सत्यमेव जयते

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

RESOURCE PACKAGE FOR QUALITY IMPROVEMENT CYCLES IN

LAQSHYA
लक्ष्य

GOVERNMENT OF INDIA

MATERNAL HEALTH DIVISION
NOVEMBER 2018

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LaQshya Quality Improvement (QI) cycles

A holistic approach to strengthen Quality of Care during intrapartum and immediate post-partum period

Introduction

Ministry of Health & Family Welfare has launched an ambitious program 'LaQshya - Quality Improvement Initiative' with objectives of reducing preventable maternal and new born mortality, morbidity and stillbirths associated with the care around delivery in Labour room and Maternity OT and ensure respectful maternity care. LaQshya is focused and targeted approach for improving intra-partum and post-partum care. Implementation of these guidelines is expected to result into delivery of respectful and zero defect care to all pregnant women and new-borns, and such improvement is incentivised. Experience has shown that improved quality has a positive impact on clients' willingness to accept and effectively use services. It is built upon the coordinated efforts of – National Health Mission, State Health Departments and Medical Colleges, for adhering to standardized practices in the Maternal and Child health department.

Prerequisite of such approach would also hinge upon the health system's preparedness for prompt identification and management of maternal and newborn complications. Delivery of such transformed care would not only need availability of adequate infrastructure, functional & calibrated equipment, drugs & supplies & HR, but also meticulous adherence to clinical protocols by the service providers at the health facilities. Pregnant women are often meted out rude and uncourteous treatment at the health facilities. Respectful maternity care not only contributes in ensuring positive outcomes for the mothers and newborns, but also supports cognitive development of the babies later in the life.

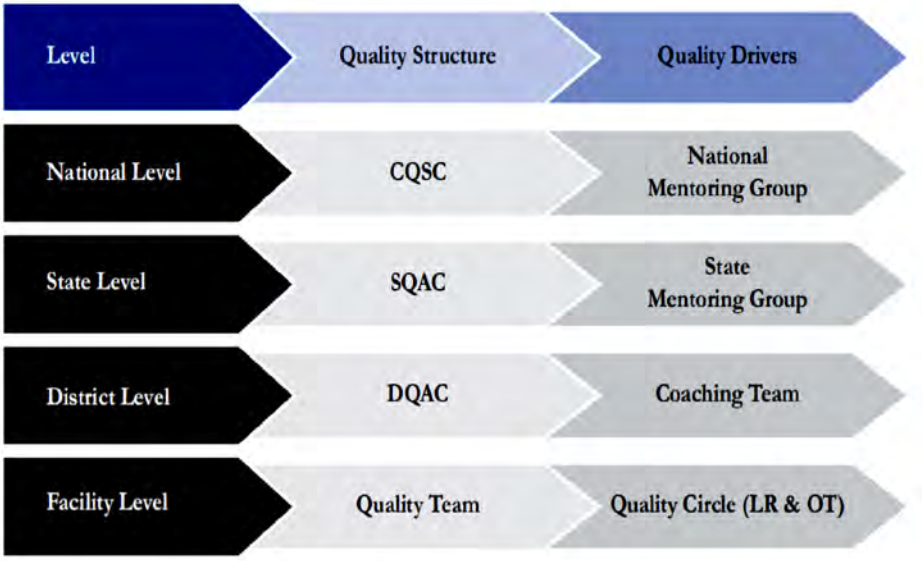
While states are in the process of implementing Quality Management System using National Quality Assurance Standards (NQAS) to obtain certification of the health facilities, the process takes substantial time and effort. While the states should continue to work towards achieving full NQAS certification of the health facilities, LaQshya Guidelines are intended for achieving improvements in the intra-partum and immediate post-partum care, which are take place in the labour room and maternity operation theatre. Implementation of these guidelines is expected to result into delivery of respectful and zero defect care to all pregnant women and newborns.

Objectives

1. To reduce maternal and newborn mortality & morbidity due to APH, PPH, retained placenta, preterm, preeclampsia & eclampsia, obstructed labour, puerperal sepsis, newborn asphyxia, and sepsis, etc.
2. To improve Quality of care during the delivery and immediate post-partum care, stabilization of complications and ensure timely referrals, and enable an effective two-way follow-up system.
3. To enhance satisfaction of beneficiaries visiting the health facilities and provide Respectful Maternity Care (RMC) to all pregnant women attending the public health facility.

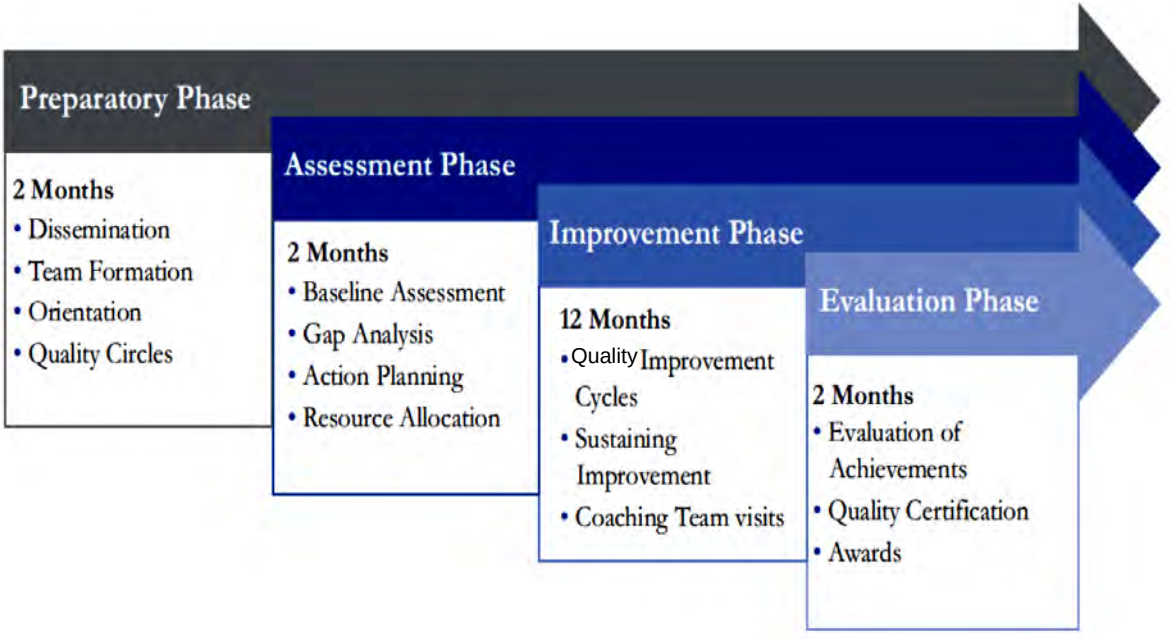
Institutional arrangement

Under the National Health Mission, the States have been supported in creating Institutional framework for the Quality Assurance – State Quality Assurance Committee (SQAC), District Quality Assurance Committee (DQAC), and Quality Team at the facility level. These committees will also support implementation of LaQshya interventions. For specific technical activities and program management, special purpose groups have been suggested, and these groups will be working towards achievement of specific targets and program milestones in close coordination with relevant structures within the QA organizational framework. Outlines of Institutional arrangement under LaQshya is given in Figure below.



Activity plan for LaQshya

Activities under LaQshya are divided into four phases, which need to take place in a defined sequence. as shown in Figure below.



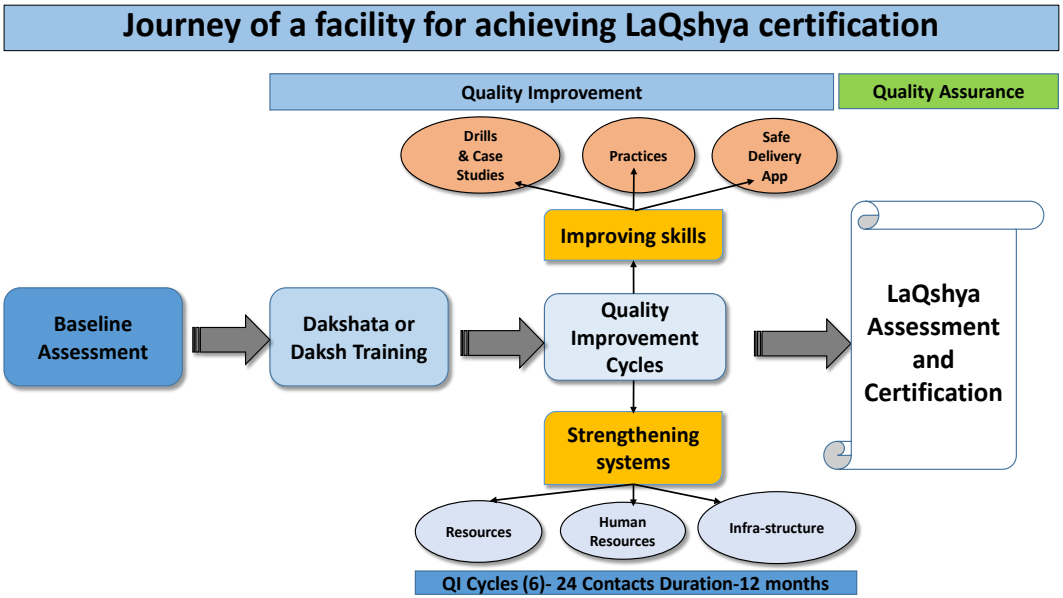
Journey of a facility for achieving LaQshya

In order to get LaQshya certification, a facility must undergo a set of processes in a sequential manner. These processes will help the systems strengthening in a systematic manner and is expected to be sustainable if followed meticulously as shown in figure below.

Although all the components of LaQshya are critical, quality improvement cycles are the most significant process to strengthen systems within the facility for sustenance. A structured post-training follow-up and handholding through these focused Quality Improvement (QI) cycles is intended to strengthen the health services and health systems through a comprehensive approach. This approach initiated under Dakshata programme in the form of mentoring and support visits has shown positive results in terms of improvement in facility readiness and in quality service provision by providers posted in labour and maternity wards of the facility. Hence, it will be continued in LaQshya initiative in the form of quality improvement cycles. Quality improvement visit continuum will help assemble a process that promotes quality at all levels of the health system by strengthening relationships within the system, focusing on the

identification and solution of problems and helping to optimize the allocation of resources, promoting high standards, teamwork and better two-way communication.

The technical content around intrapartum and immediate postpartum care will be reinforced in these 6 cycles in a structured manner by covering few topics in each cycle. These quality improvement cycles will be run using PDCA (Plan, Do, Check, Act) approach and quality tools, each for two-month duration, with first visit for the roll out, followed by sustaining efforts in the subsequent visits at the gap of 15 days, hence 4 visits per cycle. Framework for implementing quality improvement (QI) cycles during improvement phase in a facility is as follows:



No. of QI cycle	Themes	Duration of each QI cycle	No. of visits in each QI cycle
1	• Real-time Partograph generation • Use of safe birth check-list & surgical safety check-list • Strengthening documentation practices	2 months	4
2	• Triaging • Presence of birth companion during delivery • Respectful maternity care • Counselling • Enhancement of patient satisfaction	2 months	4
3	• Timely management of complications	2 months	4

	• Strengthening referral protocols		
4	• Management of labor as per protocol • AMTSL • Rational use of oxytocin • Postnatal monitoring	2 months	4
5	• Essential and emergency care of newborn & pre term babies • Management of birth asphyxia • Initiation of breast feeding • KMC for preterm newborn	2 months	4
6	• Infection Prevention • Biomedical Waste Management.	2 months	4
Total		12 months	24 visits

Institutional mechanism for operationalization of the quality improvement process

There will be primarily two bodies working directly with the facility for quality improvement on intrapartum and immediate postpartum practices. Quality circle at the facility will be primary responsible for practices, day to day action planning, identify solutions to the gaps identified during quality improvement process and sustain the best practices. District coaching team on the other hand, will have a facilitative role in supporting the facility quality circle to identify gaps, their solutions and mentoring on the key practices identified for each cycle.

Role of district coaching team

Medical/nursing staff of the **district coaching teams** or dedicated mentors hired by the states: Primary activity of these coaches/mentors will be to mentor the labour room/maternity OT staff, do gap analysis and facilitate the key stakeholders of facility to prepare a roadmap for achieving and sustaining LaQshya standards. They will act just as facilitators and strengthen the capacity of the facilities for maintaining and sustaining quality of care. District coaching teams must always remember that they are there to build capacities of the facilities for self-sustenance.

Role of quality circles

Key stakeholders of the facility will constitute a team called as **quality circle** which will work towards systems strengthening for achieving and sustaining LaQshya standards.

What is quality circle: As every facility needs to have its own mechanism for sustaining the quality of services, the services need to be monitored and reviewed periodically. This task can be performed by service providers from the facility itself through a process of self-assessment that will identify issues related to quality improvement, help in resolving the identified problems, recommend solutions and ensure that high-quality services are provided. Empirical evidence suggests that over a period of time such processes engage the attention of the personnel working in the facility, leading to improvements that are more sustainable. For institutions such as District/Civil/Sub-divisional/Referral/Rural Hospitals/CHCs/ BPHCs Quality Circles comprising of a team of medical, paramedical and other support staff should be constituted, depending on the size of the institution being monitored, for reviewing the quality of services periodically. The suggested composition of the Quality Circles is as follows:

- I/C Hospital/Medical Superintendent: Chairperson
- I/C Operation Theatre/ I/C Anaesthesia,
- I/C Surgery
- I/C Obstetrics and Gynaecology
- Hospital manager/program manager
- I/C Nursing
- I/C Ancillary Services (ward boys)
- I/C Stores
- I/C Records

At the level of CHC, a smaller committee of 4 to 5 members comprising of the Medical Superintendent, I/C Surgery, I/C Obstetrics and Gynecology, I/C OT and I/C Nursing should be constituted. The scope of work of this QC will include all the processes involved in the intrapartum and postpartum services being provided at the facility.

Key roles of quality circle:

- Prepare an action plan based on the gaps identified by the district coaching team during baseline assessment as well as during quality improvement visits
- Ensure the enabling environment in the facility to provide intrapartum and postpartum services in the terms of quality of care, respectful care, availability of logistics, human resource and infrastructure.
- **Self-assessment:** It should be done by the facility quality circle on monthly basis to track the progress and be done for the following parameters:

Resource availability: As resource availability is critical to ensure quality care, quality circle should assess the essential items required for providing intrapartum and postpartum care in its facility on monthly basis to take prompt actions and avoid stock-outs.

The resource availability checklist of 26 essential items

S. No.	Supply	Availability of items											
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
	Month												
1	Magnesium Sulphate (at least 20 ampoules)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Antibiotics for mother	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Antibiotics for baby	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	Oxytocin (5/10 IU per ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Vitamin K (1mg/ml or 1 mg/0.5 ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	IV Fluids	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Antiretrovirals	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Soap & Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Uristick (for proteinuria and glucose)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Partograph	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Cord clamps	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Sterile Perineal Pads	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Towels for receiving newborns	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Disposable syringes and disposable needles	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	IV Sets	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Supply	Availability of items											
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
	Month												
18	Corticosteroids (Inj. Dexamethasone)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	Ambu bag for babies (240 ml) with both pre & term mask (size 0,1)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	BP Apparatus	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	Stethoscope	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	Thermometer	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	Mucus extractor (Dee Lee`s/ Penguin)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	Suction device (Mechanical/Electric)	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	Functional radiant warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒
26	Protocol posters displayed	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Facility level targets: (These targets should be met by the facility before applying for the LaQshya certification)

Quality circle should track the progress by monthly assessing the performance of its facility using these indicators. The ultimate aim of the facility should be to achieve the targets required before applying for LaQshya certification.

S.No.	Indicator	Numerator (N) /Denominator (D)	Target	Values/responses of assessments											
		Month		1	2	3	4	5	6	7	8	9	10	11	12
1	Baseline assessment for LaQshya standards is done (Yes/No)	NA	Baseline assessment is done												
2	Quality Circle is established in the facility and is functional (Yes/No)	NA	Quality circle is functional												
3a	% of Labour room staff oriented on LR protocols, RMC & QI (all Dakshata trained staff should be considered as oriented. Otherwise, as the QI cycles are completed)	N - number of labour room staff oriented on LR protocols, RMC & QI D - Total number of staff posted in labour room of the facility	100%												
3b	% of maternity OT staff oriented on LR protocols, RMC & QI (all Dakshata trained staff should be considered as oriented. Otherwise, as the QI cycles are completed)	N - Number of maternity OT staff oriented on LR protocols, RMC & QI D - Total number of staff posted in maternity OT of the facility	100%												
4	% of deliveries attended by	N - Number of deliveries attended by a	90% or more												

	a birth companion	birth companion D - Total number of normal deliveries conducted in the facility													
5a	% of deliveries conducted using safe childbirth checklist in labour room	N - Number of deliveries conducted using safe childbirth checklist in labour room D - Total number of normal deliveries conducted in the facility	90% or more												
5b	% of cesarean sections conducted using Safe Surgery checklist in maternity OT	N - Number of cesarean sections conducted using Safe Surgery checklist in maternity OT D - Total number of cesarean sections conducted in the facility	90% or more												
6	% of deliveries monitored using real-time partograph	N – Number of deliveries monitored using real-time partograph D - Total number of deliveries conducted in the facility	90% or more												
7	% of deliveries where breastfeeding	N - Number of deliveries where	80% or more/ 30% increase												

	was initiated within 1 hour of birth	breastfeeding was initiated within 1 hour of birth D - Total number of deliveries conducted in the facility	from the baseline												
8	% of cases of neonatal asphyxia in labour room	N - Cases of neonatal asphyxia in labour room D - Total number of deliveries conducted in the labour room	0% or at least 20% reduction from baseline												
9	% cases of neonatal sepsis in in-born babies	N - Cases of neonatal sepsis in in-born babies D - Total number of deliveries conducted in the facility	0% or at least 20% reduction from baseline												
10	% of cases of surgical site infection in maternity OT	N - Cases of surgical site infection in maternity OT D - Total number of cesarean sections conducted in the facility	5% or less or at least 20% reduction from baseline												
11	% of preterm labour cases administered antenatal corticosteroids (ANCS)	N - Preterm labour cases administered ANCS D - Total number of cases of preterm labour admitted in the facility	80% or more or at least increment of 30% from baseline												

12	% of maternal mortality because of pre-eclampsia, eclampsia & PIH	N - Number of maternal deaths because of pre-eclampsia, eclampsia and PIH D - Total number of maternal deaths in the facility	0% or at least 25% reduction from baseline												
13	% of maternal mortality because of APH/PPH	N - Number of maternal deaths because of APH/PPH D - Total number of maternal deaths in the facility	0% or at least 25% reduction from baseline												
14	Facility Labour Room is reorganized as per labour room standardization guidelines (Yes/No)	NA	Labour Room is as per labour room standardization guidelines												
15	Facility Labour room has staffing as per defined norms in annexure B (Yes/No)	NA	Staffing is as per norms												
16	% of women administered oxytocin within one minute of delivery.	N - Number of women administered oxytocin, within one minute of delivery. D - Total number of deliveries conducted in the facility	100%												

17	OSCE scores	NA	80% or more or 30% increment from baseline												
18	Facility conducted referral audit last month (Yes/No)	NA													
19	Facility conducted maternal death, neonatal death and near-miss last month (Yes/No)	NA													
20a	Zero stock outs reported in labour room last month (Yes/No)	NA													
20b	Zero stock outs reported in Maternity OT last month (Yes/No)	NA													

Approach for quality improvement cycle

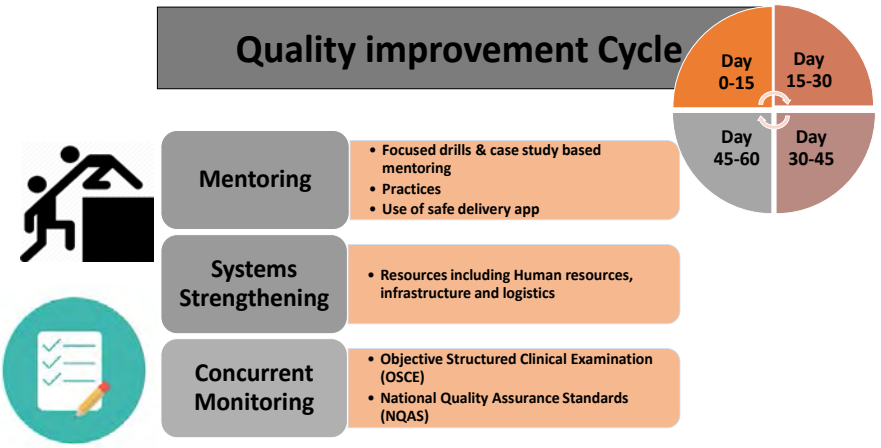
QI cycles are conducted using a multipronged approach. Each QI cycle includes use of observation checklist, review of case records and interview with facility staff, simulation drills, onsite need based mentoring.

Each QI cycle will be supported by onsite training and monitoring by coaches/mentors. The activities during these mentoring visits are performed along with quality circle and labor room/maternity OT staff. Major activities to be conducted during these visits are tabulated as follows:

S. No.	Areas addressed during QI visit	QI visit			
		1st	2nd	3rd	4th
1	Meeting with medical superintendent or facility in charge	✓	✓	✓	✓
2	Assessment of labor room and maternity OT for using resource availability checklist and QI checklist	✓			✓
3	Mentoring of all the labor room and maternity OT staff in the facility	✓	✓	✓	✓

S. No.	Areas addressed during QI visit	QI visit			
		1st	2nd	3rd	4th
4	Follow up on action plan prepared during previous visit	✓	✓	✓	✓
5	Facilitate quality circle to prepare an action plan for the current visit	✓	✓	✓	✓

Diagram showing key activities in each quality improvement cycle



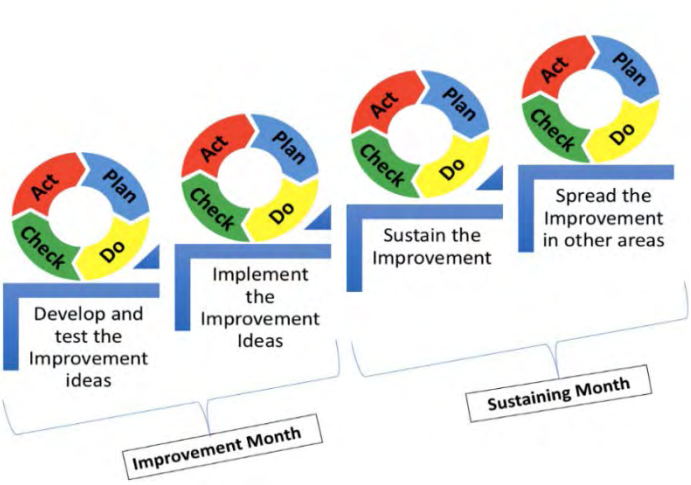
Processes for key activities to be conducted during each QI cycle

1. Action planning to address the gaps identified during QI visits

As action planning is the driver of change, it is a crucial and integral part of each QI cycle. Meticulous action planning and diligent follow up are keys to achieve desirable targets in the stipulated timeline. As action planning needs to be done in a logical and structured manner, the mentor should facilitate the quality circle members to think in a certain way while preparing action plans for their facilities based on gaps identified during QI visits.

Approach for action planning:

The Plan-Do-Check-Act (PDCA) cycle is part of the facility for healthcare improvement model for Improvement, a simple yet powerful tool for accelerating quality improvement. Once a team has set an aim, established its membership, and developed measures to determine whether a change leads to an improvement, the next step is to test a change in the real work setting.



The PDSA cycle is shorthand for testing a change—by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method, used for action-oriented learning.

The steps in the PDSA cycle are:
Step 1: Plan—Plan the test or observation, including a plan for collecting data
Step 2: Do—Try out the test on a small scale
Step 3: Check—Set aside time to analyze the data and study the results
Step 4: Act—Refine the change, based on what was learned from the test

Following are the few examples to guide to address a gap:

Example 1: Availability and timely administration of Injection oxytocin

Concern/problem statement		A. The facility where injection oxytocin is not available	B. Oxytocin is available but not provided immediately
Target	100% of Women, administered Oxytocin, immediately after birth.		
Plan	What change will you make?	To make Oxytocin available and get administered immediately after birth	To get oxytocin administered immediately after birth
	Who will make the change?	Medical officer and Pharmacist will make oxytocin available and labour room in charge will ensure its use immediately after birth	Labour room staff
	Where will the change take place?	In labour room	In labour room
	When will the change idea start and for how long will it take change the practice?	To be indented immediately and to start using as soon as made available	Immediately
Do (How?)		To make injection oxytocin available in one week and start its use. Continue the practice	To ensure injection oxytocin is prefilled just before the time of delivery and being given immediately after delivery
Check	What do you want to learn from this change idea?	Establishment of mechanism to ensure continuous supply of oxytocin and its use	Challenges in making prefilled injection oxytocin available and its immediate administration
Act		Continue the practice	Overcome the underlying challenges and continue the practice

Example 2: Availability and real time use of Partograph

Concern/problem statement		The partograph is not available	The partograph is not being filled although available	The partograph is not being filled real time
Target	Partograph is generated using real-time information in at least 90% deliveries in Labour Rooms			
Plan	What change will you make?	To make Partograph available and get it filled	To identify underlying reasons for not being used	To identify underlying barriers for the real time use
	Who will make the change?	Medical officer and labour room in-charge	Medical officer and labour room in-charge	Medical officer and labour room in-charge
	Where will the change take place?	Area where the women stays from starting of active labour pains (waiting/pre-labour area) till delivery (Labour room)	Area where the women stays from starting of active labour pains (waiting/pre-labour area) till delivery (Labour room)	Area where the women stays from starting of active labour pains (waiting/pre-labour area) till delivery (Labour room)
	When will the change idea start and for how long will it take change the practice?	To get printed and used immediately	Immediately	Immediately
Do (How?)		To make sure that standardized maternity case sheet (containing partograph) is made available and is being filled	If issue of knowledge and skill – Provide training If issue of attitude – Establish mechanism for ensuring complete filling	Address the underlying barriers (knowledge/ skill/attitude)
Check	What do you want to learn from this	Establishment of mechanism to ensure continuous supply and its use	Challenges in making prefilled injection oxytocin available and its immediate administration	For real time filling

	change idea?			
Act		Identify the cases of prolonged/obstructed labour and act according to the level of facility, and available expertise	Overcome the underlying challenges and continue the practice	Motivate for real time uses

Using the above approach, the underlying gap (which may be related to the infrastructure, logistics, practices or processes) can be identified and a strategic implementation plan should be formulated based on the level of the underlying concern. The template for preparing action plan is as follows:

Stan-dard	**Identi-fied gap**	**Plan of action**	**Person/s respon-sible**	**Time -line**	**Remarks on follow up visits**			
					1st	**2nd**	**3rd**	**4th**
					Completed/partially completed/not completed	Completed/partially completed/not completed	Completed/partially completed/not completed	Completed/partially completed/not completed

2. Obstetrics drills

One of the important strategies for mentoring service providers during QI visits will be use of drills. The technique for conducting these drills will remain standard and the content will change depending upon the clinical situation to be reinforced.

These drills are scenario-based trainings conducted in 'real time' in the normal working environment. These drills aim to test both the local emergency response system and protocols that facilities have in place to manage emergencies. A drill allows providers to practice applying their skills and knowledge to manage infrequent, but critical and life threatening events in the same setting as they would manage a real emergency – in this case, their own facility. Preparation and important things to consider before the simulation exercise:

- The simulation exercise/ drill can be done in two ways – with or without prior information to staff.
- Inform the facility in-charge in advance that drill will be conducted during QI visit and its purpose without giving any information about the clinical situation which will be managed to avoid any type of bias.
- Insist for ensuring the availability of maximum service delivery team during the drill. In case the availability of one or more key facility team members cannot be ascertained, then seek alternative arrangements like telephonic availability. If this is also not possible, then seek appointment for a different day/timing.

The procedure of a simulation drill is done under the following heads:

a) What to do before the drill (Briefing of the facility team)
b) What to do during the drill (Execution of drill procedure with the facility team)
c) What to do after the drill (Debriefing of the facility team)

a) What to do before the drill (Briefing of the facility team)

Arrange a briefing session for all staff engaged in childbirth related care on the pre-decided day and time. Insist for the presence of facility in-charge throughout this procedure. Explain the objectives of the simulation to the facility. Make sure they understand that this exercise is not a critical evaluation of their facility's functioning, but to help them understand their facility's preparedness status for managing an obstetric situation. They will also be able to identify the key gaps in functionality and fulfill them subsequently.
Explain the process of simulation to the team members, making sure that they understand the procedure and are ready to play their respective roles in the care process. Essentially, every team member is supposed to play the role they normally do while caring for a pregnant woman and a newborn in the facility.
Ideally the facility processes and status of supplies should remain as is in order to have an effective learning experience. However, if the team insists on reorganizing their supplies or making any changes in the protocols before the initiation of the drill, allow them to do so. Discuss the effects due to these changes with them later on.
If possible, seek permission from the in-charge for recording the exercise. This will enable the team to review the entire process and identify key areas for improvement. The recording will also help in delivering a crisp feedback for the team.
Introduce the standardized client, observer and/or instructor to the facility team, emphasizing that the observer and/or instructor are not to be considered present during the exercise. The instructor/observer will prompt key findings to the provider while he/she assesses the client,

and also record his/her observations on the standardized drill template. For example, if the provider is assessing the client for BP, the instructor/observer will prompt the recordings like 160/110 mmHg.

b) What to do during the drill (Execution of drill procedure with the facility team)

Start the exercise with arrival of client and her attendant in the facility. The facility team will receive, assess and manage the client as per their understanding and facility protocols. Record the observations of facility's performance and clinical outcomes for the client on a standard observation recording sheet (to be done by the observer).

During the simulation, the facility team will perform examinations, assessments, and maneuvers on the standardized client, just short of actual invasive procedures. For example, they will use a method: fetoscope, stethoscope or fetal Doppler to record fetal heart rate; they will tie the cuff of the BP apparatus on the arm of the standardized client; and they will prepare supplies such as loaded syringes, vacutainers or stellate for pricking, just stopping short of actually pricking the standardized client. The standardized client will use a Mama Natalie/appropriate model during the drill; the team members will also perform procedures such as doing a PV examination. Give the result(s) of the procedure or test on performance of such actions by the team (to be given by instructor). For example, if the provider completes the process of setting up the BP cuff around arm, the instructor will give the value of blood pressure to the provider. Similarly, for any medication, the provider(s) will have to actually hand over any oral medicine to the standardized client. For any IM/IV drug, they will break the ampoules, fill up the syringe with appropriate doses, and act as if they are injecting the medicine, stopping short of actually injecting it. For starting an IV line also, the provider will set up an IV set and stop short of actually putting the IV line in the client.

The standardized client and her attendant may try to create pressure situation and panic within the facility team to see system level challenges.

Outcome of a drill: The outcome of the drill will be successful when the facility team appropriately manages the case and saves the life of the mother and her baby, and unsuccessful when the team is not able to manage the client as per recommendations even after providing reasonable time for the care process. In either situation, conclude the drill and thank the team for their participation. Ensure that all the relevant formats are being filled during the drill for the purpose of documentation and giving feedback to the facility.

c) What to do after the drill (Debriefing of the facility team)

Congratulate the team for their performance and organize a feedback meeting. Provide a crisp and constructive feedback to them following the below mentioned steps:
Debriefing: Sit with the staff and discuss on the following-

- Standard achievements and specific outcomes of the drill
- Good practices followed by the team
- Timely completion of the task
- Coordination or team work ability
- Practices that were not done right or could have been performed better

If time permits, play the drill video for the staff and never forget to correct their mistakes!
Re-run of drill (if required and time permits): Allow the facility team to complete a practice drill on the same case scenario if required and time permits. Handhold and support them in successfully performing all essential practices to prevent or manage the complications arising in the given drill scenario. Ask the providers to use the same methodology for simulating tests, procedures and medication as used earlier.

3. Role & usage of Safe Delivery Application

One of the important strategies for mentoring service providers during RI visits will be use of Safe Delivery App. The methodology for training will remain standard only content will change as per the RI. Objective of using this app is-

- To improve the knowledge of the staff on the specific QI cycles
- To reinforce the messages after the RI visit
- To sustain the knowledge by using My Learning as self-directed learning between visits
- Appreciation of champion by providing certification

Mandatory Pre-requisite

- Availability of Safe Delivery App with mentor.
- Mentor to achieve the Safe Delivery Champion certificate before start of the facility level QI mentoring.
- Tablet available at Nursing station
- Mentor should be thoroughly familiar with all modules and features of Safe Delivery App

Methodology

Safe Delivery App usage in QI cycles	
First QI visit (Day 0)	• Ensure Safe Delivery App is downloaded/installed on facility tablet and smartphones of clinical staff (voluntary) • Conduct orientation on the Safe Delivery App using familiarization exercises • Make self-learning plan with clinical staff using My Learning in Safe Delivery App • Use Safe Delivery App to support mentoring • OSCEs – use Safe Delivery App for learning after OSCE as relevant • Link with Action Plans as relevant
Second QI visit (day 15)	• Follow-up on self-directed learning and SDA as job aid • Use Safe Delivery App to support needs-based mentoring
Third QI visit (day 30)	• Follow-up on self-directed learning and SDA as job aid • Use Safe Delivery App to support needs-based inputs
Fourth QI visit (day 45)	• Follow-up on self-directed learning and SDA as job aid • Observe reference or use of Safe Delivery App during assessment

Download/installation of Safe Delivery App

Safe Delivery App can be installed through **Google Play Store** and in case of poor internet connectivity **APK files** can be shared with the staff.

Conduct orientation on the Safe Delivery App using familiarization exercises

Step 1: Thoroughly introduce the whole Safe Delivery App including all features:

Step 2: Conduct familiarization questions to teach clinical staff how to navigate and find information in the Safe Delivery App:

- ✓ *Find the video for Manual Removal of Placenta*
- ✓ *Find the video on Vacuum Extraction*
- ✓ *Find the practical procedure describing the method of mixing alcohol-based handrub*
- ✓ *Find the adverse reactions for Magnesium Sulphate*
- ✓ *Find the video for Manual Vacuum Aspiration*
- ✓ *Find oxytocin – dosage and administration*
- ✓ *Find the video for giving uterotonic drugs*
- ✓ *Find the practical procedure for vacuum extraction*
- ✓ *Find the video on the cause of hypertension*
- ✓ *Find the video for how to manage airways during neonatal resuscitation*
- ✓ *What are the rare adverse reactions to oral contraceptive pills?*
- ✓ *When do you administer Oxytocin after delivery of the baby?*
- ✓ *How do you find the specified drug list?*
- ✓ *Where do you see respectful maternity care in the first three chapters of AMTSL?*
- ✓ *Where do you find information about the Safe Delivery App?*
- ✓ *Where do you find "My Learning"?*

Make Self-learning plan based on My Learning

Proposed plan for self-learning

	Visit 1 Give first assignment for visit 2	**Visit 2** All have completed Familiar level:	**Visit 3** All have completed Proficient level:	**Visit 4** All have completed Expert level:
QI 1	*Make plan*	*Prolonged Labor*	*Prolonged Labor*	*Prolonged Labor*
QI 2	*Use as a job aid for demonstration of RMC and birth companion practices by videos from relevant modules*	*Use as a job aid for demonstration of RMC and birth companion practices by videos from relevant modules*	*Use as a job aid for demonstration of RMC and birth companion practices by videos from relevant modules*	*Use as a job aid for demonstration of RMC and birth companion practices by videos from relevant modules*
QI 3	*Make plan*	*Hypertension* *PPH* *MRP* *Maternal Sepsis*	*Hypertension* *PPH* *MRP* *Maternal Sepsis*	*Hypertension PPH* *MRP* *Maternal Sepsis*
QI 4	*Make plan*	*AMTSL* *ENBC*	*AMTSL* *ENBC*	*AMTSL* *ENBC*
QI 5	*Make plan*	*NR* *LBW*	*NR* *LBW*	*NR* *LBW*
QI IP	*Make plan*	*IP*	*IP*	*IP*

After expert level is passed in all modules a 2-week period will pass, and then the exam will unlock. Make sure to plan with the clinical staff how to submit/show their certificates upon completion.

Use Safe Delivery App to support mentoring

Drills

The mentor can use the Safe Delivery App either before, during and/or after the drill to support learning.

Before the drill for preparation, the mentor can for example ask the clinical staff to find the definitions and how to diagnose the relevant complication in the SDA. Or the mentor could

allow clinical staff 15 minutes to review the relevant SDA module in the App as a preparation for the drill.

During the drill the mentor can allow the SDA to be availed as a job aid for the clinical staff, where they for example can look up dosages in the drug list or refer to the Action Cards on a needs basis.

After the drill, the mentor can let everybody watch the entire relevant film and discuss the drill in relation to the film and based on this let them identify what went well and what they missed or did not do well during the drill.

Facilitated discussions

During the facilitated discussions the Safe Delivery App can be referenced and used in numerous ways. For example, when discussing a specific topic, the mentor can the clinical staff to look in the Safe Delivery App (any feature film, a sub-chapter, action card, practical procedure, drug list) and search information to answer questions that the mentor asks. For example, the mentor can ask:

- What is e.g. PPH?
- How to prevent e.g. PPH?
- How to manage e.g. PPH?

After receiving the responses from the staff (Individual or in Groups), the Mentor can show the Safe Delivery App video and related features and discuss if there was any difference from what they responded and what the Safe Delivery App teaches.

The mentor can also ask the clinical staff to work together in small groups, using the Safe Delivery App to prepare small presentations or do small exercises two and two, instructing each other using the App. Also, the mentor can facilitate a discussion about the applicability of what is seen in the videos in the App in their own health facility.

OSCEs

After relevant OSCE's it can be advantageous to spend time watching the full video in plenary and direct clinical staffs' attention to the learning opportunity provided by the App on the topic in question, so that they may be able to study in-depth before the end-line OSCE.

Follow- up on self-directed learning and SDA as job aid

At each visit, the mentor asks if everybody has completed the levels assigned. The mentor supports to make a plan for how to catch up, if some are lacking behind.

The mentor uses this opportunity to re-cap what has been learned. Let the clinical staff summarize learnings, do demonstrations or answer questions based on their assignment in My Learning.

Facilitate discussion about the Safe Delivery App as a job aid: Who has used the App and for what since last visit? When and how is it helpful? Are there features the participants do not use? Why? Etc.

Consider re-capping intro of the SDA if needed: How to use all the features in the Safe Delivery App and familiarization exercises.

Action plans for Quality Circles

The mentor can consider including usage of the Safe Delivery App in the action plans as relevant. E.g. action plan on the availability of the tablet: how is that secured and supported by the quality circle?? Action plan on the effective use of the Safe Delivery App as a job aid and learning tool; how is that secured and supported by the quality circle?

4. Respectful maternity care: It is one of the important aspects which needs to be infused into every point of contact between a health service provider and a pregnant woman. Hence, mentors must be aware of all the components of respectful maternity care and be able to explain it to the service providers during their mentoring visits. It must be realized that respectful maternity care is an integral part at each moment of care and must never be compromised.

What is Respectful Maternity Care (RMC)?

Respectful Maternity Care is a universal human right that is due to every childbearing woman in every health system around the world. It includes respect for women's autonomy, dignity,

feelings, privacy, choices, freedom from ill treatment and coercion and consideration for personal preferences including option for companionship during the maternity care.

Why is Respectful Maternity Care Important?

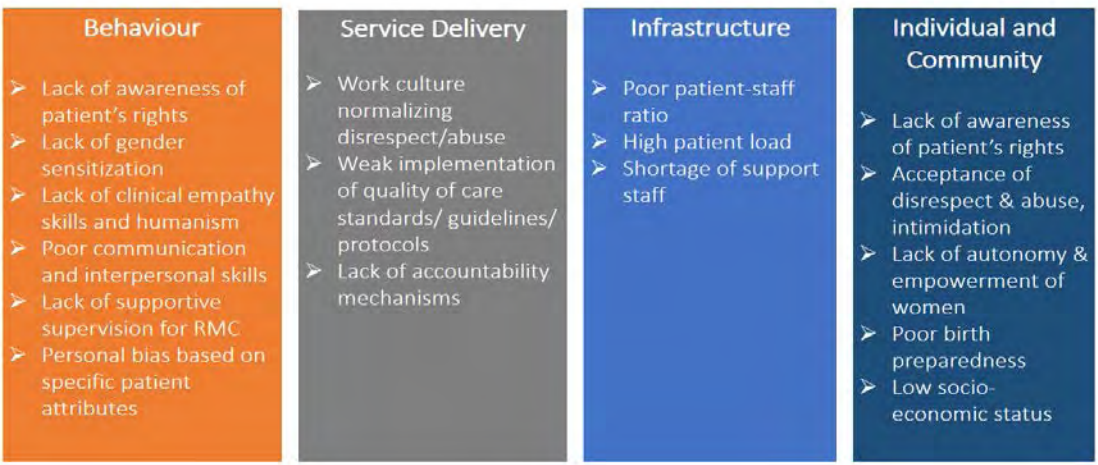
Respectful Maternity Care is an integral part of Quality of Care (QoC), which is increasingly recognized internationally as a critical aspect of the maternal and newborn health agenda.

Evidence shows that high coverage alone is not enough to reduce maternal mortality unless accompanied by improved quality throughout the continuum of care. Several studies have demonstrated that QoC often influences a woman's decision of whether to seek care in a particular institution, thereby indirectly affecting maternal mortality.

Women's experiences with maternity caregivers can empower and comfort them, or inflict lasting damage and emotional trauma. A woman's positive or negative memories of childbearing experiences stay with her throughout her lifetime. Women who experience disrespect and abuse are less likely to seek skilled health care in the future. Studies show that violating women's rights during childbirth leads women to distrust health care providers and facilities. These women are not only less likely to seek out maternity care— such as postnatal and emergency obstetric care— but other health services as well, such as family planning.

There are multiple approaches to RMC. It starts with listening to what the women as well as the service providers need and desire followed by establishing structures and processes that would ensure that these voices are heard on an on-going basis.

Causes of disrespect and abuse



Following are the seven 'Universal Rights of Childbearing Women', which need to be considered and practiced during care provision:

Category of Disrespect and Abuse	Corresponding Right
Physical abuse	Freedom from harm and ill treatment
Non-consented care	Right to information, informed consent and refusal, and respect for choices and preferences, including companionship during maternity care
Non-confidential care	Confidentiality and privacy
Non-dignified care (including verbal abuse)	Communication with dignity and respect
Discrimination based on specific attributes	Equality, freedom from discrimination, equitable care
Abandonment or denial of care	Right to timely healthcare and to the highest attainable level of health
Detention in facilities	Liberty, autonomy, self-determination, and freedom from coercion

Source: Respectful Maternity Care: The Universal Rights of Childbearing Women, The White Ribbon Alliance.

Performance standards and verification criteria for Universal rights

Performance Standards	Verification Criteria
1. The woman is protected from physical harm or ill treatment	• Touches or demonstrates caring in a culturally appropriate way • Never separates woman from her baby unless medically necessary • Does not deny food or fluid to women in labor unless medically necessitated • Provides comfort/pain-relief as necessary
2. The woman's right to information, informed consent, and choice/preferences is protected	• Encourages companion to remain with woman whenever possible • Encourages woman and her companion to ask questions • Responds to questions with promptness, politeness, and truthfulness • Explains what is being done and what to expect during examination, labour and birth • Obtains consent or permission prior to any procedure • Gives information on status and findings of examination • Gives periodic updates on status and progress of labour • Allows the woman to move about during labour
3. Confidentiality and privacy is protected	• Observer confirms that patient files are stored in locked cabinets with limited access. • Uses curtains or other visual barrier to protect woman during exams, birth, procedures

Performance Standards	Verification Criteria
	• Does not leave client records in area where they can be read by others not involved in care • Uses curtains or other visual barrier to protect woman during exams, birth, procedures • Uses drapes or covering appropriate to protect woman's privacy
4. The woman is treated with dignity and respect	• Speaks politely to woman and companion • Never insults, intimidates, threats, or coerces woman or her companion • Allows woman and her companion to observe cultural practices as much as possible
5. The woman receives equitable care, free of discrimination	• Speaks to the woman in a language and at a language level that she understands • Does not show disrespect to women based on any specific attribute
6. The woman is never left without care	• Provides essential care to the woman • Encourages woman to call if needed • Comes quickly when woman calls • Never leaves woman alone or unattended
7. The woman is never detained or confined against her will	• Never detains a woman against her will • The facility does not have a policy to detain women who do not pay

References

- LAQSHYA: Labour Room Quality Improvement Initiative. 2017. National Health Mission. Ministry of Health and Family Welfare. Government of India New Delhi
- Windau-Melmer, Tamara. 2013. A Guide for Advocating for Respectful Maternity Care. Washington, DC: Futures Group, Health Policy Project.
- WHO statement on "The prevention and elimination of disrespect and abuse during facility-based childbirth"

Quality improvement cycle – 1

Strengthening Documentation Practices

Objectives

To strengthen essential documentation practices by facilitating availability of all essential resources and building capacity of providers for their use with focus on real time partograph generation and use of Safe Childbirth Checklist (SCC) and Surgical Safety Checklists (SSC).

Facility level targets (To be achieved before applying for LaQshya certification)

- At least 90% deliveries are conducted using Safe Childbirth Checklist and Surgical Safety Checklists in Labour Room and Maternity OT (If applicable)
- Partograph is generated using real-time information in at least 90% deliveries in labour rooms
- Facility conducts referral audit on monthly basis
- Facility conducts maternal death, Neonatal death and near-miss audit and clinical discussion on monthly basis
- Facility reports zero stock outs in labour Room & Maternity OT

Brief of the key activities for QI visits

S. No.	Areas addressed during QI visit	QI visit			
		1st	2nd	3rd	4th
1	Meeting with medical superintendent or facility in charge	✓	✓	✓	✓
2	Assessment of labor room and maternity OT for entire documentation process using resource availability checklist and QI checklist (as per annexure)	✓			✓
3	Facilitate quality circle to prepare an action plan for the current visit	✓			
4	Mentoring of all the labor room and maternity OT staff in the facility	✓	✓ (Need Based)	✓ (Need Based)	✓ (Need Based)

S. No.	Areas addressed during QI visit	QI visit			
		1st	2nd	3rd	4th
5	Orientation of all the labor room and maternity OT staff on Safe delivery app and develop a self-directed learning plan	✓			
6	Follow up on action plan prepared during previous visit		✓	✓	✓

Key activities

Preparation for QI visit

- Inform the medical superintendent or facility in charge at least one day in advance about the visit
- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours
- Enquire about the status of quality circle and if not formed, inform that it would be formed on the day of visit (applicable for Day 0 visit of QI cycle 1 only)
- Keep all the materials (QI cycle visit checklist, job aids including safe delivery app, checklists, formats, action plan template, mannequins, adequate photocopies of partograph and partograph case studies) required to do mentoring and any previous action plans ready for the visit

Outline of activities for QI visits

QI visit	Tasks	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
1st	**Activity**	**Hold all staff meeting to orient the facility stakeholders on** o **LaQshya initiative, Quality improvement cycles and quality circle** o **Objectives of the current quality cycle**	
		• Facilitate formation of quality circle (if not in place) • Review functioning of quality circle by going through minutes of the meeting • Discuss current status of mechanism for o Referral audit o Maternal death, Neonatal death and near-miss audits o Uninterrupted supply of logistics • Assessment of labour room and maternity OT for documentation using o Formats/records checklist o QI cycle checklist* • Quality circle meeting to prepare action plan	• Mentoring on o Importance of documentation and its maintenance o Use of standardized maternity case sheet including Safe Childbirth checklist (SCC), o Partograph o Prolonged labor module of Safe Delivery App o Filling information in standardized labor room register o Use of Surgical Safety Checklist (SSC) o Generation of monthly reporting using above documents
	Logistics required for the activity	• Formats/records checklist • QI cycle checklist* • Action planning template	• GoI standard maternity case sheet containing SCC • Safe Surgical Checklist (SSC) • Monthly progress report format Photocopies of partograph and case study on partograph

QI visit	Tasks	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
			• The Safe Delivery App: Module on Prolonged Labor (SDA should be downloaded to facility tablet and clinical staff's phones)
	Improvement and sustenance mechanism	• Preparation of an action plan based on the gaps identified during assessment and mentoring	• Demonstration of prolonged labour module of Safe Delivery App • Prepare facility self-learning plan
2nd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks for sustainable impact • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Review records to observe improvement in documentation of practices and services provided • Need based mentoring on skills/knowledge imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool

QI visit	Tasks	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
3rd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit • Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources • Update the action plan based on the findings from this visit	• Observe the practices and provide need based inputs • Review records to ascertain the change in practices and discuss with staff for further improvement • Follow up on use of Safe Delivery App for self-learning and as reference tool
4th	**Follow up and reassessment**	• Reassessment of labour room and maternity OT documentation to ascertain improvement using o Formats/records checklist o QI cycle checklist * • Share the change in scores of standards with the quality circle during the meeting • Prepare a plan for the activities that need further improvement.	• Reinforce the significance of using partograph for decision making • Reinforce the significance of documentation of all the practices and services provided in relevant records. • Follow up on use of Safe Delivery App for self-learning and as reference tool • It is expected that all staff have achieved the expert level on prolonged labor module of Safe Delivery App by follow up and reassessment visit.

