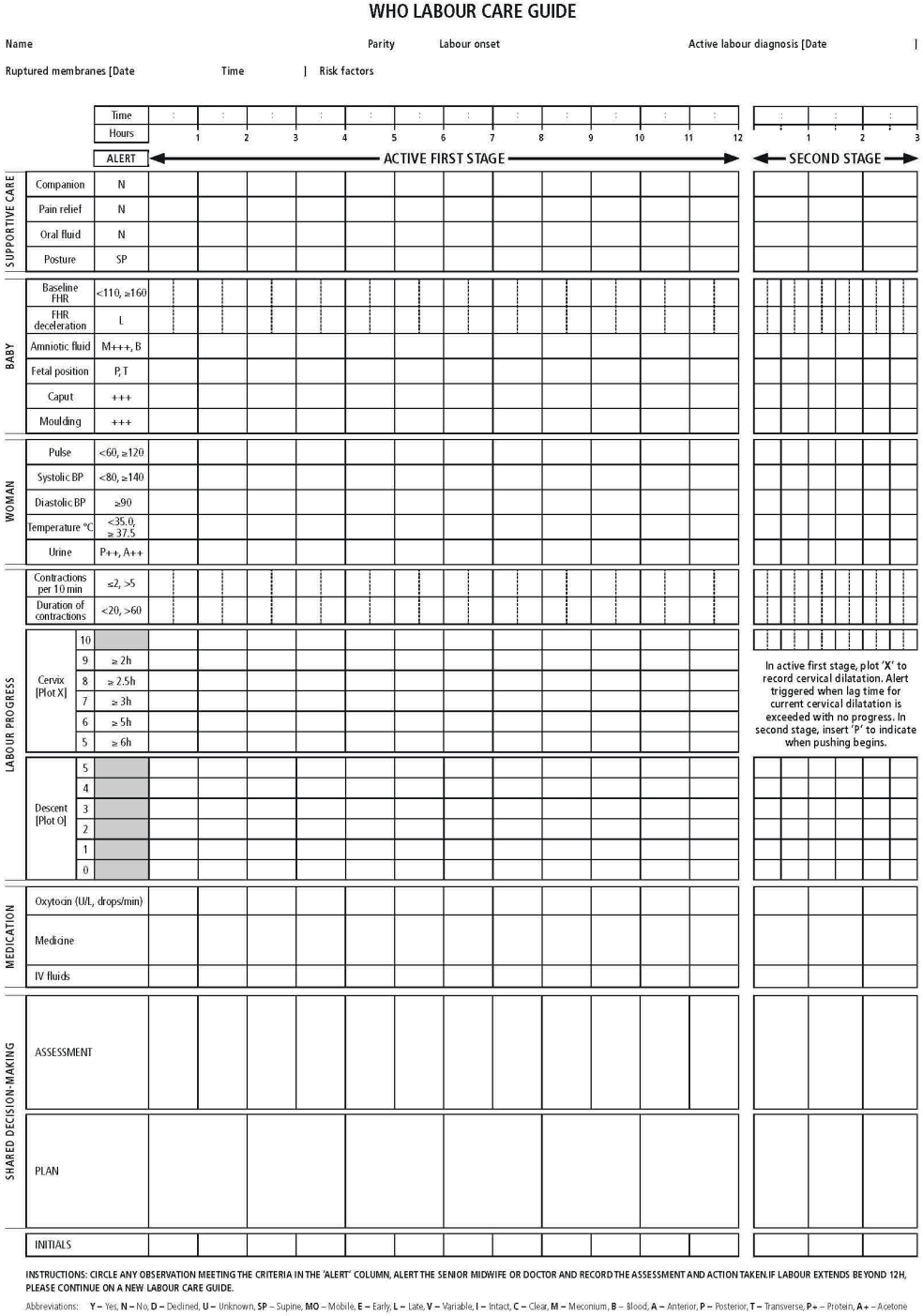
ক. নাড়ির গতি প্রতি মিনিটে কত তা ১/২ ঘন্টা পর পর পরীক্ষা করে রেকর্ড করতে হবে। প্রয়োজনে আরও ঘন ঘন করতে হবে

খ. রক্তচাপ ৪ ঘন্টা পর পর পরীক্ষা করে রেকর্ড করতে হবে।

গ. তাপমাত্রা ২ ঘন্টা পর পর পরীক্ষা করে রেকর্ড করতে হবে।

ঘ. জরায়ুর সংকোচন রেকর্ডের নীচে ঔষধ ও আইভি (IV) ফ্লুইড সমূহ চার্টে রেকর্ড করতে হবে।

Annexure 12 - WHO Labor Care Guide



WHO LABOUR CARE GUIDE

Name Parity Labour onset Active labour diagnosis [Date]

Ruptured membranes [Date Time] Risk factors

			Time	Hours	ALERT	ACTIVE FIRST STAGE	SECOND STAGE
SUPPORTIVE CARE	Companion	N					
	Pain relief	N					
	Oral fluid	N					
	Posture	SP					
BABY	Baseline FHR	<110, ≥160					
	FHR deceleration	L					
	Amniotic fluid	M+++, B					
	Fetal position	P, T					
	Caput	+++					
	Moulding	+++					
WOMAN	Pulse	<60, ≥120					
	Systolic BP	<80, ≥140					
	Diastolic BP	≥90					
	Temperature °C	<35.0, ≥ 37.5					
	Urine	P++, A++					
LABOUR PROGRESS	Contractions per 10 min	≤2, >5					
	Duration of contractions	<20, >60					
	Cervix [Plot X]	10					
		9	≥ 2h				
		8	≥ 2.5h				
		7	≥ 3h				
		6	≥ 5h				
		5	≥ 6h				
	Descent [Plot O]	5					
		4					
		3					
		2					
		1					
		0					
MEDICATION	Oxytocin (U/L, drops/min)						
	Medicine						
	IV fluids						
SHARED DECISION-MAKING	ASSESSMENT						
	PLAN						
	INITIALS						

In active first stage, plot 'X' to record cervical dilatation. Alert triggered when lag time for current cervical dilatation is exceeded with no progress. In second stage, insert 'P' to indicate when pushing begins.