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

1st visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Constitution/activation of Quality Circle	☑ ☒	
3	Assessment of labor room and maternity OT for entire documentation process using resource availability checklist and QI checklist (as per annexure)	☑ ☒	
4	Facilitate quality circle to prepare an action plan	☑ ☒	
5	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
6	Orientation of all the labor room and maternity OT staff on Safe delivery app and develop a self-directed learning plan	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and Quality Circle

- Meet medical superintendent or facility in charge and explain him regarding the objectives and activities planned for the visit and for next 2 months.
- Hold all staff meeting to orient the facility stakeholders on (applicable for day 0 of QC 1 only).

- LaQshya initiative, Quality improvement cycles and quality circle
- Objectives of the current quality cycle

- Review existing mechanism for conducting monthly referral audit, maternal death, neonatal death and near-miss audits on monthly basis and ensuring uninterrupted supply of logistics and discuss with the quality circle.
- If the mechanism is not in place or not being conducted as per GoI guidelines, the mentor should facilitate in establishing the system within the facility and also share link or softcopy of guidelines with the quality circle.
- Discuss LaQshya monthly reporting format with the quality circle and ask the facility in-charge to assign the responsibility to one person for filling and sending the report on monthly basis.
- Facilitate formal meeting of QC and develop meeting plan (every 15 days) to follow up the quality improvement in labor room/maternity OT service delivery.

Responsibilities under Strengthening Documentation Practices

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Facilitate Quality Circle formation/ functioning • Onsite training and handholding of quality circle, LR and maternity OT staff for strengthening mechanisms within their facility on documentation practices • Facilitate action planning based on the identified gaps • Facilitate mechanisms for ensuring availability of resources for performing the practices related to documentations • Review the current status of documentation processes • Assessment of labor room & OT on documentation process.	• Establish mechanism for use of safe childbirth checklist in all the vaginal deliveries and use of surgical safety checklist in all the cesarean sections • Establish a mechanism in the facility that ensures proper documentation during all the procedures related to intrapartum and immediate post-partum period. For Ex. If Clients opts for PPS (Post-Partum Sterilization- Consent form, Checklists, etc. have to filled) • Establish mechanism for use of partograph to monitor progress of all the deliveries • Establish the uninterrupted supply of partograph, SCC, SSC and all the registers/reporting formats required in labour room and maternity OT • Ensure staff is trained and skilled for monitoring of labour using partograph and has the knowledge to maintain records • Establish mechanism for entry of data in IT system and provision of tab at nursing

	station. • Establish mechanism for regular reporting of the indicators in monthly progress report • Establish mechanism for use of the indicators to improve facility services delivery • Establish a mechanism for inventory management for drugs, consumables and options of family planning.

Step 2: Assessment of labor room and maternity OT for documentation

Visit labour room and maternity OT along with facility Quality Circle and perform the assessment for availability of format/records checklist (Annexure 1.1 and 1.2) and QI cycle checklists (Annexure 1.3 and 1.4). Use the gaps identified during this assessment for action planning with quality circle.

Step 3: Mentoring of labor room and maternity OT staff

- Conduct mentoring for all the staff available at the time of the visit.
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include those challenges in action plan.
- Motivate the staff to continue good practices demonstrated.

Mentoring session outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
1	**Documentation**	10 min	Standard formats for maintaining records and reports in labour room and maternity OT (refer MNH toolkit)	• Review of registers and reports • Facilitated discussion	• Ask the service providers about importance of documentation. • Explain significance of documentation for continuity of care, accountability and service improvement. • Review the current availability and use of updated records, registers and reports and their use. Identify the documents not available/not being

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
					maintained and reason behind the same and address accordingly (annexure 1.5).
2	**Filling GoI's standard maternity case sheet including Safe Childbirth Checklist (SCC)**	20 min	GoI's standard maternity Case sheet containing SCC	• Review of existing maternity case sheets • Facilitated discussion	• Review the existing format of the maternity case sheet being used at the facility. • Discuss the GoI's standard maternity case sheet and benefits of using it. • Explain importance of use of Safe Childbirth Checklist at all relevant checkpoints to ensure delivery of quality services • Explain methods for filling SCC - Do-Check (the recommended method) and Check-Do (annexure 1.6).
3	**Filling GoI's standard labour room register**	20 min	GoI's standard labour room register	• Review of existing register • Facilitated discussion	• Discuss the importance of filling labour room register • Explain that the meticulous and complete filling of all columns of standardized labour room register reduces the burden of maintaining extra registers such as ANCS administration register, complication record register, refer in and out register etc. • Completely and accurately filled labour room register acts as a support document for audits as well as medico-legal cases (annexure 1.7).
4	**Orientation on Safe Delivery App**	20 min	Safe Delivery App	Facilitated discussion	• Introduce service providers to the Safe Delivery App (SDA) and facilitate download of the app in their phones Refer Safe Delivery App in Introduction part

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
5	**Filling partograph**	60 min	• Partograph • Partograph case study	• Review of filled partographs available in the records • Case study • Use module of prolonged labor in Safe delivery app	• Observe the availability of the partograph (Partograph is the integral part of standardized maternity case sheets). • Review the filled partographs available in the labour room and critically assess for their completeness. • Based on the lacunae found, mentor the service providers for correctly using the partograph. • Mentor on the importance of real time use of partograph for decision making in management of labour. • Hand hold the staff in filling partograph in real time if there is a case in the facility. • If there is no case and mentor with the case study (annexure 1.8). • Review module on the Safe Delivery App either as preparation or as post-exercise re-cap
6	**Identification and management of prolonged and obstructed labour**	10 minutes	Partograph	Facilitated discussion	• Mentor on identification of prolonged using partograph and its management (annexure 1.11).
7	**Filling Surgical Safety Checklist**	20 min	Surgical Safety Checklist	Facilitated discussion	• Ask the service providers if Surgical Safety Checklist is being used • Explain its use before and after the surgical procedures to reinforce accepted safety practices and foster better communication and teamwork between clinical disciplines

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
					• Explain phases corresponding to the time period in the flow of the procedure and methodology of use of Surgical Safety Checklist during each phase (annexure 1.12).

Step 4: Facilitate quality circle to preparation an action plan

Based on the gaps identified during assessment and mentoring processes, facilitate the quality circle to prepare a standard wise action plan as below:

1. Action plan for labour room

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
Facility has defined and established procedures for maintaining patients clinical records					
Facility has defined and established procedures for updating patients clinical records					
The facility ensures safe and adequate storage					

2. Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
Facility has defined and established procedures for maintaining patients clinical records					
Facility has defined and established procedures for updating patients clinical records					
The facility ensures safe and adequate storage					

Step 5: Follow up on action plan prepared during baseline assessment

Using action plan prepared during Baseline assessment, facilitate discussion for update on the gaps/challenges identified.

2nd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with or facility in charge medical superintendent	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on action plan prepared during last visit	☑ ☒	
4	Follow up on the self-learning plan on Safe delivery App	☑ ☒	

3rd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with or facility in charge medical superintendent	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on action plan prepared during last visit	☑ ☒	
4	Follow up on the self-learning plan on Safe delivery App	☑ ☒	
5	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	

Major activities to be conducted during 2nd and 3rd visits:

- Meet medical superintendent or facility in charge and discuss objective of the visit and activities planned for the day
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in practicing skills imparted and follow up with the quality circle
- Once mentoring is finished, hold meeting with the quality circle
- Follow-up on self-learning plan via SD app
- Appraise the team on improvements in practices in the labour room since previous visit
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 0) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.

4th visit (Day 45)

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Reassessment of labor room and maternity OT for documentation using formats/records checklist and QI checklist	☑ ☒	
3	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
4	Follow up on action plan prepared during last visit	☑ ☒	
5	Follow up on the self-learning plan on Safe delivery App	☑ ☒	
6	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labour room and maternity OT along with facility Quality Circle and reassess the facility using same records/formats checklist (Annexure 1.1 and 1.2) and QI checklists (Annexure 1.3 and 1.4).
- Follow-up on self-directed learning via My Learning on the Safe Delivery App
- Compare the scores of initial assessment and reassessment and share with labour room/maternity OT staff as well as with the quality circle
- Review the practices and provide need based mentoring support
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 30) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- The activities which are partially completed/not completed will be followed up during next QI cycle/s till all the gaps are addressed.

Annexures

Annexure 1.1: Assessment of labor room for availability of resources for documentation

Encircle appropriate: ☑ Available ☒ Not available. In case of availability please check the functionality of relevant items.

S.No.	Resource/ Records	QI visit			
		1st	2nd	3rd	4th
1.	Standardized GoI Maternity Case Sheets	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2.	Standardized GoI labour room register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3.	Drug stock register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4.	Equipment register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5.	PPIUCD register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6.	Laboratory register				
7.	Staff training record register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8.	OSCE score assessment register (can be included in existing register)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9.	NBCC register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10.	MTP Register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11.	Maternal death register & records	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12.	Facility Based Maternal Death Review (FBMDR) register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13.	Referral in/out register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14.	Handover register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15.	Sterilization register	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource/ Records	QI visit			
		1st	2nd	3rd	4th
16.	Microbiological sampling register (can be included in existing register)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17.	Daily cleaning register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18.	Laundry register	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 1.2: Assessment of maternity OT for availability of resources for documentation

Encircle appropriate: ☑ Available ☒ Not available ◙ Available and complete Δ Available and incomplete

S.No.	Resource/ Records	QI visit			
		1st	2nd	3rd	4th
1.	Consent form	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2.	Anesthesia form	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3.	Surgical Safety Checklist	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4.	OT Delivery registers	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5.	Microbiological sampling register (can be included in existing register)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6.	Sterilization Register				
7.	Daily Cleaning Register	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 1.3: QI checklist for labour room for documentation and stock

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard D2	**The facility has defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas**					
ME D2.1	There is established procedure for forecasting and indenting drugs and consumables	There is established system of timely indenting of consumables and drugs			SI/RR	Stock level are daily updated Requisition are timely placed well before reaching the stock out level. Check with stock and indent registers
ME D2.1	The facility ensures proper storage of drugs and consumables	Drugs are stored in containers/tray/crash cart and are labelled			OB	Check drugs and consumables are kept at allocated space in Crash cart/Drug trolleys and are labelled. Look alike and sound alike drugs are kept separately
ME D2.4	The facility ensures management of expiry and near expiry drugs	Expiry dates are maintained at emergency drug tray /Crash cart			OB/RR	Expiry dates against drugs are mentioned crash cart/emergency drug tray No expiry drug found

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME D2.5	The facility has established procedure for inventory management techniques	There is practice of calculating and maintaining buffer stock			SI/RR	At least one week of minimum buffer stock is maintained all the time in the labour room. Minimum stock and reorder level are calculated based on consumption in a week accordingly
Standard E8	**The facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage**					
ME E8.1	All the assessments, re-assessment and investigations	Progress of labour is recorded			RR	Partograph
ME E8.2	All treatment plan prescription/orders are recorded in the patient records	Treatment prescribed in nursing records			RR	Medication order, treatment plan, lab investigation are recoded adequately

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E8.4	Procedures performed are written on patients records	Delivery note is Adequate			RR	Outcome of delivery, date and time, gestation age, delivery conducted by, type of delivery, complication if any, indication of intervention, date and time of transfer, cause of death etc.
		Baby note is adequate			RR	Did baby cry, Essential new born care, resuscitation if any, Sex, weight, time of initiation of breast feed, birth doses, congenital anomaly if any.
ME E8.5	Adequate form and formats are available at point of use	Standard Formats are available			RR/OB	Availability of standardized labour room case sheets including partograph and safe Birthing checklist
ME E8.6	Register/records are maintained as per guidelines	Registers and records are maintained as per guidelines			RR	Labour room register, OT register, MTP register, Maternal death register and records, lab

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		All register/records are identified and numbered			RR	Check records are numbered and labelled legibly

Annexure 1.4: QI checklist for maternity OT for documentation

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard E8	**Facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage**					
ME E8.1	All the assessments, re-assessment and investigations are recorded and updated	Records of Monitoring/ Assessments are maintained			RR	PAC, Intraoperative monitoring
ME E8.2	All treatment plan prescription/orders are recorded in the patient records.	Treatment plan, first orders are written on Case Sheet			RR	Treatment prescribed in nursing records

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E8.4	Procedures performed are written on patients records	Operative Notes are Recorded			RR	Name of person in attendance during procedure, Pre and post-operative diagnosis, Procedures carried out, length of procedures, estimated blood loss, Fluid administered, specimen removed, complications etc.
		Anesthesia Notes are Recorded			RR	Notes includes Anesthesia type, induction, airway, intubation, inhalation agents, epidural, spinal, allergies, IV lines, IV fluids, regional block

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E8.5	Adequate form and formats are available at point of use	Standard Formats are available			RR/OB	Consent forms, Anesthesia form, surgical safety check list
ME E8.6	Register/records are maintained as per guidelines	Registers and records are maintained as per guidelines			RR	OT Register, Schedule, Infection control records, autoclaving records etc.
		All register/records are identified and numbered			RR	Register are labelled and numbered
ME E8.7	The facility ensures safe and adequate storage and retrieval of medical records	Safe keeping of patient records			RR	Records are kept in place without seepage, moisture, termite, pests

Annexure 1.5: Record Keeping and Reporting Services

Inquire from the service provider why the documentation is important?

- Accurate record keeping is essential (in healthcare) to document the assessments underlying the progress of patient's care and contribute to the quality of that care. For the purpose of this document- standardized case record, birthing register template and monthly progress report format, under *LaQshya* are elaborated.
- Record keeping and reporting are important processes that facilitate continuity of care, accountability and service improvement. The records help in identification of gaps in

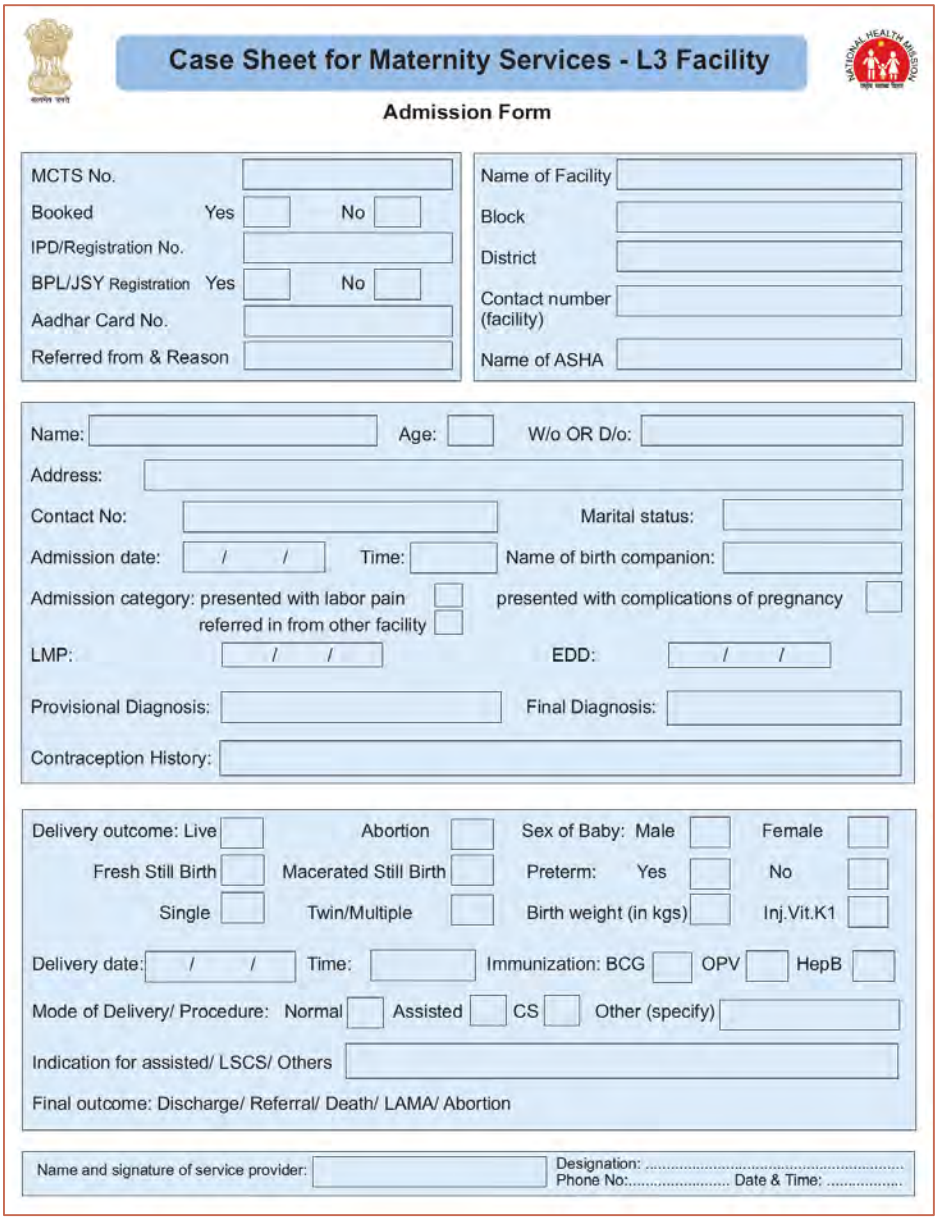
services and to plan for appropriate and timely action(s). Data generated from these records is useful at all levels of management/administration to track the volume and quality of services provided in the labor room. Highlighting the provider's efforts and achievements

Important considerations

- Ensure no important client information is missed out
- Use the SCC at all relevant checkpoints to ensure delivery of quality services in each case

Annexure 1.6: Standardized case records including Safe Childbirth Checklist (SCC)

- Check for the availability and use of standardized case records for each labor case.
- Explain the components of case sheets (Depending upon level of facility – i.e. L1, L2, L3) such as admission form, safe childbirth checklist, obstetric notes, consent for procedure and PPIUCD, notes on pre-anesthetic checkup, anesthetic notes, operation procedure notes (if applicable), delivery and post-delivery notes, blood transfusion and other procedure notes, assessment of postpartum condition, discharge notes, discharge/referral/LAMA/Death form.



Case Sheet for Maternity Services - L3 Facility

Admission Form

MCTS No.		Name of Facility	
Booked	Yes ☐ No ☐	Block	
IPD/Registration No.		District	
BPL/JSY Registration	Yes ☐ No ☐	Contact number (facility)	
Aadhar Card No.		Name of ASHA	
Referred from & Reason			

Name: Age: W/o OR D/o:

Address:

Contact No: Marital status:

Admission date: / / Time: Name of birth companion:

Admission category: presented with labor pain ☐ presented with complications of pregnancy ☐
referred in from other facility ☐

LMP: / / EDD: / /

Provisional Diagnosis: Final Diagnosis:

Contraception History:

Delivery outcome: Live ☐ Abortion ☐ Sex of Baby: Male ☐ Female ☐

Fresh Still Birth ☐ Macerated Still Birth ☐ Preterm: Yes ☐ No ☐

Single ☐ Twin/Multiple ☐ Birth weight (in kgs) ☐ Inj.Vit.K1 ☐

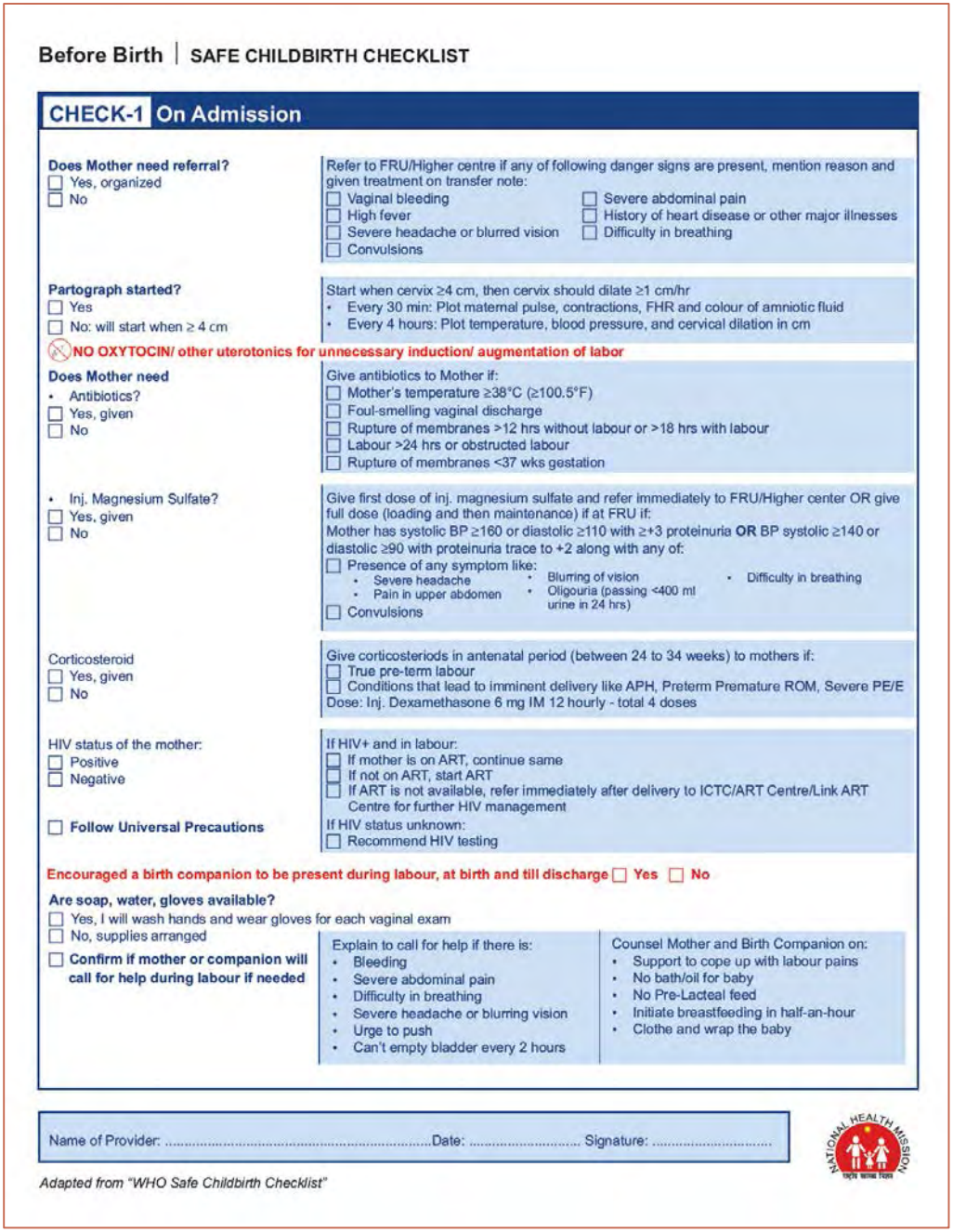
Delivery date: / / Time: Immunization: BCG ☐ OPV ☐ HepB ☐

Mode of Delivery/ Procedure: Normal ☐ Assisted ☐ CS ☐ Other (specify)

Indication for assisted/ LSCS/ Others

Final outcome: Discharge/ Referral/ Death/ LAMA/ Abortion

Name and signature of service provider: Designation: .....
Phone No:..... Date & Time: .....



Before Birth | SAFE CHILDBIRTH CHECKLIST

CHECK-1 On Admission

Does Mother need referral?
☐ Yes, organized
☐ No

Refer to FRU/Higher centre if any of following danger signs are present, mention reason and given treatment on transfer note:
☐ Vaginal bleeding
☐ High fever
☐ Severe headache or blurred vision
☐ Convulsions
☐ Severe abdominal pain
☐ History of heart disease or other major illnesses
☐ Difficulty in breathing

Partograph started?
☐ Yes
☐ No: will start when ≥ 4 cm

Start when cervix ≥4 cm, then cervix should dilate ≥1 cm/hr
- Every 30 min: Plot maternal pulse, contractions, FHR and colour of amniotic fluid
- Every 4 hours: Plot temperature, blood pressure, and cervical dilation in cm

NO OXYTOCIN/ other uterotonics for unnecessary induction/ augmentation of labor

Does Mother need
- Antibiotics?

☐ Yes, given
☐ No

Give antibiotics to Mother if:
☐ Mother's temperature ≥38°C (≥100.5°F)
☐ Foul-smelling vaginal discharge
☐ Rupture of membranes >12 hrs without labour or >18 hrs with labour
☐ Labour >24 hrs or obstructed labour
☐ Rupture of membranes <37 wks gestation

- Inj. Magnesium Sulfate?

☐ Yes, given
☐ No

Give first dose of inj. magnesium sulfate and refer immediately to FRU/Higher center OR give full dose (loading and then maintenance) if at FRU if:
Mother has systolic BP ≥160 or diastolic ≥110 with ≥+3 proteinuria **OR** BP systolic ≥140 or diastolic ≥90 with proteinuria trace to +2 along with any of:
☐ Presence of any symptom like:
- Severe headache
- Pain in upper abdomen
- Blurring of vision
- Oligouria (passing <400 ml urine in 24 hrs)
- Difficulty in breathing

☐ Convulsions

Corticosteroid
☐ Yes, given
☐ No

Give corticosteriods in antenatal period (between 24 to 34 weeks) to mothers if:
☐ True pre-term labour
☐ Conditions that lead to imminent delivery like APH, Preterm Premature ROM, Severe PE/E
Dose: Inj. Dexamethasone 6 mg IM 12 hourly - total 4 doses

HIV status of the mother:
☐ Positive
☐ Negative

☐ **Follow Universal Precautions**

If HIV+ and in labour:
☐ If mother is on ART, continue same
☐ If not on ART, start ART
☐ If ART is not available, refer immediately after delivery to ICTC/ART Centre/Link ART Centre for further HIV management
If HIV status unknown:
☐ Recommend HIV testing

Encouraged a birth companion to be present during labour, at birth and till discharge ☐ Yes ☐ No

Are soap, water, gloves available?
☐ Yes, I will wash hands and wear gloves for each vaginal exam
☐ No, supplies arranged

☐ **Confirm if mother or companion will call for help during labour if needed**

Explain to call for help if there is:
- Bleeding
- Severe abdominal pain
- Difficulty in breathing
- Severe headache or blurring vision
- Urge to push
- Can't empty bladder every 2 hours

Counsel Mother and Birth Companion on:
- Support to cope up with labour pains
- No bath/oil for baby
- No Pre-Lacteal feed
- Initiate breastfeeding in half-an-hour
- Clothe and wrap the baby

Name of Provider: .....Date: ..... Signature: .....

NATIONAL HEALTH MISSION

Adapted from "WHO Safe Childbirth Checklist"

- Ensure SCC to be filled/used at all 4 relevant check-points, (i.e. on admission, just before pushing/ Cesarean section, within one hour of birth and before discharge at appropriate times).

Pause points for SCC

A pause point or a check is a natural time during the course of labor where a health worker can briefly pause to review whether he/she has performed all essential care practices, and to prepare for the upcoming care. The SCC is organized around 4 pause points. These are important due to the following reasons:

1. **At the time of admission:** It is important to be sure that the mother does not already have complications, to determine whether she needs to be referred, and to prepare her and her companion for labor and delivery.
2. **Just before pushing (or before cesarean):** Complications can happen to the mother during labor, and it is therefore important to check her during this time. Also, many complications for the woman and baby happen just after birth. It is therefore important to be well prepared for the birth in order to give appropriate routine care and successfully manage crisis situations.
3. **Soon after birth (within 1 hour):** Many complications for the woman and baby happen just after birth. It is therefore important to check the mother and baby at this time. It is also important at that time to ensure healthy child care practices by the mother, such as early breastfeeding, temperature management of the baby, and prepare her and her companion for the postpartum period.
4. **At the time of discharge:** It is important to ensure that the mother and baby are healthy before discharge, that follow-up has been arranged, that family planning options have been discussed and offered, and that the mother and her companion know the Danger Signs for which immediate skilled care be sought.

Tips for effectively using the SCC

- Start using the SCC section at the time of admission for each woman.
- Perform all essential actions within each pause point or check.
- Complete all pause points or checks of the SCC.
- Keep the case sheet and the SCC with the woman and baby at all times.
- Prepare for each essential section on the SCC.
- Verify that the woman and baby are safe at each pause point or check.
- Mark SCC items with pen when completed.
- Complete the SCC pause points at all recommended times. Do not fill the SCC pause points together at a later stage after delivery.
- Keep accurate records for each woman and baby in the birth register.
- At shift change, fully brief the replacement staff about the condition of each woman and baby using the SCC.

The mentor should be mindful to create links between the SCC and the SDA when relevant. The SCC is a bedside checklist to help health workers remember to adhere to the safe care practices associated with improved maternal, fetal, and neonatal outcomes. The SDA is a clinical instruction and guidance tool availing the clinical guidelines for how manage complications. It can add value to strengthening the links between the SCC as a checklist and the SDA as the clinical guidelines in supporting the midwives to correctly manage hemorrhage, infection, prolonged/obstructed labor, and hypertensive-related disorders and newborn complications. The SCC helps you remember the steps – the SDA helps you access the clinical guidelines for how to act.

Annexure 1.7: Labour room register

- This register contains essential information about all the clients who have delivered at the facility.
- Discuss the importance of filling the labour room register completely and accurately.

Labour Room Register

Year SN	Month SN	Client Detail	Obstetric History	Admission Details	Detail of interventions for Delivery	Details of Delivery	Information about Baby	Complications	In case of referral	Condition of the mother and baby at discharge	Postpartum Family planning	Addition info./ Follow up details
1	2	3	4	5	6	7	8	9	10	11	12	13
		Registration No. MCTS No. Name and age Husband's/Fathers/ Guardians Name Address Mobile No. BPL/MBS reg: Y/ N Aadhar No. Bank details ASHA's name & contact no.	LMP/EDD Gravida Parity Abortion Living children Previous LSCS (Y/N) Other previous complications:	Date Time Direct in labour ☐ **Gestational age (in weeks)** BP Temp FHR Proteinuria Hb gms % Blood Group HIV Syphilis Malaria Hep B Hep C **Referred From** Identified as High Risk ☐ Specify:	**Partograph Filled** ☐ **Inducted*** ☐ **Augmented*** ☐ **Inj. Dexamethasone** ☐ **Inj. Magnesium Sulfate** ☐ **Episiotomy** ☐ **AMTSL** ☐ Yes ☐ No ☐ **Type of Uterotonic** Oxytocin IM ☐ If others, then specify: Delayed cord Clamping (1-3 min) ☐ Antibiotics ☐ Blood transfusion ☐	Date Time **Type:** Normal ☐ Assisted Delivery ☐ (Instrumental, Vacuum, etc.) Caesarean ☐ **If caesarean, Indication:** Conducted By: **Mother:** Alive ☐ Maternal Death ☐ **Baby:** Single ☐ Multiple ☐ Term ☐ Preterm ☐ Alive ☐ Still birth: Fresh ☐ Macerated ☐ New born death ☐	**Identification No** **Sex:** Male ☐ Female ☐ Other ☐ **Weight (Kgs):** **Dried** immediately after birth Yes ☐ No ☐ **Resuscitation required**** Yes ☐ No ☐ Breast feed within 1 hour Yes ☐ No ☐ If not, mention time: Vitamin K1 given Yes ☐ No ☐ Vaccination done BCG ☐ OPV ☐ Hep B ☐	**Mother:** APH ☐ PPH ☐ Pre-eclampsia ☐ Eclampsia ☐ Sepsis ☐ Obs. labour ☐ Prolonged labour ☐ Others (specify): **Baby:** Sepsis ☐ Asphyxia ☐ LBW ☐ Pre Maturity ☐ Others ☐ (specify):	**Mother:** Reason Referred to **Baby:** Reason Referred to	Date and time of Discharge **Mother:** BP Temp Bleeding PV **Baby:** Temp Feeding Respiratory Rate	Counselling Yes ☐ No ☐ **Method chosen:** LAM ☐ Condoms ☐ Injectable ☐ PPIUCD ☐ Male Sterilization ☐ PPS ☐ Others ☐ Date of method adopted	**Signature of LR I/C**
		Registration No. MCTS No. Name and age Husband's/Fathers/ Guardians Name Address Mobile No. BPL/MBS reg: Y/ N Aadhar No. Bank details ASHA's name & contact no.	LMP/EDD Gravida Parity Abortion Living children Previous LSCS (Y/N) Other previous complications:	Date Time Direct in labour ☐ **Gestational age (in weeks)** BP Temp FHR Proteinuria Hb gms % Blood Group HIV Syphilis Malaria Hep B Hep C **Referred From** Identified as High Risk ☐ Specify:	**Partograph Filled** ☐ **Inducted*** ☐ **Augmented*** ☐ **Inj. Dexamethasone** ☐ **Inj. Magnesium Sulfate** ☐ **Episiotomy** ☐ **AMTSL** ☐ Yes ☐ No ☐ **Type of Uterotonic** Oxytocin IM ☐ If others, then specify: Delayed cord Clamping (1-3 min) ☐ Antibiotics ☐ Blood transfusion ☐	Date Time **Type:** Normal ☐ Assisted Delivery ☐ (Instrumental, Vacuum, etc.) Caesarean ☐ **If caesarean, Indication:** Conducted By: **Mother:** Alive ☐ Maternal Death ☐ **Baby:** Single ☐ Multiple ☐ Term ☐ Preterm ☐ Alive ☐ Still birth: Fresh ☐ Macerated ☐ New born death ☐	**Identification No** **Sex:** Male ☐ Female ☐ Other ☐ **Weight (Kgs):** **Dried** immediately after birth Yes ☐ No ☐ **Resuscitation required**** Yes ☐ No ☐ Breast feed within 1 hour Yes ☐ No ☐ If not, mention time: Vitamin K1 given Yes ☐ No ☐ Vaccination done BCG ☐ OPV ☐ Hep B ☐	**Mother:** APH ☐ PPH ☐ Pre-eclampsia ☐ Eclampsia ☐ Sepsis ☐ Obs. labour ☐ Prolonged labour ☐ Others (specify): **Baby:** Sepsis ☐ Asphyxia ☐ LBW ☐ Pre Maturity ☐ Others ☐ (specify):	**Mother:** Reason Referred to **Baby:** Reason Referred to	Date and time of Discharge **Mother:** BP Temp Bleeding PV **Baby:** Temp Feeding Respiratory Rate	Counselling Yes ☐ No ☐ **Method chosen:** LAM ☐ Condoms ☐ Injectable ☐ PPIUCD ☐ Male Sterilization ☐ PPS ☐ Others ☐ Date of method adopted	**Signature of LR I/C**

*Induction and Augmentation to be done only at FRUs with C-section facility (Unnecessary Induction and Augmentation should not be done).
**States may consider including steps of newborn resuscitation: Position, Suction, Stimulation, Reposition, Bag & Mask Ventilation.

Instructions for filling labour room register

Column 1: Fill the year serial number.
Column 2: Fill the month serial number. Each month serial number will start with 1.
Column 3: Fill the client details such as registration number; MCTS number; name of client; husband's name; address; contact number; BPL status; aadhar number etc.
Column 4: Fill or check the box as applicable for client's age (in years) and obstetric history including last menstrual period (LMP) and expected date of delivery (EDD); gravida; parity; number of living children; any history of abortion, previous caesarean section and/or other previous complications.
Column 5: Fill the admission details or check the box as applicable, for date and time of admission; gestational age in weeks; vitals such as blood pressure, temperature, pulse and fetal heart rate at the time of admission; investigations like proteinuria, hemoglobin (gms%), blood group, HIV status, malaria test and hepatitis B status; whether referred from any facility; and identified high risk pregnancy or not.
Column 6: Record the detail of interventions for delivery by checking the appropriate boxes for interventions such as filling of partograph; induction or augmentation of labor; episiotomy; active management of third stage of labor (AMTSL) performed and the type of uterotonic drug used (Injection
Oxytocin or any other- specify); use of antibiotics for mother; blood transfusion (if performed).
Column 7: Record the delivery details like date and time of delivery; type of delivery (check the appropriate box for normal delivery, assisted delivery or cesarean section). In case of cesarean section, fill the columns for indication for performing cesarean section and the name of person conducting it.
Also check the boxes for condition of mother and newborn at the time of delivery.
Column 8: Fill the baby information such as identification number and baby's weight (in Kgs); check appropriate box for sex of baby (male or female), and other information like baby dried immediately after birth, baby breast fed within one hour of birth and administration of injection vitamin K1.
Column 9: This column captures the data on complications. Record the maternal complications by checking the appropriate response for complications such as antepartum hemorrhage (APH), postpartum hemorrhage (PPH), pre-eclampsia/eclampsia, sepsis, obstructed labor, prolonged labor or any other (specify). Similarly, record the complications in baby such as sepsis, asphyxia, low birth weight (LBW), pre maturity or any other (specify).
Column 10: Record the details for referral for mother and baby in this column with reason for referral and details of referral facility.
Column 11: Record the dtae and time of discharge along with vitals of mother and baby at discharge.
Column 12: Record the details of postpartum family planning by checking the response (as applicable) for counselling done (yes or no) and the method chosen such as lactational

amenorrhea (LAM), condoms, injectable, postpartum intrauterine contraceptive device (PPIUCD), male sterilization, postpartum sterilization (PPS) or any other (specify). Also mention the date of adopting the method.

Column 13: Record any additional information or follow-up details with signature of the LR in-charge in this column.

Annexure 1.8: Monitoring the Progress of Labour – Plotting and interpretation of Partograph

<table>
<tr><th>Parameter</th><th>Frequency</th><th>Plotting</th><th>Interpretation / Action</th></tr>
<tr><td>Fetal Condition</td><td>Every 30 min</td><td>Count fetal heart rate every 30 minutes
Count for one full minute, immediately following a uterine contraction
Fetal distress: FHR <120 beats/minute or >160 beats/minute</td><td>FHR is <120 beats / min or >160 beats / min is an indication for referral to FRU</td></tr>
<tr><td>Amniotic fluid</td><td>Every 30 min</td><td>Membranes intact (mark ‘I’), Blood stained (mark ‘B’), Clear liquor (mark ‘C’), Meconium stained liquor (mark ‘M’)*</td><td>Meconium and /or blood stained amniotic fluids are indications for referral to FRU</td></tr>
<tr><td>Cervical dilatation</td><td>Every 4 hour</td><td>Begin plotting in active labor. Always plot first finding at Alert line. Note the time.</td><td>If Alert line is crossed (the plotting moves to the right of the alert line) it indicates abnormal labour: prolonged/ obstructed labour. Refer to FRU</td></tr>
<tr><td rowspan="5">Contractions</td><td rowspan="5">Every 30 min</td><td>Number of contractions in 10 min</td><td rowspan="2">Contractions not increasing in duration, intensity and frequency e.g. 2 or less contractions lasting for <20 sec in 10 min are indications for referral to FRU</td></tr>
<tr><td>Duration (in second) | Plotting</td></tr>
<tr><td>Less than 20 |  </td><td rowspan="3"></td></tr>
<tr><td>20 to 40 |  </td></tr>
<tr><td>More than 40 |  </td></tr>
<tr><td rowspan="2">Pulse and BP</td><td>Pulse - Every 30 min</td><td>Record with dot (.)</td><td><60 bradycardia, >100 tachycardia</td></tr>
<tr><td>BP -Every 4 hour</td><td>Record using a vertical arrow, with upper end signifying systolic BP and lower end diastolic BP</td><td>>140/90mmHg is indicative of hypertension</td></tr>
</table>

Parameter	Frequency	Plotting	Interpretation / Action
Temperature	Every 30 min	Note in ˚C or ˚F	>38˚C or 100˚F indicates fever

Annexure 1.9: Partograph case study

Note: The Safe Delivery App can be used to support the clinical staff's work during the case studies. The module on "*Prolonged labor"* is relevant. Alternatively, a review of the module can also be done after the case studies, to reflect and learn more.

Rani (wife of Rambhajan), 18 years of age, was admitted at 10:00 am on 11 June 2009 with complaints of labour pains since 7:00 am. This is her first pregnancy.

Plot the following findings on the partograph:

At 10:00am: The cervix is dilated 4 cm. She had 2 contractions in 10 minutes, each lasting less than 20 seconds. The FHR is 140 per minute. The membranes are intact. Her BP is 100/70 mmHg. Her temperature is 37°C. Her pulse is 80 per minute.

10:30 am: FHR 140, contractions 2/10 each 20 seconds, pulse 90/minute

11:00 am: FHR 136, contractions 2/10 each 20 seconds, pulse 88/minute

11:30 am: FHR 140, contractions 2/10 each 20 seconds, pulse 84/minute

12:00 noon: FHR 136, contractions 3/10 each 30 seconds, pulse 88/minute, membranes ruptured, amniotic fluid clear

12:30 pm: FHR 146, contractions 3/10 each 35 seconds, pulse 90/minute, amniotic fluid clear

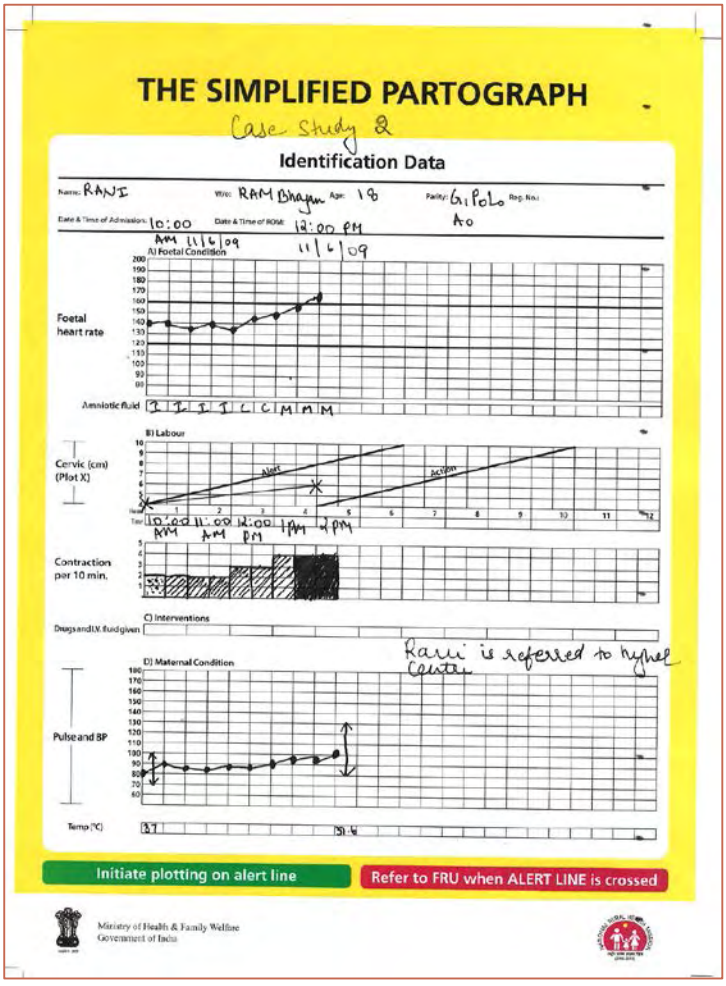
1:00 pm: FHR 150, contractions 4/10 each 40 seconds, pulse 92/minute, amniotic fluid meconium-stained

1:30 pm: FHR 160, contractions 4/10 each 45 seconds, pulse 94/minute, amniotic fluid meconium-stained

At 2:00 pm: Cervix dilated 6 cm. Amniotic fluid meconium-stained. Contractions 4/10 each 45 seconds. FHR 162/minute. Pulse100/minute. Temperature 37.6°C. BP 130/80 mmHg.

What action would you take in Rani's case?

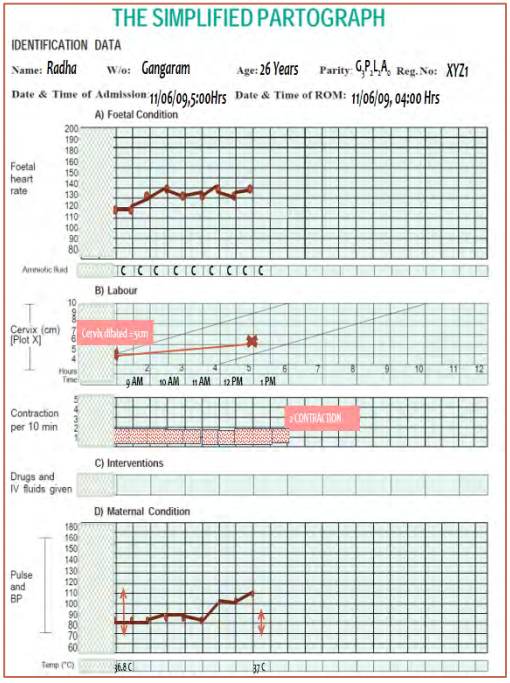
Answer key:


THE SIMPLIFIED PARTOGRAPH
Case Study 2
Identification Data
Name: RANI
Wife: RAM Bhajan
Age: 18
Parity: G1P0L0
Reg. No.:
A0
Date & Time of Admission: 10:00 AM 11/6/09
Date & Time of ROM: 12:00 PM 11/6/09
A) Foetal Condition
Foetal heart rate
Amniotic fluid
B) Labour
Cervix (cm) (Plot X)
Alert
Action
10:00 AM
11:00 AM
12:00 PM
1PM
2PM
Contractions per 10 min.
C) Interventions
Drugs and I.V. fluid given
D) Maternal Condition
Rani is referred to higher centre
Pulse and BP
Temp (°C)
Initiate plotting on alert line
Refer to FRU when ALERT LINE is crossed
Ministry of Health & Family Welfare
Government of India

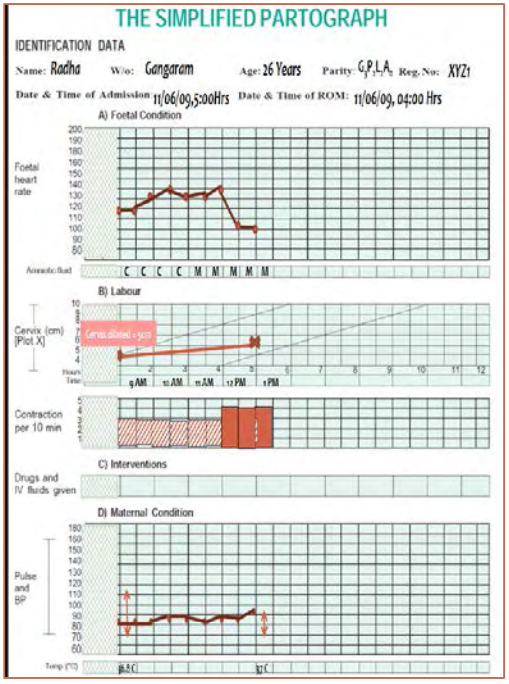
Annexure 1.10: Identification and management of prolonged and obstructed labour

- Explain definitions and identification of prolonged and obstructed labour
- Inquire the factors influencing the progress of labour – power, passage and passenger
- Explain them how partograph findings in both cases and how they should be correlated with clinical signs and symptoms in order to arrive at a conclusion whether it is a case of prolonged or obstructed labour

Pantograph findings in case of prolonged and obstructed labour



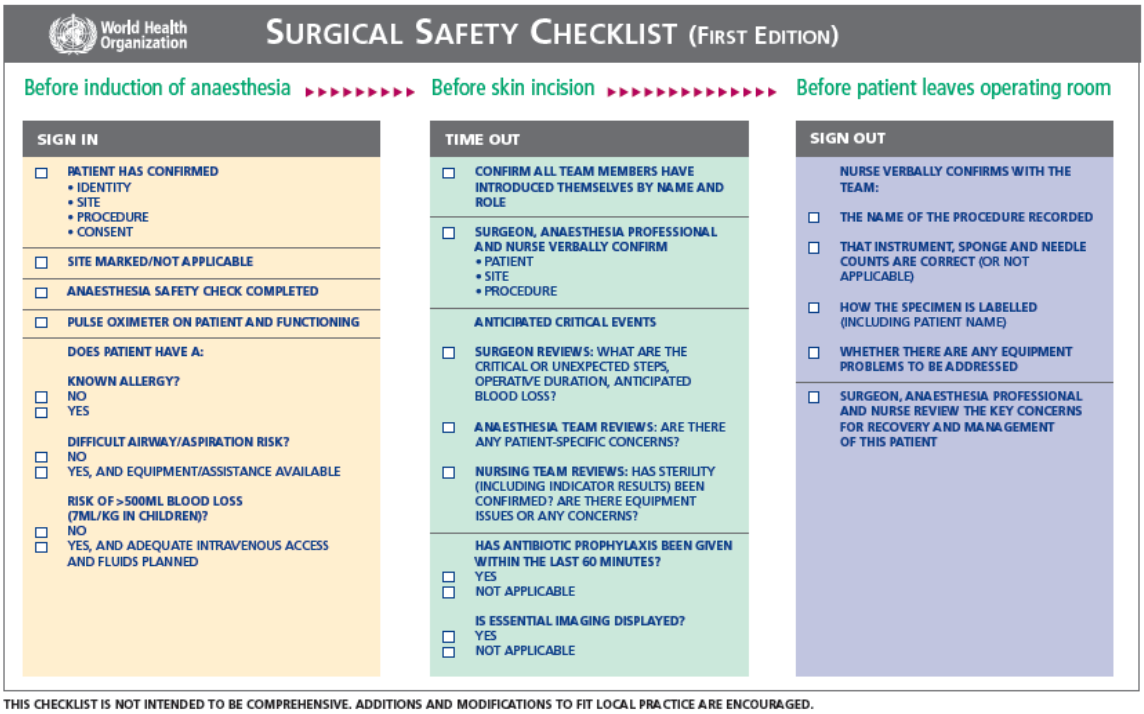
Partograph in prolonged labour



Partograph in obstructed labour

- Assess the preparedness of the facility in dealing the case a case of prolonged or obstructed labour
- Identification
- Availability of antibiotics
- Referral protocols and services

Annexure 1.11: Surgical Safety Checklist (SSC)



World Health Organization

SURGICAL SAFETY CHECKLIST (FIRST EDITION)

Before induction of anaesthesia ▸▸▸▸▸▸▸▸▸ Before skin incision ▸▸▸▸▸▸▸▸▸▸▸▸▸ Before patient leaves operating room

SIGN IN

- ☐ PATIENT HAS CONFIRMED
  - IDENTITY
  - SITE
  - PROCEDURE
  - CONSENT
- ☐ SITE MARKED/NOT APPLICABLE
- ☐ ANAESTHESIA SAFETY CHECK COMPLETED
- ☐ PULSE OXIMETER ON PATIENT AND FUNCTIONING
- DOES PATIENT HAVE A:

  KNOWN ALLERGY?
  - ☐ NO
  - ☐ YES

  DIFFICULT AIRWAY/ASPIRATION RISK?
  - ☐ NO
  - ☐ YES, AND EQUIPMENT/ASSISTANCE AVAILABLE

  RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?
  - ☐ NO
  - ☐ YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED

TIME OUT

- ☐ CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM
  - PATIENT
  - SITE
  - PROCEDURE

ANTICIPATED CRITICAL EVENTS

- ☐ SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?
- ☐ ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?
- ☐ NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?

HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?
- ☐ YES
- ☐ NOT APPLICABLE

IS ESSENTIAL IMAGING DISPLAYED?
- ☐ YES
- ☐ NOT APPLICABLE

SIGN OUT

NURSE VERBALLY CONFIRMS WITH THE TEAM:

- ☐ THE NAME OF THE PROCEDURE RECORDED
- ☐ THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)
- ☐ HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)
- ☐ WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT

THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.

- The WHO Surgical Safety Checklist is a checklist used before and after the surgical procedures to reinforce accepted safety practices and foster better communication and teamwork between clinical disciplines.
- The ultimate goal of the Checklist is to help in ensuring that teams consistently follow a few critical safety steps and thereby minimize the most common and avoidable risks endangering the lives and well-being of surgical patients.
-

Instructions for using SSC: The Checklist divides the operation into three phases, each corresponding to a specific time period in the normal flow of a procedure.

1. **The period before induction of anaesthesia (Sign In):** The person coordinating the Checklist will verbally review with the patient (when possible) that his or her identity has been confirmed, that the procedure and site are correct and that consent for surgery has been given. The coordinator will visually confirm that the operative site has been marked (if appropriate) and that a pulse oximeter is on the patient and functioning. The coordinator will also verbally review with the anaesthesia professional the patient's risk of blood loss, airway difficulty and allergic reaction and whether a full

anaesthesia safety check has been completed. Ideally the surgeon will be present for "Sign In", as the surgeon may have a clearer idea of anticipated blood loss, allergies, or other complicating patient factors.

2. **The period after induction and before surgical incision (Time Out):** Each team member will introduce him or herself by name and role. If already partway through the operative day together, the team can simply confirm that everyone in the room is known to each other. The team will pause immediately prior to the skin incision to confirm out loud that they are performing the correct operation on the correct patient and site and then verbally review with one another, in turn, the critical elements of their plans for the operation using the Checklist questions for guidance. They will also confirm that prophylactic antibiotics have been administered within the previous 60 minutes and that essential imaging is displayed, as appropriate.
3. **The period during or immediately after wound closure but before removing the patient from the operating room (Sign Out):** The team will review together the operation that was performed, completion of sponge and instrument counts and the labelling of any surgical specimens obtained. It will also review any equipment malfunctions or issues that need to be addressed. Finally, the team will review key plans and concerns regarding postoperative management and recovery before moving the patient from the operating room.

In each phase, the Checklist coordinator must be permitted to confirm that the team has completed its tasks before it proceeds further.

Annexure: 1.12 Monthly progress reporting (MPR) format

- Prepare monthly progress report using data entered in the birthing register/standardized case records.
- Avoid filling information which has not been recorded in any of the data source.
- Data from this report will be used to generate a dashboard of indicators that will help identify gaps and track progress of critical services being performed for the clients at the facility.

Section 1: General Information				
Sr.	**Indicator**	**Response**	**Instructions**	**Source of Data**
1	Name of State		Please write name of state	
2	Name of District		Please write name of district	
3	Name of Facility		Please write name of facility	
4	Type of Facility		(MCH/DH/SDH/CHC)	
5	Reporting Month		Use MM/YYYY format	
6	Date of Visit		Please enter DD/MM/YYYY format	

7	Total Number of Deliveries		This number will be derived based on 6a+6b+6c	
7a	Total number of normal vaginal deliveries		This number will be derived from labour room register	LR Register
7b	Total number of assisted vaginal deliveries		This number will be derived from labour room register	LR Register
7c	Total number of C-Sections		This number will be derived from OT register	OT Register
8	Total number of maternal deaths		Enumerate based on LR, OT and PNC Register	LR Register OT Register PNC Register
9	Causes of maternal death			FBMDR Register
9a	• APH			
9b	• PPH			
9c	• Sepsis			
9d	• Obstructed labour			
9e	• PIH/Eclampsia			
9f	• Others			
10	Total number of live births		Total number of live births registered in last month as per the LR and OT register	LR Register OT Register
11	Total number of still births		To be calculated as 10a+10b	
11a	Total number of Fresh Still births		Total number of live births registered in last month as per the LR and OT register	LR Register OT Register
11b	Total number of macerated still births		Total number of live births registered in last month as per the LR and OT register	LR Register OT Register
12	Number of neonatal deaths		This number includes all inborn and out-born newborn	LR Register SNCU Register
13	Major causes of neonatal deaths			FBCDR Register
13a	• Prematurity			
13b	• Sepsis			
13c	• Asphyxia			
13d	• Others			
14	Total number of Low Birth Weight babies born in facility			LR Register
Section 2: Monthly reporting indicators				
Sr.	**Indicator**	**Response**	**Instructions**	**Source of Data**
15	Number of normal deliveries conducted in presence of Birth Companion		Additional column on birth companion to be added in	LR Register

			LR register to collect this indicator	
16	Number of normal deliveries conducted using Safe Birth Checklist		Additional column on safe birth checklist to be added in LR register to collect this indicator	LR Register
17	Number of planned and emergency C-Section operations where safe surgical checklist was used		Additional column on safe surgical checklist to be added in LR register to collect this indicator	OT Register
18	Number of normal deliveries conducted using real time Partograph		Real time Partograph column data for LR Register	LR Register
19	Number of newborns delivered in facility who were breastfed within one hour of delivery?		Additional column on initiation of breastfeeding to be added in PNC register to collect this indicator	PNC ward register
20	Whether microbiological sampling from labour room is collected as per protocol		Yes or No	New register for sampling in LR
21	Whether microbiological sampling from Maternity OT is collected as per protocol		Yes or No	New register for sampling in OT
22	Number of C-Sections operations in which surgical site infection developed within one month of operation		Additional column on surgical site infection to be added in PNC and OPD register to collect this indicator	PNC ward register OPD register
23	Number of preterm cases where Antenatal Corticosteroids (ANCS) was administered in facilities with SNCU		Additional column on ANCS to be added in ANC register to collect this indicator	ANC Register/ LR Register
24	Number of newborns delivered in facility with SNCU developed birth asphyxia		SNCU register will provide number of inborn newborns developing birth asphyxia	SNCU Register
25	Number of newborns delivered in facility with SNCU developed sepsis		SNCU register will provide number of inborn newborns developing sepsis	SNCU Register
26	Total number of inborn LBW newborns in facility provided KMC		This includes all inborn LBW newborn in facility including LR & SNCU	LR register SNCU register
27	Number of beneficiaries delivered last month who were either satisfied or highly satisfied		Please mention how many women were interviewed and how many responded satisfied or highly satisfied	Mera Aspatal App or Physical interview at facility

28	Whether facility has reorganized labour room as per the guidelines?		Yes, No. or in progress	LR standard checklist
29	Whether facility has adequate staff at labour rooms as per defined norms?		Yes or No	Annexure B of LaQshya Guidelines
30	Number of deliveries conducted in facility where Oxytocin was administered within one minute of birth		AMTSL column in LR register will provide this data	LR Register
31	Number of maternal deaths were reviewed in last month		FBMCDR meeting minutes will provide this data	FBMCDR meeting minute
32	Number of neonatal deaths were reviewed in last month		FBMCDR meeting minutes will provide this data	FBMCDR meeting minute
33	Number of Maternal Near Miss Cases were reviewed in last month		FBMCDR meeting minutes will provide this data	FBMCDR meeting minute
34	Whether there was any stock outs of drugs and consumables in LR		Yes or No	Pharmacy Stock out register
35	Whether there was any stock outs of drugs and consumables in maternity OT		Yes or No	Pharmacy Stock out register
36	Whether facility labour room has achieved NQAS certification		Yes or No	NQAS assessment report
37	Whether MCH/DH has functional Obs ICU/Hybrid ICU/HDU?		Yes, No or In process	Obs ICU/HDU monthly report submitted by facility
38	Number of LaQshya mentoring visits conducted		Mention number of visits by mentors	
39	Number of QI team meetings at labour room/OT		Please mention number of meetings	QI team meeting register
40	Number of onsite training session conducted		Please mention number of training session conducted	

Quality improvement cycle 2

Triaging, Respectful Maternity Care and birth companion

Objective

To strengthen system of triaging of pregnant women, ensuring Respectful Maternity Care (RMC), Birth companion and to formulate strategies for enhancement of patient's satisfaction including counselling of mothers and family members right from admission till discharge.

Facility level targets

- Facility has oriented the Labour room and Maternity OT staff on LR protocols, RMC & counselling
- At least 90% of deliveries are attended by a birth companion
- All the mothers and family members/birth companion receive counselling services right from admission till discharge.

Brief of the key activities for QI visits:

S. No.	Areas addressed during current visit	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Meeting with medical superintendent or facility in charge and Quality circle	✓	✓	✓	✓
2	Assessment of labour room and maternity OT for triaging & respectful maternity care, birth companion and counselling services using resource availability and QI checklist	✓			✓
3	Facilitate quality circle to prepare an action plan for the current visit	✓	✓	✓	✓
4	Introduce OSCE checklists as per the Annexures	✓			
5	Conducting drill on empowering birth companion and respectful maternity care	✓			
6	Mentoring of all the labor room and maternity OT staff in the facility for	✓	✓	✓ (Need based)	✓

S. No.	Areas addressed during current visit	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
	empowering birth companion, respectful maternity care and counselling services		(Need based)		(Need based)
7	Follow up on action plan prepared during last visit	✓	✓	✓	✓
8	Conduct OSCE as per the annexures			✓	

Responsibilities under triaging, ensuring respectful maternity care including concept of birth companion and counselling services

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Onsite mentoring and handholding of quality circle, labour room and maternity OT staff for strengthening mechanisms in the facility for o Triaging o Presence of birth companion o Respectful maternity care o Counselling of mother and family members right from admission till discharge	• Establish mechanism for proper assessment and triaging of pregnant women in the facility • Establish mechanism in the facility for presence of birth companion during all the deliveries • Establish mechanism for empowering birth companion • Ensure Implementation of the protocols for Natural Birthing Process • Ensure respectful maternity care for all the women coming for delivery like maintaining the full privacy with three side curtains or LDR cubicles • Ensure that all the women and family members coming for delivery receive appropriate counselling services • Establish mechanism for taking feedback for Mothers and attendants on services provided

Key activities

Preparation for QI visit: This task should be performed by the district coaching team before visiting the facility.

- Inform the medical superintendent or facility in charge at least one day in advance about the visit
- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours
- Keep all the materials (QI cycle visit checklist, job aids including safe delivery app, checklists, formats, action plan template, mannequins) required to do mentoring and any previous action plans ready for the visit

Activity outline for QI visits

<table>
<tr><th rowspan="2">QI visit</th><th rowspan="2">Tasks to be facilitated by district coaching team</th><th colspan="2">Facility stakeholders to be involved in the task</th></tr>
<tr><th>Quality circle</th><th>Clinical Staff</th></tr>
<tr><td rowspan="2">1st</td><td>Activity</td><td colspan="2">Hold all staff meeting to orient the facility stakeholders on
o Accomplishments during previous cycle and major uncompleted activities
o Objectives of the current quality cycle</td></tr>
<tr><td></td><td>• Assessment of labour room and maternity OT for mechanisms in place for triaging & respectful maternity care, birth companion and counselling services using
o Resource availability checklist
o QI cycle checklist*
• Quality circle meeting to prepare action plan</td><td>• Conducting drill on empowering birth companion and respectful maternity care
• Observe the practices of at least 2 staff nurses on FP counselling
• Mentoring on
o Assessment and triaging
o Empowering birth companion
o Respectful maternity care
o Counselling (diet, postpartum family planning and breastfeeding)</td></tr>
</table>

	Logistics required for the activity	• Resource availability checklist • QI cycle checklist* • Action planning template	• Mannequins – MamaNatalie, NeoNatalie **(# In case of higher facilities like MC, DH existing skill stations to be used)** • Checklist for abdominal assessment fundal height, per abdominal examination and per vaginal examination • Checklist for family planning counselling • Case scenario and checklist for conducting drill on empowering birth companion and respectful maternity care • Videos from relevant modules of safe delivery app
	Creating enabling environment	• Follow up of action plan of previous visit • Preparation of an action plan based on the gaps identified during assessment and mentoring	• Prepare facility self-learning plan using safe delivery app
2 (Day 15)	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks in a mechanism that impact is sustainable • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Need based mentoring on practices imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool • Review records for improvement in documentation of practices
3 (Day 30)	**Follow up**	• Follow up of meeting on action plan prepared during the previous visit	• Observe the practices and provide need-based inputs.

		• Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources • Update the action plan based on the findings from this visit	• Review records to ascertain the change in practices and discuss with staff for further improvement
4 (Day 45)	**Follow up and reassessment**	• Reassessment of labour room and maternity OT for triaging, respectful maternity care and counselling to ascertain improvement using o Resource availability checklist o QI cycle checklist* • Prepare a plan for the activities that need further improvement.	• Reinforce the significance of following standard procedures

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

First visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for triaging , respectful maternity care ,empowering of birth companion, and counselling services using resource availability checklist and QI checklist	☑ ☒	
3	Introducing OSCE checklist as per the annexure	☑ ☒	
4	Conducting drill on empowering birth companion and respectful maternity care respectful maternity care	☑ ☒	
5	Mentoring of all the labor room and maternity OT staff in the facility for triaging , respectful maternity care ,empowering of birth companion, and counselling services	☑ ☒	
5	Follow up on action plan prepared during last visit (of previous cycle)	☑ ☒	
6	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	
7	Make plan for self-directed learning on My Learning at the Safe Delivery App	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and quality circle

Hold a meeting with medical superintendent or facility in charge and quality circle to discuss the objectives and activities planned for the visit and for next 2 months

Step 2: Assessment of labor room and maternity OT for Triaging, empowering birth companion and respectful maternity care & Counselling services

Visit labour room and maternity OT along with facility Quality Circle and perform the assessment using resource availability checklist (Annexure 2.1), checklist for practices (Annexure 2.2) and QI checklist (Annexure 2.3). Use the gaps identified during this assessment for action planning with quality circle

Step 3: Mentoring of labor room and maternity OT staff

- Engage all the available staff during mentoring session
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include relevant challenges in action plan.
- Motivate the staff to continue good practices demonstrated.
- FP counselling done by at least 2 staff nurses should be observed and gaps identified should be used during mentoring session.

Mentoring Session Outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
1	Triage	15 min	Annexure 2.10	Facilitated discussion	Focused and brief recap of concept of Triage, examinations to be done during it , flow of patients
2	Respectful maternity care	30 min	• Annexure 2.6 • Safe delivery app	Drill followed by debriefing	• Conduct drill on respectful maternity care as described in the introduction part followed by debriefing • Explain importance of Respectful Maternity Care including women's autonomy, dignity, feelings, privacy, confidentiality, choices, freedom from ill treatment and coercion and keeping relatives timely updated regarding the status of woman and efforts being carried out for managing the emergency consideration for personal preferences including option for companionship during the maternity care
3	Client rights related to childbirth	25 min	Annexure 2.7	Facilitated discussion	'Universal Rights of Childbearing Women' need to be considered and practiced during care provision
3	Counselling of mother and relatives	20 min	Annexure 2.8	Facilitated discussion	Importance of counselling of mother and relatives at facility from admission till discharge

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
4	Empowering birth companion	20 min	• Annexure 2.9 • Safe delivery app	Facilitated discussion	Birth companions can be an important partner in care provision if properly empowered through knowledge related to the delivery process

Step 4: Facilitate quality circle to prepare an action plan

Identify malpractices and in accordance with quality circle, prepare a standard wise action plan based on the gaps identified during assessment and mentoring processes.

Action plan for labour room

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
Standard E B1: The facility provides the information to care seekers, attendants & community about the available services and their modalities					
Standard E B2: Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barrier on account of physical economic, cultural or social reasons					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
Standard E B3: The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding patient related information					
Standard E B4: The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making					
Standard E B5: The facility ensures that there are no financial barrier to access, and that there is financial protection given from the cost of hospital services					
ME C 1.2: Patient amenities are provided as per patient load					
ME D 3.2: The facility has provision of restriction of visitors in patient areas					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
ME 18.11: Facility ensures Physical and emotional support to the pregnant women means of birth companion of her choice					

Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
Standard E B1: The facility provides the information to care seekers, attendants & community about the available services and their modalities					
Standard E B2: Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barrier on account of physical economic, cultural or social reasons					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
Standard E B3: The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding patient related information					
Standard E B4: The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making					
Standard E B5: The facility ensures that there are no financial barrier to access, and that there is financial protection given from the cost of hospital services					

Second visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring (as per need) of labor room and maternity OT staff in the facility	☑ ☒	
4	Meeting with quality circle to follow up and update action plan	☑ ☒	

Third visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring (as per need) of labor room and maternity OT staff in the facility	☑ ☒	
3	Assessment of labor room and maternity OT staff in performing practices	☑ ☒	
4	Meeting with quality circle to follow up and update action plan	☑ ☒	
5.	Follow up on self-directed learning plan from SD App	☑ ☒	

Major activities to be conducted during both the visits:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in translation of learned skills into practices
- Conduct OSCE of all clinical staff as per given in the annexures (To be conducted only during 3rd visit)
- Follow up on self-learning plan via SD App
- Once mentoring is finished, hold meeting with the quality circle
- Appraise the team on improvements in practices in the labour room since previous visit
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Identify interventions where no improvement was seen and make a follow up action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.

Fourth visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labour room and maternity OT for triaging & respectful maternity care, birth companion and counselling services using resource availability and QI checklist	☑ ☒	
3	Mentoring of all the labor room and maternity OT staff in the facility (Need based)	☑ ☒	
4.	Follow up on the self-learning plan of SD App	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labour room and maternity OT along with facility Quality Circle and reassess the facility using same resource availability checklist (Annexure 2.1) and QI checklists (Annexure 2.2 and 2.3). Compare the scores of initial assessment and reassessment and share with labour room/maternity OT staff as well as with the quality circle

- Review the practices and provide need based mentoring support
- In consultation with the quality circle, update the action plan prepared during last visit of the quality cycle by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. This action plan will be used during next QI cycle till all the gaps are addressed.

Annexures

Annexure 2.1: Assessment of labor room and maternity OT for triage, birth companion and respectful maternity care and counselling services

Encircle appropriate: ☑ Available ☒ Not available In case of availability please check the functionality of relevant items.

Resource availability in and around labor room

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
1	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Autoclave	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	hub cutter	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	Color coded bags for disposal of biomedical waste	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Rapid Diagnostic kit for malaria , syphilis, HIV	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Urine test kit for sugar and protein	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Urine pregnancy test kit	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Curtain in labor room to ensure privacy to woman	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Examination table	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Foot step	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
11	Wall clock with seconds hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Measuring tape	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Emergency drug tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Examination tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	MCP card, Safe motherhood booklet	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Washbasin	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Refrigerator	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	Delivery tray in case of emergency	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	For communication – telephone facility	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	Wheelchair and/or stretcher	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	Adult Weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	PPE (Cap, Mask, Apron, Shoes/ Shoe covers)*	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	Table & chair for doctor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	Mattress on the stretcher used for patient transport	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	Front opening gowns for all pregnant women	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
Signage's and IEC					
1	Directional signage from entry of th facility	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Numbering of rooms	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
3	Departmental signage's				
4	Main departmental and internal section signage's	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Restricted area signage	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Name of doctor and nurse on duty displayed and updated	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Information regarding services displayed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Contact details of referral transport/ambulance available	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	IEC material for breast feeding, kangaroo mother care, family planning etc. are displayed at circulation and waiting area	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Signage and information are in local language	☑ ☒	☑ ☒	☑ ☒	☑ ☒
Other resources					
11	Wheel chair/stretcher	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Screen/partition at delivery table	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Curtains/frosted glasses at windows	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Stool for birth companion (1 per labour table)	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Resource availability OT

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
1	Hand washing station with elbow operated tap and wide and deep sink (height around 96 cm)	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
2	Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Antiseptic soap	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	PPE (cap, mask, apron, eye cover surgical gown)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Sterile gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Elbow length gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Disposable gown/apron	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Personal protective kit for delivering HIV positive cases	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Chlorine solution/powder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Color coded bins and bags	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Blue color card box	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	PEP	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	PEP issuance register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Sterile gauze	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Glucometer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	RDK	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	blood grouping	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	Functional warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	resuscitation apparatus	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	suction/mucous extractor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	O_2 cylinder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	weighing scale,	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	Scrub area should not be inside the OT room	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
26	Family planning job aids, counselling kit, posters & flip book needed for counselling	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Signage's and IEC

S. No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Departmental signage's	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Information regarding services displayed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Screen between 2 OT tables (If more than 1 tables are available in single room)	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 2.3: National Quality Assurance Standards checklist for birth companion

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard B1	**The facility provides the information to care seekers, attendants & community about the available services and their modalities**					
ME B1.1	The facility has uniform and user-friendly signage system	Availability of departmental signage's			OB	Numbering, main department and internal sectional signage, Restricted area signage displayed. Directional signages are

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME B1.2	The facility displays the services and entitlements available in its departments	Necessary Information Regarding services provided is displayed			OB	Name of doctor and Nurse on duty are displayed and updated. Contact details of referral transport/ambulance displayed
ME B1.5	Patients & visitors are sensitized and educated through appropriate IEC / BCC approaches	IEC Material is displayed			OB	Breast feeding, kangaroo care, family planning etc (Pictorial and chart) in circulation & waiting area
ME B1.6	Information is available in local language and easy to understand	Signage's and information are available in local language			OB	Check all information for patients/visitors are available in local language
Standard B2	**Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barrier on account of physical economic, cultural or social reasons.**					
ME B2.1	Services are provided in manner that are sensitive to gender	Only on duty staff is allowed in the labour room when it is occupied			OB	Pregnant woman, her birth companion, doctor, nurse/ ANM on duty and other support staff only, are allowed in the labour room
ME B2.3	Access to facility is provided without any	Availability of Wheel chair or stretcher for easy Access to the			OB	

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
	physical barrier & friendly to people with disabilities	Availability of ramps and railing & Labour room is located at ground floor			OB	If not located on the ground floor availability of the ramp/lift with person for shifting
ME B2.4	There is no discrimination on basis of social and economic status of the patients	Check care to pregnant women is not denied or differed due to discrimination			OB/PI	Discrimination may happen because of religion, caste, ethnicity, cast, language, paying capacity and educational level
Standard	**The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding**					
ME B3.1	Adequate visual privacy is provided at every point of care	Availability of screen/partition at delivery tables			OB	Screens/Partition has been provided from three side of the delivery table or Cubicle for ensuring visual privacy
		Curtains/frosted glass have been provided at windows			OB	Check all the windows are fitted with frosted glass or curtains have been provided
		No two women are treated on common bed/Delivery Table			OB/PI	Check that observation beds and delivery tables are not shared by multiple women at the same time because of any reason
ME B3.2	Confidentiality of patient's records, and clinical information is maintained	Patient Records are kept at secure place beyond access to general staff/visitors			SI/OB	Check records are not lying in open and there is designated space for keeping records with limited access. Records are not shared with anybody without permission of hospital administration

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME B3.3	The facility ensures the behavior of staff is dignified and respectful, while delivering the services	Behavior of labour room staff is dignified and respectful			OB/PI	Check that labour staff is not providing care in undignified manner such as yelling, scolding, shouting, blaming and using abusive language, unnecessary touching or examination
		Pregnant women is not left unattended or ignored during care in the labour room			OB/PI	Check that care providers are attentive and empathetic to the pregnant women at no point of care they are left alone.
		Care provided at labour room is free from physical abuse or harm			OB/PI	Check if the physical abuse practices such as pinching, slapping, restraining, pushing on the abdomen, extensive episiotomy etc.
		Pregnant women is explicitly informed before examination and procedures			OB/PI	Check if care providers verbally inform the pregnant women before touching, examination or starting procedure

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME B3.4	The facility ensures privacy and confidentiality to every patient, especially of those conditions having social stigma, and also safeguards vulnerable groups	HIV status of patient is not disclosed except to staff that is directly involved in care			SI	Check if HIV status of pregnant women is not explicitly written on case sheets and avoiding any means by which they can be identified in public such as labelling or allocating specific beds
Standard B4	**The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making**					
ME B4.1	There is established procedure for taking informed consent before treatment and procedures	Consent is taken before delivery and or shifting			SI/RR	Check the labour room case sheet for consent has been taken
ME B4.4	Information about the treatment is shared with patients or attendants, regularly	Labour room has system in place to involve patient's relative in decision making about pregnant women treatment			PI	Check if pregnant women and her family members have been informed and consulted before shifting the patient for C-Section or referral to higher center
Standard B5	**The facility ensures that there are no financial barrier to access, and that there is financial protection given from the cost of hospital services**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME B2.1	The facility provides cashless services to pregnant women, mothers and neonates as per prevalent government schemes	Check all services including drugs, consumables, diagnostics and blood are free of cost in labour room			PI/SI	Check if there are no user charges of any services in labour room Ask Pregnant women and their attendants if they have not paid for any services or any informal fees to service providers
Standard C1	**The facility has infrastructure for delivery of assured services, and available infrastructure meets the prevalent norms**					
ME C1.2	Patient amenities are provided as per patient load	Availability of patients amenities such as Drinking water, Toilet & Changing area			OB	Dedicated Toilets for Labour Room area and Staff Rooms. LDR concept for Labour Room should have attached toilet with each LDR unit. Toilets are provided with western style toilet seats. Drinking water Facility within labour room For Pregnant women & companion
Standard D3	**The facility provides safe, secure and comfortable environment to staff, patients and visitors**					
ME D3.2	The facility has provision of restriction of visitors in patient areas	There is no overcrowding in labour room			OB	Visitors are restricted at labour room. One birth companion is allowed to stay with the Pregnant women
Standard E18	**The facility has established procedures for Intranatal care as per guidelines**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E18.11	Facility ensures Physical and emotional support to the pregnant women means of birth companion of her choice	Women are encouraged and counselled for allowing birth companion of their choice			PI/SI	
		Orientation session and information is available for Birth companion			PI/SI	

Standard E2	**The facility has defined and established procedures for clinical assessment and reassessment of the patients**					
ME E2.1	There is established procedure for initial assessment of patients	Rapid Initial assessment of Pregnant Women to identify complication and Prioritize care			RR/SI/ OB	Recording of vitals and FHR. immediate sign if following danger sign are present - difficulty in breathing, fever, severe abdominal pain, Convulsion or unconsciousness, Severe headache or blurred vision
		Recording and reporting of Clinical History			RR/SI	Recording of women obstetric History including LMP, EDD, Parity, Gravida status, H/O CS, Live birth, Still Birth and Medical History (TB, Heart diseases, STD, HIV status) and Surgical History

		Recording of current labour details			RR	Time of start, frequency of contractions, time of bag of water leaking, colour and smell of fluid and baby movement
		Physical Examination			RR/SI	Recording of Vitals, shape & Size of abdomen, presence of scars, foetal lie and presentation. & vaginal examination
ME E19.2	Facility staff adheres to protocol for counselling on danger signs, post-partum family planning and exclusive breast feeding	Staff counsels mother on vital issues			PI/SI	Counsels on danger signs to mother at time of discharge; Counsels on post-partum family planning to mother at discharge; Counsels on exclusive breast feeding to mother at discharge

Annexure 2.4: National Quality Assurance Standards checklist for birth companion and respectful maternity care for maternity OT

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard B1	**Facility provides the information to care seekers, attendants & community about the available services and their modalities**					
ME B1.1	The facility has uniform and user- friendly signage system	Availability of departmental signage's			OB	Numbering, main department, internal sectional signage and Restricted area signage are displayed. Directional signages are given from the entry of the facility
ME B1.2	The facility displays the services and entitlements available in its departments	Information regarding services are displayed			OB	Display doctor/ Nurse on duty and updated OT schedule displayed
Standard B2	**Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barrier on account of physical, economic, cultural or social reasons**					
ME B2.3	Access to facility is provided without any physical barrier & and friendly to people with disabilities	OT is easily accessible			OB	Availability of wheel chair or stretcher for easy access. Door is wide enough for passage of trolley and staff
Standard B3	**Facility maintains the privacy, confidentiality & Dignity of patient and related information**					

ME B3.1	Adequate visual privacy is provided at every point of care	Patients are properly draped/covered before and after procedure			OB	Look patients are covered while being transferred from ward to OT and vice-versa
		Visual Privacy is maintained between two OT Tables			OB	Preferably only one OT table should be placed in theatre, if it is not possible because of high case load adequate visual privacy should be provided through screens if multiple patients are present in same OT
ME B3.2	Confidentiality of patients records and clinical information is maintained	Patient Records are kept at secure place beyond access to general staff/visitors			SI/OB	In drawers/Amirah; preferably with lock facility
ME B3.3	The facility ensures the behavior of staff is dignified and respectful, while delivering the services	Behaviour of OT staff is dignified and respectful			OB/PI	Check that OT staff is not providing care in undignified manner such as yelling, scolding, shouting, blaming and using abusive language
ME B3.4	The facility ensures privacy and confidentiality to every patient, especially of those conditions having social stigma, and also safeguards vulnerable groups	Pregnant women is not left unattended or ignored during care in the OT			OB/PI	Check that care providers are attentive and empathetic to the pregnant women at no point of care they are left alone

Standard B4	**Facility has defined and established procedures for informing and involving patient and their families about treatment and obtaining informed consent wherever it is required**					
ME B4.1	There is established procedures for taking informed consent before treatment and procedures	Consent is taken for surgical procedures			SI/RR	Written consent with details of the procedure with potentials risks and complication. Should be signed by patient/next of kin and one witness
		Separate consent is taken for Anesthesia procedure			SI/RR	Written consent with details of the anaesthesia with potentials risks and complication. Should be signed by patient/next of kin and one witness
Standard B5	**Facility ensures that there are no financial barrier to access and that there is financial protection given from cost of care**					
ME B2.1	The facility provides cashless services to pregnant women, mothers and neonates as per prevalent government schemes	All surgical procedure are free of cost for JSSK beneficiaries			PI/SI	Free Drugs, consumables, blood, referral etc.

Annexure 2.5: Checklist for FP counselling -

During counselling, key messages on healthy timing and spacing of pregnancy (HTSP), return to fertility (RTF) and information on chosen FP method are provided including clarification of misconceptions.

The mentor should observe counselling of at least 1 client in any of the following clinics (If client is not available at the time of assessment, can observe counselling through role-play):

- FP/ ANC Clinic (for FP/ PPFP/ Post Abortion counselling)
- Labor ward (for PPFP counselling of clients in early labor)
- Postpartum ward (for PPFP counselling of clients after delivery and before discharge)

Observe if counsellor:

S. No.	Task	Score
1	Ensures availability of family planning job aids, counselling kit, posters & flip book, models, samples of contraceptives while doing counselling.	1
2	Ensures that woman is comfortable to talk (either in passive phase of first stage of labour and comfortable or is comfortably lying/sitting after delivery)	1
3	Ensures privacy.	1
A	**Establishes a good rapport and initiates counselling for FP**	
1	Greets the woman with respect and kindness.	1
2	Uses body language to show interest in and concern for the woman.	1
3	Tells the woman that we are going to talk about post-partum family planning and this session is going to help her to take decision on her own as per her needs.	1
4	Encourages the woman to ask questions and responds to the woman's questions/concerns and asks the client if s/he would like their spouse or important family member to be included in the counselling session	1
5	If she agrees includes client's husband/family member with her consent.	1
6	Uses language that the woman can understand. Asks questions that elicit more than 'Yes' or 'No' answers.	1
B	**ASK- Determines reproductive goals and use of other contraception**	**1**
1	Asks to explore client's knowledge about return to fertility and benefits of spacing pregnancies.	1

S. No.	Task	Score
2	If woman has not decided as yet to adopt any PPFP method, then displays the counselling kit/flip book page/ tray with contraceptives showing all the FP methods and asks if client is interested to use any particular method. Discusses the time of initiation of various FP methods with regards to breastfeeding status of the postpartum client (in case of PPFP for a postpartum client) • Asks if the client has any prior experience of using a FP method and/or if s/he has a particular method in mind. If client has a method in mind, provides method specific counselling on that method.	1
3	• If client doesn't have any specific method in mind, asks the following 4 questions and eliminates methods according to client's response: i. Do you want more children in the future after this delivery? (If yes, do not discuss male and female sterilization) ii. Will you breastfeed your baby up to 6 months after delivery? (If yes, does not discuss combined oral contraceptive pills) iii. Will your partner use condoms? (If yes, discusses about condoms. Also, irrespective of client's response, assesses woman's risk for STIs and HIV and explains that condom is the only method that can protect from STI and HIV) iv. Is there an FP method you could not tolerate in the past? (If yes, asks which method and does not discuss the method in detail)	1
C	**TELL- Provides the client with information about the postpartum/ interval family planning methods**	**1**
1	Provides general information about benefits of spacing/ limiting births (if client wants more children in future or has not yet decided whether she wants more children or not): • Informs that to ensure her and her baby's health she should wait at least two years after this birth before trying to get pregnant again • Informs about the return of fertility postpartum and the risk of pregnancy • Informs how LAM and breastfeeding are different • Provides information about the health, social and economic benefits of family planning.	1

S. No.	Task	Score
2	Briefly provides general information about those contraceptive methods that are appropriate for woman based on her facts to questions asked before • How to use the method? • Effectiveness • Possible common side effects • Need for protection against STIs including HIV/AIDS • Informs combined oral contraceptive pills will not be appropriate in the postpartum period and may be taken later	1
3	Clarifies any misinformation or misconception the woman may have about family planning methods. Asks if the client has any prior experience of using a FP method and/or if s/he has a particular method in mind.	1
D	**HELP- Assists the client to arrive at a choice or gives her additional information that she needs to make a decision**	**1**
1	Shows the methods (using samples of contraceptives or flip book) and allows the client to feel the items. Asks which method interests the woman. Helps her choose a method.	1
2	Supports the client's choice and tells her the next steps for providing her choice.	1
Method specific counselling - once the woman has chosen a method for post-partum period.		
E	**EVALUATE AND EXPLAIN- Determines if she can safely use the method and provides key information about how to use the method.**	**1**
1	Screens the woman's medical condition using MEC wheel for appropriateness of the chosen method. If needed can take help, or refer the woman for evaluation.	1
2	Ensures there are no medical conditions that are category 3 or 4 which limit the use of the chosen method. (If the chosen method is not appropriate for her, helps the woman to find a more suitable method).	1

S. No.	Task	Score
3	Explains the woman about key information of the chosen family planning method: • Type of method (spacing or limiting) • How to take/use it, and what to do if she is late/forgets taking her method • When can it be done • How does it work • Effectiveness • Immediate return of fertility on discontinuation • Tubal ligation and NSV are irreversible surgical methods and it is difficult to revert the procedure with unpredictable results of return to fertility. • Counsels that there are other irreversible methods which if used correctly and consistently for long time can act as limiting methods • Effect on breastfeeding • Advantages and non-contraceptive benefits • Limitations • Common side effects • Warning signs and where to go if she experiences any of them	1
4	Asks the woman to repeat the instructions about her chosen method of contraception: • How to use the method of contraception? • Possible side effects and what to do if they occur • When to return to the health facility	1
5	Notes down the chosen PPFP method on the case sheet and prepares accordingly. Records client's choice in the designated register.	1
6	Asks if the woman has any questions or concerns. Listens attentively, addresses her questions and concerns.	1
7	Prepares according to the method chosen by woman	1

Total score

Annexure 2.6: Case scenario and drill on Respectful maternity care

Seema 27-year-old G5P4 presents at full term in labor with the onset of contractions approximately 6 hour ago. She is a booked case with history of regular ANC check-ups. Her records indicate she is carrying a singleton pregnancy in the cephalic presentation. Her past medical history is uncomplicated, she has no allergies, and she takes no medications other than supplements. Her prenatal labs tests are within normal limits and her pregnancy has been uncomplicated.

Observation	Yes	No	Prompts for the observer/ standardized client	Instruction for standardized client	Remarks
Provider greets the client					
Provider introduces herself					
Provider allows a companion to be there during examination. If case the examination by a male staff, ensures presence of female staff or female companion during the examination					
Provider ensures privacy during the examination by using curtain or screen					
Provider tells attendant to sit down and helps the woman in lying down on the examination table					
Provider explains the client and the attendant regarding what is going to be done					

Observation	Yes	No	Prompts for the observer/ standardized client	Instruction for standardized client	Remarks
Provider elicits present history, relevant obstetric, menstrual, medical and surgical history and reviews relevant medical records				Pain in abdomen for 6 hours, LMP 9 months back, G5P4, rest of the obstetric history - nothing significant, medical & surgical history is not significant	
Provider reviews investigation records			Hb, urine and Others – within normal limits, HIV – ve, single fetus, vertex presentation, No cephalo pelvic disproportion	Investigations done at the start of pregnancy	
Provider conducts general physical examination/systemic examination – BP, pulse & temperature recorded, looks for Pallor, edema and examine RS, CVS, CNS			110/70, 98^{o}F, 84/min, pallor & edema absent. Systemic examination- No significant findings		
Provider takes verbal consent for abdominal examination and requests the women uncover the abdomen for examination. The provider make sure that the only portion of the body to be examine is exposed					

Observation	Yes	No	Prompts for the observer/ standardized client	Instruction for standardized client	Remarks
Provider conducts per abdominal examination			Full term, cephalic presentation, contractions – 4 contractions per10 minutes, each lasting more than 40 sec. FHR – 140/min		
Provider makes the mother and attendant listen to the FHR (if fetal Doppler with speaker available)					
Provider informs mother to undress by herself ensuring and takes verbal consent for PV examination					
Before examination she asks the women to be relaxed and to take deep breaths during examination					
Provider conducts per vaginal examination with proper technique (after washing hands and wearing gloves in both hands)			Cervical dilatation – 5 cms, 100% effaced, Head at 0 station, membranes present		
Provider shares all the finding of the examination with the women and the companion					

Observation	Yes	No	Prompts for the observer/ standardized client	Instruction for standardized client	Remarks
Provider informs the woman and the companion that it is time for the delivery to take place the approximate time would it take for the delivery to take place and asks the woman to rest on the bed					
Provider informs the attendant and the women regarding the danger signs during labour and to inform her immediately if any of them appear					
She informs that she will come after half an hour to examine the progress again					
Provider informs them to make necessary arrangements and preparations for the mother and baby such as availability of soft cotton clothes and cap for the baby and extra pair of clothes and clean pads for mother etc.					
Provider counsels them regarding the supportive care*					

Observation	Yes	No	Prompts for the observer/ standardized client	Instruction for standardized client	Remarks
Provider allots a bed to the mother in the ward and guides her where the washroom is					
Partograph plotting started			Rate of cervical dilatation is satisfactory, no fetal distress and all the maternal parameters are normal		

**Supportive care: Maintaining ambulation, have frequent voiding, taking soft diet and drink water, not to keep the client unattended at any point of time, not to push unnecessarily, to have left lateral position*

Debrief on:

- What is Respectful Maternity Care
- Client rights
- Importance of empowering birth companion

Note: during the de-briefing the mentor can use the Safe Delivery App to facilitate a discussion and learning about RMC and birth companion by letting the clinical staff identify where in the Safe Delivery App these principles are displayed

Look for:

- Birth companion in all relevant scenes, stays with the woman throughout, comforts the woman upon loss, accompanies also upon discharge (PAC) etc.

- Woman covered by blanket (not left naked) unless the clinical situation requires otherwise

- The midwife is smiling, informing the woman, is caring (hand on shoulder etc.), she asks consent, emphasizes the importance of “pscycke” amongst the 4 p’s in prolonged labor

Annexure 2.7: Client rights

Following are the seven 'Universal Rights of Childbearing Women', which need to be considered and practiced during care provision

Category of Disrespect and Abuse	Corresponding Right
Physical abuse	Freedom from harm and ill treatment
Non-consented care	Right to information, informed consent and refusal, and respect for choices and preferences, including companionship during maternity care
Non-confidential care	Confidentiality, privacy
Non-dignified care (including verbal abuse)	Communication with dignity and respect
Discrimination based on specific attributes	Equality, freedom from discrimination, equitable care
Abandonment or denial of care	Right to timely healthcare and to the highest attainable level of health
Detention in facilities	Liberty, autonomy, self-determination, and freedom from coercion

Source: Respectful Maternity Care: The Universal Rights of Childbearing Women, The White Ribbon Alliance.

Performance standards and verification criteria for Universal rights

Performance Standards	Verification Criteria
1. The woman is protected from physical harm or ill treatment	• Touches or demonstrates caring in a culturally appropriate way • Never separates woman from her baby unless medically necessary • Does not deny food or fluid to women in labor unless medically necessitated • Provides comfort/pain-relief as necessary
2. The woman's right to information, informed consent, and	• Encourages companion to remain with woman whenever possible • Encourages woman and her companion to ask questions

Performance Standards	Verification Criteria
choice/preferences is protected	• Responds to questions with promptness, politeness, and truthfulness • Explains what is being done and what to expect during examination, labour and birth • Obtains consent or permission prior to any procedure • Gives information on status and findings of examination • Gives periodic updates on status and progress of labour • Allows the woman to move about during labor
3. Confidentiality and privacy is protected	• Observer confirms that patient files are stored in locked cabinets with limited access. • Uses curtains or other visual barrier to protect woman during exams, birth, procedures • Does not leave client records in area where they can be read by others not involved in care • Uses curtains or other visual barrier to protect woman during exams, birth, procedures • Uses drapes or covering appropriate to protect woman's privacy
4. The woman is treated with dignity and respect	• Speaks politely to woman and companion • Never insults, intimidates, threats, or coerces woman or her companion • Allows woman and her companion to observe cultural practices as much as possible
5. The woman receives equitable care, free of discrimination	• Speaks to the woman in a language and at a language level that she understands • Does not show disrespect to women based on any specific attribute
6. The woman is never left without care	• Provides essential care to the woman • Encourages woman to call if needed • Comes quickly when woman calls • Never leaves woman alone or unattended
7. The woman is never detained or confined against her will	• Never detains a woman against her will • The facility does not have a policy to detain women who do not pay

Annexure 2.8: Counselling of mother and relatives

Training of maternity care staff to national standards for Competency in interpersonal communication and counselling skills should be ensured by the health systems

Counselling should be done:

1. At the time of admission and during labour
2. Immediately after delivery / post-partum period
3. At the time of discharge

1. Counselling at the time of admission

Greet and introduce yourself. Ask the present complaint and reason for the visit to the health facility. Explain what is going to happen and take informed verbal consent before performing the examination or any other procedure. After completion of history and examination, the findings should be shared with the woman and the family members/companion.

For the further management, there may be 2 possibilities based on history and examination:

- The woman may be required to referral to the higher facility
- The women may deliver in the same facility

In both the conditions, thorough counselling of the women and her family members should be done

- The woman may require referral to the higher facility: Counsel the women and her family members on:
    - ✓ The present condition of the mother and the fetus
    - ✓ Need and importance for referral
    - ✓ Possible adverse consequences with women and the baby if the referral is not being carried out

  Guide to the nearest FRU or higher facility where the resources and experts for the management of the condition are present. Also guide regarding the available transportation facilities, approximate time required to reach the higher facility and where to or to whom to consult there. Provide the referral slip with the details of condition mentioned and inform the higher facility regarding the referral.