INSTRUCTIONS: CIRCLE ANY OBSERVATION MEETING THE CRITERIA IN THE 'ALERT' COLUMN, ALERT THE SENIOR MIDWIFE OR DOCTOR AND RECORD THE ASSESSMENT AND ACTION TAKEN. IF LABOUR EXTENDS BEYOND 12H, PLEASE CONTINUE ON A NEW LABOUR CARE GUIDE.

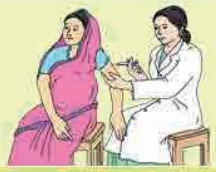
Abbreviations: **Y** – Yes, **N** – No, **D** – Declined, **U** – Unknown, **SP** – Supine, **MO** – Mobile, **E** – Early, **L** – Late, **V** – Variable, **I** – Intact, **C** – Clear, **M** – Meconium, **B** – Blood, **A** – Anterior, **P** – Posterior, **T** – Transverse, **P+** – Protein, **A+** – Acetone

Annexure 13 - Postpartum Family Planning Counselling Cards

২ প্রসব পরবর্তী পরিবার পরিকল্পনা কাউন্সেলিং

প্রসব পরবর্তী সেবা

- প্রসবের পর প্রথম ৬ মাস শিশুকে শুধুমাত্র বুকের দুধ খাওয়ানোর জন্য পরামর্শ দেয়া
- ল্যাকটেশন্যাল এ্যামনোরিয়া মেথড (LAM) এর ব্যবহার এবং গর্ভধারণ রোধে এ পদ্ধতি কতটুকু কার্যকর তা বুঝিয়ে বলা
- প্রসবের পর কমপক্ষে ২ বছর বিরতি দিয়ে পরবর্তী গর্ভধারণের পরামর্শ দেয়া
- বিভিন্ন জন্মনিয়ন্ত্রণ পদ্ধতি সম্পর্কে কাউন্সেলিং করা এবং গ্রহীতার জন্য উপযুক্ত পদ্ধতি পছন্দ ও গ্রহণ করতে সাহায্য করা
- প্রসবের ৬ সপ্তাহ পর থেকে যে কোন জন্মনিয়ন্ত্রণ পদ্ধতি ব্যবহার করা যায়
  (তবে মনে রাখবেন যে, বাচ্চাকে বুকের দুধ খাওয়ালে প্রথম ৬ মাস মিশ্র খাবার বড়ি ব্যবহার করা যায় না)



টিকাদান কেন্দ্র

- প্রসবের পর প্রথম ৬ মাস শিশুকে শুধুমাত্র বুকের দুধ খাওয়ানোর জন্য পরামর্শ দেয়া
- ল্যাকটেশন্যাল এ্যামনোরিয়া মেথড (LAM) এর ব্যবহার এবং গর্ভধারন রোধে এ পদ্ধতি কতটুকু কার্যকর তা বুঝিয়ে বলা
- কমপক্ষে ২ বছর বিরতি দিয়ে পরবর্তী গর্ভধারণের পরামর্শ দেয়া
- জন্মনিয়ন্ত্রণ পদ্ধতি ব্যবহার করার জন্য মা'কে উৎসাহিত করা এবং রেফার করা
- সুযোগ থাকলে টিকাদান কেন্দ্র থেকে মিনিপিল (আপন), মিশ্র খাবার বড়ি, ইনজেকশন এবং কনডম সরবরাহ করা
  (তবে মনে রাখবেন যে, বাচ্চাকে বুকের দুধ খাওয়ালে প্রথম ৬ মাস মিশ্র খাবার বড়ি ব্যবহার করা যায় না)

গর্ভপাত পরবর্তী সেবা

- গর্ভপাত ও মাসিক নিয়মিত করণের পর কমপক্ষে ৬ মাস বিরতি দিয়ে গর্ভধারণের জন্য পরামর্শ দেয়া
- বিভিন্ন জন্মনিয়ন্ত্রণ পদ্ধতি সম্পর্কে কাউন্সেলিং করা, উপযুক্ত পদ্ধতি পছন্দ এবং গ্রহণে সাহায্য করা, যেমন: কনডম, মিশ্র খাবার বড়ি, ইনজেকশন, ইমপ্ল্যান্ট, আইইউডি, এনএসভি এবং টিউবেকটমি
- জরায়ুতে বা তলপেটে সংক্রমণের লক্ষণ/চিহ্ন না থাকলে আইইউডি এবং টিউবেকটমিসহ যে কোন পদ্ধতি গ্রহণ করা যায়
- জরায়ুতে বা তলপেটে সংক্রমণের লক্ষণ/চিহ্ন থাকলে তার চিকিৎসা করা এবং ভালো হওয়ার পর আইইউডি এবং টিউবেকটমি গ্রহণ করা যাবে
- পরিবার পরিকল্পনার আধুনিক পদ্ধতি সমূহের পাশাপাশি জরুরী গর্ভনিরোধক এর ব্যবহার সম্পর্কে বলা

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Supported by: USAID's MaMoni Maternal and Newborn Care Strengthening Project, 2023