- When the women and/or the provider decides to deliver in the same facility there could be two possibilities:

A. The delivery is expected to occur after some time (may be hours) and she is required to be shifted to the labour ward

B. The delivery is eminent, and she is required to be shifted to the labour room

A. The delivery is expected to occur after some time (may be hours) and she is required to be shifted to the labour ward

- Explain the approximate time required for the delivery to take place
- Guide her to the ward, ensure the bed is allotted and inform her regarding the location of the toilet
- Counsel the mother and the companion regarding the supportive care such as:
  - Maintaining hydration
  - Empty the bladder preferably two hours or earlier if required
  - Counselling regarding diet
  - Maintaining ambulation if membranes are not ruptured
  - To take deep breaths during labour in between contractions and blow out gently during counts
  - To apply pressure only during contractions
  - Danger signs and to inform provider if they immediately occur

B. The delivery is eminent and she is required to be shifted to the labour room

- Allowing birth companion to be in the labour room and provide stool/chair to sit beside the labour table
- Provide clean clothes for the mother and the companion
- Counsel the mother to bear down only during contraction when the head is crowning and to take deep breaths in between the contractions
- If episiotomy is required, inform the mother about the procedure and obtain verbal consent

2. Counselling after delivery / Postpartum counselling

Immediately after delivery (Fourth stage of labour/within 1-2 hours)	**After Fourth of Stage (1^{st} 48 hours)**
Encourage the mother/companion • To maintain hydration of the mother • To eat normal meals • To initiate breastfeeding as early as possible within half an hour of childbirth • Counsel on importance of colostrum feeding	Encourage • To pass urine • To maintain ambulation • To not to give any pre-lacteal feeds to baby (continue exclusive breastfeeding) • To take nutritious diet with plenty of fluids

• Not to give any pre-lacteal feeds to the baby Explain • Danger signs of mother and newborn to mother and companion and inform the provider immediately if they occur	Explain • Danger signs of mother and newborn to mother and companion and to inform provider immediately if they occur • Perineal and hand hygiene • Importance of delaying bath for at least 24 hours and 7 days for pre-term/LBW babies respectively • Counsel on PPFP and help her adopt a reliable contraceptive

3. Counselling at the time of discharge

Counsel the mother and/or her companion on routine care of mother and baby, proper nutrition of foods available at home and rest, and postpartum family planning options (details in sections below).

At the time of discharge, counsel the woman and her husband/family on the following:

- Exclusive and on demand breastfeeding for the baby
- Immunization of baby (briefly share the significance of routine immunization). Ensure the baby gets GoI approved immunization of BCG, Polio and Hepatitis B before discharge
- Danger signs of mother and baby, for early identification and seeking appropriate and timely care

Provide written information (on the discharge slip) on the scheduled postnatal check-up visits (at least three).

Postpartum counselling

Routine Care

As a part of the routine care, counsel the woman and her husband/family to ensure the following:

For care of the mother	For care of the baby
• Sleep with baby under an insecticide-treated bed net • Do not take any medications without doctor's advice • Do not consume alcohol or drugs • Abstain from sexual intercourse for about 6 weeks postpartum, or till the perineal wounds heal or until she feels comfortable for it	• Wash hands before holding the baby • Delaying baby's first bath • Prevention from hypothermia by: o Keeping the baby's room warm and draught free o Keeping the baby warm and adequately covered (clothes, cap and socks) o Bedding-in/rooming-in

Hygiene

For the mother	For the baby
Bathing • Take a daily bath • Wear clean clothes **Menstrual hygiene** • Keep the perineal area clean • It is preferable to use sanitary pads instead of cloth. Change the pads every 4 to 6 hours or more frequently if required • If using cloth pads, wash them with soap and water and sun-dry	**Bathing** • Wash/sponge the face, neck, underarms daily • Wash the buttocks when soiled and dry thoroughly • Use warm water for bathing. Dry thoroughly, and wrap/clothe immediately **Cord care** • Wash hands before providing cord care • Keep the cord dry • Avoid touching the stump repeatedly • Keep cord stump loosely covered with clean clothes • If stump is soiled, wash with clean water and soap and dry thoroughly • Seek immediate medical care if the stump is red or draining pus/blood

Nutrition

For mother:

- Eat variety of healthy foods cooked at home - such as cereals, beans, vegetables, fruits, meat, fish, oils, nuts, seeds, cheese, milk and other local food varieties to help her feel well and strong
- Consume iron rich foods such as green leafy vegetables, whole pulses, jaggery, meat, poultry and fish.
- Consume calcium rich foods like milk, butter milk, yoghurt, cheese, sweet potatoes and green beans.
- Reassure the mother that consuming normal foods does not harm her breastfeeding. Every mother and is capable of secreting enough milk for her baby.
- Increase fluid intake along with the foods, drink plenty of water.
- Identify if there are any taboos against certain foods which are nutritionally healthy. Advise the mother and her family to refrain from these taboos (e.g. the taboo against eating solid food for six days).
- Iron and folic acid (IFA) supplementation for at least six months.
- Calcium supplementation for at least six months.

For baby:

Advise the mother on exclusive and demand breastfeeding for 6 months (including night feeds). Not to give top feeds and even water.

Postpartum family planning (PPFP)

- Counsel the mother and her husband/family on importance of healthy timing and spacing of pregnancy, (HTSP) and various family planning options (limiting and spacing).
- Counsel on the time of return of fertility- a woman can conceive as early as within a month of childbirth, even before her menses start if she is not breastfeeding. Hence adopting a PPFP method is crucial for her to prevent an unwanted pregnancy.
- GoI recommend birth-to-pregnancy interval of 2 years; abortion to pregnancy interval of 6 months.
- Inform them of the benefits of family planning (FP) for both mother and baby; and risks of not using it.
- Counsel using the FP counselling kit/contraceptive samples/flip book and job aids.
- Family planning must be done using the GATHER -- Greet, Ask, Tell, Help, Explain and Return approach.
- Involve men in FP counselling as they are the final decision makers in a family and have special FP needs of their own.

- Ensure the protection of clients' rights by ensuring informed choice and informed consent.

Annexure 2.9: Empowering birth companion

Introduction

A birth companion is someone who will be with the laboring woman during and immediately after delivery. They can be an important partner in care provision, if properly empowered through knowledge related to the delivery process. Usually, birth companions are women who have undergone the process of labor and provide continuous one-to-one support to other women experiencing labor and child birth.

Significance

Birth companions can help provide emotional support and help reduce the stress a pregnant woman undergoes during delivery, assist in early initiation of breast feeding, and provide better care to the newborn. It is evident that emotional support during labor results in reduced chances of adverse outcomes such as prolonged labor, postpartum depression, newborn sepsis, use of analgesia or anesthesia during labor, need for episiotomy and cesarean section etc.

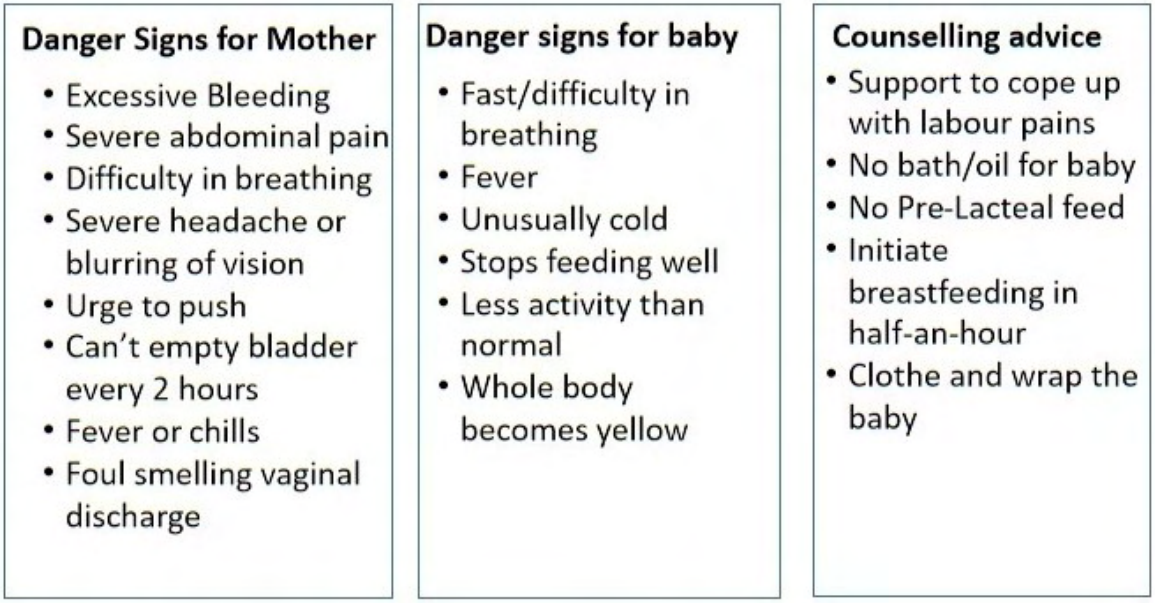
Preparation for Care

Ensure availability of a birth companion with proper counselling on her/his role. Let her/him participate in the care provision with a responsibility.

Care Process

- A birth companion plays a vital role in:
- Providing emotional support to the mother.
- Early identification of danger signs and information to service providers.
- Provide support in basic care practices such as maintaining hydration of mother during labor, keeping the baby covered and early initiation of breast feeding, etc.

Counsel the birth companion regarding the following:



Annexure 2.10: Triaging Pregnant Women for Prioritized Care

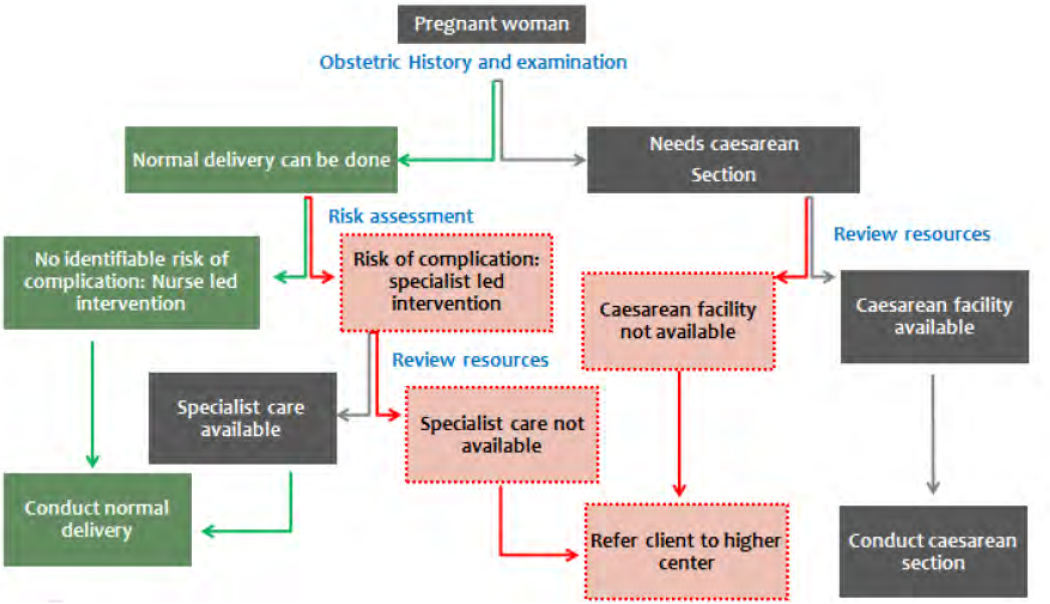
Definition - Triaging is the classification of clients after initial assessment into categories based on the action(s) required. Triaging in case of pregnant women refers to the assessment of her condition through history taking, examination and relevant laboratory investigations, to identify whether she needs basic care, specialized care or referral-out from the facility. Practicing these steps can help expedite quick decisions for care.

Significance

Delay in initiation of appropriate care, once the pregnant woman reaches a health facility (third delay) is an important cause of maternal and newborn death in Indian settings. Triaging is important to address this delay in early decision and initiation of care at the facility.

Preparation for Care

Keep necessary equipment such as blood pressure (BP) apparatus, thermometer, fetoscope or fetal doppler, stethoscope, dipsticks for urine examination, percussion hammer, inch tape, and a watch with seconds hand available in functional status at the site of initial assessment. Ensure the use of Safe Childbirth Checklist (SCC) for every case. This will facilitate in remembering to perform all essential actions for improved patient care.



Care Process

Below is a decision-tree algorithm to triage a pregnant woman:

Important considerations

- Do NOT send the mother to First Referral Unit (FRU) directly from the out patients' department (OPD) without proper assessment.
- History taking and examination are key to triaging.
- It prevents the delay for referral and decision- making for the level of care.
- SCC is important in assessing the clients for referral.
- Triaging should be done at first contact of patient

Annexures 2.11: OSCE Checklists

Annexure 2.11.1: EDD Weight and BP Measurement

Scenario: A woman attends the antenatal clinic for the first time – you are the health professional. She states that she is approximately 3 months pregnant. The first day of her last menstrual period was 3rd January 2018. You will conduct her antenatal check.

S. No.	Steps	Score	Remarks
1	Ask to calculate EDD (Answer: 10th October 2018)	2	
Explain and demonstrate the use of the weighing scales			
2	Ensure scale is on flat and hard surface	1	
3	Ensure scale is calibrated to zero	2	
4	Read to nearest 100g	1	
5	Record on MCP card	1	
Describe and demonstrate the measurement of BP			
6	Ensure patient is sitting or lying down on her left side	1	
7	Ensure sphygmomanometer is at level of heart. Note zero error.	1	
8	Position cuff (3cm above elbow)	1	
9	Increase cuff pressure until pulse disappears + 30mmHg	1	
10	Put stethoscope on brachial artery	1	
11	Slowly release pressure	1	
12	Note the BP when the sound is heard (systolic) and when it disappears (diastolic)	2	
13	Record on MCP card	1	
State normal weight gain			
14	9-11 kg	1	

How do you diagnose Pre-eclampsia			
15	Hypertension Albumin (+2) in urine	2	
16	110 mmHg	1	
	Total score:	20	

Annexure 2.11.2: Abdominal Examination

Scenario: A woman attends your antenatal clinic at 36 weeks' gestation for routine antenatal care.

Steps	Total Mark	Remark
Please elaborate the steps before you carry out an abdominal examination/ palpation		
▪ Ensure privacy of woman	1	
▪ Obtain verbal consent from woman	1	
▪ Check that she has emptied her bladder and instruct her to keep her legs and thighs in a semi-flexed position with thighs kept slightly open	1	
▪ Examine from the right-hand side	1	
▪ Centralize the uterus with one hand if it is tilted to one side	1	
Please demonstrate how to do an abdominal examination/ palpation		
Here instructor would prompt: What do you look for on the abdomen? Visually assess:		
▪ Scars	1	
▪ Shape	1	
▪ Size	1	
Measure fundal height: ▪ Using ulnar border of left hand, start palpating gently from xiphisternum downwards till you meet the first resistance (fundus of the uterus)	1	
▪ Identify symphysis pubis	1	

▪ Measure the distance between symphysis pubis and fundus in cm with the tape face down	1	
Here the facilitator would prompt: What is the importance of this?		
▪ cm = approx. gestational age in weeks	1	
Palpation:		
▪ Fundal grip: Keep both hands over the fundus and try to palpate the part of the fetus at the upper pole of the uterus to identify head of breech	1	
▪ Lateral grip: Keep hand on one side of the abdomen and palpate other side of the abdomen with other hand and repeat the manoeuvre to identify which side is the back of the fetus and determine the lie	1	
Pelvic pole to confirm presenting part and determine engagement:		
▪ First pelvic grip: With the fingers and thumb of the right hand try to hold the part of the fetus at the lower pole of the uterus just above the symphysis pubis and identify it and move it to see if it is movable or fixed	1	
▪ Second pelvic grip: Turn towards the feet of the woman, slightly extend the woman's legs. Keep both hands on either side of the presenting part with fingers towards the pelvis	1	
Auscultate FH on spino-umbilical line at the side identified as back		
▪ For 60 seconds	1	
▪ Record findings	1	
▪ Explain to mother	1	
What is the normal FH range?		
120-160 beats/min regular	1	
Total score:	**20**	

Annexure 2.11.3: Hemoglobin Estimation

Steps	Total Mark	Remarks
▪ Keep all the necessary items ready	1	
▪ Wash hands and wear gloves	1	
▪ Clean the Hb tube and pipette	1	
▪ Fill the Hb tube with N/10 HCl up to 2g with the dropper	1	
▪ Clean tip of the person's ring finger with the spirit swab	2	
▪ Prick the ring finger with the lancet and discard the first drop of blood	2	
▪ Allow a large blood drop to form on the fingertip	1	
▪ Suctions it with the pipette up to 20 cu.mm mark. (Connect pipette to syringe and pull the barrel instead of mouth sucking by pipette)	2	
▪ Take care that air entry is prevented while suctioning the blood.	1	
▪ Wipe the tip of the pipette and transfer the blood to the Hb tube containing N/10 HCl	1	
▪ Rinse the pipette 2-3 times with N/10 HCl in the Hb Tube	1	
▪ Leave the solution in test tube for 10 minutes	1	
▪ After 10 minutes, dilute the acid by adding distilled water drop-by-drop and mix it with stirrer	1	
▪ Match with the colour of the comparator	1	
▪ Note down the reading (lower meniscus)	1	
▪ Dispose of the used lancet in a puncture proof container	1	
▪ Immerse the used gloves in 0.5% chlorine solution	1	

Annexure 2.11.4: Urine Test

Scenario: 27-year-old attending a routine antenatal check-up at 28 weeks of pregnancy.

Steps	Total Mark	Remark
▪ Explain to the patient what the test is for	1	
▪ Ask for a urine sample	1	
▪ Check expiry date on dipsticks and read instructions carefully	2	
▪ Remove one strip and close container tightly	2	
▪ Dip indicator side of the strip in the urine sample, remove it and tap at the edge of container to remove excess urine	2	
▪ Follow manufacturer's recommendations for when it is time to read the results	1	
▪ Compare the sugar reagent part with the sugar chart on the container	1	
▪ Compare the albumin reagent part with the albumin results chart on side of bottle	1	
▪ Discard used test stick in red bin (as per GoI protocol)	1	
▪ Explain results to the patient and record on MCP card	2	
To detect pre-eclampsia	2	
To screen for gestational diabetes	2	
Refer to higher facility for further blood tests	2	
Total score:	**20**	

Annexure 2.11.5: Cervical Dilatation

Steps	Marks	Remark
Ask the Participant to demonstrate the steps to assess Cervical effacement and dilatation inform that in woman has just urinated		
▪ Wash hands	2	
▪ Wear HLD/sterilized gloves on both hands	2	
▪ Take an antiseptic solution swab in a sponge holder and clean both labia from above downwards.	2	
▪ Repeat the step again using another swab	2	
▪ Discard the swabs in the yellow bucket	1	
▪ Separate the labia, clean with a swab from above downwards	2	
▪ Insert index and middle finger to perform the vaginal examination	2	
▪ Rotate the hand 90 degrees so that the palm faces upwards and gently stretches the fingers till the rim of cervix is felt (usually at 3–9 o'clock position)	2	
▪ Assess cervical dilatation and informs in cms.	2	
▪ Feel the rim of the cervix with the index and middle finger	1	
▪ Assess the cervical effacement and informs (in %)	1	
▪ Remove the glove inside out and put in 0.5% chlorine solution	1	

Quality improvement cycle 3
Timely Management of complications & Strengthening Referral protocol

Objective: To strengthen system of management of complications with strengthening of referral protocol

Facility level targets:

- No case of pre-eclampsia, eclampsia & PIH related mortality or at least 25% reduction from baseline
- No case of APH/PPH related mortality or at least 25% reduction from baseline

Brief of the key activities for QI visits:

S. No.	Areas to be addressed during the visit	QI visit			
		1st	2nd	3rd	4th
1	Meeting with medical superintendent or facility in- charge and Quality circle	✓	✓	✓	✓
2	Assessment of labor room and maternity OT for management of complications using resource availability checklist and QI checklist	✓			✓
3	Facilitate quality circle to prepare an action plan for the current visit	✓			
4	Performing case scenario based drills for management of complications – PPH and eclampsia	✓			
5	Introduce OSCEs related to maternal complications and share checklists for OSCE	✓			
6	Mentoring of all the labor room and maternity OT staff in the facility	✓	✓ (Need based)	✓ (Need based)	✓ (Need based)
7	Follow up on action plan prepared during last visit	✓	✓	✓	✓
8	Conduct OSCE of labor room and maternity OT staff as per the annexures			✓	

Responsibilities under timely management of maternal complications & strengthening referral protocols

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Onsite training and handholding of quality circle and labor room and maternity OT staff for management of maternal complications • Facilitate action planning based on the identified gaps • Facilitate mechanisms for ensuring availability of resources for performing the practices related to management of complications • Facilitate establishment of mechanism in the facility for referral mechanism as per guidelines	• Establish mechanism for correct and timely management of complications like Pre-Eclampsia, PPH and other complications in the facility • Ensure establishment of a mechanism within the facility for initial management and timely referral of pregnant women with complications as per the protocol • Ensure all the labor room and maternity OT staff is trained and skilled for assessment and complications managements • Ensure that all LR and maternity OT staff are trained to use referral protocols • Ensure uninterrupted supplies required for assessment and management of complications

Key activities:

Preparation for QI visit: This task should be performed by the district coaching team before visiting the facility.

- Inform the medical superintendent or facility in-charge at least one day in advance about the visit
- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours

- Keep all the materials (QI cycle visit checklist, job aids, checklists, formats, action plan template, mannequins) required to do mentoring and any previous action plans ready for the visit

Activity outline for QI visits:

<table>
<tr><th rowspan="2">QI visit</th><th rowspan="2">Tasks to be facilitated by district coaching team</th><th colspan="2">Facility stakeholders to be involved in the task</th></tr>
<tr><th>Quality circle</th><th>Clinical Staff</th></tr>
<tr><td rowspan="3">1st</td><td>Activity</td><td colspan="2">Hold all staff meeting to orient the facility stakeholders on
o Accomplishments during previous cycle and major uncompleted activities
o Objectives of the current quality cycle</td></tr>
<tr><td></td><td>• Assessment of labor room and maternity OT management of maternal complications using resource availability checklist QI cycle checklist*
• Quality circle meeting to prepare action plan</td><td>• Conduct drill on eclampsia and PPH management
• Mentoring on referral protocols for complicated cases</td></tr>
<tr><td>Logistics required for the activity</td><td>• Resource availability checklist
• QI cycle checklist*
• Action planning template</td><td>• Mannequins – MamaNatalie and NeoNatalie - # In case of higher facilities like MC, DH existing skill stations to be used)
• Checklists for conducting drill on Eclampsia and PPH management
• OSCE checklists as per annexures
• Job aids for management of pre-eclampsia, eclampsia and PPH
• Safe Delivery App: Modules Hypertension, PPH, Manual Removal of Placenta, Maternal Sepsis (The App is downloaded to facility tablet and on the mobile phones of staff (voluntary).</td></tr>
</table>

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
	Improvement and sustenance mechanism	• Follow up of action plan of previous visit • Preparation of an action plan based on the gaps identified during assessment and mentoring	• Identify champions within the facility • Prepare facility self-learning plan • Ensure availability of all the relevant job aids in the labor room/Maternity OT, incl. facility tablet with the Safe Delivery App • Identify champions within the facility • Prepare facility self-learning plan
2nd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks for sustainable impact • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Need based mentoring on practices imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool • Review records for improvement in
3rd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit • Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources • Update the action plan based on the findings from this visit	• Observe the practices and provide need based inputs. • Conduct OSCE of all providers • Review records to ascertain the change in practices and discuss with staff for further improvement • Ensure the completion of assigned module of Safe Delivery App
4th	**Follow up and reassessment**	Reassessment of labor room and maternity OT using • Resource availability checklist • QI cycle checklist* • Share the change in scores of standards with the quality circle during the meeting	• Reinforce the significance of following standard procedures • Follow up on use of Safe Delivery App for self-learning and as reference tool

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	Clinical Staff
		• Prepare a plan for the activities that need further improvement.	

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

First visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for management of complications using resource availability checklist and QI checklist	☑ ☒	
3	Introducing OSCE as per the given annexures	☑ ☒	
4	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
5	Make self-learning plan via Safe Delivery App	☑ ☒	

6	Follow up on action plan prepared during last visit	☑ ☒	
7	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	
8	Conduct drill on eclampsia and PPH management	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and quality circle

- Hold a meeting with medical superintendent or facility in charge and quality circle to discuss the objectives and activities planned for the visit and for next 2 months

Step 2: Assessment of labor room and maternity OT for management of complications and referral protocol

Visit labour room and maternity OT along with facility Quality Circle and perform the assessment using resource availability checklist (Annexure 3.1) and QI checklists (Annexure 3.2 and 3.3). Use the gaps identified during this assessment for action planning with quality circle

Step 3: Mentoring of labor room and maternity OT staff

- Engage all the available staff during mentoring session
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include relevant challenges in action plan.
- Motivate the staff to continue good practices demonstrated.
- Use the Safe Delivery App to re-enforce the mentoring

Mentoring Session Outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
1	Conduct drill on eclampsia and PPH management	40 min	• Drill case scenario and checklist Annexure 3.4 & 3.5 • Mama-Natalie and Neo-Natalie • Safe delivery App	Drill followed by debriefing	• Conduct drill on eclampsia and PPH management as described in the introduction part followed by debriefing for both • In drills explain importance of o Early identification and prompt management o Working in team o Keeping resources for complications management readily available and at accessible location o Keeping relatives timely updated regarding the status of woman and efforts being carried out for managing the emergency
2	Prevention & management of maternal sepsis and puerperal sepsis	10 min	• SCC • Annexure 3.6 & 3.3 • Safe Delivery App	Review of present condition followed by Facilitated discussion	• Explain that how using pause point in SCC infection at various stages can be identified • Discuss recommended antibiotics in not very Sick Mother and very sick mother • Assess the current practices in preventing infections and availability of antibiotics in managing them

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
3	Preventing parent to child transmission (PPTCT) of HIV Introduction	20 min	Annexure 3.7	Facilitated discussion	• Discuss probability of transmission of HIV from mother to child at various stages (during ANC, intrapartum and postpartum period with and without breastfeeding) and interventions carried out to reduce the chances of transmission at each stage separately • Assess the readiness of the facility in handling such cases
4	Facilitate on strengthening referral protocols	20 min		Facilitated discussion	• Review availability of referral protocols and facilitated their development in case of non-availability

Step 4: Facilitate quality circle to preparation an action plan

In consultation with quality circle, based on the gaps identified during assessment and mentoring processes prepare a standard wise action plan as below:

Action plan for labour room

☑ Completed ☒ Not completed

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
A1: The facility provides Curative Services					
A2: The facility provides RMNCHA Services					
E1: The facility has defined procedures for registration, consultation and admission of patients					
E2: The facility has defined and established procedures for clinical assessment and reassessment of the patients					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
E3: The facility has defined established procedures for continuity of care of patient and referral					
E4: The facility has a procedure to identify high risk and vulnerable patients					
E5: The facility has a procedure to identify high risk and vulnerable patients					
E13: The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion.					
E16: The facility has defined and established procedures for end of life care and death					
E18: The facility has established procedures for Intranatal care as per guidelines					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
E19: The facility has established procedures for postnatal care as per guidelines					

Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
E2: The facility has defined and established procedures for clinical assessment and reassessment of the patients					
E3: Facility has defined and established procedures for continuity of care of patient and referral					
E4: Facility has defined and established procedures for continuity of care of patient and referral					
E5: Facility has a procedure to identify high risk and vulnerable patients					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
E12: The facility has defined and established procedures for nursing care					
E13: The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion.					
E16: The facility has defined and established procedures for end of life care and death					
E18: Facility has established procedures for postnatal care as per guidelines					

(For additional gaps/ malpractices above mentioned format should be used)

Second visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	

Number of quality circle members participated in the meeting and their designations:	

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring (as per need) of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on self learning plan	☑ ☒	
4	Meeting with quality circle to update action plan	☑ ☒	

Third visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	

3	Assessment of labor room and maternity OT staff in performing practices (skills) using OSCE	☑ ☒	
4	Follow up on self-learning plan	☑ ☒	
5	Meeting with quality circle to update action plan	☑ ☒	

Major activities to be conducted during both the visits:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in translation of learned skills into practices
- Conduct OSCE of all clinical staff as per given in Annexures (To be conducted only during 3rd visit)
- Once mentoring is finished, hold meeting with the quality circle
- Follow-up on self-learning plan via Safe Delivery App
- Appraise the team on improvements in practices in the labour room since previous visit
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 0) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.

Fourth visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	

Number of quality circle members participated in the meeting and their designations:	

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for assessment , triaging , management of complications using resource availability checklist and QI checklist	☑ ☒	
3	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labour room and maternity OT along with facility Quality Circle and reassess the facility using same resource availability checklist (Annexure 3.1) and QI checklists (Annexure 3.2 and 3.3).
- Compare the scores of initial assessment and reassessment and share with labour room/maternity OT staff as well as with the quality circle
- Review the practices and provide need based mentoring support
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 30) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources

- Make a follow up action plan for partially completed/not completed activities as below. This action plan will be used during next Qi cycle till all the gaps are addressed.

Annexures

Annexure 3.1: Assessment of labor room for availability of resources and performance of practices for assessment, triaging, management of complications.

In case of availability please check the functionality of relevant items.

Encircle appropriate: ☑ Available ☒ Not available

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
1.	Magnesium Sulphate (at least 20 ampoules)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2.	Antibiotics for mother	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3.	Antibiotics for baby	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4.	Oxytocin (5/10 IU per ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5.	Vitamin K (1mg/ml or 1 mg/0.5 ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6.	IV Fluids	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7.	Antiretrovirals	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8.	Soap & Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9.	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10.	Uristick (for proteinuria and glucose)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11.	Partograph	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12.	Cord clamps	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13.	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
14.	Sterile Perineal Pads	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15.	Towels for receiving newborns	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16.	Disposable syringes and disposable needles	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17.	IV Sets	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18.	Corticosteroids (Inj. Dexamethasone)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19.	Ambu bag for babies (240 ml) with both pre & term mask (size 0,1)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20.	BP Apparatus	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21.	Stethoscope	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22.	Thermometer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23.	Mucus extractor (Dee Lee`s/ Penguin)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24.	Suction device (Mechanical/Electric)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25.	Functional radiant warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
26.	Protocol posters displayed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
27.	Doppler/fetoscope in labor room/admission area	☑ ☒	☑ ☒	☑ ☒	☑ ☒
28.	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
29.	Cotton swab	☑ ☒	☑ ☒	☑ ☒	☑ ☒
30.	Hub cutter	☑ ☒	☑ ☒	☑ ☒	☑ ☒
31.	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
32.	Color coded bags for disposal of biomedical waste	☑ ☒	☑ ☒	☑ ☒	☑ ☒
33.	Misoprostol	☑ ☒	☑ ☒	☑ ☒	☑ ☒
34.	Cold storage for Inj. Oxytocin at the point of use	☑ ☒	☑ ☒	☑ ☒	☑ ☒
35.	HIV testing kit	☑ ☒	☑ ☒	☑ ☒	☑ ☒
36.	Nevirapine syrup	☑ ☒	☑ ☒	☑ ☒	☑ ☒
37.	Functional baby weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
38.	Functional oxygen cylinder (with	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
	wrench) with new born mask				
39.	Curtain in labor room to ensure privacy to woman	☑ ☒	☑ ☒	☑ ☒	☑ ☒
40.	Examination table	☑ ☒	☑ ☒	☑ ☒	☑ ☒
41.	Foot step	☑ ☒	☑ ☒	☑ ☒	☑ ☒
42.	Wall clock with seconds hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
43.	Measuring tape	☑ ☒	☑ ☒	☑ ☒	☑ ☒
44.	Emergency drug tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
45.	Examination tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
46.	MCP card, Safe motherhood booklet	☑ ☒	☑ ☒	☑ ☒	☑ ☒
47.	Washbasin	☑ ☒	☑ ☒	☑ ☒	☑ ☒
48.	Refrigerator	☑ ☒	☑ ☒	☑ ☒	☑ ☒
49.	Delivery tray in case of emergency	☑ ☒	☑ ☒	☑ ☒	☑ ☒
50.	For communication – telephone facility	☑ ☒	☑ ☒	☑ ☒	☑ ☒
51.	Wheelchair and/or stretcher	☑ ☒	☑ ☒	☑ ☒	☑ ☒
52.	Adult Weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
53.	PPE (Cap, Mask, Apron, Shoes/ Shoe covers)*	☑ ☒	☑ ☒	☑ ☒	☑ ☒
54.	Table & chair for doctor	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 3.2: Assessment of maternity OT for availability of resources and performance of practices for assessment, triaging, management of complications

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
1	Hand washing station with elbow operated tap and wide and deep sink (height around 96 cm)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
3	Antiseptic soap	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	PPE (cap, mask, apron, eye cover surgical gown)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Sterile gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Elbow length gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Disposable gown/apron	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Personal protective kit for delivering HIV positive cases	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Chlorine solution/powder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Color coded bins and bags	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Blue color card box	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	PEP	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	PEP issuance register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Sterile gauze	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Glucometer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	RDK	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	blood grouping	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	Functional warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	resuscitation apparatus	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	suction/mucous extractor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	O_2 cylinder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	weighing scale,	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	Scrub area should not be inside the OT room	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 3.3: National Quality Assurance Standards checklist for management of complications

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Area of Concern - A: Service Provision						
Standard A1	**The facility provides Curative Services**					
ME A1.14	Services are available for the time period as mandated	Labour room service is functional 24X7			SI/RR	Verify with records that deliveries have been conducted in night on regular basis
Standard	**The facility provides RMNCHA Services**					
ME A2.1	The facility provides Reproductive health Services	Availability of Post-Partum IUD insertion services			SI/RR	Verify with records that PPIUD services have been offered in labour room

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME A2.2	The facility provides Maternal health Services	Availability of Vaginal Delivery services Availability of Pre-term delivery services			SI/RR SI/RR	Normal vaginal & assisted (Vacuum/Forcep) delivery Check if pre-term delivery are being conducted at facility and not referred to higher centres unnecessarily
		Management of Postpartum Haemorrhage			SI/RR	Check if Medical/Surgical management of PPH is being done at labour room
		Management of Retained Placenta			SI/RR	Check staff manages retained placenta cases in labour room. Verify with records
		Septic Delivery & Delivery of HIV positive Pregnant Women			SI/RR	Check if infected delivery cases are managed at labour room and not referred to higher centres unnecessarily
		Management of PIH/Eclampsia/ Pre-eclampsia			SI/RR	Check services for management of PIH/ Eclampsia are being proved at labour room

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Area of Concern - E: Clinical Services						
Standard E1	**The facility has defined procedures for registration, consultation and admission of patients**					
ME E1.4	There is established procedure for managing patients, in case beds are not available at the facility	Check how service provider cope with shortage of delivery tables due to high patient load			OB/SI	Provision of extra tables
Standard E3	**The facility has defined and established procedures for continuity of care of patient and referral**					
ME E3.1	The facility has established procedure for continuity of care during interdepartmental transfer	There is procedure of handing over patient / new born from labour room to OT/ Ward/SNCU			SI/RR	Hand over from Labour Room to the destination department is given while shifting the Mother & Baby. Shifting toward should be done at least two hours after delivery in case of conventional LR and 4 hours in case of LDR
		There is a procedure for consultation of the patient to other specialist with in the hospital			SI/RR	Check if there are linkages and established process for calling other specialist in labour room if required

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E3.2	The facility provides appropriate referral linkages to the patients/services for transfer to other/ higher facilities to assure the continuity of care	Reason for referral is clearly stated and referral is authorized by competent person (Gynaecologist or Medical officer on duty)			RR	Verify with referral records that reasons for referral were clearly mentioned and rational. Referral is authorized by Gynaecologist or Medical officer on duty after ascertaining that case cannot be managed at the facility. Labor room staff confirms the suitability of referral with higher centers to ascertain that case can be managed at higher center and will not require further referrals
		Essential information regarding referral facilities are available at labour room			RR/OB	Check for availability of following - Referral Pathway Names, Contact details and duty schedules for responsible persons at higher referral centers Name, Contact details, duty schedule of Ambulance services

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Advance communication regarding the patient's condition is shared with the higher center			SI/RR	The information regarding the case, expected time of arrival and special facilities such as specialist, blood, intensive care may be required is communicated to the higher center
		Patient referred with referral slip			RR/SI	A referral slip/Discharge card is provided to patient when referred to another health care facility. Referral slip includes demographic details, History of woman, examination findings, management
ME E3.3	A person is identified for care during all steps of care	Nurse is assigned for each pregnant women			RR/SI	Check for nursing hand over
Standard E4	**The facility has defined and established procedures for nursing care**					
ME E4.1	Procedure for identification of patients is established at the facility	There is a process for ensuring the identification before any clinical procedure			OB/SI	Identification tags for mother and baby

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E4.2	Procedure for ensuring timely and accurate nursing care as per treatment plan is established at the facility	There is a process to ensure the accuracy of verbal/telephonic orders			SI/RR	Verbal orders are rechecked before administration. Verbal orders are documented in the case sheet
ME E4.3	There is established procedure of patient hand over, whenever staff duty change happens	Patient hand over is given during the change in the shift			RR/SI	Nursing Handover register is maintained
		Hand over is given bed side			SI/RR/ OB	Handover is given during the shift change beside the pregnant women explaining the condition, care provided and any specific care if required
ME E4.5	There is procedure for periodic monitoring of patients	Patient Vitals are monitored and recorded periodically			RR/SI	Check for BP, pulse,temp, Respiratory rate FHR, dilation Uterine Contractions, blood loss any other vital required is monitored and recoded in case sheet
Standard E5	**The facility has a procedure to identify high risk and vulnerable patients**					
ME E5.1	The facility identifies vulnerable patients and ensure their safe care	Vulnerable patients are identified and measures are taken to protect them from any harm			OB/SI	Check the measure taken to prevent new born theft, sweeping and baby fall

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E5.2	The facility identifies high risk patients and ensure their care, as per their need	High Risk Pregnancy cases are identified and kept in intensive monitoring			OB/SI	List of cases identified as High Risk is available with labour room staff. Check for the frequency of observation: Ist stage: half an hour and 2nd stage: every 5 min
Standard E13	**The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion.**					
ME E13.9	There is established procedure for transfusion of blood	Protocol of blood transfusion is monitored & regulated			RR	Blood is kept on room temperature (28 ºC) before transfusion. Blood transfusion is monitored and regulated by qualified person
Standard E16	**The facility has defined and established procedures for end of life care and death**					
ME E16.2	The facility has standard procedures for handling the death in the hospital	Death note is written as per mother & neonatal death review guidelines			RR	Maternal and neonatal death are recorded as per MDR guideline. Death note including efforts done for resuscitation is noted in patient record. Death summary is given to patient attendant quoting the immediate cause and underlying cause if possible

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		There is established criteria for distinguishing between new-born death and still birth			SI/RR	Every still birth is examined, classified by paediatrician before declaration & record is maintained
Standard E18	**The facility has established procedures for Intranatal care as per guidelines**					
ME E18.1	Facility staff adheres to standard procedures for management of second stage of labour	Ensures 'six cleans' are followed during delivery			SI/OB	Ensures 'six cleans' are followed during delivery: Clean hands, Clean surface, Clean blade, Clean cord tie, Clean towel and Clean cloth to wrap mother
		Allows spontaneous delivery of head			SI/OB	By flexing the head and giving perineal support
		Delivery of shoulders and Neck			SI/OB	Manages cord round the neck; assists delivery of shoulders and body; delivers baby on mother's abdomen
		Check no unneccessary episiotomy performed			SI/RR	Check with records and interview with staff if they are still practicing routine episiotomy

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Unnecessary augmentation and induction of labour is not done using uterotonics			SI/RR	Check uterotonics such as oxytocin and mesoperstol is used not for routine induction normal labour unless clear medical indication and the expected benefits outweigh the potential harms Outpatient induction of labour is not done
ME E18.2	Facility staff adheres to standard procedure for active management of third stage of labour	Rules out presence of second baby by palpating abdomen			SI	Check staff competence
		Use of Uterotonic Drugss			SI/RR	Administration of 10 IU of oxytocin IM immediately after Birth . Check if there is practice of preloading the oxytocin inj for prompt administration after birth
		Control Cord Traction			SI/RR	Only during Contraction
		Uterine tone assessment			SI/RR	Check staff competence
		Checks for completeness of placenta before discarding			SI/RR	After placenta expulsion, Checks Placenta & Membranes for Completeness

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E18.3	Facility staff adheres to standard procedures for routine care of new-born immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second pre-warmed towel			SI/OB	Check staff competence through demonstration or case observation
		Performs delayed cord clamping and cutting (1-3 min)			SI/OB	Check staff competence through demonstration or case observation
		Initiates breast-feeding soon after birth			SI/OB	Check staff competence through demonstration or case observation
		Records birth weight and gives injection vitamin K			SI/OB	Check staff competence through demonstration or case observation
ME E18.4	There is an established procedure for assisted and C-section deliveries per scope of services.	Staff is aware of Indications for referring patient for to Surgical Intervention			SI	Ask staff how they identify slow progress of labour, How they interpret Partogram

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Management of Obstructed Labour			SI/RR	Diagnosis obstructed labour based on data registered from the partograph, Re-hydrates the patient to maintain normal plasma volume, check vitals, gives broad spectrum antibiotics, perform bladder catheterization and takes blood for Hb & grouping, Decides on the mode of delivery as per the condition of mother and the baby
ME E18.5	Facility staff adheres to standard protocols for identification and management of Pre-Eclampsia / Eclampsia	Records BP in every case checks for proteinuria			SI/RR	Check staff competence through demonstration or case observation
		Identifies danger signs of severe PE and convulsions			SI/RR	Check staff competence through demonstration or case observation
		Administers injection magnesium sulphate appropriately			SI/RR	Check staff competence through demonstration or case observation

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Provides nursing care & ensures specialist attention			SI/RR	Check staff competence through demonstration or case observation
ME E18.6	Facility staff adheres to standard protocols for identification and management of PPH	Checks uterine tone and bleeding PV regularly			SI/OB	Check staff competence through demonstration or case observation
		Identifies PPH			SI/OB/ RR	Assessment of bleeding (PPH if >500 ml or > 1 pad soaked in 5 Minutes or any bleeding sufficient to cause signs of hypovolemia in patient
		Manages PPH as per protocol			SI/OB/ RR	Starts IV fluids, manages shock if present, gives uterotonic, identifies causes, performs cause specific management
		Staff knows the use of oxytocin for Management of PPH			SI/OB/ RR	Initial Dose: Infuse 20 IU in 1 L NS/RL at 60 drops per minute Continuing dose: Infuse 20 IU in 1 L NS/RL at 40 drops per minute Maximum Dose: Not more than 3 L of IV fluids containing oxytocin

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Management of Retained Placenta			SI/RR	Administration of another dose of Oxytocin 20IU in 500 ml of RL at 40-60 drops/min an attempt to deliver placenta with repeat controlled cord traction. If this fails performs manual removal of Placenta
ME E18.7	Facility staff adheres to standard protocols for Management of HIV in Pregnant Woman & Newborn	Provides ART for seropositive mothers/links with ART center			SI/RR	Check case records and Interview of staff
		Provides syrup Nevirapine to newborns of HIV seropositive mothers			SI/RR	Check case records and Interview of staff
ME E18.8	Facility staff adheres to standard protocol for identification and management of preterm delivery	Correctly estimates gestational age to confirm that labour is preterm			SI/RR	Assessment and evaluation to confirm gestational age, administration of corticosteroid and tocolytoics for 24-34 weeks Magnesium sulphate given to preterm labour < 32 weeks

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Identifies conditions that may lead to preterm birth			SI/RR	(severe PE/E, APH, PPROM)
		administers antenatal corticosteroids in pre term labour and conditions leading to pre term delivery (24-34 weeks)			SI/RR	Review case records
ME E18.9	Staff identifies and manages infection in pregnant woman	Records mother's temperature at admission and assesses need for antibiotics			SI/RR	Review case records
		Administers appropriate antibiotics to mother			SI/RR	Review case records
ME 18.10	There is Established protocol for newborn resuscitation is followed at the facility	Facility staff adheres to standard protocol for resuscitating the newborn within 30 seconds			SI/OB	Performs initial steps of resuscitation within 30 seconds: immediate cord cutting and PSSR at radiant warmer

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Facility staff adheres to standard protocol for preforming bag and mask ventilation for 30 seconds if baby is still not breathing			SI/OB	Initiates bag and mask ventilation using room air with 5 ventilator breaths and continues ventilation for next 30 seconds if baby still does not breathe
		Facility staff adheres to standard protocol for taking appropriate actions if baby does not respond to bag and mask ventilation after golden minute			SI/OB	If baby still not breathing/ breathing well, continues ventilation with oxygen, calls or arranges for advanced help or referral
ME E18.11	Facility ensures Physical and emotional support to the pregnant women means of birth companion of her choice	Women are encouraged and counselled for allowing birth companion of their choice			PI/SI	
		Orientation session and information is available for Birth companion			PI/SI	
Standard E19	**The facility has established procedures for postnatal care as per guidelines**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E19.1	Facility staff adheres to protocol for assessment of condition of mother and baby and providing adequate postpartum care	Performs detailed examination of mother			SI/RR/ PI	Check for records of Uterine contraction, bleeding, temperature, B.P, pulse, Breast examination, (Nipple care, milk initiation), Check for perineal washes performed
		Looks for signs of infection in mother and baby			OB/SI	Staff Interview
		Looks for signs of hypothermia in baby and provides appropriate care			RR/SI/PI	Skin to skin contact with mother, regular monitoring and specialist attention as required
ME E19.3	Facility staff adheres to protocol for ensuring care of newborns with small size at birth	Facilitates specialist care in newborn <1800 gm			SI/RR	Facilitates specialist care in newborn <1800 gm (seen by pediatrician)
		Facilitates assisted feeding whenever required			SI/RR/ PI	
		Facilitates thermal management including kangaroo mother care			SI/RR/ PI	Facilitates thermal management including kangaroo mother care

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME 19.4	The facility has established procedures for stabilization/ treatment/referral of post-natal complications	There is established criteria for shifting newborn to SNCU			SI/RR	Check if criteria has been defined and in practice by labour room staff

Annexure 3.3: Maternity OT: National Quality Assurance Standards checklist for management of complications

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Area of Concern - E: Clinical Services						
Standard E2	**The facility has defined and established procedures for clinical assessment and reassessment of the patients**					
ME E2.1	There is established procedure for initial assessment of patients	There is procedure for Pre-Operative assessment			RR/SI	Physical examination, results of lab investigation, X-Rays, diagnosis and proposed surgery
Standard E3	**Facility has defined and established procedures for continuity of care of patient and referral**					
ME E3.1	Facility has established procedure for continuity of care during interdepartmental transfer	There is procedure of handing over from OT to Maternity Wards, HDU and SNCU			SI/RR	Transfer Register is maintained
Standard E4	**The facility has defined and established procedures for nursing care**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E4.1	Procedure for identification of patients is established at the facility	There is a process for ensuring the identification before any clinical procedure			OB/SI	Patient id band/verbal confirmation etc. At least two identifiers are used
ME E4.3	There is established procedure of patient hand over, whenever staff duty change happens	Patient hand over is given during the change in the shift			SI/RR	Handover register is maintained
ME E4.5	There is procedure for periodic monitoring of patients	Patient Vitals are monitored and recorded periodically			RR/SI	Check for use of cardiac monitor/multi parameter
Standard E5	**Facility has a procedure to identify high risk and vulnerable patients**					
ME E5.1	The facility identifies vulnerable patients and ensure their safe care	Vulnerable patients are identified and measures are taken to protect them from any harm			OB/SI	Check the measure taken to prevent new born theft, sweeping of baby or fall
ME E5.2	The facility identifies high risk patients and ensure their care, as per their need	High risk patients are identified and treatment given on priority			OB/SI	HIV, Infectious cases
Standard E11	**The facility has defined and established procedures for Emergency Services and Disaster Management**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E11.3	The facility has disaster management plan in place	Staff is aware of disaster plan & their Role and Responsibilities of staff in disaster is defined			SI/RR	Ask role of staff in case of disaster
Standard E12	**The facility has defined and established procedures of diagnostic services**					
ME E12.1	There are established procedures for Pre-testing Activities	Container is labelled properly after the sample collection			OB	Including Specimen for HPE & biopsy. Name, Age, Sex, date, UHID
ME E12.3	There are established procedures for Post-testing Activities	OT is provided with the critical value of different test			SI/RR	Critical values are displayed
Standard E13	**The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion**					
ME E13.8	There is established procedure for issuing blood	Availability of blood units in case of emergency with out replacement			RR/SI	The blood is ordered for the patient according to the MSBOS *(Maximum Surgical Blood Order Schedule)*
ME E13.9	There is established procedure for transfusion of blood	Consent is taken before transfusion			RR	Duly signed by patient/ next of kin
		Patient's identification is verified before transfusion			SI/OB	At least two identifiers are used

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Protocol of blood transfusion is monitored & regulated			RR	Blood is kept on optimum temperature before transfusion. Blood transfusion is monitored and regulated by qualified person
ME E13.10	There is a established procedure for monitoring and reporting Transfusion complication	Any major or minor transfusion reaction is recorded and reported to responsible person			RR	After transfusion, Reaction form is returned back to blood bank, even when there is no reaction
Standard E16	**The facility has defined and established procedures for end of life care and death**					
ME E16.2	The facility has standard procedures for handling the death in the hospital	Death note including efforts done for resuscitation is noted in patient record			RR	Includes both maternal and neonatal death. Death summary is given to patient attendant quoting the immediate cause and underlying cause if possible
Standard E18	**Facility has established procedures for Intranatal care as per guidelines**					
ME 18.3	Facility staff adheres to standard procedures for routine care of new-born immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second pre-warmed towel;			SI/OB	Check staff competence through demonstration or case observation

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Performs delayed cord clamping and cutting (1-3 min);			SI/OB	Check staff competence through demonstration or case observation
		Initiates breast-feeding soon after birth			SI/OB	Check staff competence through demonstration or case observation
		Records birth weight and gives injection vitamin K1.			SI/OB	Check staff competence through demonstration or case observation
ME E18.4	There is an established procedure for assisted and C-section deliveries per scope of services	Pre operative care and part preparation			SI/RR	Check for Haemoglobin level is estimated, and arrangement of Blood, Catheterization, Administration of Antacids Proper cleaning of perineal area before procedure with antisepsis
		Proper selection Anesthesia technique			SI/RR	Check Both General and Spinal Anesthesia Options are available. Ask for what are the criteria for using spinal and GA. Regional block and epidural anaesthesia used wherever required/indicated

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Intraoperative care			SI/RR	Check for measures taken to prevent Supine Hypotension (Use of pillow/Sandbag to tilt the uterus), Technique for Incision, Opening of Uterus, Delivery of Foetus and placenta, and closing of Uterine Incision
		Post-operative care			SI/RR	Frequent monitoring of vitals, Strict IO charting, Flat bed without pillow for SA, NPO depending on type of anesthesia and surgery
ME 18.5	Facility staff adheres to standard protocols for identification and management of Pre-Eclampsia / Ecalmpsia	Management of PIH/Eclampsia			SI/RR	Ask for how to secure airway and breathing, Loading and Maintenance dose of Magnesium sulphate, Administration of anti-Hypertensive Drugs

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME 18.6	Facility staff adheres to standard protocols for identification and management of PPH	Postpartum Haemorrhage			SI/RR	IV fluids, parental oxytocin and antibiotics, manual removal of placenta, blood transfusion, B-lynch suturing, surgery
		Ruptured Uterus			SI/RR	Put patient in left lateral position, maintain Airway, breathing and circulation, IV Fluid, antibiotics, urgent laparotomy and hysterectomy
ME 18.7	Facility staff adheres to standard protocols for Management of HIV in Pregnant Woman & Newborn	Provides ART for seropositive mothers/ links with ART center			SI/RR	Check case records and Interview of staff
		Provides syrup Nevirapine to newborns of HIV seropositive mothers			SI/RR	Check case records and Interview of staff
ME 18.10	There is Established protocol for newborn resuscitation is followed at the facility.	New born Resuscitation			SI/RR	Ask Nursing staff to demonstrate Resuscitation Technique
Standard E19	**Facility has established procedures for postnatal care as per guidelines**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E19.1	Post partum Care is Provided to Mother	Prevention of Hypothermia			SI/RR	Skin contact, Kangaroo mother care, radiant warmer, warm clothes
		Initiation of Breastfeeding with in 1 Hour			PI/SI	Shall be initiated as early as possible and exclusive breast feeding
ME E19.4	Stabilization/ treatment/referral of post natal complication	There is established criteria for shifting new born to SNCU			SI/RR	Only the new born requiring intensive care should be transferred to SNCU

Annexure 3.4: Exercise on emergency obstetric drill – Prevention and Management of Pre-eclampsia and Eclampsia (PE/E)

Scenario for drill: Shanti 35 year old G4P2 presents at full term in labor with the onset of contractions approximately 5 hours ago. She is also complaining severe headache and epigastric pain. She is having singleton pregnancy with vertex presentation. Previous history is non-conclusive and her past medical and surgical history is uncomplicated. She is not taking any medications and her Ante Natal Check-up visits are not clear. Her prenatal labs tests are not available but her pregnancy has been uncomplicated so far.

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
Provider elicits relevant history, reviews relevant medical records and performs relevant examination					
Provider elicits H/O presenting complaints				Labor pains, severe headache, epigastric pain	
Provider elicits relevant menstrual and obstetric history				9 months back, G4P2	
Provider elicits medical and surgical history				Not significant	
Provider reviews investigation records			Within normal limits, HIV –ve, single fetus, vertex presentation		
Provider records BP			140/96 mmHg		
Provider checks urine for protein			2+		
Provider records temperature			98^0 F		
Provider performs RS, CVS, CNS examination			Not significant		
Provider conducts per abdominal examination			Full term cephalic presentation, contractions – 4/10, > 40 sec, FHR – 140/min		

Provider conducts per vaginal (PV) examination as per technique			Cervical dilatation – 7 cms, fully effaced, head at 0 station, membranes present		
Check for case management based on scenario 1-5:					
Scenario 1 – Referral without any management					
Provider refers the client without any interventions			CONCLUDE		
Scenario 2 – Referral with management using MgSO4					
Provider gives: • Pre-referral dose of MgSO4 (5g 50% MgSO4 each, deep IM in both buttocks), OR • Loading dose (2g 20% MgSO4 slow IV + 5g 50% MgSO4 each, deep IM in both buttocks)					
Provider reviews for need of ANCS; Writes a referral note mentioning the dose, route and time of administration of MgSO4					
Provider arranges transportation along with the information to the referral point			CONCLUDE		
Scenario 3 – Admission and management using MgSO4 prior to convulsion					
Provider admits the client and gives loading dose of MgSO4 (IV + IM)					
Provider starts antihypertensive treatment/ calls for specialist					
Provider reviews for need of ANCS; Takes decision to deliver the case/calls for			CONCLUDE		

specialist					
Scenario 4 – Admission and management using MgSO4 after convulsion					
Provider admits the client and starts the expectant line of management (such as antihypertensive, IV line, observation etc.)				Convulsions start	
Provider performs following immediately during convulsions: • Shouts for help • Puts client in left lateral position • Avoids tongue bite • Secures airway • Performs suction • Catheterizes, preferably with Foleys. Measures and records volume • Avoids fall of client • Starts IV line • Measures and maintains vital parameters					
Provider performs definitive management: • Antihypertensive • Gives loading dose of MgSO4 • Calls specialist					
Provider reviews for need of ANCS; Takes decision to deliver the case and starts maintenance dose			CONCLUDE		
Scenario 5 – Admission and management without use of MgSO4					
Provider admits the client and starts the expectant line of management (such as antihypertensive, IV line, observation etc.)				Convulsions start	

Provider performs following immediately during convulsions: • Shouts for help • Puts client in left lateral position • Avoids tongue bite • Secures airway • Performs suction • Catheterizes, preferably with Foleys. Measures and records volume • Avoids fall of client • Starts IV line • Measures and maintains vital parameters					
Provider manages the client using drugs other than MgSO4; Reviews for need of ANCS			CONCLUDE		

Debrief on:

- Prevention of pre-eclampsia/eclampsia
- Management of pre-eclampsia/eclampsia including nursing care, role of anti-hypertensive, regime of inj. Magnesium Sulphate and decision regarding termination of pregnancy according to gestational age
- Review the need and use of Antenatal corticosteroids (ANCS)
- Importance of having readily available and accessible eclampsia management box in place

Note: The module Hypertension on the Safe Delivery App can be used either BEFORE the drill as preparation, DURING the drill as available job aid, or AFTER the drill for assessment and further learning – or a combination.

Annexure 3.5: Exercise on emergency Prevention and Management of Postpartum Haemorrhage (PPH)

Scenario for drill: Geeta 21 year old gravida 2 para 1 presents at full term in labor with the onset of contractions approximately 6 hour ago. She is a booked case with history of regular ANC check-ups. Her records indicate she is carrying a singleton pregnancy in the vertex presentation. Her past medical history is uncomplicated, she has no allergies, and she takes no medications other than supplements. Her prenatal labs tests are within normal limits and her pregnancy has been uncomplicated.

Observation	Yes	No	Prompts for the observer/actor	Instruction for actor	Remarks
Provider elicits relevant history, reviews relevant medical records and performs relevant examination					
Provider elicits H/O presenting complaints				Pain in abdomen	
Provider elicits relevant menstrual and obstetric history				9 months back, G2P1	
Provider elicits medical and surgical history				Not significant	
Provider reviews investigation records			Hb, urine and others – within normal limits, HIV –ve, single fetus, vertex presentation, no cephalo pelvic disproportion		
Provider records temperature and BP			98^0 F, 110/70 mmHg		
RS, CVS, CNS examination done			Not significant		
Provider conducts per abdominal examination			Full term, cephalic presentation, contractions – 4 contractions per 10 minutes each lasting more than 40 sec,		

			FHR – 140/min		
Provider conducts per vaginal (PV) examination as per technique			Cervical dilatation – 5 cms, 80% effaced, head at 0 station, membranes present		
Partograph plotting started			All parameters normal		
Provider conducts delivery as per protocol					
Provider loads uterotonic prior to conducting the delivery					
Provider follows all steps of conducting normal delivery				Slowly push the baby out	
Provider performs AMTSL: Rules out the presence of second baby and gives utertonic soon after delivery of baby; Performs controlled cord traction (CCT) and receives placenta in a receiver; Massages the uterus			Uterus relaxed	Start bleeding	
Provider examines the placenta properly			Placenta and membranes are complete, no anomaly		
Provider examines the perineum, cervix and vagina			Continuous bleeding, , no tears, uterus relaxed	Continue bleeding	
Provider manages PPH (Atonic PPH) appropriately					
Provider identifies the case of PPH				Continue bleeding	
Provider calls for help					
Provider continues					

uterine massage					
Provider establishes IV lines with 2 wide bore cannula			IV line in place	Show symptoms of shock	
Provider sends blood for grouping and cross matching					
Provider starts rapid infusion of RL/NS					
Provider adds 20 IU of oxytocin to 1000 ml of RL, infuses at the rate of 40–60 drops per minute; Continues uterine massage					
Provider evaluates vital signs			BP – 90/60 mm Hg RR – 30/min Rapid pulse Cold and clammy skin, woman anxious and confused		
Provider gives oxygen (if available), keeps the woman in head low position and keeps her warm					
Provider catheterizes the woman (self-retaining catheter)					
Provider starts other uterotonic drugs, controls bleeding with bi-manual compression/ aortic compression/ performs condom tamponade				Reduce bleeding	
Provider arrange for blood transfusion/ specialist care/ referral			CONCLUDE		

Debrief on:

- AMTSL
- Management of PPH
- Skill practice by all staff: Condom Tamponade, Bimanual Compression of Uterus, External Aortic Compression
- Importance of having readily available and accessible PPH management box in place

Note: The module PPH on the Safe Delivery App can be used either BEFORE the drill as preparation, DURING the drill as available job aid, or AFTER the drill for assessment and further learning – or a combination.

Annexure 3.6: Identification and Management of Pre- eclampsia and Eclampsia

- Define hypertension and classify hypertensive disorders of pregnancy

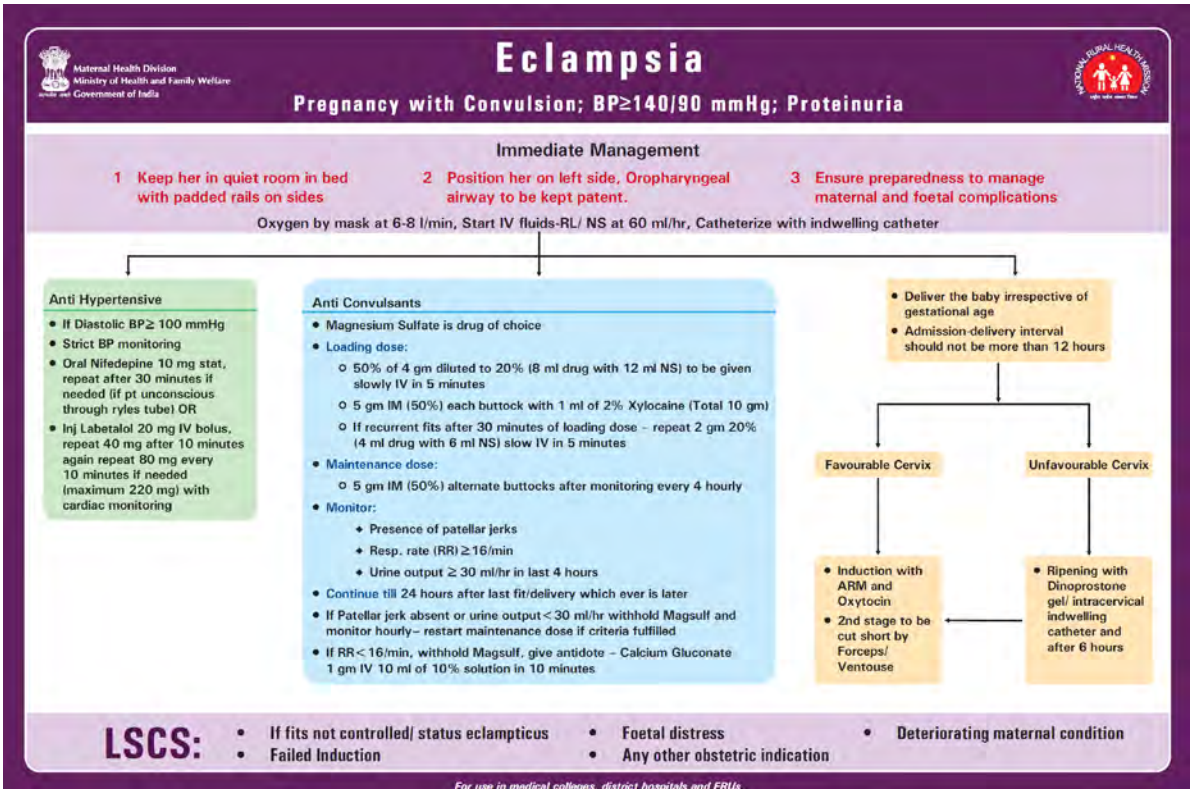
Type of hypertension	Characteristic
Chronic hypertension	Hypertension presenting before 20 weeks of gestation in the absence of proteinuria
Gestational Hypertension	Hypertension presenting after 20 weeks of gestation in the absence of proteinuria
Pre-eclampsia	Blood Pressure is equal to or more than 140/90 and less than 160/110, proteinuria is trace or 1+ or 2+, but there are no signs and symptoms
Severe preeclampsia	It presents with any of the following two scenarios- 1. Pre-eclampsia with any of the signs and symptoms, viz.- Headache, blurring of vision, epigastric pain, oligouria, pulmonary edema or abnormal edema over face, hands, abdomen and vulva. 2. Blood pressure and proteinuria more than the levels of pre-eclampsia- that is, equal to or more than 160/110 BP, and 3+ or 4+ proteinuria.
Eclampsia	Presence of convulsions with BP more than 140/90 mmHg and proteinuria more than trace.

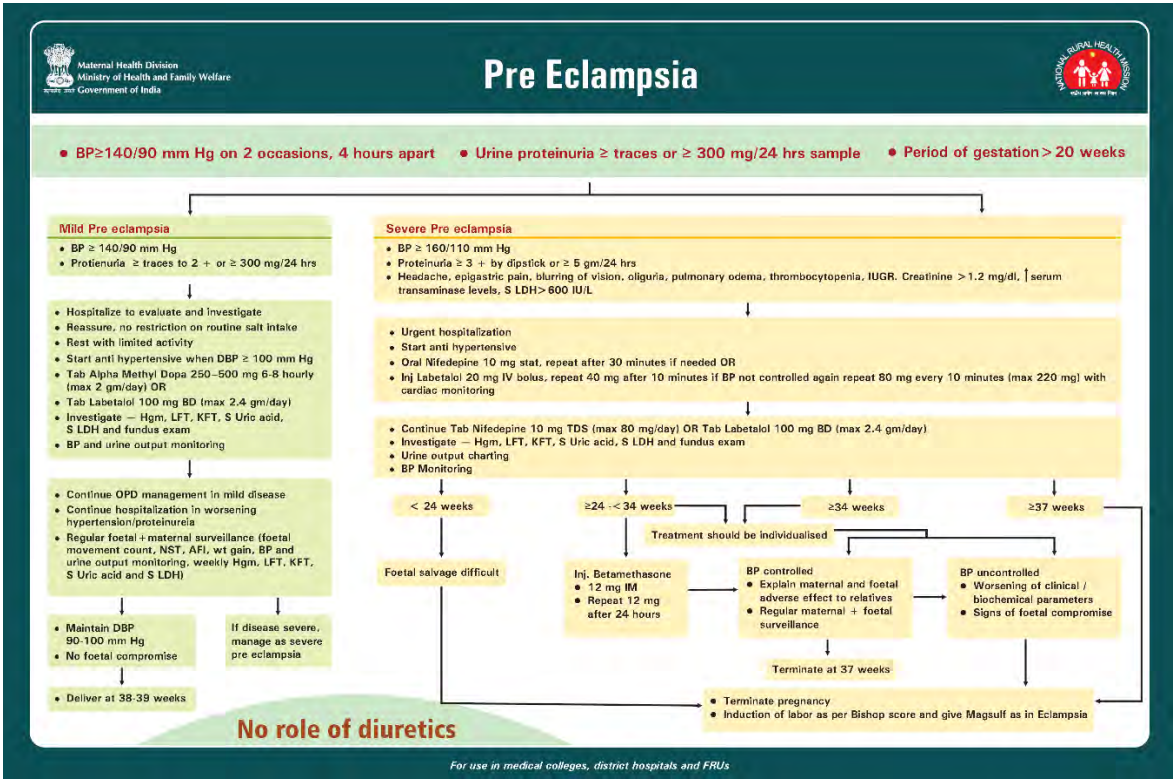
- Discuss with staff if they have managed such case and referral if required
- Ensure availability of **eclampsia management kit** containing: Mouth gag, Suction catheter, IV cannula, IV set, IV fluids (RL), Syringes (20 mL, 10 mL, 5 mL), Antihypertensive drugs (Labetalol- Tab & Inj., Tab. Nifedipine), Inj. Magnesium sulfate-

at least 20 ampoules (1 amp = 1 gm), 2% xylocaine, Alcohol swabs, Adhesive tape, Antiseptic solution bottle, Blood and urine collection vials, Self-retaining catheter, Urobag, Syringe & distilled water for inflation, dry cotton swabs, Sterile gloves, knee hammer, Inj. Calcium Gluconate, Explain management of eclampsia and pre-eclampsia using the following protocol posters

- Explain staff to label it and place it at accessible location
- Discuss with staff management of pre-eclampsia and eclampsia using following protocol posters
- If available, review record including maternity case sheet of such case

Management of eclampsia





Annexure 3.7: Identification and management of postpartum hemorrhage (PPH)

- Discuss the following regarding PPH: If they have managed such case in past– How they managed the case and was referral if required, definition, types, signs and symptoms, cause specific management

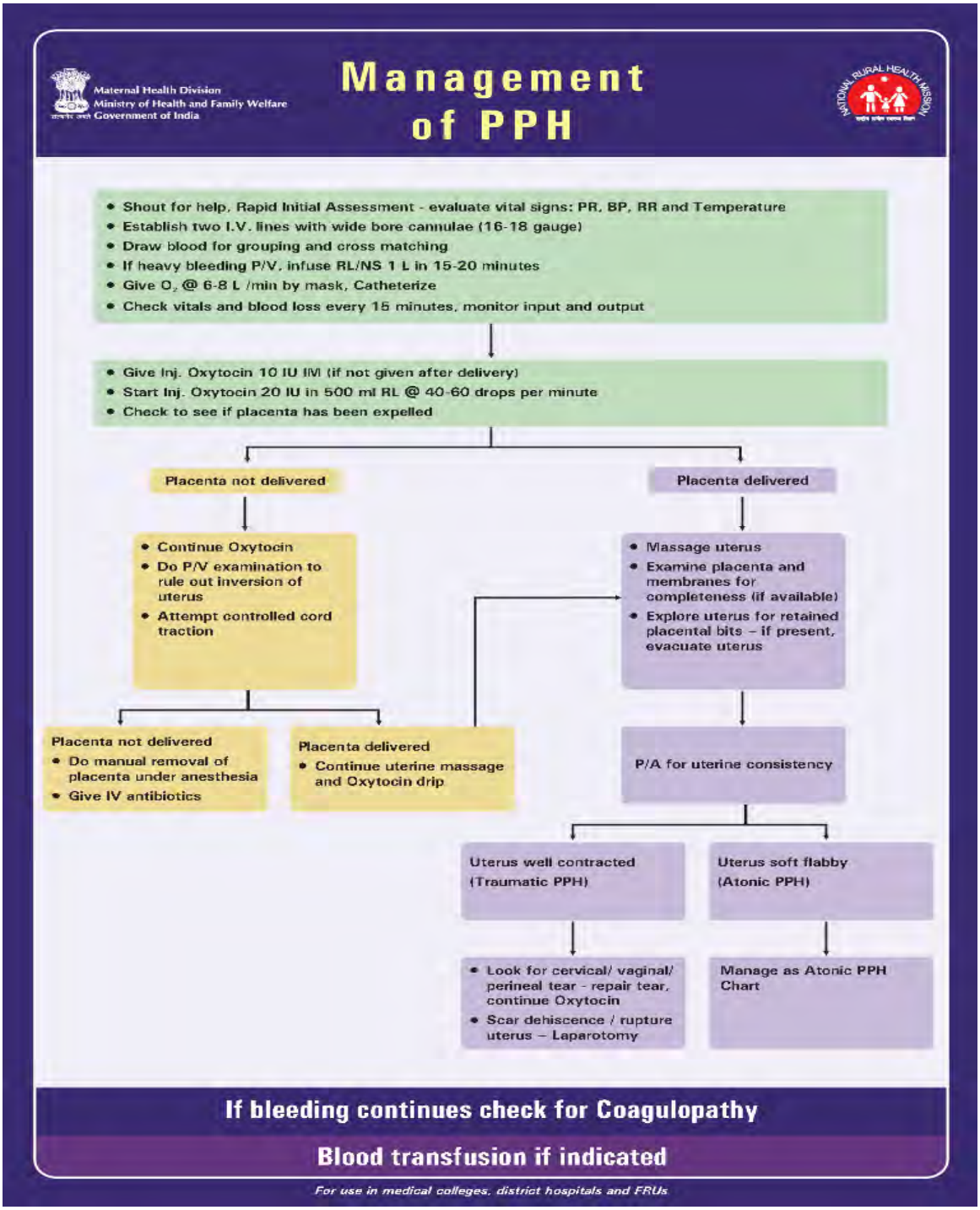
Causes of PPH:

Primary/Immediate PPH	Delayed/Secondary PPH
• Tone - atonic PPH: most common cause (80-90%) • Tears or trauma • Tissue - retained or incomplete placenta, membranes • Thromboembolic - coagulopathy	• Infection in the uterus • Retained placental fragments

Definitions of cause specific types of PPH:

Cause of PPH	Characteristics of uterus	Status of placental expulsion	Other features
Atonic uterus	Soft and flabby	Completely expelled	Shock may be present
Tears of cervix, vagina or perineum	Contracted	Completely expelled	Common after assisted deliveries
Partially separated and retained placenta	Soft	Not delivered	--
Retained placental fragments	Contracted	Missing portions in the placenta or torn membranes	Delayed PPH
Uterine inversion	Uterine fundus not felt per abdomen	May or may not be expelled	Mild or severe pain
Uterine rupture	Uterine tenderness	Expelled	Shock may be present tachycardia, abdominal tenderness

- Ensure availability of PPH management kit containing: Wide bore cannula (number 16/18)- at least 2, IV set, IV fluids (NS, RL), Syringes (10 mL, 5 mL, 2 mL), Blood and urine collection vials, Inj. Oxytocin (to be kept in refrigerator), Tab. Misoprostol, Inj. Methylergometrine, Inj. Carboprost (to be kept in refrigerator), Bowl with cotton swabs, Alcohol/spirit swabs, Antiseptic solution bottle, Adhesive tape, Suture material, Dry cotton swabs, Self-retaining catheter, Urobag, Syringe & distilled water for inflation, Long elbow-length sterile gloves, Sterile gloves, For Condom Tamponade: SS tray with lid, Sims speculum, SS bowl with swabs, Sponge holders, Suture material, Scissors, Foley's catheter (16 no.), Condoms, IV set, 500 mL NS, PPE
- Discuss management using following protocol posters:
    - Management of atonic PPH
    - Management of PPH
- **Discuss that even a small amount of blood loss in anemic woman can lead to PPH so proper estimation of hemoglobin should be done**


Maternal Health Division
Ministry of Health and Family Welfare
Government of India
Management of PPH
NATIONAL RURAL HEALTH MISSION
• Shout for help, Rapid Initial Assessment - evaluate vital signs: PR, BP, RR and Temperature
• Establish two I.V. lines with wide bore cannulae (16-18 gauge)
• Draw blood for grouping and cross matching
• If heavy bleeding P/V, infuse RL/NS 1 L in 15-20 minutes
• Give O2 @ 6-8 L /min by mask, Catheterize
• Check vitals and blood loss every 15 minutes, monitor input and output
• Give Inj. Oxytocin 10 IU IM (if not given after delivery)
• Start Inj. Oxytocin 20 IU in 500 ml RL @ 40-60 drops per minute
• Check to see if placenta has been expelled
Placenta not delivered
Placenta delivered
• Continue Oxytocin
• Do P/V examination to rule out inversion of uterus
• Attempt controlled cord traction
• Massage uterus
• Examine placenta and membranes for completeness (if available)
• Explore uterus for retained placental bits – if present, evacuate uterus
Placenta not delivered
• Do manual removal of placenta under anesthesia
• Give IV antibiotics
Placenta delivered
• Continue uterine massage and Oxytocin drip
P/A for uterine consistency
Uterus well contracted (Traumatic PPH)
Uterus soft flabby (Atonic PPH)
• Look for cervical/ vaginal/ perineal tear - repair tear, continue Oxytocin
• Scar dehiscence / rupture uterus – Laparotomy
Manage as Atonic PPH Chart
If bleeding continues check for Coagulopathy
Blood transfusion if indicated
For use in medical colleges, district hospitals and FRUs

o

Maternal Health Division
Ministry of Health and Family Welfare
Government of India

Management of Atonic PPH

NATIONAL RURAL HEALTH MISSION

- Placenta expelled, uterus soft and flabby
- Traumatic causes excluded

↓

- Shout for help, Rapid Initial Assessment to evaluate vital signs: PR, BP, RR and Temperature
- Establish two I.V. lines with wide bore cannulae (16-18 gauge)
- Draw blood for grouping and cross matching

- If heavy bleeding, infuse NS/RL 1L in 15-20 minutes
- Give O_2 @ 6-8 L /min by mask, Catheterize
- Check vitals & blood loss every 15 minutes, Monitor input & output

↓

- Perform continuous uterine massage
- Give Inj. Oxytocin 20 IU in 500 ml RL/ NS @ 40 drops/minute
- Do not give Inj. Oxytocin as IV bolus

↓

Uterus still not contracted

↓ If bleeding P/V not controlled

Inj Ergometrine* 0.2 mg IM or IV slowly (contraindicated in high BP, severe anemia, heart disease)

↓

Inj Carboprost* (PGF2) 250 µg IM (contraindicated in Asthma)

↓ If bleeding P/V not controlled

Tab Misoprostol (PGE1) 800 µg Per rectal

↓

Bleeding not controlled by drugs

↓

Explore uterine cavity for retained placental bits

↓

- Perform bimanual compression
- If fails perform compression of abdominal aorta

↓

- Check for coagulation defects
- If present give blood products

Uterine Tamponade (Indwelling Catheters/ Condom/ Sangstaken tube/ Ribbon gauze packing) as life saving measure

Surgical intervention
- Uterine compression suture (B-Lynch)
- Uterine/Ovarian A ligation
- Hysterectomy

Bleeding controlled by drugs

↓

- Repeat uterine massage every 15 minutes for first 2 hours
- Monitor vitals closely every 10 minutes for 30 minutes, every 15 minutes for next 30 minutes and every 30 minutes for next 3-6 hours or until stable
- Continue Oxytocin infusion (Total Oxytocin not to exceed 100 IU in 24 hours)

• Continue vital monitoring • Transfuse blood if indicated • Monitor Input/ Output

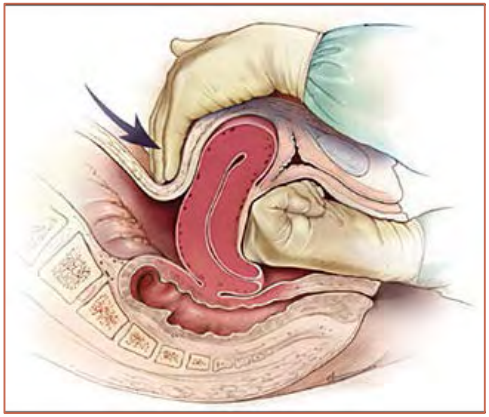
* Wherever needed

Inj. Ergometrine can be repeated every 15 minutes (max 5 doses – 1 mg)

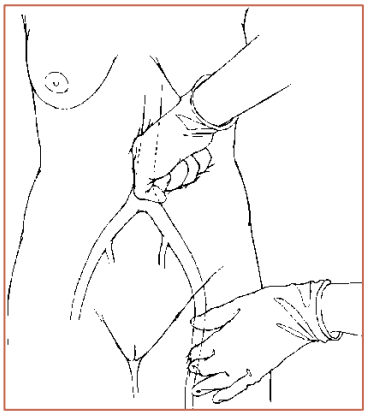
Inj Carboprost can be repeated every 15 minutes (max 8 doses – 2 mg)

For use in medical colleges, district hospitals and FRUs

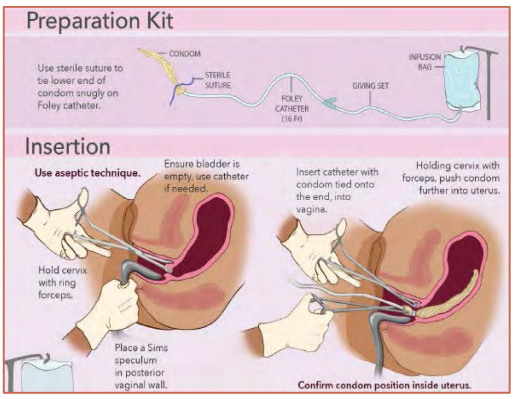
- Demonstrate following mechanical methods for management

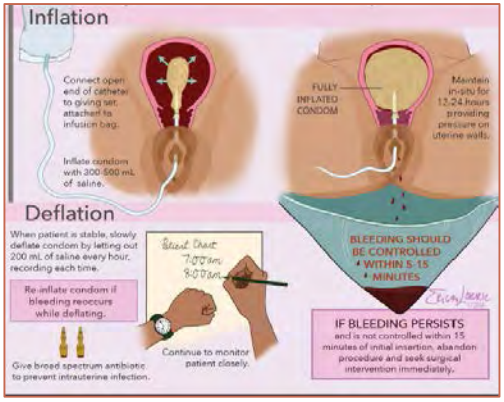


Bimanual Compression



Compression of Abdominal Aorta





Condom Balloon Tamponade

For referral transport of PPH patient to higher center:

Maintain	Use
Contraction of uterus	Transfer with ongoing uterotonic infusion and uterine massage Provide bimanual compression (external if possible and internal if necessary)
Empty bladder	Insert self-retaining catheter
Blood volume	Continue IV fluids (crystalloids), elevate leg end
Observation and monitoring of condition	Check and monitor color, pulse, blood pressure, blood loss – In case of low hemoglobin, Prophylaxis and treatment of anemia- **even a small amount of blood loss in anemic woman can lead to PPH**., uterine contraction, level of consciousness and urine output. Check blood clotting time
Warmth of patient	Keep woman warm (cover with blankets)
Accurate records	Charts, referral notes
Preparation for blood transfusion	Assess need for blood transfusion; Inform receiving facility about the case and blood group
Accompanying patient	Send a skilled provider with the woman to ensure an open airway, to deliver first aid if the woman goes into shock
For traumatic cases	Cover the tear with sterile pad

Annexure 3.8: Prevention and Management of Maternal Infections including puerperal sepsis

- Using SCC discuss the signs and symptoms of infection/sepsis in the pregnant woman during all 4 pause points
- Discuss the risk factors and preventive strategies which could be adopted by the facility –It could be achieved by infrastructural changes or alteration in existing infection prevention practices
- Discuss the management

Puerperal Sepsis

- Explain that puerperal sepsis (maternal sepsis) is defined as an infection of the genital tract at any time between the onset of rupture of membranes or labor, and the 42nd day following delivery or abortion.
- It is characterized by the presence of any two or more of the following signs and symptoms:
    - Fever >100.5 Fahrenheit (>38ºC)
    - Abnormal/foul smelling vaginal discharge
    - Lower abdominal pain
    - Sub-involuted (and tender) uterus
- Discuss
    - Risk factors
    - Preventive strategies
    - Management

Important considerations

- Do NOT do routine perineal shaving or enema.
- Do NOT do routine exploration of uterus after delivery.
- Do NOT do unnecessary PV examinations.
- Do NOT prescribe routine antibiotics to the mother.
- Follow all standard IP practices.

Annexure 3.9: Preventing Parent to Child Transmission (PPTCT) of HIV

- Explain that out of ANC, during delivery and postpartum period (during breast feeding) there are higher chances of transmission of HIV from mother to child during delivery of the baby
- Explain key approaches to prevent the transmission during each period

ART for mother
Tenofovir (TDF) 300 mg + Lamivudine (3TC) 300 mg + Efavirenz (EFV) 600 mg once daily lifelong
ARV prophylaxis for newborn

Syrup Nevirapine immediately after birth to be continued till six weeks irrespective of breast feeding status (Extend to 12 weeks of syrup Nevirapine, if the duration of the ART of mother is less than 24 weeks)
Safe delivery techniques in HIV+ pregnant women
• Standard/Universal Work Precautions (UWP) • Do NOT rupture membranes artificially (ARM) • Minimize vaginal examination and use aseptic techniques • Avoid invasive procedures like fetal blood sampling, fetal scalp electrodes • Avoid instrumental delivery • Avoid episiotomy • Do NOT perform routine suctioning of newborn

- Ensure availability of HIV testing kits in labour room and motivate the staff to use them

Important considerations

- Counsel mother for exclusive breastfeeding for upto 6 months after birth as the preferred option.
- Recommend replacement feeding in case the mother is seriously ill, reluctant or dead.
- Counsel for Early Infant Diagnosis at 6 weeks.

Annexure 3.11: OSCE Management of PPH

Situation: Following a prolonged labour, normal delivery of a healthy baby and AMTSL, you note there is profuse vaginal bleeding estimated at 1000ml. You have checked and found signs of shock.

S. No.	Steps	Score	Remarks
	Describe the steps you will take in this scenario		
1	▪ Shout for help ▪ Reassure the woman	1 1	
	Demonstrate management		
2	▪ Insert IV cannula (wide bore) ▪ Take blood for cross-matching ▪ Start IV fluids (1L RL) ▪ Check whether oxytocin has been given in AMTSL. If not, give oxytocin 10 IU IM ▪ Start oxytocin 20 IU in 500 ml of RL at 40–60 drops per minute ▪ Wash hands ▪ Wear gloves ▪ Palpate and massage uterus to ensure well contracted ▪ If atonic, start uterine massage ▪ Check for soft-tissue trauma ▪ Catheterize the bladder ▪ Continue to massage the uterus if not contracted ▪ Check placenta and membranes complete	1 1 1 1 1 1 1 1 1 1 1 1 1	
	If bleeding has not stopped, what further management would you perform?		
3	Bimanual compression	1	
	How do you reassess the woman once bleeding is under control?		
4	▪ Take pulse every 30 minutes ▪ Take blood pressure every 4 hours ▪ Assess urine output every 4 hours until > 30 ml/hour	1 1 1	
	If bleeding does not settle what will you do?		
5	Refer to higher facility with complete referral note		
	Total score:		

***Any amount of blood loss can be dangerous for the women.**

Score of competency = 16/20 (80%) (1 point for each mentioned step)

Participant's score = ____ /20

Result: Competent/Needs improvement (circle the appropriate result)

Annexure 3.13: OSCE for managing Eclampsia

Scenario: A woman is admitted to a basic facility at 38weeks having just had a fit. She is semiconscious. Demonstrate the steps to be done by you.

S. No.	Steps	Score	Remarks
1	Call for help	1	
2	Check Circulation	1	
3	Establish and maintain airway	1	
4	Check Breathing	1	
5	Place woman in left lateral position	1	
6	Records drug administration in woman's record	1	
7	Take the required number of MgSo4 and check the expiry date	1	
8	Prepare two 10 ml syringes of 5 g (10 ml) 50% Magnesium Sulphate	1	
9	Wash and dry hand	1	
10	Wear gloves	1	
11	Clean injection site with alcohol	1	
12	Administer 5 g (10 ml) by DEEP IM injection in each buttock (upper outer quadrant)	1	
13	Cut the needle with hub cutter	1	
14	Dispose of used syringe in a proper disposal box	1	
	before administering Magnesium Sulphate to a woman who is conscious, what would you warn her about?		
15	She may experience a feeling of warmth/irritation along IV site	2	
	Here the instructor would prompt: If the mother is not stabilized, what should you do next?		

16	Refer to a higher facility if treatment not available	2	
	When transferring a woman with suspected eclampsia, what do you need to ensure is available?		
17	Basic life support -Patent IV line, airway and referral slip with documentation of all medication given	2	

Score of competency = 16/20 (80%)

Participant's score = ____ /20

Result: Competent/Needs improvement (circle the appropriate result)

Annexure 3.14: OSCE for CAB Approach

Scenario: A 25-year-old woman, unconscious, delivered at home 5 hours ago. The family said she lost a lot of blood at the time of delivery. The placenta has been delivered. She has been brought to your health centre. Examination on arrival shows a blood pressure of 90/55 mmHg, and pulse rate of 115 beats/min.

Steps	Total Mark	Remark
What would you do first?		
▪ Shout for help ▪ Insert 2 IV lines ▪ Take blood and send it to lab ▪ Start fluids at a rapid rate (1 L in 20 mins)	1 1 1 1	
What would you do next?		
▪ Assess airway patency (looking at chest movements, listening for and / or feeling air through nostrils)	1	
If the airway is not patent what would you do?		
▪ Perform head tilt, chin lift and jaw thrust	1	
The woman is breathing, what would you do next?		
▪ Provide immediate management of shock	1	
What steps would you take to provide immediate management of shock?		

▪ Turn patient to left lateral position ▪ Start oxygen @ 6–8 L/min ▪ Keep the woman warm ▪ Elevate her legs ▪ Catheterize the woman ▪ Monitor vital signs every 15 mins	1 1 1 1 1 1	
The woman is not breathing. Demonstrate what would you do		
▪ Suction only if vomit or blood present ▪ Positioning ▪ Insert airway ▪ Give 30 chest compressions followed by 2 breaths @ 100 compressions/min ▪ Press sternum vertically to depress it by 4–5 cm ▪ Each breath should be provided for 1 second and should raise the chest	1 1 1 1 1 1	
You have successfully resuscitated the woman. What would you do next?		
▪ Find out the cause and manage accordingly	1	
Total Score	**20**	

Annexure 3.15: OSCE for Insertion of IV Line

Steps	**Total Mark**	**Remark**
Assemble the necessary equipment: ▪ Sterile cotton wool swabs and iodine/betadine	1	
▪ IV cannula	1	
▪ Saline flush	1	
▪ Gloves and splints/tourniquet	1	
▪ Blood sample bottles	1	
Identify the site of insertion	1	
Apply tourniquet proximal to vein	1	
Wash hands and put on gloves	1	
▪ Clean the site with alcohol	1	
▪ Wait for 30 seconds	1	
▪ Apply povidone iodine solution	1	

▪ Remove the povidone iodine using alcohol	1	
▪ Allow to air-dry for 30 seconds	1	
Insert cannula into vein (15-degree angle)	1	
When blood is seen, advance cannula whilst withdrawing the stylet	1	
Flush with 2 ml of NS to check for flow of the fluid	1	
Connect to IV fluids or put in stopper	1	
Secure cannula with adhesive tape	1	
Safe disposal of:		
▪ Stylet in puncture-proof container	1	
▪ Plastic waste in red bin	1	
Total	**20**	

Quality Improvement Cycle 4

Management of labor, AMTSL and rational use of uterotonics

Objective: To strengthen processes for management of labor as per protocols including active management of third stage of labor (AMTSL) & rational use of uterotonics

Facility level targets:

100% of women, administered oxytocin immediately after birth

Brief of the key activities for QI visits:

S. No.	Areas addressed during current visit	QI visit			
		1st visit	2nd visit	3rd visit	4th visit
1	Meeting with medical superintendent or facility in-charge and Quality circle	✓	✓	✓	✓
2	Assessment of labor room and maternity OT for management of labor, AMTSL and rational use of uterotonics using resource availability checklist and QI checklist	✓			✓
3	Drill on active management of third stage of labour	✓			
4	Mentoring of all the labor room and maternity OT staff in the facility including assigning the module on AMTSL in Safe delivery app	✓	✓ (Need based)	✓ (Need based)	✓ (Need based)
5	Introduce OSCE as per the annexures	✓			
6	Follow up on action plan prepared during last visit	✓	✓	✓	✓
7	Self-directed learning plan via the Safe Delivery App and follow up	✓	✓	✓	✓
8	Facilitate quality circle to prepare an action plan for the current visit	✓			
9	Conducts OSCE on conduction of normal labour and Active Management of third stage of labour			✓	

Responsibilities of the key stakeholders

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Onsite training and handholding of quality circle and LR and maternity OT staff for strengthening mechanisms within their facility on o Conducting normal delivery o AMTSL o Rational use of uterotonics • Facilitate action planning based on the identified gaps • Facilitate mechanisms for ensuring availability of resources for performing the practices related to normal delivery, AMTSL and rational use of uterotonics	• Ensure availability of adequate number of all trays as per delivery load • Ensure availability of essential supplies and resources needed for the labor LR and maternity OT including • Ensure organization of labor room and maternity OT as per the standards • Ensure all LR staff are competent in conducting normal delivery including AMTSL • Ensure all LR staff are using uterotonics (Oxytocin) judiciously and as per the protocol • Establish a mechanism in which surgical procedures done in maternity OT are as per SOPs and standards.

Key activities:

Preparation for QI visit: This task should be performed by the district coaching team before visiting the facility.

- Inform the medical superintendent or facility in charge at least one day in advance about the visit
- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours
- Keep all the materials (QI cycle visit checklist, job aids including safe delivery app, checklists, formats, action plan template, mannequins) required to do mentoring and any previous action plans ready for the visit

Activity outline for QI visits:

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
1st	**Activity**	**Hold all staff meeting to orient the facility stakeholders on** o **Objectives of the current quality cycle**	
		• Assessment of labor room and maternity OT for normal delivery and AMTSL using o Resource availability checklist o QI cycle checklist* • Quality circle meeting to prepare action plan	• Conduct drill on AMTSL • Introduce OSCE related to normal delivery active management of third of labour to providers • Mentoring on o Conducting normal delivery o AMTSL o Rational use of uterotonics
	Logistics required for the activity	• Resource availability checklist • QI cycle checklist* • Action planning template	• Job aid on AMTSL • Job aid on Do and don'ts for use of uterotonics • Scenario and checklist for conducting drill on normal delivery, AMTSL and ENBC • Safe Delivery App to be downloaded to facility tablet and in the mobile phones of the staff.
	Improvement and sustenance mechanism	• Follow up of action plan of previous visit • Preparation of an action plan based on the gaps identified during assessment and mentoring	• Assignment on AMTSL module of Safe Delivery App • Ensure availability of all the relevant job aids in the labor room/Maternity OT • Identify champions within the facility • Prepare facility self-learning plan on My Learning on the SDA

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
2nd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks for sustainable impact • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Need based mentoring on practices imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool • Review records for improvement in documentation of practices
3rd	**Follow up**	• Follow up meeting on action plan prepared during the previous visit • Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources • Update the action plan based on the findings from this visit	• Observe the practices and provide need based inputs. • Review records to ascertain the change in practices and discuss with staff for further improvement • Follow up on use of Safe Delivery App for self-learning and as reference tool • Conducts OSCE of all providers on normal delivery and AMTSL using Annexure 4.7 and 4.8
4th	**Follow up and reassessment**	• Reassessment of labor room and maternity OT for normal delivery & AMTSL practices to ascertain improvement using o Resource availability checklist o QI cycle checklist* • Share the change in scores of standards with the quality circle during the meeting • Prepare a plan for the activities that need further improvement.	• Reinforce the significance of following standard procedures • Follow up on use of Safe Delivery App for self-learning and as reference tool

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

First visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in- charge	☑ ☒	
2	Assessment of labor room and maternity OT for management of labor & AMTSL using resource availability checklist and NQAS checklist	☑ ☒	
3	Conducts Drill on active management of third stage of labor	☑ ☒	
4	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
5	Follow up on action plan prepared during last visit	☑ ☒	
6	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	
7	Develop self-learning plan – Safe Delivery App	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and quality circle

Hold a meeting with medical superintendent or facility in charge and quality circle to discuss the objectives and activities planned for the visit and for next 2 months.

Step 2: Assessment of labor room and maternity OT for management of labor, AMTSL and rational use of uterotonics

Visit labour room and maternity OT along with facility Quality Circle and perform the assessment using resource availability checklist (Annexure 4.1) and QI checklist (Annexure 4.2). Use the gaps identified during this assessment for action planning with quality circle.

Step 3: Mentoring of labor room and maternity OT staff

- Conducts the drill as per the given case scenario
- Engage all the available staff during mentoring session
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include relevant challenges in action plan.
- Motivate the staff to continue good practices demonstrated and identify challenges in translation of learned skills into practice

Mentoring Session Outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session Outline
1	Normal delivery, AMTSL and Essential Newborn care (ENBC)	45 min	• Mannequins – MamaNatalie, NeoNatalie • Case scenario and checklist for conducting the drill (Annexure 4.5) • Safe Delivery App	Drill followed by debriefing and practice by each service provider	• Conduct the drill as per the given case scenario • Debrief participants after the drill and explain Importance of each step of normal delivery & AMTSL • Briefly explain the steps of ENBC (detailed ENBC will be discussed in QI 5

S. No.	Skills/practices	Time	Logistics required	Methodology	Session Outline
2	Preparation for safe delivery	20 min	• Job aids for all trays as per MNH toolkit (Annexure 4.1)	Facilitated discussion	• Ask participants how do they prepare for the delivery. • Discuss importance and contents of all the trays to be prepared for each delivery • Discuss adequate number of trays tha should be available based on delivery load (MNH toolkit)
3	Rational use of uterotonics	10 min	• Annexure 4.7 • Safe Delivery App	Facilitated discussion	• Ask current practices about the use of uterotonic drugs • Discuss rational use of uterotonics using Annexure 4.7
4	Care of mother and new born immediately after birth	15 min	• Annexure 4.8 • Safe Delivery App	Facilitated discussion	• Ask what should be done to provide immediate care of mother and baby after birth • Discuss it using Annexure 4.8

Step 4: Introduces OSCE related to normal delivery active management of third of labour to providers

- Use the module on AMTSL on the Safe Delivery App for self-study after the OSCE

Step 5: Facilitate quality circle to prepare an action plan

In consultation with quality circle, based on the gaps identified during assessment and mentoring processes prepare a standard wise action plan as below:

1.Action plan for labor room

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
A1: The facility provides Curative Services					
A2: The facility provides RMNCHA Services					
A3: The facility has established procedures for Intranatal care as per guidelines					
E6: The facility follows standard treatment guidelines defined by State/Central government for prescribing the generic drugs & their rational use					

2.Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks
A1: The facility provides Curative Services					
A2: The facility provides RMNCHA Services					
A3: The facility has established procedures for Intranatal care as per guidelines					
E6: The facility follows standard treatment guidelines defined by State/Central government for prescribing the generic drugs & their rational use					
E 14: Facility has established procedures of Anaesthetic services					
E 15: Facility has defined and established procedures of Surgical Services					

Second visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on self-directed learning via Safe Delivery App	☑ ☒	
4	Meeting with quality circle to update action plan	☑ ☒	

Third visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Meeting with quality circle to update action plan	☑ ☒	
4	Follow up on self-directed learning via Safe Delivery App	☑ ☒	
5	Performs OSCE of each of the LR and maternity OT staff using OSCE sheet for AMTSL and normal labor.	☑ ☒	

Major activities to be conducted during both 2nd and 3rd visits:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in translation of learned skills into practices
- Once mentoring is finished, hold meeting with the quality circle
- Prepare a self-learning plan on My Learning on the Safe Deliver App and follow-up on every visit
- Appraise the team on improvements in practices in the labor room since previous visit
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.
- Performs OSCE of each of the LR and maternity OT staff using OSCE sheet for AMTSL and normal labor. Share the scores with the staff.

Fourth visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for management of labor & AMTSL using resource availability checklist and NQAS checklist	☑ ☒	
3	Follow up on action plan prepared during last visit	☑ ☒	
4	Follow up on self-directed learning via Safe Delivery App	☑ ☒	
5	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labor room and maternity OT along with facility Quality Circle and reassess the facility using same resource availability checklist and QI checklists
- Compare the scores of initial assessment and reassessment and share with labor room/maternity OT staff as well as with the quality circle
- Review the practices and provide need based mentoring support

- Follow-up on self-learning on Safe Delivery App
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 30) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. This action plan will be used during next QI cycle till all the gaps are addressed.

Annexures

Annexure 4.1: Assessment of labor room for availability of resources and performance of practices for Normal delivery, cesarean section and AMTSL

Encircle appropriate: ☑ Available ☒ Not available ◙ Available and complete Δ Available and incomplete

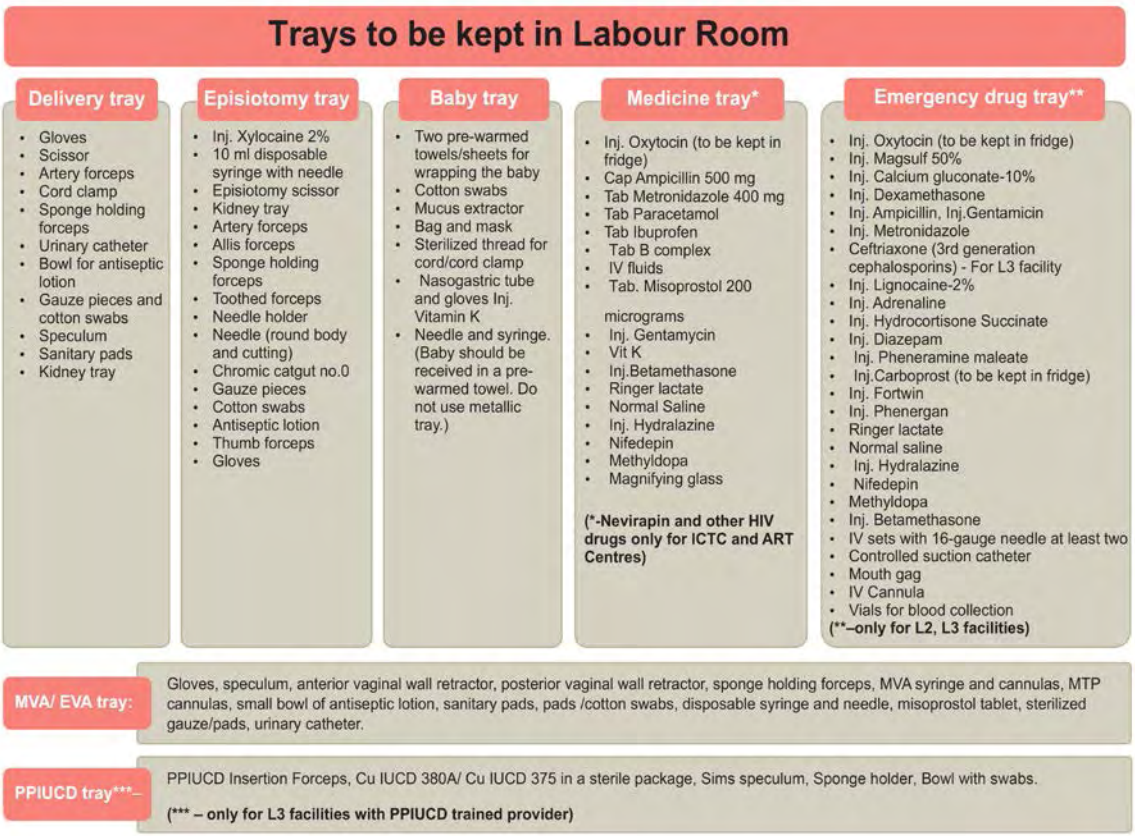
Resource availability in labor room

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
1.	Wheelchair and/or stretcher	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2.	Washbasin	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3.	Wall clock with seconds hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4.	Refrigerator	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5.	PPE (Cap, Mask, Apron, Shoes/ Shoe covers)*	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6.	MCP card, Safe motherhood booklet	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7.	Kelly's pad	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8.	Foot step	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9.	Examination tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
10.	Emergency drug tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11.	Delivery tray in case of emergency	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12.	Complete sets of all trays as per the attached job aid	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13.	Cold storage for Inj. Oxytocin at the point of use	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14.	Bucket attached with Labor table	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15.	Bleaching powder/ Sodium hypochloride Solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16.	Oxytocin (5/10 IU per ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17.	Soap & Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18.	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19.	Partograph	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20.	Cord clamps	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21.	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22.	Sterile Perineal Pads	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23.	Towels for receiving newborns	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24.	Disposable syringes and disposable needles	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25.	Protocol posters displayed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
26.	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
27.	Cotton swab	☑ ☒	☑ ☒	☑ ☒	☑ ☒
28.	Hub cutter	☑ ☒	☑ ☒	☑ ☒	☑ ☒
29.	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
30.	Color coded bags for disposal of biomedical waste	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1st	2nd	3rd	4th
31.	Misoprostol	☑ ☒	☑ ☒	☑ ☒	☑ ☒
32.	Functional baby weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
33.	Curtain in labor room to ensure privacy to woman	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Trays in the Labor room should be prepared according to the GOI MNH toolkit (Job aid) given below:



Annexure 4.2: Assessment of maternity OT for availability of resources and performance of practices for Normal delivery, cesarean section and Minilap

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
1	Oxytocin (5/10 IU per ml)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Soap & Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	Cord clamps	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Sterile Perineal Pads	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Towels for receiving newborns	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Disposable syringes and disposable needles	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Cotton swab	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Bleaching powder/ Sodium hypochloride Solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Hub cutter	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Color coded bags for disposal of biomedical waste	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Cold storage for Inj. Oxytocin at the point of use	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Functional baby weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Wall clock with seconds hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	Emergency drug tray	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	Refrigerator	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	PPE (Cap, Mask, Apron, Shoes/ Shoe covers) Surgical gown, Goggles	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	Medical gases, Oxygen and nitrogen	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
	Cylinders/ Piped Gas supply				
22	Local anesthesia* – Procaine, lignocaine, bupivacaine, Xylocaine jelly	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	General anesthesia * -Halothane, Nitrous Oxide. Injectable: Barbiturates (Theopental, Thiamylal, Methohexital)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	Benzodiazepines* - (Diazepam, Lorazepam, Midazolam), Ketamine, Etomidate, Propofol, Neostigmine, Naloxone, Flumazenil, Sugammadexas per EDL/State guidelines	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	Opioid analgesics. Fentanyl, Sufentanil, * Morphine, Buprenorphine, Levorphanol, Methadone-As per EDL/State guidelines	☑ ☒	☑ ☒	☑ ☒	☑ ☒
26	Muscle relaxants * Succinylcholine, Vecuronium, Mivacurlum, Tubocarine as per EDL/ state guidelines	☑ ☒	☑ ☒	☑ ☒	☑ ☒
27	**Emergency drugs** Inj Magsulf 50%, Inj Calcium gluconate 10%, Inj Dexamethasone, inj Hydrocortisone, Succinate, Inj diazepam, inj Pheneramine maleate, inj Corboprost, Inj Fortwin, Inj Phenergen, Betameathazon, Inj Hydrazaline, Nefidepin, Methyldopa, ceftriaxone	☑ ☒	☑ ☒	☑ ☒	☑ ☒
28	Other Drugs Antibiotics, Analgesics, Uterotonic drugs, IV fluids and anithypertensive drugs-as per EDL/State guidelines.	☑ ☒	☑ ☒	☑ ☒	☑ ☒
29	Dressings Material Adequate quantity of sterile pads, gauze, bandages, Antiseptic Solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
30	LSCS Set, Cervical Biopsy Set, Proctoscopy Set, Hysterectomy set, D & C Set	☑ ☒	☑ ☒	☑ ☒	☑ ☒
31	Instruments for New Born Care Radiant warmer, Baby tray with Two pre warmed towels/sheets for wrapping the baby, mucus extractor, bag and mask (0 & 1 no.), sterilized thread for cord/ cord clamp, nasogastric tube	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
32	General surgery equipments Diathermy (Unit and Bi Polar), Cautery	☑ ☒	☑ ☒	☑ ☒	☑ ☒
33	Availability of Point of care diagnostic instruments Glucometer, HIV rapid diagnostic kit, USG, ABG Machine	☑ ☒	☑ ☒	☑ ☒	☑ ☒
34	Operation Table with Trendelenburg type OT Table hydraulic major and OT table hydraulic minor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
35	Instruments: Resuscitation for Newborn & Mother Resuscitation bag (Adult & Paediatrics), Oxygen, Suction machine, laryngoscope scope, Defibrillator (Paediatric and adult), LMA, ET Tube	☑ ☒	☑ ☒	☑ ☒	☑ ☒
36	Anaesthesia equipment: Boyles apparatus, Bains Circuit or Sodalime absorbent in close circuit, AGSS (Anesthesia gas scavenging system)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
37	Drugs & Instruments Refrigerator, Crash cart/ Drug trolley, instrument trolley, dressing trolley, Instrument cabinet and racks for storage of sterile items	☑ ☒	☑ ☒	☑ ☒	☑ ☒
38	Functional OT light Shadow less Major & Minor, Ceiling and Stand Model, Focus Lamp	☑ ☒	☑ ☒	☑ ☒	☑ ☒
39	Availability of Fixtures: Tray for monitors, Electrical panel for anesthesia machine with minimum 6 electrical sockets (2= 15 amp power point), panel with outlet for Oxygen and vacuum and X-ray view box.	☑ ☒	☑ ☒	☑ ☒	☑ ☒
40	Sponge-holding forceps	☑ ☒	☑ ☒	☑ ☒	☑ ☒
41	Surgical drape (towel with central hole)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
42	Scalpel	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
43	Scalpel blade, size 15	☑ ☒	☑ ☒	☑ ☒	☑ ☒
44	Allis forceps	☑ ☒	☑ ☒	☑ ☒	☑ ☒
45	Medium artery forceps straight	☑ ☒	☑ ☒	☑ ☒	☑ ☒
46	Medium artery forceps curved	☑ ☒	☑ ☒	☑ ☒	☑ ☒
47	Needle holder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
48	Straight scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
49	Curved scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
50	Babcock clamp/forceps (medium size)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
51	Small right-angle abdominal retractor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
52	Dissecting forceps, toothed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
53	Dissecting forceps, non-toothed	☑ ☒	☑ ☒	☑ ☒	☑ ☒
54	Small stainless-steel bowl	☑ ☒	☑ ☒	☑ ☒	☑ ☒
55	Sim's vaginal speculum, medium	☑ ☒	☑ ☒	☑ ☒	☑ ☒
56	1-0 chromic catgut	☑ ☒	☑ ☒	☑ ☒	☑ ☒
57	Small round-bodied curved needle	☑ ☒	☑ ☒	☑ ☒	☑ ☒
58	Small curved/straight cutting needle	☑ ☒	☑ ☒	☑ ☒	☑ ☒
59	Non-absorbable suture material	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1st	2nd	3rd	4th
60	Dressing material	☑ ☒	☑ ☒	☑ ☒	☑ ☒

***Any of these**

Annexure 4.3: National Quality Assurance Standards checklist for management of labor, AMTSL & rational use of uterotonics for Labor room

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			1st visit	4th visit		
Standard A1	**The facility provides Curative Services**					
ME A1.4	Services are available for the time period as mandated	Labor room service is functional 24X7			SI/RR	Verify with records that deliveries have been conducted in night on regular basis
Standard A2	**The facility provides RMNCHA Services**					
ME A2.1	The facility provides Reproductive health Services	Availability of Post-Partum IUD insertion services			SI/RR	Verify with records that PPIUD services have been offered in labor room
ME A2.2	The facility provides Maternal health Services	Availability of Vaginal Delivery services			SI/RR	Normal vaginal & assisted (Vacuum/ Forceps) delivery

		Management of Retained Placenta			SI/RR	Check staff manages retained placenta cases in labor room. Verify with records
ME A3.2	The facility Provides Laboratory Services	24*7 Availability of point of care diagnostic tests			SI/OB	HIV, Hb%, Random blood sugar, Protein Urea Test UPT

Standard E6	**The facility follows standard treatment guidelines defined by State/Central government for prescribing the generic drugs & their rational use**					
	There is procedure of rational use of drugs	Check for that relevant Standard treatment protocols are available at point of use			RR	Intrapartum care, Essential newborn care, Newborn Resuscitation, Pre-Eclampsia, Eclampsia, Postpartum hemorrhage, Obstructed Labor, Management of preterm labor
		Check staff is aware of the drug regime and doses as per STG			SI/RR	Check BHT that drugs are prescribed as per treatment protocols & Check for rational use of utero-tonic drugs

Standard E18	**The facility has established procedures for Intra-natal care as per guidelines**

ME E18.1	Facility staff adheres to standard procedures for management of second stage of labour	Ensures 'six cleans' are followed during delivery			SI/OB	Ensures 'six cleans' are followed during delivery: Clean hands, Clean surface, Clean blade, Clean cord tie, Clean towel and Clean cloth to wrap mother
		Allows spontaneous delivery of head			SI/OB	By flexing the head and giving perineal support
		Delivery of shoulders and Neck			SI/OB	Manages cord round the neck; assists delivery of shoulders and body; delivers baby on mother's abdomen
		Check no un-necessary episiotomy performed			SI/RR	Check with records and interview with staff if they are still practicing routine episiotomy
		Unnecessary augmentation and induction of labor is not done using utero-tonics			SI/RR	Check utero-tonics such as oxytocin and mesoperstol is used not for routine induction normal labour unless clear medical indication and the expected benefits outweigh the potential harms Outpatient induction of labour is not done
ME E18.2		Rules out presence of second baby by			SI	Check staff competence

	Facility staff adheres to standard procedure for active management of third stage of labor	palpating abdomen				
		Use of Utero-tonic Drugs			SI/RR	Administration of 10 IU of oxytocin IM immediately after Birth. Check if there is practice of preloading the oxytocin Inj. for prompt administration after birth
		Control Cord Traction			SI/RR	Only during Contraction
		Uterine tone assessment			SI/RR	Check staff competence
		Checks for completeness of placenta before discarding			SI/RR	After placenta expulsion, Checks Placenta & Membranes for Completeness
ME E18.3	Facility staff adheres to standard procedures for routine care of newborn immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second prewarmed towel			SI/OB	Check staff competence through demonstration or case observation
		Performs delayed cord clamping and cutting (1-3 min)			SI/OB	Check staff competence through demonstration or case observation
		Initiates breast-feeding soon after birth			SI/OB	Check staff competence through demonstration or case observation

		Records birth weight and gives injection vitamin K			SI/OB	Check staff competence through demonstration or case observation
	Provider follows SOP for PPIUCD insertion	Pre – insertion , insertion and post - insertion tasks			SI/OB	Check provider follows standard procedure for insertion of PPIUCD including Pre – insertion, insertion and post - insertion tasks

Annexure 4.4 National Quality Assurance Standards checklist for maternity OT

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			1st visit	4th visit		
Standard A1	**Facility Provides Curative Services**					
ME A1.14	Services are available for the time period as mandated	OT Services are available 24X7			SI/RR	Check with OT records that OT services were functional in 24X7 and surgeries are being conducted in night hours
ME A1.16	The facility provides Accident & Emergency Services	Availability of Emergency OT services as and when required			SI/OB	

ME A1.17	The facility provides Intensive care Services	Availability of Maternity HDU/ICU services in the facility			SI/OB	
Standard A2	**Facility provides RMNCHA Services**					
ME A2.2	The facility provides Maternal health Services	Availability of Elective C-section services			SI/RR	Check services are available and are being utilized
		Availability of Emergency C-section services			SI/RR	Check services are available and are being utilized
	The facility provides Reproductive health Services	Availability of Post-partum sterilization services			SI/OB	Tubal ligation
Standard E6	**Facility follows standard treatment guidelines defined by state/central government for prescribing the generic drugs & their rational use**					
	There is procedure of rational use of drugs	Check staff is aware of the drug regime and doses as per STG			SI/RR	Check BHT that drugs are prescribed as per treatment protocols & Check for rational use of uterotonic drugs
		Maximum dose of high alert drugs are defined and communicated & there is process to ensure that right doses of high alert drugs are only given			SI/RR	Value for maximum doses as per age, weight and diagnosis are available with nursing station and doctor. A system of independent double check before administration, Error prone

						medical abbreviations are avoided
Standard E14	**Facility has established procedures for Anaesthetic Services**					
ME E14.1	Facility has established procedures for Pre Anaesthetic Check up	There is procedure to ensure that PAC has been done before surgery			RR/SI	There is procedure to review findings of PAC
		Minimum PAC for emergency cases			RR/SI	In emergency & life saving conditions, surgery may be started with General physical examination of the patient & sending the sample for lab. Examination
ME E14.2	Facility has established procedures for monitoring during anaesthesia	Anesthesia plan is documented before starting surgery			RR	Type of anaesthesia planned-local/general/ spinal/epidural. Time is mentioned on all entries of anaesthesia monitoring sheet
		Anesthesia Safety Checklist is used for safe administrati			RR	Check use of WHO Anesthesia Safety Checklist

		on of anaesthesia				
		Anesthesia equipment are checked before induction			RR	Sufficient reserve of gases. Vaporizers are connected, Laryngoscope, ET tube and suction App are ready and clean
		Food intake status of Patient is checked			RR/SI	Time of last food intake is mentioned
		Patients vitals are recorded during anaesthesia			RR	Heart rate, cardiac rate, BP, O_2 Saturation, temperature, Respiration rate
		Airway security is ensured			RR/SI	Breathing system of anaesthesia equipment that delivers gas to the patient is securely and correctly assembled and breathing circuits are clean
		Potency and level of anaesthesia is monitored			RR/SI	Recorded in the Anesthesia Record Form
		Anesthesia note is recorded			RR	Check for the adequacy, signed, complete, and

						post anaesthesia instructions.
		Any adverse Anesthesia Event is recorded and reported			RR	Reduced level of consciousness, reparatory depression, malignant hyperpyrexia, bone marrow depression, life threatening pressure effect, anaphylaxis
ME E14.3	Facility has established procedures for Post Anesthesia care	Post anaesthesia status is monitored and documented			RR/SI	Check for anaesthetic notes & post operating instructions in post operative room & area
Standard E15	**Facility has defined and established procedures of Surgical Services**					
ME E15.1	Facility has established procedures OT Scheduling	List of Elective Surgeries for the day is prepared and displayed outside OT			RR/SI	Surgery list is prepared in consonance with availability of the OT hours and patients requirement
		Surgery list is complete in all respect			OB/SI	Day, date and time of surgeries. Name, Age, Gender of patients. Clear description of the procedure

						(name of procedure which side,) Name of the surgeon & anesthetist. Major or minor case
		Operation list is sent to OT well in advance			RR/SI	By 12:00 hours, a day before the surgery
		Surgery list is informed to surgeon and ward sister.			RR/SI	Verify the surgery register/ email
		The operation list does not exceed the time allocated to it.			RR/SI	This does not refer to the time during an operation of an individual patient
ME E15.2	Facility has established procedures for Preoperative care	Patient evaluation before surgery is done and recorded			RR/SI	Vitals, Patients fasting status etc.
		Antibiotic Prophylaxis and Tetanus given as indicated			RR/SI	As per instructions of surgeon/anaesthetist
		Surgeries planned under local anaesthesia/Regional Block sensitivity test is done			RR/SI	lidocaine sensitivity test
		There is a process to prevent wrong			RR/SI	Surgical Site is marked before entering into OT

		site and wrong surgery				
		No shaving of the surgical site			SI/RR	Only clipping on the day of surgery in OT is done
		Skin preparation before surgery is done.			SI/RR	Bathing with soap and water prior to surgery in ward.
		Skin preparation is done as per protocol			RR/SI	Prepare the skin with antiseptic solution (Chlorhexidine gluconate and iodine), starting in the centre and moving out to the periphery. This area should be large enough to include the entire incision and an adjacent working area
		Draping is done as per protocol			SI/OB	Scrub, gown and glove before covering the patient with sterile drapes. Leave uncovered only the operative field and those areas necessary for the maintenance of anaesthesia

ME E15.3	Facility has established procedures for Surgical Safety	Surgical Safety Check List is used for each surgery			RR/SI	Check for Surgical safety check list has been used for surgical procedures
		Sponge and Instrument Count Practice is implemented			RR/SI	Instrument, needles and sponges are counted before beginning of case, before final closure and on completing of procedure & documented
		Adequate Haemostasis is secured during surgery			RR/SI	Check for functional Cautery, use of artery forceps and suture ligation techniques
		Appropriate suture material is used for surgery as per requirement			RR/SI	For closing abdominal wall or ligating blood vessel use non-absorbable sutures (braided suture, nylon, polyester etc). absorbable sutures in urinary tract. Braided Biological sutures are not used for dirty wounds, Catgut is not used for

						closing fascial layers of abdominal wounds or where prolonged support is required
		Check for suturing techniques are applied as per protocol			RR/SI	Braided sutures for interrupted stiches. Absorbable and nonabsorbable monofilament sutures for continuous stiches
ME E15.4	Facility has established procedures for Post- operative care	Post-operative monitoring is done before discharging to ward			RR/SI	Check for post-operative operation room/area is used and patients are not immediately shifted to ward after surgery
		Post-operative notes and orders are recorded			RR/SI	Post-operative notes contains Vital signs, Pain control, Rate and type of IV fluids, Urine and Gastrointestinal fluid output, other medications and Laboratory investigations
		Information & instructions are			RR/SI	Instructions given by

		given to nursing staff before shifting the patient to the ward from the OT				surgeon and anaesthetist
Standard E18	**Facility has established procedures for Intranatal care as per guidelines**					
ME 18.3	Facility staff adheres to standard procedures for routine care of newborn immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second prewarmed towel;			SI/OB	Check staff competence through demonstration or case observation
		Performs delayed cord clamping and cutting (1-3 min);			SI/OB	Check staff competence through demonstration or case observation
		Initiates breastfeeding soon after birth			SI/OB	Check staff competence through demonstration or case observation
		Records birth weight and gives injection vitamin K1.			SI/OB	Check staff competence through demonstration or case observation
ME E18.4	There is an established procedure for assisted and	***** Pre-operative care and part preparation			SI/RR	Check for Haemoglobin level is estimated, and arrangement of Blood,

	C-section deliveries per scope of services					Catheterization, Administration of Antacids Proper cleaning of perineal area before procedure with antisepsis
		Proper selection Anesthesia technique			SI/RR	Check Both General and Spinal Anesthesia Options are available. Ask for what are the criteria for using spinal and GA. Regional block and epidural anaesthesia used wherever required/indicated
	Provider follows SOP for PPIUCD insertion	Insertion and post - insertion tasks			SI/OB	Check provider follows standard procedure for PPIUCD Insertion in case of Intra-caesarean insertion.
* In case of surgeries of female and male sterilization standard procedures should be followed.						
		Intraoperative care			SI/RR	Check for measures taken to prevent Supine Hypotension

						(Use of pillow/Sandbag to tilt the uterus), Technique for Incision, Opening of Uterus, Delivery of Foetus and placenta, and closing of Uterine Incision
		Post-operative care			SI/RR	Frequent monitoring of vitals, Strict IO charting, Flat bed without pillow for SA, NPO depending on type of anaesthesia and surgery

Annexure 4.5: Drill case scenario on normal delivery, AMTSL and ENBC

Geeta 21 year old G2P1 presents at full term in labor with the onset of contractions approximately 6 hour ago. She is a booked case with history of regular ANC check-ups. Her records indicate she is carrying a singleton pregnancy in the vertex presentation. Her past medical history is uncomplicated, she has no allergies, and she takes no medications other than supplements. Her prenatal labs tests are within normal limits and her pregnancy has been uncomplicated.

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
Provider elicits present history, relevant obstetric, menstrual, medical and surgical history and reviews relevant medical records				Pain in abdomen, LMP 9 months back, G2P1, rest of the obstetric history - nothing significant, medical & surgical history is not significant	
Provider reviews investigation records			Hb, urine and others – within normal limits, HIV –ve, single fetus, vertex presentation, no cephalo pelvic disproportion	Investigations done at the start of pregnancy	
Provider conducts general physical examination/systemic examination – BP, pulse & temperature recorded, looks for Pallor, edema and examine RS, CVS, CNS			110/70, 98°F, 84/min, pallor & edema absent. Systemic examination- No significant findings		
Provider conducts per abdominal examination			Full term, cephalic presentation, contractions – 4 contractions per10 minutes, each lasting more than 40 sec. FHR – 140/min		

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
Provider conducts per vaginal examination with proper technique (after washing hands and wearing gloves in both hands)			Cervical dilatation – 5 cms, 80% effaced, Head at 0 station, membranes present		
Partograph plotting started			Rate of cervical dilatation is satisfactory, no fetal distress and all the maternal parameters are normal		
Preparation for conducting the delivery					
PPE available and provider wears them correctly (except gloves at this stage)					
Provider washes hands before doing PV examination using correct technique					
Provider wears sterile gloves using proper technique					
Provider switches on the radiant warmer/heat source at least half an hour prior to delivery					
Provider prepares delivery tray and baby tray					

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
Provider prepares newborn care corner with all essential equipment and supplies					
Provider loads uterotonic prior to conducting the delivery					
Was the client shifted to LR at appropriate time					
Provider conducts the delivery as per the facility specific protocols					
Provider placed two pre-warmed towels on mother's abdomen				Slowly start pushing the baby out	
Provider cleans perineum using proper technique (Apply nothing on model)					
Episiotomy done*					
Provider provides perineal support				Keep pushing the baby out	
Head flexion done				Push the head of the baby out	
Suction of baby after delivery of head done*					
Assisted the delivery of shoulders and body				Push the baby out completely	
Baby received on the mother's abdomen			Baby is crying and breathing well		
Active Management of Third Stage of labor and ENBC					
Provider rules out the presence of second baby					

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
Provider gives Injection Oxytocin 10 IU IM on anterolateral aspect of thigh or 3 tablets of Misoprostol of 200 mcg each orally (if oxytocin is NA) to mother					
Provider dries the baby rapidly with a clean dry towel from head to feet, discards the used towel/sheet and covers the baby including the head with a clean dry towel/Puts a cap					
Provider assesses the baby for breathing, color of extremities and muscular tone			Baby is crying breathing well		
Provider applies identification band on baby's wrist or ankle					
Provider performs delayed cord clamping: clamps & cuts cord by sterile instruments within 1-3 minutes of birth					
Provider places the baby in skin-to- skin contact on the mother's chest or abdomen					

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
Provider initiate breast feeding within 1 hour of delivery				Start breastfeeding	
Provider delivers the placenta by CCT only during contractions				Deliver the placenta	
Provider receives the placenta on a receiver					
Provider gives Uterine massage			Uterus contracted		
Check for labor room organization at the facility					
For mother • Delivery tray prepared along with followings • 2 perineal pads • 2 artery clamps • 1 bowl with gauze pieces for antiseptic cleaning • Sponge holder • Scissors for cord cutting • Episiotomy tray prepared • Uterotonic (to be used immediately after delivery)					
Receiver for placenta available					

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
For essential newborn care – check for availability of • Two pre-warmed clean towels • Cord ligature/clamp • Mucus extractor • Cap for baby • Identification band					
For NBR at NBC area – check for availability of • Radiant warmer/heat source • Shoulder roll • Mucous extractor • Bag and mask (Size 0, 1) • Oxygen supply • Stethoscope Working clock with second's hand					

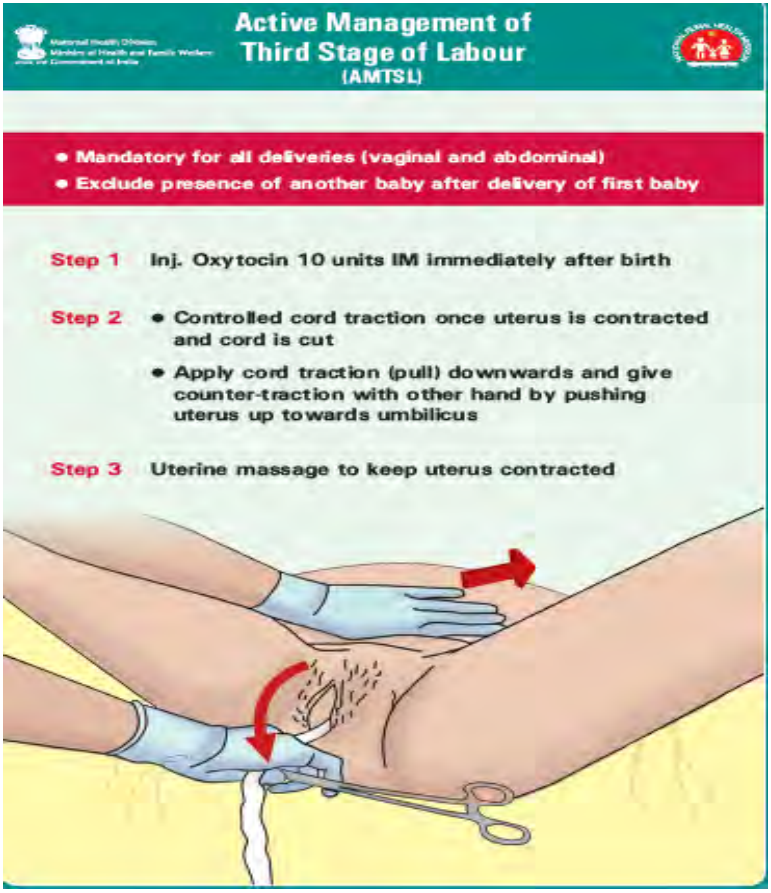
Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
For mother • Delivery tray prepared along with followings • 2 perineal pads • 2 artery clamps • 1 bowl with gauze pieces for antiseptic cleaning • Sponge holder • Scissors for cord cutting • Episiotomy tray prepared • Uterotonic (to be used immediately after delivery)					
Receiver for placenta available					
For essential newborn care – check for availability of • Two pre-warmed clean towels • Cord ligature/clamp • Mucus extractor • Cap for baby • Identification band					

Observation	Yes	No	Prompts for the observer/standardized client	Instruction for standardized client	Remarks
For NBR at NBC area – check for availability of • Radiant warmer/heat source • Shoulder roll • Mucous extractor • Bag and mask (Size 0, 1) • Oxygen supply • Stethoscope • Working clock with second's hand					
For mother • Delivery tray prepared along with followings • 2 perineal pads • 2 artery clamps • 1 bowl with gauze pieces for antiseptic cleaning • Sponge holder • Scissors for cord cutting • Episiotomy tray prepared • Uterotonic (to be used immediately after delivery)					

Note: The module on AMTSL and on ENBC on the Safe Delivery App can be used either BEFORE the drill as preparation, DURING the drill as available job aid, or AFTER the drill for assessment and further learning – or a combination.

Active Management of Third stage of labour (AMTSL)

- Explain the importance and rationale of performing AMTSL in order to reduce the possibility of developing postpartum hemorrhage
- Demonstrate the steps of AMTSL using following protocol poster



Important considerations

Avoid the below mentioned unnecessary and harmful practices during delivery, ENBC and AMTSL for better maternal and newborn outcome:

1. Do NOT shave the perineum.
2. Do NOT induce or augment the labor without proper indication and back-up for caesarean section.
3. Do NOT perform routine catheterization.
4. Do NOT give enema unless rectum is fully loaded.

5. Do NOT do routine episiotomy unless indicated.
6. Do NOT sweep the vagina and cervix.
7. Do NOT give fundal pressure.
8. Do NOT wipe off the greasy vernix from baby's body as it acts a protective shield to prevent the baby from hypothermia.
9. Inj. Oxytocin is the preferred uterotonic and methyl ergometrine should not be used routinely.
10. Do NOT milk the umbilical cord as it causes hemolysis and jaundice in the baby.
11. Keep the cord dry.
12. Do NOT bathe the baby for at least 24 hours for a term, and 7 days for a low birth weight/preterm baby to prevent hypothermia.
13. Do NOT pat on the back by hanging the baby upside down. It may lead to intracranial hemorrhage.
14. Do NOT wait for signs of separation before doing CCT. Wait for uterine contractions and see if the cord is lengthening on gentle traction with counter traction.
15. Do NOT do CCT in a relaxed uterus.
16. The other hand in CCT is meant for counter traction and not massage or helping the placenta to come out.
17. Do NOT explore the uterus after delivery of the placenta, as it is painful and may lead to a shock or infection.

Annexure 4.7 : Rational use of uterotonics

Discuss with the staff the current practices of use of uterotonics

Do's

FRU/DH	SC/PHC
• Use oxytocin as a part of AMTSL for all cases just after delivery • Use oxytocin as a first line of management of PPH • Use misoprostol for AMTSL (600 mcg orally) and PPH management (800 mcg sublingually) if oxytocin is not available • Always store oxytocin with appropriate temperature management and save misoprostol from moisture • Induce labour only in cases of confirmed post term pregnancy (reached 41weeks), pre-labour rupture of membranes at term, dead/anomalousfoetus, eclampsia/severe preeclampsia, placental abruption • Use oxytocin only (IV infusion gradualdose increase) for induction of labour in case prostaglandins are not available • Use oral or low dose misoprostol for induction of labour only in indicated cases • Augment labour only in cases where there is a clear medical indication and the expected benefits outweigh the potential harms	• Use oxytocin (10 IU IM injection) as a part of AMTSL for all cases just after delivery in facilities where it can be used under cold chain • Use Misoprostol (600 mcg orally) for AMTSL in all cases in case Oxytocin is not available or cold chain can't be maintained • Use oxytocin as a first line of management of PPH if available and IV line facility is available • Use misoprostol for PPH management (800 mcg sublingually) if oxytocin is not available • Always store oxytocin with appropriate temperature management and save misoprostol from moisture

Don'ts

FRU/DH	SC/PHC
• Do not use methyl ergometrin in cases of pre-eclampsia/eclampsia or hypertension • Do not use Oxytocin as IV bolus • Do not use uterotonics for induction of labor in normal pregnancies at term • Do not use misoprostol for induction of labor in cases of previous caesarean sections • Do not augment labor in absence of prolonged labor and cases where uterine contractions are good • Do not augment labor using uterotonics in cephalopelvic disproportion, or any other reasons with a potential for obstruction of labour such as malpresentations or malposition, or presence of a scarred uterus	• Do not use methyl ergometrin in cases of pre-eclampsia/eclampsia or hypertension • Do not use Oxytocin as IV bolus • Do not use uterotonics for induction of labor in normal pregnancies at term • Do not attempt induction or augmentation of labour, refer such cases to FRU/District Hospitals

Annexure 4.8 Routine Assessment of Clinical Condition of Mother and New-born after Delivery

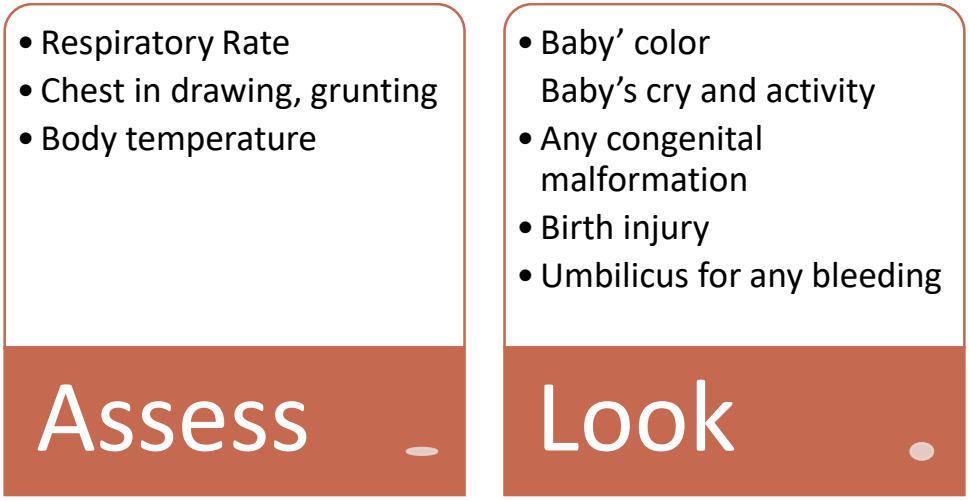
- Explain that the first 48 hours of the postpartum period, followed by the first one week, are the most crucial period for the health and survival of both the mother and her newborn.
- Routine assessment of the clinical condition of a mother and newborn will help in early identification of any potential complications, so appropriate action can be taken accordingly.

- Discuss the existing practices in assessing of clinical condition of mother and new-born after delivery, Such as
    - For how long mother and baby are being kept in labour room after delivery
    - When the breastfeeding is started
    - Weather mother and baby are assessed before shifting from laour room to PNC ward
- Explain that the mother and newborn have to be closely monitored for the first few hours after birth. Monitor the following every 15 minutes during first one hour, and then every 30 minutes during the second hour:
- Discuss care process for mother and newborn

Care of Mother

Check the mother every 15 minutes for the following (for 2 hours)	Encourage woman	Explain
•General condition, BP and pulse •Uterus, whether well-contracted or not •Perineum and vagina for amount of vaginal bleeding, conditions of suture or any swelling/ haematoma	•To maintain hydration •To Initiate breastfeeding within half an hour •To understand importance of colostrum feeding •To not to give any pre lacteal feed to baby	•Danger signs to mother and companion •(refer to SCC)

Care of the newborn



- Provide KMC in a small baby (<2000 grams). KMC can be started in the hospital as soon as the baby's condition permits (i.e. the baby does not require special treatment, such as oxygen or IV fluid).
- Initiate immediate breast feeding in the labor room.
- Administer injection Vitamin K1 to all the newborns in the labor room itself.

Annexure 4.8 Pre/Post Training Objective Structured Clinical Evaluation (OSCE)

Situation: The second stage of labour is just over. Now deliver the placenta by performing Active Management of Third Stage of Labor (AMTSL).

Observation: Observe if the participant is performing the following steps of AMTSL in the right order, using the right technique:

S.No.	Steps	Score	Remarks
1.	Preliminary step--rules out the presence of another baby by abdominal examination		
2.	Administers uterotonic drug—10 IU oxytocin IM OR Misoprostol 3 tablets (600ug) orally		
3.	Performs Controlled Cord Traction during contractions and delivers the placenta and membranes		
4.	Performs uterine massage		
5.	Examines the lower vagina and perineum		
6.	Examines placenta, membranes and umbilical cord A. Maternal surface of placenta B. Foetal surface C. Membranes D. Umbilical cord		
7.	Places instruments in 0.5% chlorine solution for 10 minutes for decontamination		
8.	Decontaminates or disposes the syringe and needle		
9.	Immerses both gloved hands in 0.5% chlorine solution		
10.	Washes hands thoroughly with soap and water and air dries		

Score of competency = 8/10 (80%) Participant's score = ____ /10 Result: Competent/Needs improvement (circle the appropriate result)

Annexure 4.8 OSCE Checklist for Conducting Normal Delivery (II stage of labor), ENBC

S.No.	Steps	Score	Remarks
1.	Keep the equipment, supplies and drugs necessary for conducting a delivery ready:		
2.	Allows the woman to adopt the position of her choice		
3.	Maintains privacy		
4.	Tells the woman and her support person what is going to be done and encourages them to ask questions		
5.	Listens to what the woman and her support person have to say		
6.	Provides emotional support and reassurance		
7.	**Delivery of the head once crowning occurs:** Keeps one hand gently on the head under the sub-pubic angle as it advances with the contractions to maintain flexion Supports the perineum with the other hand and covers the anus with a pad held in position by the hand Tells the mother to take deep breaths and to bear down only during a contraction		
8.	Feels gently around the baby's neck for the presence of the umbilical cord, checks: If the cord is present and is loose around the neck, delivers the baby through the loop of the cord, or slips the cord over the baby's head If the cord is tight around the neck, places two artery clamps on the cord and cuts between the clamps, and then unwinds it from around the neck		
9.	**Delivery of the shoulders and the rest of the body:** Waits for spontaneous rotation of the head and		

	shoulders and delivery of the shoulders. This usually happens within 1–2 minutes Applies gentle pressure downwards on the shoulder under the sub-pubic arch to deliver the top (anterior) shoulder Then lifts the baby up, towards the mother's abdomen, to deliver the lower (posterior) shoulder		
10.	Deliver rest of the baby's body follows smoothly by lateral flexion		
11.	Continues managing actively third stage of labor as per the checklist		

Essential newborn care (ENBC)

1.	Notes the sex and time of birth		
2.	Places the baby on the mother's abdomen in a prone position with face to one side		
3.	Looks for breathing or crying of the baby. If the baby is breathing or crying*****, proceeds immediately to dry the baby with a pre-warmed towel or piece of clean cloth. (Does not wipe off the white greasy substance–vernix, covering the baby's body)		
4.	After drying, discards the wet towel or cloth after wiping the mother's abdomen also Wraps the baby loosely in another clean, dry and warm towel. If the baby remains wet, it leads to heat loss		
5.	Completes drying and wrapping of the crying baby		

Score of competency = 9/11 (80%) Participant's score = ____ /11 Result: Competent/Needs improvement (circle the appropriate result)

Quality improvement cycle 5

Essential and emergency care of Newborn and Pre-term babies

Objective

To improve essential and emergency care of Newborn and Pre-term babies including management of birth asphyxia and timely initiation of breast feeding as well as KMC for preterm newborns in the facility

Facility level targets:

- To achieve 80% percentage or more breastfeeding within 1 hour or at least 30% increment from baseline.
- To achieve 0% neonatal asphyxia rate in Labor Room or at least reduction of 20% from baseline
- To achieve 80% or more antenatal corticosteroids administration rate in case of preterm labor or at least increment of 30% from baseline

Brief of the key activities for QI visits:

S. No.	Activities	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Meeting with medical superintendent or facility in charge and Quality circle	✓	✓	✓	✓
2	Assessment of labor room and maternity OT for essential and emergency care of Newborn and Pre-term babies using resource availability checklist, skills checklist and QI checklist	✓			✓
3	Introduce OSCE of the staff on Newborn Resuscitation (NBR)	✓			
4	Mentoring of all the labor room and maternity OT staff in the facility including assigning the SDA modules on newborn management and newborn resuscitation	✓	✓ (Need based)	✓ (Need based)	✓ (Need based)

S. No.	Activities	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
5	Conduct OSCE of the staff on Newborn Resuscitation (NBR)			✓	
6	Make plan for self-directed learning via Safe Delivery App	✓	✓ (Need based)	✓ (Need based)	✓ (Need based)
7	Follow up on action plan prepared during last visit	✓	✓	✓	✓
8	Facilitate quality circle to prepare an action plan for the current visit	✓			

Responsibilities of the key stakeholders

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Onsite training and handholding of quality circle and labour room and maternity OT staff for strengthening mechanisms within their facility on o Essential newborn care (ENBC) and newborn resuscitation (NBR) o Breastfeeding o Care of low birth weight babies • Facilitate action planning based on the identified gaps • Facilitate mechanisms for ensuring availability of resources for performing the practices related to care of Newborn and Pre-term babies	• Ensuring newborn care and resuscitation protocols are displayed • Ensure that LR and maternity OT staff is trained and skilled on providing essential and emergency care to newborn and low birth weight babies • Ensure uninterrupted supplies required for performing ENBC, NBR and KMC • Establish mechanisms and enabling environment for early initiation and promotion of breastfeeding in the facility

Key activities:

Preparation for QI visit: This task should be performed by the district coaching team before visiting the facility.

- Inform the medical superintendent or facility in-charge at least one day in advance about the visit

- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours
- Keep all the materials (assessment checklists, job aids incl. safe delivery app, training checklists, formats, action plan template, mannequins) required to do facility assessment and mentoring of the staff and any previous action plans ready for the visit

Activity outline for QI visits:

<table>
<tr><th rowspan="2">QI visit</th><th rowspan="2">Tasks to be facilitated by district coaching team</th><th colspan="2">Facility stakeholders to be involved in the task</th></tr>
<tr><th>Quality circle</th><th>Clinical Staff</th></tr>
<tr><td rowspan="3">1
(Day 0)</td><td>Activity</td><td colspan="2">Hold all staff meeting to orient the facility stakeholders on
• Accomplishments during previous cycle and major uncompleted activities
• Objectives of the current quality cycle</td></tr>
<tr><td></td><td>• Assessment of labor room and maternity OT for essential and emergency care of Newborn and Pre-term babies using
o Resource availability checklist
o QI cycle checklist*
• Quality circle meeting to prepare action plan</td><td>• Introduce OSCE of the staff on Newborn Resuscitation (NBR)
• Conduct drill on management of pre-term labor and birth asphyxia
• Mentoring on
o Essential newborn care
o Emergency care of pre-term babies
o Management of birth asphyxia/ Newborn resuscitation
o Timely initiation of breast feeding
o Kangaroo Mother Care (KMC)
o Assisted feeding
o Safe delivery app</td></tr>
<tr><td>Logistics required for the activity</td><td>• Checklist for assessment of resource availability
• QI cycle checklist*
• Action planning template</td><td>• Mannequins – Mama Natalie, Neo Natalie, Preemie Natalie, Mama breast model
• Place for establishing OSCE station for newborn resuscitation
• OSCE sheet for NBR (1 for each service provider)</td></tr>
</table>

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
	Creating enabling environment	• Follow up of action plan of previous visit • Preparation of an action plan based on the gaps identified through assessment and mentoring during current visit	• Safe Delivery App: Modules on ENBC, Newborn Resuscitation, Low Birth Weight (The App to be downloaded on facility tablet and in the mobile phones of the staff) • KMC pouch • Algorithm for Newborn resuscitation (NBR) • All equipment for ENBC, NBR and KMC available and functional • Checklist for NBR displayed in LR and Maternity OT. • Privacy in PNC ward for breastfeeding • Relevant IEC material displayed in admission area, LR, maternity OT and ANC and PNC wards • Baby friendly hospital guidelines displayed in the OPD area • No baby cradles in the facility • Prepare facility self-learning plan on My Learning on the SDA
2 (Day 15)	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks for sustainable impact • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Need based mentoring on practices imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool

QI visit	Tasks to be facilitated by district coaching team	Facility stakeholders to be involved in the task	
		Quality circle	**Clinical Staff**
			• Review records for improvement in documentation of practices
3 (Day 30)	**Follow up**	• Follow up meeting on action plan prepared during the previous visit • Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources • Update the action plan based on the findings from this visit	• Observe the practices and provide need based inputs. • Review records to ascertain the change in practices and discuss with staff for further improvement • Follow up on use of Safe Delivery App for self-learning and as reference tool • Conduct drill on management of pre-term labor and birth asphyxia
4 (Day 45)	**Follow up and reassessment**	• Reassessment of labor room and maternity OT for infection control practices to ascertain improvement using o Resource availability checklist o QI cycle checklist* • Share the change in scores of standards and OSCE assessment with the quality circle during the meeting • Prepare a plan for the activities that need further improvement.	• Reinforce the significance of following standard procedures • Follow up on use of Safe Delivery App for self-learning and as reference tool

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

First visit (Day 0)

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Activities to be completed during the visit	Response	Remark
1	Meeting with medical superintendent or facility in-charge	☑ ☒	
2	Assessment of labor room and maternity OT for essential and emergency care of Newborn and Pre-term babies using resource availability checklist, checklist for practices assessment performed and QI checklist	☑ ☒	
3	Introduce OSCE on Newborn Resuscitation –NBR (Annexure 5.5)	☑ ☒	
4	Drill on management of pre-term delivery and birth asphyxia case	☑ ☒	
5	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
6	Create plan for self-learning via. Safe Delivery App	☑ ☒	
7	Follow up on action plan prepared during last visit	☑ ☒	
8	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and quality circle

Hold a meeting with medical superintendent or facility in charge and quality circle to discuss the objectives and activities planned for the visit and for next 2 months.

Step 2: Assessment of labor room and maternity OT for essential and emergency care of Newborn and Pre-term babies and low birth weight babies

Visit labor room and maternity OT along with facility Quality Circle and perform the assessment using resource availability checklist (Annexure 5.1), checklist for practices assessment performed (Annexure 5.2) and QI checklist (Annexure 5.3). Use the gaps identified during this assessment for action planning with quality circle.

Step 3: Introduce OSCE to labor room and maternity OT staff on NBR

Establish station for performing OSCE on newborn resuscitation.

Introduce OSCE to the participants using OSCE sheet for NBR. Share the sheet & process with the staff. This will help them recognize the need for mentoring support. This exercise will also help the coaching team to understand current practices and knowledge of staff regarding the resuscitation process. They will be able to address weaker areas during mentoring session. **Use the module on Newborn Resuscitation on the Safe Delivery App for self-study after the OSCE**

Step 4: Mentoring of labor room and maternity OT staff

- Engage all the available staff during mentoring session
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include relevant challenges in action plan.
- Motivate the staff to continue good practices demonstrated and identify challenges in translation of learned skills into practices

Mentoring Session Outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
1	**Pre-term and birth asphyxia drill**	45 min	• Mannequins – Mama-Natalie, Preemie Natalie, Neo-Natalie • Case scenario and checklist for conducting the drill (Annexure 5.5)	Drill followed by debriefing and practice by each service provider	**Refer the Instructions for Drill**

			• Safe delivery app		
2	**Preventing Prematurity Related Complications**	20 min	• Use of antenatal corticosteroids • Flow chart for antennal corticosteroid administration (Annexure 5.6) • Safe delivery app	Facilitated discussion	• Review the existing use of ANC at the facility. • Discuss the benefits of giving ANC to preterm babies.
3	**Essential New-born Care (ENBC)**	15 min	• Neo Natalie • Towels • Vitamin K1 (Annexure 5.7) • Safe delivery app	Demonstration	• Ask the service providers about importance of ENBC • Review the current practices and explain the importance of ENBC with the help of <u>demonstration</u>
4	**New-born Resuscitation (NBR)**	15 min	• Mannequins – Mana Natalie, Neo Natalie, Preemie Natalie, Mama breast model • Algorithm for neonatal resuscitation • Checklist for neonatal resuscitation (Annexure 5.8) • Safe delivery app	Drill followed by debriefing and practice by each service provider	**Refer the Instructions for Drill**

5	**Breastfeeding**	15 min	• Mama Breast model (Annexure 5.9) • Safe delivery app	Demonstration followed by discussion	• Ask the service providers about importance of Breastfeeding • Demonstrate the entire process as per the checklist and explaining steps
6	**Care of the babies with Small Size at Birth and Kangaroo Mother Care (KMC)**	30 min	• Preemie Natalie • KMC pouch (Annexure 5.10) • Safe delivery app	Demonstration	• Review the existing care given to small size at birth or pre term babies.
7	**Assisted feeding for babies with small size at birth**	15 min	• Preemie Natalie (Annexure 5.11) • Safe delivery app	Demonstration	• Ask the service providers about the process of feeding • Demonstrate the entire process as per the checklist explaining steps
8	**Prevention of hypothermia in newborn**	20 min	• Annexure 5.12 • Safe delivery app	Facilitated discussion	• Review the knowledge of service providers regarding prevention of Hypothermia • Discuss Prevention of hypothermia in newborn
9	**Prevention and management of neonatal sepsis**	20 min	• Annexure 5.13 • Safe delivery app	Facilitated discussion	• Ask the service providers what could be done to prevent sepsis • Discuss prevention and management of neonatal sepsis

Step 5: Facilitate quality circle to prepare an action plan

In consultation with quality circle, based on the gaps identified during assessment and mentoring processes prepare a standard wise action plan as below:

Action plan for labor room

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 15 (Completed/partially completed/not completed)
E18 : Facility has established procedures for Intranatal care as per guidelines					
E19 : The facility has established procedures for postnatal care as per guidelines					

Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 15 (Completed/partially completed/not completed)
E18 : Facility has established procedures for Intranatal care as per guidelines					
E19 : The facility has established procedures for postnatal care as per guidelines					

2nd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for emergency care of Newborn and Pre-term babies using resource availability checklist, skill checklist and QI checklist	☑ ☒	
3	Follow up on action plan prepared during last visit	☑ ☒	
4	Mentoring of all the labor room and maternity OT staff in the facility (Need based)	☑ ☒	
5	Follow-up on self-directed learning via Safe Delivery App	☑ ☒	
6	Meeting with quality circle to update action plan	☑ ☒	

3rd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Follow up on action plan prepared during last visit (Need based)	☑ ☒	
3	Mentoring of all the labor room and maternity OT staff in the facility (As per the plan)	☑ ☒	
4	Follow-up on self-directed learning via Safe Delivery App	☑ ☒	
5	Meeting with quality circle to update action plan	☑ ☒	

Major activities to be conducted during both the visits:

- Meet medical superintendent or facility in-charge, discuss status of relevant actions based on previous action plan, objectives of the current visit and activities planned for the day.
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in translation of learned skills into practices
- Follow up on self-learning via Safe Delivery App
- Once mentoring is finished, hold meeting with the quality circle
- Appraise the team on improvements in practices in the labour room since previous visit

- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 0) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Follow up on action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.
- Conduct OSCE as per the annexures

4th visit (Day 45)

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Follow up on action plan prepared during last visit	☑ ☒	
3	Assessment of labor room and maternity OT for emergency care of Newborn and Pre-term babies using resource availability checklist and QI checklist	☑ ☒	
4	Follow-up on self-directed learning via Safe Delivery App	☑ ☒	
5	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labour room and maternity OT along with facility Quality Circle and reassess the facility using same resource availability checklist (Annexure 5.1) and QI checklists (Annexure 5.2 and 5.3). Compare the scores of initial assessment and reassessment and share with labour room/maternity OT staff as well as with the quality circle
- Perform OSCE of LR staff (if not done in previous visit) available individually using OSCE sheet for NBR. Compare the scores of initial assessment and reassessment and identify the staff which needs further handholding.
- Review the practices and provide need based mentoring support
- Follow up on self-learning via Safe Delivery App
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 30) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. This action plan will be used during next Qi cycle till all the gaps are addressed.

Annexures

Annexure 5.1: Assessment of labor room and maternity OT for availability of resources and performance of practices emergency care of Newborn and Pre-term babies

Encircle appropriate: ☑ Available ☒ Not available

List of essential items

	Supply	Visit 1	Visit 4
1	Magnesium Sulphate (at least 20 ampoules)	☑ ☒	☑ ☒
2	Antibiotics for mother	☑ ☒	☑ ☒
3	Antibiotics for baby	☑ ☒	☑ ☒
4	Oxytocin (5/10 IU per ml)	☑ ☒	☑ ☒
5	Vitamin K (1mg/ml or 1 mg/0.5 ml)	☑ ☒	☑ ☒
6	IV Fluids	☑ ☒	☑ ☒
7	Antiretrovirals	☑ ☒	☑ ☒
8	Soap & Running water	☑ ☒	☑ ☒
9	Gloves	☑ ☒	☑ ☒
10	Uristick (for proteinuria and glucose)	☑ ☒	☑ ☒
11	Partograph	☑ ☒	☑ ☒
12	Cord clamps	☑ ☒	☑ ☒
13	Sterile scissors	☑ ☒	☑ ☒
14	Sterile Perineal Pads	☑ ☒	☑ ☒
15	Towels for receiving newborns	☑ ☒	☑ ☒
16	Disposable syringes and disposable needles	☑ ☒	☑ ☒
17	IV Sets	☑ ☒	☑ ☒
18	Corticosteroids (Inj. Dexamethasone)	☑ ☒	☑ ☒
19	Ambu bag for babies (240 ml) with both pre & term mask (size 0,1)	☑ ☒	☑ ☒
20	BP Apparatus	☑ ☒	☑ ☒
21	Stethoscope	☑ ☒	☑ ☒

22	Thermometer	☑ ☒	☑ ☒
23	Mucus extractor (Dee Lee`s/ Penguin)	☑ ☒	☑ ☒
24	Suction device (Mechanical/Electric)	☑ ☒	☑ ☒
25	Functional radiant warmer	☑ ☒	☑ ☒
26	Protocol posters displayed	☑ ☒	☑ ☒
27	Safe delivery app on facility tablet	☑ ☒	☑ ☒

Resource availability in labor room

S.No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Towels for receiving the baby	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Cord clamp	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	Baby weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Vitamin K1	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Antenatal corticosteroid (Dexamethasone / Betamethasone)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Ambu bag with size 0 and 1 mask	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Functional radiant warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Functional oxygen cylinder with wrench	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Mucous extractor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Clock with second hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Shoulder roll	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Stethoscope	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Posters regarding breastfeeding, management of pre-term labour, newborn resuscitation	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Syrup nevirapine	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Resource availability in maternity OT

S. No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Towels for receiving the baby	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Sterile scissors	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Cord clamp	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	Baby weighing scale	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Vitamin K1	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Antenatal corticosteroid (Dexamethasone / Betamethasone)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Ambu bag with size 0 and 1 mask	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Functional radiant warmer	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Functional oxygen cylinder with wrench	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Mucous extractor	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Clock with second hand	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Shoulder roll				
13	Gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Stethoscope	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Posters regarding breastfeeding, management of pre term labour, newborn resuscitation	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Syrup nevirapine	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Annexure 5.2: National Quality Assurance Standards checklist for labor room for emergency care of Newborn and Pre-term babies

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: Patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard E18	**Facility has established procedures for Intranatal care as per guidelines**					
ME 18.3	Facility staff adheres to standard procedures for routine care of new- born immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second pre- warmed towel			SI/OB	Check staff competence through demonstration or case observation
		Performs delayed cord clamping and cutting (1-3 min)			SI/OB	Check staff competence through demonstration or case observation
		Initiates breast-feeding soon after birth			SI/OB	Check staff competence through demonstration or case observation
		Records birth weight and gives injection vitamin K			SI/OB	Check staff competence through demonstration or case observation
ME 18.7	Facility staff adheres to standard protocols for Management of HIV in Pregnant Woman & Newborn	Provides ART for seropositiv e mothers/ links with ART center			SI/RR	Check case records and Interview of staff

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Provides syrup Nevirapine to newborns of HIV seropositive mothers			SI/RR	Check case records and Interview of staff
ME E18.8	Facility staff adheres to standard protocol for identification and management of preterm delivery	Correctly estimates gestational age to confirm that labour is preterm			SI/RR	Assessment and evaluation to confirm gestational age, administration of corticosteroid and tocolytoics for 24-34 weeks Magnesium sulphate given to preterm labour < 32 weeks
		Identifies conditions that may lead to preterm birth			SI/RR	(severe PE/E, APH, PPROM)
		administers antenatal corticosteroids in pre term labour and conditions leading to pre term delivery (24-34 weeks)			SI/RR	Review case records
ME 18.10	There is Established protocol for newborn resuscitation is followed at the facility	Facility staff adheres to standard protocol for resuscitating the newborn within 30 seconds			SI/OB	Performs initial steps of resuscitation within 30 seconds: immediate cord cutting and PSSR at radiant warmer

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Facility staff adheres to standard protocol for preforming bag and mask ventilation for 30 seconds if baby is still not breathing			SI/OB	Initiates bag and mask ventilation using room air with 5 ventilator breaths and continues ventilation for next 30 seconds if baby still does not breathe
		Facility staff adheres to standard protocol for taking appropriate actions if baby does not respond to bag and mask ventilation after golden minute			SI/OB	If baby still not breathing/ breathing well, continues ventilation with oxygen, calls or arranges for advanced help or referral
Standard E19	**The facility has established procedures for postnatal care as per guidelines**					
ME E19.1	Facility staff adheres to protocol for assessment of condition of mother and baby and providing adequate postpartum care	Performs detailed examination of mother			SI/RR/ PI	Check for records of Uterine contraction, bleeding, temperature, B.P, pulse, Breast examination, (Nipple care, milk initiation), Check for perineal washes performed
		Looks for signs of infection in mother and baby			OB/SI	Staff Interview
		Looks for signs of hypothermia in baby and provides appropriate care			RR/SI/	Skin to skin contact practice

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME E19.2	Facility staff adheres to protocol for counselling on danger signs, post-partum family planning and exclusive breast feeding	Staff counsels mother on vital issues			PI/SI	Counsels on danger signs to mother at time of discharge; Counsels on postpartum family planning to mother at discharge; Counsels on exclusive breast feeding to mother at discharge
ME E19.3	Facility staff adheres to protocol for ensuring care of newborns with small size at birth	Facilitates specialist care in newborn <1800 gm			SI/RR	Facilitates specialist care in newborn <1800 gm (seen by paediatrician)
		Facilitates assisted feeding whenever required			SI/RR/ PI	
		Facilitates thermal management including kangaroo mother care			SI/RR/ PI	Facilitates thermal management including kangaroo mother care
ME 19.4	The facility has established procedures for stabilization/ treatment/refer ral of postnatal complications	There is established criteria for shifting newborn to SNCU			SI/RR	Check if criteria has been defined and in practice by labour room staff

Annexure 5.3: National Quality Assurance Standards checklist for maternity OT for emergency care of Newborn and Pre-term babies

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard E18	**Facility has established procedures for Intranatal care as per guidelines**					
ME 18.3	Facility staff adheres to standard procedures for routine care of new-born immediately after birth	Wipes the baby with a clean pre-warmed towel and wraps baby in second pre- warmed towel;			SI/OB	Check staff competence through demonstration or case observation
		Performs delayed cord clamping and cutting (1-3 min);			SI/OB	Check staff competence through demonstration or case observation
		Initiates breast-feeding soon after birth			SI/OB	Check staff competence through demonstration or case observation
		Records birth weight and gives injection vitamin K1.			SI/OB	Check staff competence through demonstration or case observation
ME 18.7	Facility staff adheres to standard protocols for Management of	Provides ART for seropositive mothers/ links with ART center			SI/RR	Check case records and Interview of staff

	HIV in Pregnant Woman & Newborn	Provides syrup Nevirapine to newborns of HIV seropositive mothers			SI/RR	Check case records and Interview of staff
ME 18.10	There is Established protocol for newborn resuscitation is followed at the facility	New born Resuscitation			SI/RR	Ask Nursing staff to demonstrate Resuscitation Technique
Standard E19	**Facility has established procedures for postnatal care as per guidelines**					
ME E19.1	Post-partum Care is Provided to Mother	Prevention of Hypothermia			SI/RR	Skin contact, Kangaroo mother care, radiant warmer, warm clothes
		Initiation of Breastfeeding with in 1 Hour			PI/SI	Shall be initiated as early as possible and exclusive breast feeding
ME E19.4	Stabilization/ treatment/referral of post-natal complication	There is established criteria for shifting new born to SNCU			SI/RR	Only the new born requiring intensive care should be transferred to SNCU

Annexure 5.4: OSCE - Newborn Resuscitation

This OSCE sheet should also be used as checklist during the mentoring session

Case scenario: A newborn baby is just delivered on mother's abdomen. The baby is not crying and not breathing. How will you proceed?

S. No.	Task	Score		Remarks
		Day 0	Day 60	
1	Getting ready with: • Bag and mask (sizes '0' and '1') • Suction equipment • Radiant warmer or other heat source • 2 warm towels • Clock with seconds hand • Oxygen source • Gloves • Shoulder roll • Cord tie/ Cord clamp • Scissors • Stethoscope			
2	Dries baby with dry, warm towel, removes wet towel and assesses if baby is crying /breathing.			
3	If not crying, clamps and cuts the cord immediately			
4	Places the baby on a warm, firm flat surface (radiant warmer)			
5	**P**ositions the baby in slight neck extension using a shoulder roll **S**uctions mouth and nose **S**timulates the baby by gently rubbing the back twice **R**epositions the head			
6	Assesses breathing			
7	• If breathing well- provides observational care with mother • If not breathing well – o Applies appropriately sized mask* correctly o Initiates bag and mask ventilation using room air			

	o Gives 5 ventilatory breaths using room air and looks for chest rise			
8	If there is no chest rise after 5 breathes, takes corrective measures (Corrects the position / sucks mouth and nose / checks the seal / gives ventilation with increased pressure)			
9	If there is adequate chest rise, continues bag and mask ventilation for 30 seconds (breath- 2-3)			
10	Reassesses the breathing after 30 seconds of ventilation			
11	If still not breathing, calls for help**, continues bag and mask ventilation and asks trained help to assess the heart rate			
12	If heart rate is <100 / ≥100/ min and baby is still not breathing, continues bag and mask ventilation and connects oxygen. If help available, then he provides chest compression, intubation and medication			
13	If heart rate is ≥100 /min and baby is breathing well or at any point, if baby starts breathing, provides observational care with mother			
14	If advance help is not available & baby not breathing, then refers to higher center continuing bag and mask ventilation with oxygen			

*Mask size 0 for preterm and 1 for term baby

**Help: a person skilled to provide chest compression, intubation and medication. If trained help not available, prepare for referral continuing bag and mask ventilation until the referral facility is reached.

Score of competency = 12/14 (80%)

Note that it can be beneficial to review the module in the Safe Delivery App after the OSCE for self-study

For OSCE on Essential newborn care (ENBC) refer to Cycle 4

Annexure 5.5: Scenario and checklist for conducting drill on management of pre-term labor and birth asphyxia

Scenario for drill: Geeta 21 years old gravida 2 para 1 presents in labor with the onset of contractions approximately 6 hours ago. She is a booked case but not regular with her ANC check-ups. Her past medical history is uncomplicated, she has no allergies, and she takes no medications.

Checklist for drill

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
Provider elicits relevant obstetric, medical and surgical history and reviews relevant medical records					
Provider elicits and records H/O presenting complaints elicited and recorded				Pain in abdomen	
Provider elicits and records relevant menstrual history				Approx. 7 months back	
Provider elicits and records relevant obstetric history				G2P1, rest of the obstetric history - nothing significant	
Provider elicits and records relevant medical history				Not significant	
Provider elicits and records relevant surgical history				Not significant	
Provider reviews investigation records			Hb, urine and others – within normal limits, HIV –ve, Single fetus, Vertex presentation, no cephalo-pelvic disproportion		
Provider conducts general physical examination					
Provider records BP			110/70 mmHg		
Provider records temperature			98^0 F		
Provider performs RS, CVS,			Not significant		

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
CNS examination					
Provider conducts per abdominal examination					
Provider informs the client and birth companion of the procedure and takes consent					
Providers palpates abdomen and assesses the gestational age (GA) correctly – correlates LMP, fundal height and USG findings (if available)			**Preterm (GA 32 weeks),** presentation – cephalic, contractions – 3 contractions per 10 mins, each lasting for 30 secs		
Provider auscultates to elicit fetal heart rate (FHR)			FHR – 140/min		
Provider conducts per vaginal (PV) examination					
Provider informs the client and birth companion of the procedure and takes consent					
Provider washes hands before doing PV examination using correct technique					
Provider wears gloves in both hands with correct technique					
Provider follows proper technique of conducting PV examination including assessment for pelvic adequacy			Cervical dilatation – 4 cms, 80% effaced, head at 0 station, membranes present, adequate pelvis		
Provider starts plotting partograph			Rate of cervical dilatation is		

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
			satisfactory, no fetal distress and all the maternal parameters are normal		
Provider prepares for preterm delivery/ refers to higher center with appropriate management: - Administers the first dose of ANCS Dexamethasone 6 mg IM - Calls the doctor/ refers to higher center - Is aware of the complete course of ANCS in case of admission					
Preparation for conducting the delivery					
PPE available and provider wears them correctly (except gloves at this stage)					
Provider washes hands before doing PV examination using correct technique					
Provider wears sterile gloves using proper technique					
Provider switches on the radiant warmer/heat source at least half an hour prior to delivery					
Provider prepares delivery tray and baby tray					
Provider prepares new born care corner with all essential equipment and supplies					

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
Provider loads uterotonic prior to conducting the delivery					
Provider shifts the client to LR at or near full dilatation					
Provider conducts the delivery as per the facility specific protocols					
Provider places two pre-warmed towels on mother's abdomen				Slowly start pushing the baby out	
Provider cleans perineum using proper technique (Apply nothing on model)					
Provider performs episiotomy*					
Provider provides perineal support				Keep pushing the baby out	
Provider maintains flexion of the head				Push the head of the baby out	
Provider performs suction of mouth and nose after delivery of head done*					
Provider assists the delivery of shoulders and body				Push the baby out completely	
Provider receives baby on mother's abdomen					
Provider thoroughly dries the baby using the first towel on mother's abdomen. Removes wet towel and takes baby in dry towel			Baby is NOT crying		
If there are more than one provider then one provider performs AMTSL and other proceeds for NEW BORN RESUSCITATION (NBR)-Assesses breathing at every step, should be completed in 1 min consisting of 30 sec bag and mask ventilation, observer should take note of timings. If there is only single provider on duty then he/she proceeds for NBR and shout for help and assistance for AMTSL					

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
Provider immediately clamps and cuts the cord					
Provider shifts the baby to designated NBC area immediately					
Provider positions the baby with the use of shoulder roll			Baby is NOT breathing		
Provider performs suction of the baby's mouth followed by nose			Baby is NOT breathing		
Provider stimulates the baby by rubbing the back or flickering of sole			Baby is NOT breathing		
Provider repositions the baby and prepares for bag and mask ventilation			Baby is NOT breathing		
Provider completes above mentioned steps of NBR within 30 seconds			Baby is NOT breathing		
Provider starts Bag and mask ventilation with appropriate sized mask and give 5 ventilatory breaths using room air and ensures chest rise			Baby is NOT breathing		
If there is no chest rise after 5 breathes, provider takes corrective measures (Corrects the position / sucks mouth and nose / checks the seal / gives ventilation with increased pressure)					

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
If there is adequate chest rise, provider continues bag and mask ventilation for 30 seconds			Baby starts breathing		
Provider performs observational care (cap, ID band, ensure warmth and early initiation of breastfeeding/assisted feeding)					
Provider gives birth doses (BCG, Hepatitis B & Polio) to baby			**CONCLUDE DRILL**		
OR If the baby is still not breathing after 30 seconds of bag and mask ventilation, provider calls for help**, continues bag and mask ventilation and asks trained help to assess the heart rate			Baby is NOT breathing		
If advance help is not available and baby not breathing, then provider refers to higher center continuing bag and mask ventilation with oxygen			**CONCLUDE DRILL**		
OR If heart rate is <100 / ≥ 100 per min, provider continues bag and mask ventilation and connects oxygen. If help is available then provides chest compression, intubation			Baby starts breathing		

Observation	Yes	No	Prompts for the observer/ actor	Instructions for actor	Remarks
and medication					
Provider performs observational care (cap, ID band, ensure warmth and early initiation of breastfeeding/assisted feeding)					
Provider gives birth doses (BCG, Hepatitis B & Polio) to baby			**CONCLUDE DRILL**		
Check for respectful maternity care (RMC) and role of birth companion					
Provider keeps the client and birth companion informed at all times of the procedures and outcome of examination					
Provider maintains privacy of clients during all examinations					
Check for infection prevention practices					
Provider and other staff follow the guidelines for segregation of waste					
Provider and other staff follow the guidelines for segregation of waste					

Consider using the 3 newborn modules on Safe Delivery App prior to the drill as a preparation OR after the drill in order to help assess and re-cap correct protocols. Also consider that the Safe Delivery App can be available as a job aid to the clinical staff during the drill.

Annexure 5.6: Preventing Prematurity Related Complications

Introduction

Preterm babies are the babies delivered before completing 37 weeks of gestation. Deaths from prematurity related complications can be prevented by using antenatal corticosteroids, doing appropriate thermal management, providing need based assisted feeding and performing infection prevention practices.

This annexure describes the significance and process of administering antenatal corticosteroids to the mother before anticipated preterm birth.

Significance

The most common cause of death among preterm babies (less than 34 weeks) is Respiratory Distress Syndrome (RDS). This is an acute lung disease due to surfactant deficiency in the lungs (found among preterm babies), which leads to atelectasis and subsequent failure of gas exchange. RDS can largely be prevented by corticosteroid administration in pregnant women who present with preterm labor.

Preparation for Care

- Estimate the correct gestational age of the pregnant woman presenting with true labor pains.
- Ensure availability of Injection Dexamethasone.

Care Process

Indications:

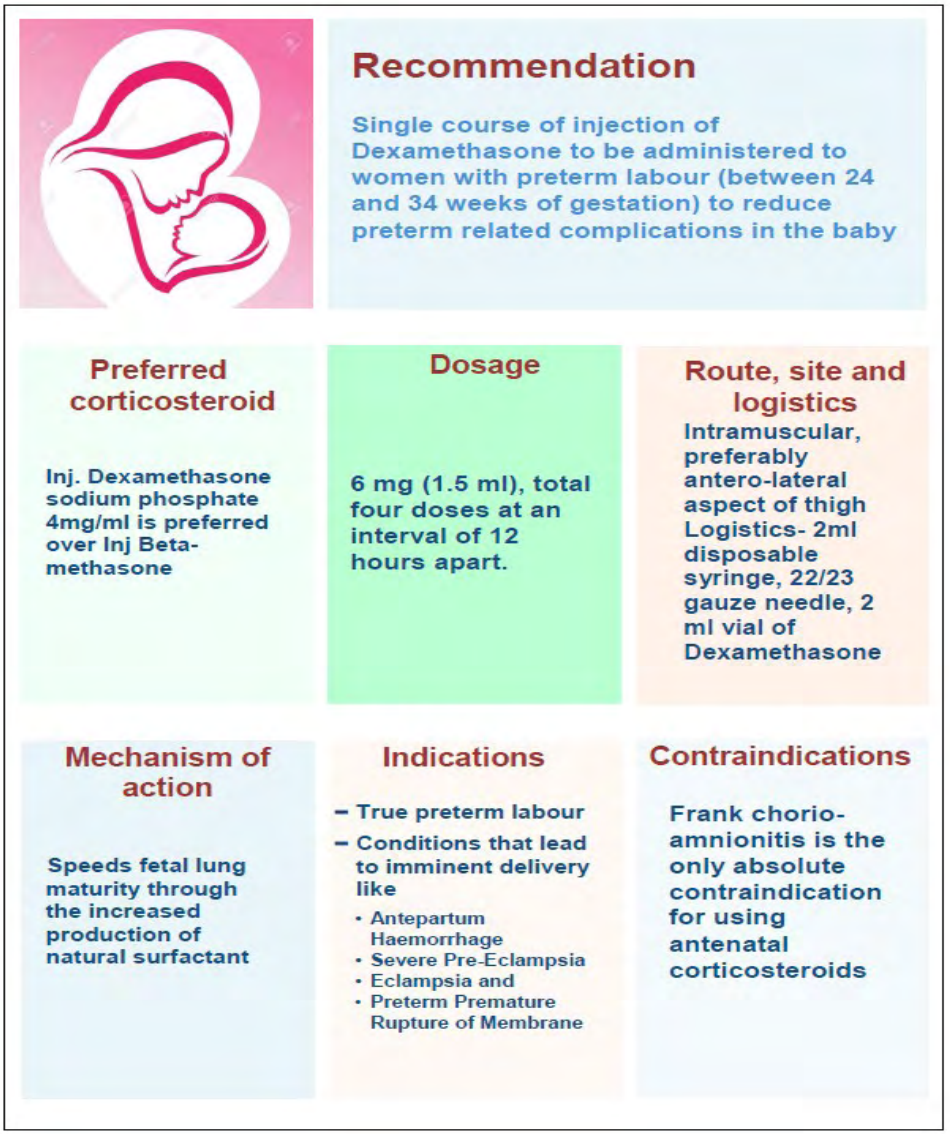
1. True preterm labor (between 24-34 weeks of gestation)
2. Conditions that lead to imminent delivery (between 24-34 weeks of gestation)
    - Antepartum haemorrhage
    - Preterm premature rupture of membranes
    - Severe pre-eclampsia
    - Eclampsia

Important considerations

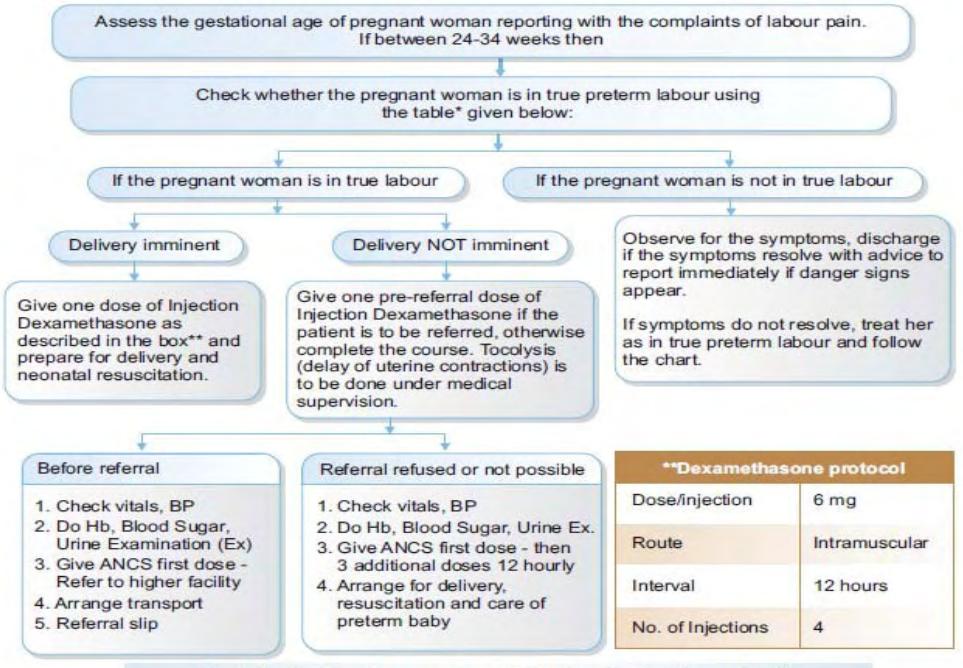
- Repeated courses or more frequent doses are not useful and therefore not recommended.
- If mother delivers before completion of the regimen, there is no need to give the remaining doses to her.
- Maternal diabetes, pre-eclampsia and hypertension are NOT contraindications for using injection corticosteroid in pregnant women.
- Antenatal Corticosteroid therapy has maximal effect if the fetus is delivered 24 hours after the last dose, and up to 7 days thereafter. Partial effect is evident within a few

hours prior to birth. Hence, even if delivery occurs during the treatment regimen, there are still benefits for baby. Antenatal corticosteroids have a role even if surfactant replacement is available.

- Oral preparations of steroids are not to be used.
- Chorioamnionitis is an **absolute contraindication** to administer antenatal corticosteroids- signs and symptoms of which are- fever, lower abdominal pain, foul smelling vaginal discharge, tachycardia, uterine tenderness and fetal tachycardia.



Flow Chart for Antenatal Corticosteroid (ANCs) Administration {24-34 Weeks gestational Age}



**Dexamethasone protocol	
Dose/injection	6 mg
Route	Intramuscular
Interval	12 hours
No. of Injections	4

Contraindication for use of ANCS is Frank Chorioamnionitis

*Symptoms of True and False Labour Pain	
TRUE Labour Pain	FALSE Labour Pain
1. Begins irregularly but becomes regular and predictable 2. Felt first in the lower back and sweeps around to the abdomen in a wave pattern 3. Continues no matter what the woman's level of activity 4. Increases in duration, frequency and intensity with the passage of time 5. Accompanied by 'show' (blood-stained mucus discharge) 6. Associated with cervical effacement and cervical dilatation	1. Begins irregularly but becomes remains irregular 2. Felt first abdominally and remains confined to the abdomen and groin 3. Often disappears with ambulation or sleep 4. Does not increase in duration, frequency or intensity with the passage of time 5. Show absent 6. Does not associate cervical effacement and cervical dilatation

Annexure 5.7: Essential Newborn Care

Introduction

Essential Newborn Care (ENBC) is care that every newborn baby needs irrespective of birthing place or person attending the birth (medical or paramedical personnel) and its size. ENBC should be done immediately after the baby is born and continued for at least the first 7 days after birth.

Benefits of ENBC

Following are the benefits of providing routine neonatal care at the time of birth (and for the first few weeks of life):

- Prevention of hypothermia
- Establishment of respiration and ensuring normal breathing
- Provision of mother's milk
- Protection from infection
- Other- care of eye, cord and provision of Injection Vitamin K prophylaxis

Care Process

For all newborns crying and breathing spontaneously, follow ENBC practices, the key components of which are:

1. Call out the time of birth.
2. Receive the baby onto a clean, dry and warm towel or cloth.
3. Place the baby prone on the mother's abdomen with face turned to one side.
4. Assess the baby's breathing while drying*.
5. If breathing normally, immediately dry the baby and discard the first towel.
6. Cover the baby with second clean, dry and warm towel or piece of cloth.
7. Clamp and cut the umbilical cord when the cord pulsation stops, or in 1-3 minutes (delayed cord clamping).
8. Leave the baby between the mother's breasts to start skin-to-skin care. Cover the mother and baby with a warm cloth
9. Cover the baby's head with a cap.
10. Place an identity label on the baby.
11. Encourage the initiation of breastfeeding.
12. Administer injection vitamin K intramuscular to baby according to weight.
13. Record baby details such as time of birth, weight, gender and any other relevant information.

** If the baby is not crying or breathing well, perform resuscitation.*

Care of the eyes: There is no need for any regular eye care unless there are signs of infection**.** Some neonates may develop persistent epiphora (watering) due to blockage of nasolacrimal duct by epithelial debris. The mother should be advised to massage the either side of the nose adjacent to the medial canthus 5 to 8 times daily, each time before she feeds the baby. Avoid the use of kajal as it may transmit infections, cause injury or even cause lead poisoning.

Care of umbilical cord: Umbilical cord should be clamped between 1 and 3 minutes of birth. Umbilical cord should be clamped/tied by a sterile clamp or thread at approximately 2-3 cm and 5 cms from the baby's abdomen and cut between the ties with a sterile, clean blade. If there is oozing, a second tie should be placed between the baby's skin and the first tie. The cord should be inspected frequently during the initial few hours after birth for early detection of any oozing from the cord. Nothing should be applied to the cord stump.

Injection Vitamin K1: Injection Vitamin K1 should be administered intramuscularly on the anterolateral aspect of the thigh using a 26-gauge needle and 1ml syringe. Dose to be used is 0.5 mg for babies weighing less than 1000 gm and 1.0 mg for those weighing above a 1000 gm at birth.

Use of Injection Vitamin K Prophylaxis in Newborns

Who
will receive?

All newborns delivered in the facilities at all levels (both public and private)

Preparation
to be used

Injection Vitamin K1 (Phytonadione):

a) 1 mg/1 ml
b) 1 mg/0.5 ml

Dose
to be given

- Birth weight 1000 gm or more: 1 mg
- Birth weight less than 1000 gm: 0.5 mg

Site and route
of injection

- Antero-lateral aspect of the thigh, intramuscular injection

Who
will give?

- Medical Officer, staff nurse or ANM

Where
it will be given

- In labour room
- It can be given in post-natal ward if missed in labour room
- In case of referral the injection should be given at the SNCU/NBSU

When
it will be given

- Soon after delivery, ensuring skin-to-skin contact with mother and initiation of breast feeding
- Not later than 24 hours of birth

Logistics
required

- 26 gauze needle and 1 ml syringe

Storage

- Room temperature in a dry place

Recording

- Labour room register
- Case sheet
- Referral slips
- Discharge ticket of the newborn

Important considerations while performing ENBC

Dos	Don'ts
• All babies are to be placed on mother's abdomen • Cut cord between 1-3 min (i.e. delayed cord clamping). • Always keep baby and mother together • Skin-to-skin contact and initiate breastfeeding • Injection vitamin K1 is to be given to all the newborns • Delay first bath by at least 24 hours	• Don't perform routine suction unless the mouth or nose is blocked • Don't cut the cord immediately after birth. • Don't keep every baby in the warmer, and hand it over to the birth companion. • Don't feed the baby pre-lacteal feeds • Don't wipe off vernix or bathe the newborn till discharge

Annexure 5.8: Newborn Resuscitation (NBR)

Introduction

Neonatal resuscitation means to revive or restore life to a baby from the state of birth asphyxia. The golden minute resuscitation is a set of sequential activities performed to stimulate and assist breathing within the first minute of birth in babies who do NOT cry (breathe) spontaneously at birth.

Significance

Timely intervention by care providers working in the labor room by performing **basic newborn resuscitation within golden minute** can reduce neonatal mortality.

Preparation for Care

Ensure availability of a functional newborn care area within the labor room which should have all the neonatal resuscitation care equipment available in functional state, viz.

- Bag and mask with "0" and "1" mask
- Suction device- De Lee's (commonly used) or
- Penguin
- Radiant warmer
- Two pre-warmed baby receiving
- Towels for drying the baby
- Clock with second hand
- Oxygen source with
- Newborn mask

- Gloves
- Shoulder roll
- Cord clamp or tie
- Sterile Scissors

Important considerations

- Anticipate and prepare for resuscitation immediately in the labor room for all deliveries
- In case more than one baby is expected prepare accordingly.
- If possible, call for help whenever a baby doesn't cry spontaneously at birth
- Ensure effective chest raise while ventilating with the bag and mask

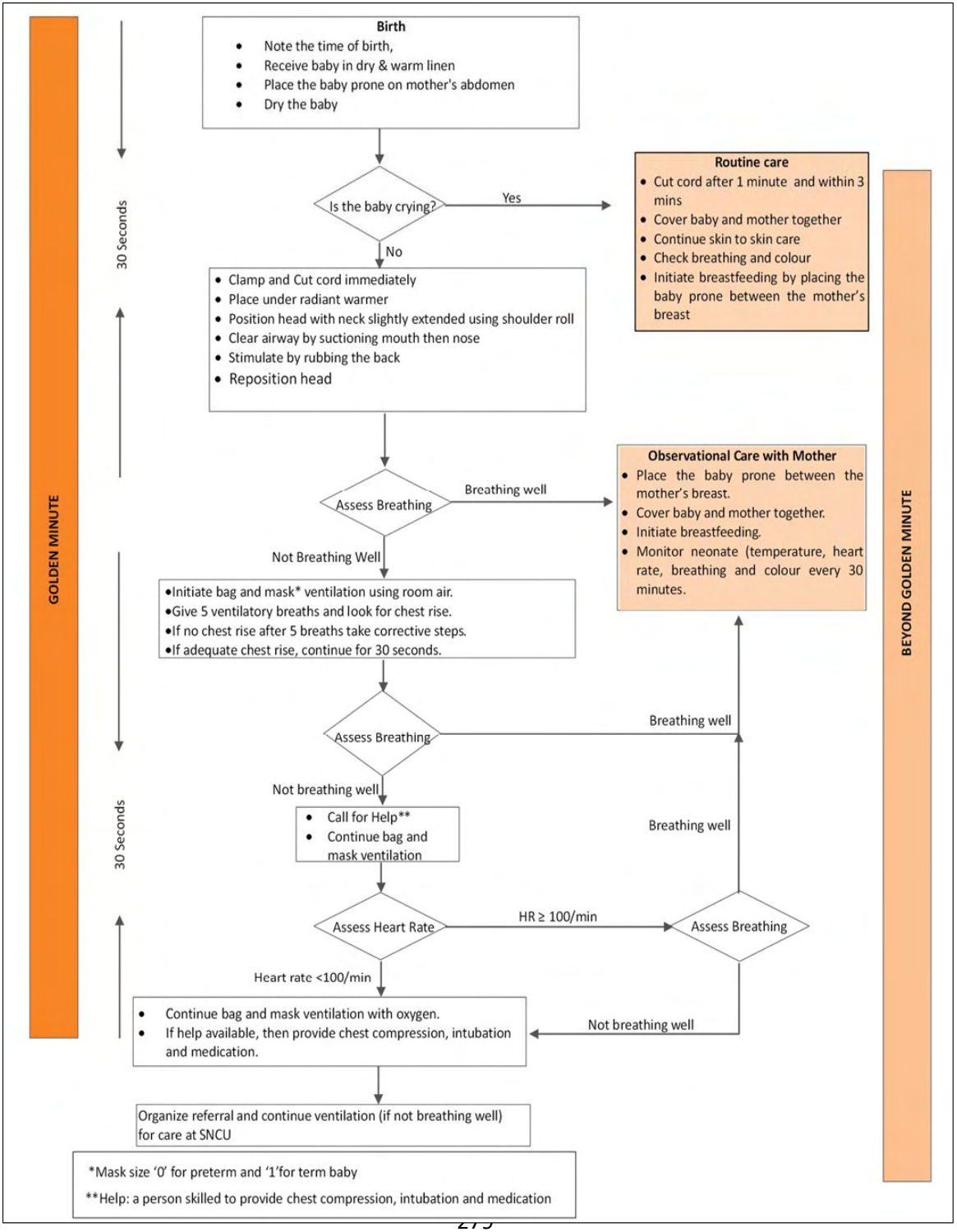
Reasons for inadequate or absent chest movements are:

- *The seal is inadequate*- Re-apply the mask to the face and try to form a better seal.
- T*he airway is blocked*- Check the baby's position, extension of neck and mouth, and oropharynx and nose for secretions. If there, correct the position or clear the secretions.
- *Not enough pressure is being given*- Try ventilating with the baby's mouth slightly open. Increase the pressure to squeeze the bag until there is observable movement of chest.

Not recommended practices during resuscitation are:

- Routine suction of the newborn at birth or later unless copious secretions are seen
- Stimulation of the newborn by slapping; postural drainage, and slapping the back; squeezing the chest to remove secretions from the airway.

Checklist for Newborn resuscitation: (OSCE sheet for NBR as per annexure 5.5)


GOLDEN MINUTE
BEYOND GOLDEN MINUTE
30 Seconds
30 Seconds
Birth
Note the time of birth,
Receive baby in dry & warm linen
Place the baby prone on mother's abdomen
Dry the baby
Is the baby crying?
Yes
Routine care
Cut cord after 1 minute and within 3 mins
Cover baby and mother together
Continue skin to skin care
Check breathing and colour
Initiate breastfeeding by placing the baby prone between the mother's breast
No
Clamp and Cut cord immediately
Place under radiant warmer
Position head with neck slightly extended using shoulder roll
Clear airway by suctioning mouth then nose
Stimulate by rubbing the back
Reposition head
Assess Breathing
Breathing well
Observational Care with Mother
Place the baby prone between the mother's breast.
Cover baby and mother together.
Initiate breastfeeding.
Monitor neonate (temperature, heart rate, breathing and colour every 30 minutes.
Not Breathing Well
•Initiate bag and mask* ventilation using room air.
•Give 5 ventilatory breaths and look for chest rise.
•If no chest rise after 5 breaths take corrective steps.
•If adequate chest rise, continue for 30 seconds.
Assess Breathing
Breathing well
Not breathing well
Call for Help**
Continue bag and mask ventilation
Breathing well
Assess Heart Rate
HR ≥ 100/min
Assess Breathing
Heart rate <100/min
Continue bag and mask ventilation with oxygen.
If help available, then provide chest compression, intubation and medication.
Not breathing well
Organize referral and continue ventilation (if not breathing well) for care at SNCU
*Mask size '0' for preterm and '1'for term baby
**Help: a person skilled to provide chest compression, intubation and medication

Annexure 5.9: Breastfeeding

Breast milk is the best and only needed feed for a newborn baby. Initiate breastfeeding as soon as possible (within an hour) after birth. Newborn baby is mostly in an alert and active stage immediately after birth and therefore this period must be used for initiation of breastfeeding.

Significance

Early initiation and exclusive breastfeeding helps in significant reduction of maternal and newborn mortality. Colostrum is rich in antibodies and helps in reduction of newborn infections. Breastfeeding also helps in reducing the chances of hypothermia and hypoglycemia in the baby. Oxytocin release while breastfeeding helps in uterine contraction and hence less amount of postpartum blood loss.

Care Process

Correct positioning	***Good attachment***
Describe and ensure correct position for breastfeeding (as mentioned below): • Baby's body is well supported • The head, neck and body of baby are kept in the same plane • Entire body of baby faces mother • Baby's abdomen touches mother's abdomen	Describe and ensure good attachment (as mentioned below): • Baby's mouth is wide abdomen • Lower lip is turned out • Chin is touching mother's breast • Larger area of areola is visible above than below

Benefits of breastfeeding

Following are the benefits of breastfeeding:

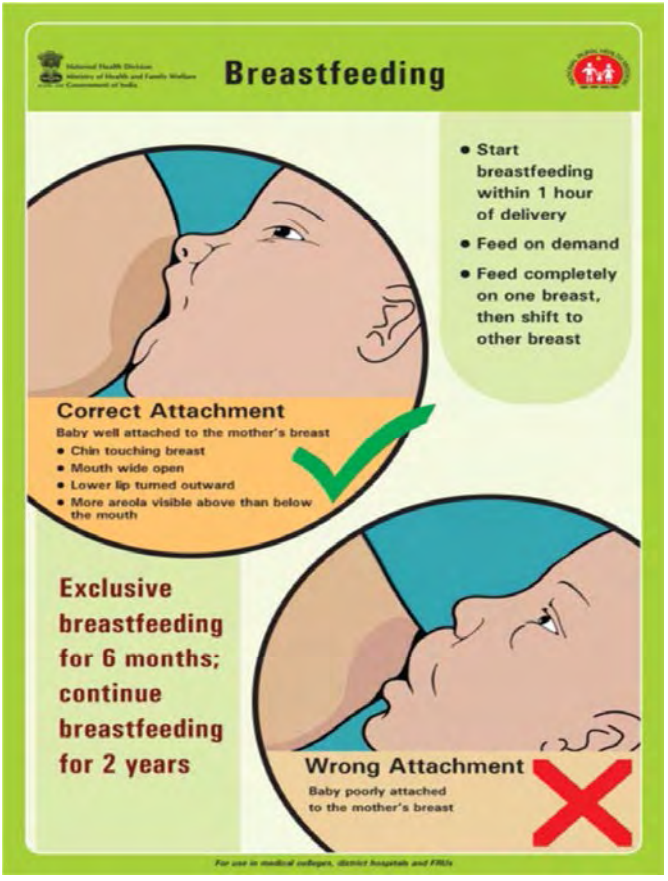
Benefits to mother	Benefits to baby	Benefits to family and community
• Improves emotional bonding • Readily available and affordable • Promotes family planning • Reduces risks of breast and ovarian cancer	• Ideal food for newborns and infants • Safe and contains antibodies • Prevents hypothermia in newborns • Reduces chances of overweight, obesity and type-2 diabetes later in life	• Saves money • Promotes family planning • Decreases need for hospitalization • Contributes to maternal and child survival

• Helps women return to their pre-pregnancy weight faster • Lowers rates of obesity	• Associated with better brain growth and improved intelligence	

Important considerations:

Breastfeeding is considered adequate if the baby:

- Passes urine 6-8 times in 24 hours.
- Sleeps for 2-3 hours after feeds.
- Gains weight adequately (10-15g/kg/day).



Annexure 5.10: Care of the Babies with Small Size at Birth

Introduction
Babies with small size at birth include babies who are small for gestational age or are born preterm (before 37 weeks). Such babies require special care after birth to prevent life threatening complications.

Significance
Complications related to prematurity are the leading causes of deaths amongst newborns worldwide. These babies are at high risk of hypothermia, infections, asphyxia and feeding difficulties. Most of the deaths due to complications related to prematurity can be averted through special care of these babies.

Care Process
Special care for babies with small size at birth includes:

- Thermal management including KMC
- Assisted feeding
- Prevention and management of infections
- Prevention and management of complications such as asphyxia, hyperbilirubinemia, neonatal encephalopathy

The first two components of special care are described below.

Thermal Management
All the necessary actions for prevention of hypothermia amongst newborns as described under the section *"preventing complications in newborns"* should be performed in these cases. Special care for these newborns includes Kangaroo Mother Care.

Kangaroo Mother Care (KMC)
Babies with a birthweight between 1800-2500 gm are generally stable at birth. Initiate KMC immediately after birth in such babies. Babies with weight less than 1800 gm will require care at a specialized center and switching to KMC once they are stable.

Components of KMC

- Early and prolonged skin-to-skin contact with the mother (or a substitute care giver).
- Exclusive and frequent breast feeding.

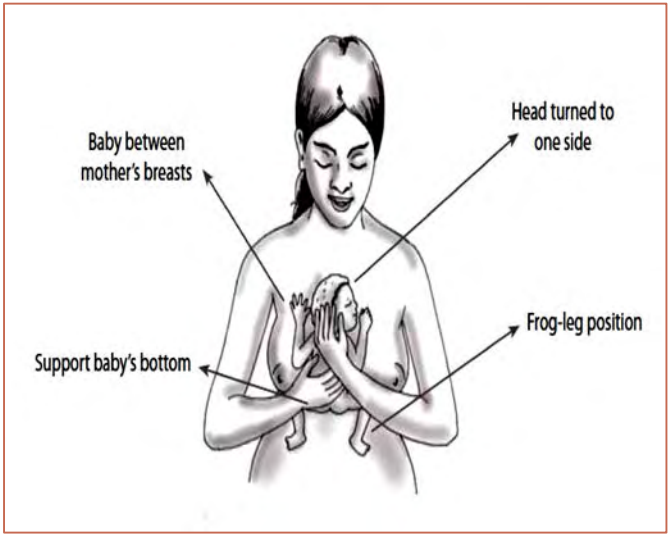
Preparation

- A KMC supporter wrap or a suitable piece of cloth for wrapping the newborn in touch with the mother.

- Clothing for the infant—cap, socks, disposable diapers, and front-open sleeveless shirt or '*jhabala*' made of cotton.

Benefits of KMC

- Reduces risk of hypothermia.
- Promotes lactation and weight gain.
- Lowers the chance of infection in newborn and thereby reduces hospital stay.
- Better bonding between the mother and newborn.



Process

KMC position and handling:

- Place the infant in a way that its abdomen is at the level of the mother's epigastrium.
- Support the infant from the bottom with a sling/binder.
- Help the mother to adopt a semi-reclining position (40-45 degree) while sleeping. This can be achieved with the help of 3-4 pillows on the hospital bed or special semi-reclining chairs.
- Inform the mother that she can walk, stand, sit, or engage in different activities while providing KMC

Duration of KMC

- The minimum duration of a KMC session is at least one hour.
- Remove infant from skin-to-skin contact only for changing diapers and clinical assessment.
- Continue KMC till the baby reaches term or weight is more than 2500 gm.

Feeding during KMC

- Explain the mother how to breastfeed while the infant is in KMC position.
- Tell the mother to breastfeed at fixed intervals of two hours and not on demand initially, to ensure an adequate and assured minimal intake.
- Explain the mother that holding the infant near the breast stimulates milk production.
- Tell the mother that she may express milk while the infant is still in KMC position.

Annexure 5.11: Assisted feeding for babies with small size at birth

Small babies may require assisted feeding to ensure adequate nutrition. Preterm infants have feeding difficulties due to inability to coordinate sucking, swallowing and breathing; immature and sluggish gut; systematic illness. Full-term small-for-gestational age infants suffer from poor attachment and sucking efforts on breast, poor swallowing, vomiting, regurgitation or abdominal distension if they are weak or sick.

Process

Assisted feeding technique may differ according to the weight and age of the baby.
The different assisted feeding techniques are as below:

- *Katori*-spoon or paladai feeding
- Oro-gastric/nasogastric tube feeding
- IV fluids.

Katori-spoon, paladai, and oro-gastric/nasogastric tube feeding

In babies whose breathe-swallow reflex is well developed, *katori*spoon feeding can be initiated. In babies who are unable to swallow, oro-gastric/nasogastric feeding should be initiated. Subsequently, all of these babies will need to be transitioned to breast feeding.
Feed options

- Breast milk **(the best option)**
- Donor's breast milk
- Formula milk
- Animal milk

Technique to express breast milk by hand

- Keep a clean container under the breast.
- Place finger and thumb on each side of areola and press towards the chest wall.
- Press behind the nipple and areola between your finger and thumb.
- Press from the sides to empty all segments.

Technique of Katori-spoon or paladai feeding

- Use a clean medium-sized cup and a small (1-2ml size) spoon.
- Take the baby on the lap and in semi-upright position, with head well supported and place a napkin
- around the neck to mop up the spillage.
- Stimulate the angle of the mouth and rest the spoon with 1-2ml of milk at the angle of the mouth.
- Pour the milk slowly into the open mouth and let the milk flow into the baby's mouth slowly.
- Check if the baby is swallowing.
- Continue feeding in this manner till the desired amount has been fed.
- Burp the baby.

Technique of oro-gastric/nasogastric tube feeding

Procedure for tube insertion:

- Wash and air dry both the hands, and wear sterile gloves.
- Measure required length of tube without removing it from the sterile packet.
- Note and mark the point of graduated marking from the angle of mouth or the tip of nostril to the lower tip of the ear lobe and then to the mid-point between the xiphisternum and umbilicus.
- Flex the baby's head slightly, and insert with a no-touch technique after moistening the tube's tip with normal saline.
- Confirm correct positioning of the tube by-- aspirating some fluid or pushing air and auscultating for sound of air gush using a stethoscope.
- Secure the tube in place gently with tape.

Procedure for tube feeding:

- Attach the appropriate size syringe for feeding (10 mL or more) without its plunger to the tube.
- Keeping the syringe vertical, pour the required amount of feed (breast milk) in syringe and allow it to go down slowly with gravity.
- Always pinch the tube when syringe is empty or during removal, so as to prevent the passage of air.
- How often and how much to feed:
- Every 2 hours at least 12 times in a day.
- Fluid requirement are met by enteral feeds, or intravenous fluid, or both.

- Increase by 15ml/kg/day to maximum 150ml/kg/day by end of first week of life.

Important considerations

- Generally, babies with gestational age beyond 34 weeks can be initiated on breast feeding.
- Start with spoon/paladai feeding in babies with gestational age between 32-34 weeks.
- Start with OG tube feeding in babies with gestational age between 28-31 weeks.
- Start IV fluids in babies with gestational age <28 weeks or birth weight <1200gms.
- Move to next level of feeding if the baby in any of these categories accepts feed by suggested methodology.

Annexure 5.12: Prevention of Hypothermia in Newborn

The normal temperature in a newborn range from 36.5° C to 37.4° C and hypothermia is defined as a temperature less than 36.5° C (NSSK, GoI). Warmth is one of the basic needs of a newborn, and is critical to baby's survival and well-being.

Significance

All newborns are prone to developing hypothermia because of the larger surface area per unit of body weight and hence, can lose heat faster than older children and adults. A cold baby is less active, does not breastfeed well and may develop respiratory distress.
The chances of developing hypothermia are significantly higher in small size babies (preterm, low birth weight babies) due to reduced thermal insulation caused due to less subcutaneous fat and decreased heat production due to less brown fat. Such newborns are also at a higher risk of becoming hypoglycemic in cases of severe hypothermia and even death.

Preparation for Care

- Maintain temperature in the labor room to 26° C - 28° C.
- Switch on the radiant warmer at least half an hour prior to expected time of delivery.
- Keep all essential supplies ready - like pre-warmed towels, thermometer and clothing for the baby.
- Maintain warm chain for the newborn at all times.

Care Process

A baby must be kept warm at the place of living or during transportation for special care either from home to hospital or within the hospital. The warm chain is a set of various interlinked procedures carried out at birth, and during the following hours and days, in order to minimize the likelihood of heat loss in all newborns.

To prevent hypothermia in newborn, the following steps of warm chain need to be practiced:

1. Maintain temperature in labor room as warm at around 26-28◦C.
2. Dry the baby immediately after birth and wrap the baby in a pre-warmed towel.
3. Keep the baby in skin-to-skin contact with the mother for as long as possible.
4. Initiate breast feeding as early as possible, ideally within one hour of delivery.
5. Postpone the bathing of baby for at least 24 hours and at least for seven days for preterm and LBW babies.
6. Maintain appropriate clothing and bedding for baby. Keep the baby adequately covered (cap, socks, etc.).
7. Keep the mother and baby together as long as possible. Give Kangaroo Mother Care to Low Birth Weight or preterm baby.
8. In case there is need for transportation, maintain warmth of the baby.
9. In case newborn resuscitation is required, always perform it under a heat source i.e., radiant warmer.
10. Train the providers and peers and raise awareness about hypothermia.
11. Regularly monitor the temperature of the baby.

Important considerations

- Do NOT place the baby on a cold surface (such as a metallic tray).
- Keep the baby in skin-to-skin contact with mother.
- Do NOT remove vernix while drying the baby.
- Postpone bath for as long as possible (at least 24 hours in normal term baby and 7 days in low birth weight or preterm baby).

Annexure 5.13: Neonatal Sepsis – Prevention and Management and Antiretroviral therapy

Neonatal sepsis is a clinical syndrome characterized by signs and symptoms of infection, with or without bacteremia in the first month of life. Neonatal sepsis can be classified in two sub-types: 1. Early onset and 2. Late onset

Characteristics	Early onset	Late onset
Time of onset	Within 72 hours	After 72 hours
Source of infection	During labor and delivery through genital tract of mother or delivery area	Hospital or community

This annexure describes care and management during the early onset neonatal sepsis.

Significance

Sepsis is the most common cause of neonatal deaths worldwide including India. Since the health of the mother and the health of the baby are inextricably linked, maternal sepsis can get transmitted to the newborn, resulting in potentially serious condition. Small babies (Pre-term and Small for Gestational Age) are at a higher risk of acquiring infection. Safe childbirth practices such as adherence to infection prevention (IP) practices, early identification and timely management of sepsis, can reduce the risk of infections.

Preparation for Care

- Follow all standard IP practices during and post-delivery
- For timely identification of neonatal sepsis, be vigilant to the conditions that may lead to infections in a baby
- Regularly monitor the baby's temperature
- Ensure the availability of recommended antibiotics in the labor room

Care Process

Preventive strategies for neonatal sepsis

- Reducing unnecessary per vagina (PV) examinations.
- Appropriately managing maternal infections using antibiotics whenever indicated.
- Maintaining hygiene and following "six-cleans" of delivery.
- Drying and wrapping the baby with washed and clean towels/cloth.
- Early initiation of exclusive breastfeeding.
- Strict hand-washing practices while handling the baby.
- Ensuring dry cord care.
- Avoiding unnecessary interventions for the baby such as routine suctioning of newborns after birth.

Risk factors for newborn infections

Related to mother and delivery	Related to newborn care
• Failure to follow IP practices • Poor monitoring of mother's temperature during labor • Frequent PV examinations • Prolonged rupture of membranes >18 hrs • Pre-labor rupture of membranes >12 hrs	• Very low birth weight, prematurity • Lack of exclusive breastfeeding • Poor hygiene and frequent handling • Unneeded newborn interventions such as routine suctioning of newborn

• Preterm pre-labor rupture of membranes • Prolonged labor >24 hrs/obstructed labor • Pre-existing STIs/RTIs	

Identification and care of newborns

Newborn can be symptomatic (with signs of neonatal sepsis) or asymptomatic (when mother had signs of sepsis). In both the cases refer to facility based newborn care (FBNC) unit for management of such cases.

Supportive care for newborns with infection

- Provide warmth to the baby and ensure s/he has a consistently normal temperature.
- Start intravenous line in case not accepting/tolerating oral feeds.
- Administer injection Vitamin K1 (according to the weight) intramuscularly, if not given immediately after birth.
- Provide oxygen support if breathing is inadequate. Do bag and mask ventilation if not breathing.
- Provide gentle physical stimulation, if apneic.
- Avoid enteral feed if hemodynamically compromised. If the newborn is in shock, then do not start enteral feeds.

Anti-retroviral therapy for newborn

Administer syrup nevirapine to all newborns born to HIV positive mothers once daily for a period of 6 weeks following birth, as a prophylaxis to prevent mother to child transmission of HIV. In addition, these mothers along with their babies need to be referred to ART centers for appropriate care.

The table below details the nevirapine dosage based on the birth weight of baby:

Birth weight of infant	Dose (mg)	Dose (in ml)	Duration
Birth weight > 2.5kg	15 mg once daily	1.5 ml once a day	Up to 6 weeks irrespective of exclusively breastfed or exclusive replacement fed
Birth weight from 2.5kg to < 2.5kg	10 mg once daily	1 ml once a day	
Birth weight < 2kg	2 mg/kg once daily	0.2 ml/kg once a day	

Important considerations

- Immediate treatment with antibiotics is essential in preventing neonatal sepsis.
- Follow all standard IP practices (e.g. hand-hygiene, cleaning/disinfection of delivery surfaces and equipment, sterilization of reused equipment etc.).

Annexure 5.14 Kangaroo Mother Care

Scenario: A woman has given birth in your maternity unit to a baby at 34 weeks' gestation. The baby weighs 2 kg and is pink, active, stable and breathing normally.

Steps	Total Mark	Score	Remark
Demonstrate how you would perform kangaroo mother care (give participant clothed baby)			
▪ Explain the procedure to the mother	1		
▪ Ensure privacy for the mother	1		
▪ Ensure the mother is sitting or reclining comfortably	1		
▪ Gently undress the baby except for cap, nappy and socks	1		
▪ Place baby prone on the mother's chest	1		
▪ In an upright position	1		
▪ Between her breasts, skin to skin	1		
▪ In a frog-like position (arms and legs flexed)	1		
▪ Turn baby's head to one side so airway is open	1		
▪ Support baby's bottom using appropriate sling or binder	1		
▪ Cover mother and baby with blanket or shawl	1		
▪ Ensure baby is breastfed frequently	1		
What should the ideal room temperature be?			
▪ 26-28°C	1		
What are the two key components of KMC?			
▪ Skin-to-skin contact	1		
▪ Exclusive breastfeeding	1		
What are the benefits of KMC?			
▪ Reduces risk of hypothermia	1		
▪ Promotes lactation	1		
▪ Promotes weight gain	1		
▪ Reduces infections	1		
▪ Improves bonding between mother and newborn	1		

Quality improvement cycle –6

Infection prevention and Bio-medical waste management

Objective

To strengthen infection prevention practices including biomedical waste management in the facility.

Facility level targets

- To achieve 0% neonatal sepsis rate in-born babies or at least reduction of 20% from baseline
- To achieve 5% or less surgical site infection rate in Maternity OT or at least reduction of 30% from baseline

Key activities

Preparation for QI visit

- Inform the medical superintendent or facility in charge at least one day in advance about the visit
- Ask for time to have all relevant staff at one place for on-site training session and inform that activity may take 6-8 hours
- Keep all the materials (QI cycle visit checklist, job aids including safe delivery app, checklists, formats, action plan template, mannequins) required to do mentoring and any previous action plans ready for the visit

Outline of activities for QI visits

QI visit	Tasks	Facility stakeholders to be involved in the task		
		Quality circle	**Clinical Staff**	**Support staff**
1 (Day 0)	**Activity**	**Hold all staff meeting to orient the facility stakeholders on** o **Accomplishments during previous cycle and major uncompleted activities** o **Objectives of the current quality cycle**		
		• Facilitate formation of quality circle (if not in place) • If already in place, review its functioning by going through minutes of the meeting • Assessment of labour room and maternity OT for infection control practices using o Resource availability checklist o QI cycle checklist* • Quality circle meeting to prepare action plan • CSSD concept and process flow	• Mentoring on o Universal infection prevention practices o Wearing and removing PPE o Biomedical waste management o CSSD process flow o Infection prevention in specific case scenarios – Spillage management	• Mentoring on o Labour room cleaning o Preparation of 0.5% bleaching solution o Wearing and removing PPE o Processing of instruments o CSSD process flow o segregation of bio-medical waste
	Logistics required for the activity	• Resource availability checklist • QI cycle checklist* • Action planning template	• Job aid on universal infection prevention practices • Job aid on handwashing • Job aid on segregation of biomedical waste • Personal Protective Equipment (PPE) • Safe Delivery App: Module on Infection Prevention (to be downloaded on facility tablet and in the mobile phones of the staff)	• Job aid on Preparation of 0.5% bleaching solution • Job aid on processing of instruments • Job aid on segregation of biomedical waste

QI visit	Tasks	Facility stakeholders to be involved in the task		
		Quality circle	**Clinical Staff**	**Support staff**
				• Safe Delivery App (facility tablet)
	Creating enabling environment	• Follow up of action plan of previous visit • Preparation of an action plan based on the gaps identified during assessment and mentoring	• Prepare facility self-learning plan via Safe Delivery App • Ensure availability of all the relevant job aids in the labor room/Maternity OT • Identify champions within the facility • Prepare facility self-learning plan	Ensure availability of all the relevant job aids in the labor room/ Maternity OT
2 (Day 15)	**Follow up**	• Follow up meeting on action plan prepared during the previous visit and review implementation status of identified change ideas • Address bottlenecks for sustainable impact • Update the action plan based on the findings from this visit	• Identify challenges in implementing the change ideas and follow up with the quality circle • Need based mentoring on practices imparted during the previous visit • Follow up on use of Safe Delivery App for self-learning and as reference tool • Review records for improvement in documentation of practices	• Need based mentoring on practices imparted during the previous visit • Identify challenges in implementing the change ideas and follow up with the quality circle
3 (Day 30)	**Follow up**	• Follow up meeting on action plan prepared during the previous visit • Discuss and plan for sustainability of successful change ideas • Ensure mechanisms for uninterrupted supply of resources	• Observe the practices and provide need based inputs. • Review records to ascertain the change in practices and discuss with staff for further improvement • Follow up on use of Safe Delivery App for self-learning and as reference tool	• Observe the practices and provide need based inputs

QI visit	Tasks	Facility stakeholders to be involved in the task		
		Quality circle	**Clinical Staff**	**Support staff**
		• Update the action plan based on the findings from this visit		
4 (Day 45)	**Follow up and reassessment**	• Reassessment of labour room and maternity OT for infection control practices to ascertain improvement using o Resource availability checklist o QI cycle checklist* • Share the change in scores of standards with the quality circle during the meeting • Prepare a plan for the activities that need further improvement.	• Reinforce the significance of following standard procedures • Follow up on use of Safe Delivery App for self-learning and as reference tool	• Reinforce the significance of following standard procedures

**Source: National Quality Assurance Standards (NQAS) checklist*

Activities on the day of QI visit

First visit (Day 0)

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for infection prevention and Biomedical waste using resource availability checklist and QI checklist	☑ ☒	
3	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
4	Develop self-learning plan via Safe Delivery App with clinical staff	☑ ☒	
5	Follow up on action plan prepared during last visit	☑ ☒	
6	Facilitate quality circle to prepare an action plan for the current visit	☑ ☒	

Step 1: Meeting with medical superintendent or facility in charge and quality circle

- Hold a meeting with medical superintendent or facility in charge and quality circle to discuss the objectives and activities planned for the visit and for next 2 months

Responsibilities of District coaching team	Responsibilities of the Quality circle
• Facilitate Quality Circle formation/ functioning • Onsite training and handholding of quality circle, LR and maternity OT staff for strengthening mechanisms within their facility on Infection prevention and BMW management • Facilitate action planning based on the identified gaps • Facilitate mechanisms for ensuring availability of resources for performing the practices of IP • Review the current status of documentation processes	• Establish Hand Hygiene and personal protection practices in the facility. • Establish BMW management mechanism in the facility. • Establish mechanisms for processing of instruments. • Establish CSSD process flow in the facility • Uninterrupted supplies for the above mentioned practices.

• Assessment of labor room & OT on documentation process.	• Ensure staff is trained and skilled for infection control and bio-medical Waste Management. • Vaccination of all the labour room/maternity OT staff for Hepatitis B. • Establish standard IP practices specifically for OT in case of C-section and PPS/ Mini lap services.

Step 2: Assessment of labor room and maternity OT for infection prevention practices and biomedical waste management

Visit labour room and maternity OT along with facility Quality Circle and perform the assessment using resource availability checklist (Annexure 6.1) and QI checklists (Annexure 6.2 and 6.3). Use the gaps identified during this assessment for action planning with quality circle

Step 3: Mentoring of labor room and maternity OT staff

- Engage all the available staff during mentoring session
- Ask them about the challenges they may encounter while performing the skills imparted and suggest possible solutions. Ensure to include relevant challenges in action plan.
- Motivate the staff to continue good practices demonstrated.

Mentoring Session Outline

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
1	**Labour room entry and cleaning**	20 min	• Protocols for labour room entry and cleaning (Annexure 6.4) • GoI video on organizing labour room	Facilitated discussion	• Explain the Importance of restricting entry and creating buffer zone • Frequency and procedures for cleaning
2	**Personal Protection measures**	10 min	• Job aid on PPE (Annexure 6.6) • PPE kit • Safe delivery app	Facilitated discussion and demonstration	• Explain the Importance of Hepatitis B immunisation • Advantages of universal precautions

S. No.	Skills/practices	Time	Logistics required	Methodology	Session outline
3	**Hand hygiene**	10 min	• Job aid for handwashing (Annexure 6.7) • Soap and water • Alcohol hand rub • Safe delivery app	Demonstration	• Ask them to demonstrate steps of Hand washing/hand hygiene • Explain Importance of Hand washing/hand hygiene • When and how to perform hand hygiene practices
4	**Bio-medical waste management**	20 min	• Job aid for bio-medical waste management (Annexure 6.8)	Facilitated discussion	• Ask how they are segregating waste at source in color-coded bins
5	**Processing of instruments**	20 min	• Job aid on processing of instruments (Annexure 6.9) • GoI video on instrument processing • Safe delivery app	Facilitated discussion	• Explain that processing of instruments to be conducted in the following sequence: Decontamination - Washing - Sterilisation – Storage
6	**Management of infection related incidents**	20 min	• Protocol for spillage (Annexure 6.10)	Facilitated discussion	• Discuss that support staff is not being exposed to the infectious/hazardous waste

Step 4: Facilitate quality circle to preparation an action plan

In consultation with quality circle, based on the gaps identified during assessment and mentoring processes prepare a standard wise action plan as below:

Action plan for labour room

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
F1. The facility has infection control Programme and procedures in place for prevention and measurement of hospital associated infection					
F2. The facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis					
F3. The facility ensures standard practices and materials for personal protection					
F4. The facility has standard procedures for processing of equipment and instruments					
F5. Physical layout and environmental control of the patient care					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
areas ensures infection prevention					
F6. The facility has defined and established procedures for segregation, collection, treatment and disposal of bio medical and hazardous waste					

Action plan for maternity OT

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
F1. The facility has infection control Programme and procedures in place for prevention and measurement of hospital associated infection					

Standard	Identified gap	Plan of action	Person/s responsible	Timeline	Remarks on follow up visit at day 0 (Completed/partially completed/not completed)
F2. The facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis					
F3. The facility ensures standard practices and materials for personal protection					
F4. The facility has standard procedures for processing of equipment and instruments					
F5. Physical layout and environmental control of the patient care areas ensures infection prevention					
F6. The facility has defined and established procedures for segregation, collection, treatment and disposal of bio medical and hazardous waste					

2nd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Follow up on action plan prepared during the last visit	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on self-learning plan on Safe Delivery App	☑ ☒	
4	Meeting with quality circle to update action plan	☑ ☒	

3rd visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	
3	Follow up on self-learning plan on Safe Delivery App	☑ ☒	
4	Meeting with quality circle to update action plan	☑ ☒	

Major activities to be conducted during both the visits:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Inform him that follow up quality circle meeting will be held at the end of the mentoring visit
- Visit the labour/maternity OT, observe the practices and provide need based mentoring on skills imparted during the first visit of the quality cycle using same training materials
- Identify challenges in translation of learned skills into practices
- Follow up on self-learning plan on Safe Delivery App
- Once mentoring is finished, hold meeting with the quality circle

- Appraise the team on improvements in practices in the labour room since previous visit
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (1st Visit) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- Make a follow up action plan for partially completed/not completed activities as below. Also, add action plan for newly identified gaps/challenges during the current visit if any.
- Conduct OSCE as per the annexure.

4th visit

Basic information

Date of visit:	__/___/____	Name of the mentor:	
No. of Providers oriented during current visit:		Designation:	
Number of quality circle members participated in the meeting and their designations:			

Checklist of activities (Mentor must fill-in this checklist before leaving the facility to ascertain that all the major activities are accomplished)

S. No.	Areas addressed during current visit	Response	Remark
1	Meeting with medical superintendent or facility in charge	☑ ☒	
2	Assessment of labor room and maternity OT for infection prevention and Biomedical waste using resource availability checklist and QI checklist	☑ ☒	
3	Follow up on self-learning plan on Safe Delivery App	☑ ☒	
4	Mentoring of all the labor room and maternity OT staff in the facility	☑ ☒	

Major activities to be conducted during the visit:

- Meet medical superintendent or facility in charge, discuss status of relevant action items based on previous action plan, objectives of the current visit and activities planned for the day
- Hold a brief meeting with the quality circle and discuss the activities conducted during last 45 days to improve the practices and major changes observed in the practices
- Visit labour room and maternity OT along with facility Quality Circle and reassess the facility using same resource availability checklist (Annexure 6.1) and QI checklists (Annexure 6.2 and 6.3).
- Compare the scores of initial assessment and reassessment and share with labour room/maternity OT staff as well as with the quality circle
- Review the practices and provide need based mentoring support
- Follow up on self-learning plan on Safe Delivery App
- In consultation with the quality circle, update the action plan prepared during first visit of the quality cycle (day 30) by appropriately marking in the remarks column.
- As resource availability is critical for improving practices, ask quality circle to ensure uninterrupted supply of resources
- By now gaps should have been fulfilled and a self-sustaining mechanism should be in place for gaps partially completed/not completed.
- If ready facility should start the process of certification.

Annexures

Annexure 6.1: Assessment of labor room and maternity OT for availability of resources for infection prevention and Biomedical waste

Encircle appropriate: ☑ Available ☒ Not available ◙ Available and complete Δ Available and incomplete

Resource availability in labor room

S.No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Hand washing station	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Antiseptic soap	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	PPE (cap, mask, apron, eye cover)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Sterile gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
6	Elbow length gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Disposable gown/apron	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Heavy duty gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Gum boots	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Personal protective kit for delivering HIV positive cases	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Autoclave	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Chlorine solution/powder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Protocol posters	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Safe delivery app in facility tablet	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Gluteraldehyde	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Hospital grade phenyl	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Disinfectant detergent solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	Colour coded bins and bags	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S.No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
19	Blue colour card box	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	PEP	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	PEP issuance register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
24	Sterile gauze	☑ ☒	☑ ☒	☑ ☒	☑ ☒
25	3 buckets for mopping	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Registers in labor room

S.No.	Registers	QI visit							
		1 (Day 0)		2 (Day 15)		3 (Day 30)		4 (Day 45)	
		Availability	Completeness	Availability	Completeness	Availability	Completeness	Availability	Completeness
1	Sterilization register	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ
2	Daily clean register	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ

Resource availability in maternity OT

S. No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
1	Hand washing station with elbow operated tap and wide and deep sink	☑ ☒	☑ ☒	☑ ☒	☑ ☒
2	Running water	☑ ☒	☑ ☒	☑ ☒	☑ ☒
3	Antiseptic soap	☑ ☒	☑ ☒	☑ ☒	☑ ☒
4	PPE (cap, mask, apron, eye cover)	☑ ☒	☑ ☒	☑ ☒	☑ ☒
5	Sterile gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒

S. No.	Resource	QI visit			
		1 (Day 0)	2 (Day 15)	3 (Day 30)	4 (Day 45)
6	Elbow length gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
7	Disposable gown/apron	☑ ☒	☑ ☒	☑ ☒	☑ ☒
8	Heavy duty gloves	☑ ☒	☑ ☒	☑ ☒	☑ ☒
9	Gum boots	☑ ☒	☑ ☒	☑ ☒	☑ ☒
10	Personal protective kit for delivering HIV positive cases	☑ ☒	☑ ☒	☑ ☒	☑ ☒
11	Autoclave	☑ ☒	☑ ☒	☑ ☒	☑ ☒
12	Chlorine solution/powder	☑ ☒	☑ ☒	☑ ☒	☑ ☒
13	Gluteraldehyde	☑ ☒	☑ ☒	☑ ☒	☑ ☒
14	Hospital grade phenyl	☑ ☒	☑ ☒	☑ ☒	☑ ☒
15	Disinfectant detergent solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
16	Colour coded bins and bags	☑ ☒	☑ ☒	☑ ☒	☑ ☒
17	Blue colour card box	☑ ☒	☑ ☒	☑ ☒	☑ ☒
18	Puncture proof container	☑ ☒	☑ ☒	☑ ☒	☑ ☒
19	PEP	☑ ☒	☑ ☒	☑ ☒	☑ ☒
20	PEP issuance register	☑ ☒	☑ ☒	☑ ☒	☑ ☒
21	Antiseptic solution	☑ ☒	☑ ☒	☑ ☒	☑ ☒
22	Sterile gauze	☑ ☒	☑ ☒	☑ ☒	☑ ☒
23	3 buckets for mopping	☑ ☒	☑ ☒	☑ ☒	☑ ☒

Registers in maternity OT

S.No.	Registers	QI visit							
		1 (Day 0)		2 (Day 15)		3 (Day 30)		4 (Day 45)	
		Availability	Completenes	Availability	Completenes	Availability	Completenes	Availability	Completenes
1	OT swab register	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ
2	Sterilizatio register	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ
3	Daily clean register	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ	☑ ☒	◙ Δ

Annexure 6.2: National Quality Assurance Standards checklist for labor room for infection control

SI: Staff interview *RR: Review of Records*

OB: Observation *PI: patients' interview*

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard D4	**The facility has established Programme for maintenance and upkeep of the facility**					
ME D4.1	Exterior & Interior of the facility building is maintained appropriately	Interior & exterior of patient care areas are plastered & painted & building are white washed in uniform colour			OB	Wall and Ceiling of Labour Room are painted in white colour. The walls of the labour room complex should be made of white wall tiles, with seamless joint, and extending up to the ceiling

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
	Patient care areas are clean and hygienic	Floors, walls, roof, roof topes, sinks patient care and circulation areas are Clean			OB	All area are clean with no dirt, grease, littering and cobwebs. Surface of furniture and fixtures are clean
		Toilets are clean with functional flush and running water			OB	Check toilet seats, floors, basins etc are clean and water supply with functional cistern has been provided
	Hospital infrastructure is adequately maintained	Check for there is no seepage, Cracks, chipping of plaster Window panes, doors and other			OB	Check for delivery as well as auxiliary areas

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Delivery table are intact and without rust & Mattresses are intact and clean			OB	Observe for any signs for rusting or accumulation of dirt/grease/encrusted body fluid
ME D4.5	The facility has policy of removal of condemned junk material	No condemned/ Junk material in the Labour room			OB	Check of any obsolete article including equipment's, instrument, records, drugs and consumables
ME D4.6	The facility has established procedures for pest, rodent and animal	No stray animal/ rodent/birds			OB	Check for no stray animal in and around labour room
Standard	**The facility ensures clean linen to the patients**					
ME D7.1	The facility has adequate sets of linen	Availability & use of clean linen			OB/RR	Clean Delivery gown is provided to Pregnant Women & sterile drape for baby

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME D7.3	The facility has standard procedures for handling, collection, transportation and washing of linen	There is system to check the cleanliness and Quantity of the linen			SI/RR	Quantity of linen is checked before sending it to laundry. Cleanliness & Quantity of linen is checked received from laundry. Records are maintained
Standard F1	**The facility has infection control programme and procedures in place for prevention and measurement of hospital associated infection**					
ME F1.2	The facility has provision for Passive and active culture surveillance of critical & high risk areas	Surface and environment samples are taken for microbiological surveillance			SI/RR	Swab are taken from infection prone surfaces such as delivery tables, door, handles, procedure lights etc.
ME F1.4	There is Provision of Periodic Medical Check-up and immunization of staff	There is procedure for immunization & medical checkup			SI/RR	Hepatitis B, Tetanus Toxic
ME F1.5	The facility has established procedures for regular monitoring of infection control practices	Regular monitoring of infection control practices			SI/RR	Hand washing and infection control audits done at periodic intervals
Standard F2	**The facility has defined and Implemented procedures for ensuring hand hygiene practices and**					

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME F2.1	Hand washing facilities are provided at point of use	Availability of hand washing with running Water Facility at Point of Use			OB	Check for availability of wash basin near the point of use Ask to Open the tap. Ask Staff water supply is regular
		Availability of antiseptic soap with soap dish/liquid antiseptic with dispenser			OB/SI	Check for availability/ Ask staff if the supply is adequate and uninterrupted. Availability of Alcohol based Hand rub
		Display of Hand washing Instruction at Point of Use			OB	Prominently displayed above the hand washing facility, preferably in Local language
		Handwashing station is as per specification			OB	Availability of elbow operated taps & Hand washing sink is wide and deep enough to prevent splashing and retention of water

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME F2.2	The facility staff is trained in hand washing practices and they adhere to standard hand washing practices	Staff is aware of when and how to hand wash			SI/OB	Ask for demonstration of six steps & check staff awareness five moments of handwashing
ME F2.3	The facility ensures standard practices and materials for antisepsis	Availability & Use of Antiseptics			OB	Like before giving IM/IV injection, drawing blood, putting Intravenous and urinary catheter & Proper cleaning of perineal area before procedure with antisepsis
		Check Shaving is not done during part preparation/delive			SI	Staff Interview
Standard F3	**The facility ensures standard practices and materials for personal protection**					
ME F3.1	The facility ensures adequate personal protection Equipment as per requirements	Availability of Masks, caps and protective eye cover			OB/SI/ RR	Check if staff is using PPEs Ask staff if they have adequate supply Verify with the stock/Expenditure register

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Sterile gloves are available at labour room			OB/SI / RR	Check if staff is using PPEs Ask staff if they have adequate supply Verify with the stock / Expenditure register
		Use of elbow length gloves for obstetrical purpose			OB/SI / RR	Check if staff is using PPEs Ask staff if they have adequate supply Verify with the stock/Expenditure register
		Availability of disposable gown/ Apron			OB/SI / RR	Check if staff is using PPEs Ask staff if they have adequate supply Verify with the stock/Expenditure register
		Heavy duty gloves and gum boots for housekeeping staff			OB/SI / RR	Check if staff is using PPEs Ask staff if they have adequate supply Verify with the stock/Expenditure register
		Personal protective kit for delivering HIV cases			OB/SI	Cap & Mask, protective Eye cover, Disposable apron

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME F3.2	The facility staff adheres to standard personal protection practices	No reuse of disposable gloves, Masks, caps and aprons			OB/SI	
		Entry to the labour Room is only after change of shoes and wearing Mask & Cap			OB	
Standard F4		**The facility has standard procedures for processing of equipment and instruments**				
ME F4.1	The facility ensures standard practices and materials for decontamination and cleaning of instruments and procedures areas	Disinfection of operating & Procedure surfaces			SI/OB	Cleaning of delivery tables tops after each delivery with 2% carbolic acid
		Proper handling of Soiled and infected linen			SI/OB	No sorting ,Rinsing or sluicing at Point of use/ Patient care area
		Cleaning of instruments			SI/OB	Cleaning is done with detergent and running water after use
ME F4.2	The facility ensures standard practices and materials for disinfection and sterilization of instruments and equipment	Equipment and instruments are sterilized after each use as per requirement			OB/SI	Autoclaving

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Autoclaving of delivery kits is done as per protocols			OB/SI	Ask staff about temperature, pressure and time. Ask staff about method, concentration and contact time required for chemical sterilization
		There is a procedure to ensure the traceability of sterilized packs & their storage			OB/SI	Sterile packs are kept in clean, dust free, moist free environment
Standard F5		**Physical layout and environmental control of the patient care areas ensures infection prevention**				
ME F5.1	Layout of the department is conducive for the infection control practices	Facility layout ensures separation of routes for clean and dirty items			OB	
ME F5.2	The facility ensures availability of standard materials for cleaning and disinfection of patient care areas	Availability of disinfectant & cleaning agents as per requirement			OB/SI	Chlorine solution, Glutaraldehyde, Hospital grade phenyl, disinfectant detergent solution
ME F5.3	The facility ensures standard practices are followed for the cleaning and disinfection of patient care areas	Spill management protocols are implemented			SI/RR	Spill management kit staff training, protocol displayed

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
		Cleaning of patient care area with detergent solution			SI/RR	Staff is trained for preparing cleaning solution as per standard procedure
		Standard practice of mopping and scrubbing are followed & three bucket system is followed			OB/SI	Unidirectional mopping from inside out. Cleaning protocols are available/ displayed. Cleaning equipment like broom are not used in patient care areas
Standard F6		**The facility has defined and established procedures for segregation, collection, treatment and disposal of bio medical and hazardous waste**				
ME F6.1	The facility Ensures segregation of Bio Medical Waste as per guidelines and 'on- site' management of waste is carried out as per guidelines	Availability of colour coded bins & Plastic bags at point of waste generation			OB	
		Segregation of Anatomical and soiled waste in			OB/SI	
		Segregation of infected plastic waste in red bin			OB	
		Display of work instructions for segregation and handling			OB	

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
ME F6.2	The facility ensures management of sharps as per guidelines	Availability of functional needle cutters & puncture proof box			OB	See if it has been used or just lying idle
		Availability of post exposure prophylaxis & Protcols			OB/SI	Ask if available. Where it is stored and who is in charge of that. Also check PEP issuance register Staff knows what to do in condition of needle stick injury
		Glass sharps are disposed in Blue coded Card box			OB	Includes used vials, slides and other broken infected glass
ME F6.3	The facility ensures transportation and disposal of waste as per guidelines	Check bins are not overfilled			OB/SI	Bins should not be filled more than 2/3 of its capacity

Annexure 6.3: National Quality Assurance Standards checklist for maternity OT for infection control

Ref. No.	ME Statement	Check-point	Compliance		Assessment Method	Means of Verification
			Day 0	Day 45		
Standard D4	**The facility has established Programme for maintenance and upkeep of the facility**					
ME D4.1	Exterior of the facility building is maintained appropriately	Department is painted/whitewashed in uniform colour & plastered &			OB	Painted in soothing colours (No bright colours.)
ME D4.2	Patient care areas are clean and hygienic	Floors, walls, roof, roof tops, sinks patient care and circulation areas are Clean			OB	All area are clean with no dirt, grease, littering and cobwebs
		Surface of furniture and fixtures are clean			OB	Look for dirt above OT light, behind stationary equipment etc.
ME D4.3	Hospital infrastructure is adequately maintained	Check for there is no seepage, Cracks, chipping of plaster			OB	Check corners, false ceiling
		OT Table are intact and without rust			OB	Mattresses are intact and clean
		No unnecessary items in sterile zone				No slabs, almirah, storing unnecessary items like drums, equipment, instruments etc. Items not required for immediate procedures are kept out of sterile zone

ME D4.5	The facility has policy of removal of condemned junk material	No condemned/Junk material in the OT			OB	No partial compliance.
ME D4.6	The facility has established procedures for pest, rodent and animal control	No stray animal/ rodent/birds			OB	Check for no stray animal in and around OT. Also no lizard, cockroach, mosquito, flies, rats, etc.
Standard D7	**The facility ensures clean linen to the patients**					
ME D7.1	The facility has adequate sets of linen	OT has facility to provide sufficient and clean linen for surgical patient			OB/RR	Drape, draw sheet, cut sheet and gown
		OT has facility to provide linen for staff			OB/RR	OT dress, gown. Separate OT dress for OT staff
ME D7.2	The facility has established procedures for changing of linen in patient care areas	Linen is changed after each procedure			OB/RR	Bed sheets, draw sheets and Macintosh
ME D7.3	The facility has standard procedures for handling, collection, transportation and washing of linen	There is system to check the cleanliness and Quantity of the linen received from laundry			SI/RR	OT tech/Nurse checks Number of linen, cleanliness, whether it is torned or stained
Standard F1	**The facility has infection control programme and procedures in place for prevention and measurement of hospital associated infection**					
ME F1.2	Facility has provision for Passive and active culture surveillance of critical & high risk areas	Surface and environment samples are taken for microbiological surveillance			SI/RR	Swab are taken from infection prone surfaces

ME F1.3	Facility measures hospital associated infection rates	There is procedure to report cases of Hospital acquired infection			SI/RR	Patients are observed for any sign and symptoms of HAI like fever, purulent discharge from surgical site
ME F1.4	There is Provision of Periodic Medical Check-ups and immunization of staff	There is procedure for immunization medical check-up of the staff			SI/RR	Hepatitis B, Tetanus Toxoid etc.
ME F1.5	Facility has established procedures for regular monitoring of infection control practices	Regular monitoring of infection control practices			SI/RR	Hand washing and infection control audits done at periodic intervals
ME F1.6	Facility has defined and established antibiotic policy	Check for Doctors are aware of Hospital Antibiotic Policy			SI/RR	Antibiotics prescribed are in line with Antibiotic Policy
Standard F2	**The facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis**					
ME F2.1	Hand washing facilities are provided at point of use	Availability of hand washing with running Water Facility at Point of Use			OB	Check for availability of wash basin near the point of use Ask to Open the tap. Ask Staff water supply is regular
		Availability of antiseptic soap with soap dish/ liquid antiseptic with dispenser			OB/SI	Check for availability/ Ask staff if the supply is adequate and uninterrupted
		Display of Hand washing Instruction at Point of Use			OB	Prominently displayed above the hand washing facility, preferably in Local language

		Availability of elbow operated taps			OB	Elbow /foot operated or Sensor
		Hand washing sink is wide and deep enough to prevent splashing and retention of water			OB	Tap should be approx. 96 cm from the ground
ME F2.2	Staff is trained and adhere to standard hand washing practices	Adequate preparation for surgical scrub			OB/SI/ RR	Check Finger nails of staff. They should not reach beyond finger tip. No nail polish or artificial nails. All jewelry on the fingers, wrists and arms should be removed. Adjust water to a comfortable temperature
		Adherence to Surgical scrub method			SI/OB	Procedure should be repeated several times so that the scrub lasts for 3 to 5 minutes. Hands must always be kept above elbow level. The hands and forearms should be dried with a sterile towel only.
		Use of antibiotic soap/liquid			SI/OB	Check adequate quantity of antibiotic soap/ Chlorhexidine solution is available and used
		Staff aware of when to hand wash			SI	Ask for 5 moments of hand washing

ME F2.3	Facility ensures standard practices and materials for antisepsis	Availability of Antiseptic Solutions			OB	Povidine iodine solution
		Proper cleaning of procedure site with antisepsis			OB/SI	Like before giving IM/IV injection, drawing blood, putting Intravenous and urinary catheter
		Check sterile field is maintained during surgery			OB/SI	Surgical site covered with sterile drapes, sterile instruments are kept within the sterile field
Standard F3	**Facility ensures standard practices and materials for Personal protection**					
ME F3.1	Facility ensures adequate personal protection equipment's as per requirements	Sterile gloves are available at OT and Critical areas			OB/SI	Inadequate quantity, as per load
		Availability of Masks			OB/SI	Inadequate quantity, as per load
		Availability of Caps & gown/ Apron			OB/SI	Inadequate quantity, as per load
		Personal protective kit for infectious patients			OB/SI	Disposable surgery kit for HIV patients
		Availability of gum boots			OB/SI	Inadequate quantity, as per load
ME F3.2	Staff is adhere to standard personal protection practices	No reuse of disposable gloves, Masks, caps and aprons			OB/SI/ RR	Check Autoclaving/ sterilization records

		Compliance to correct method of wearing and removing the gloves			SI	Adherence to standard technique so that sterile area is not in contact with unsterile at any given point of time
		Compliance to standard technique of wearing and removing of gown			SI	Adherence to standard technique so that sterile area is not in contact with unsterile at any given point of time
Standard F4	**Facility has standard Procedures for processing of equipment's and instruments**					
ME F4.1	Facility ensures standard practices and materials for decontamination and clean in of instruments and procedures areas	Decontamina-tion of operating & Procedure surfaces			SI/OB	Ask staff about how they decontaminate the procedure surface like OT Table, Stretcher/Trolleys etc. (Wiping with .5% Chlorine solution)
		Cleaning of instruments after use			SI/OB	Ask staff how they clean the instruments like ambubag, suction canulae, Surgical Instruments (Soaking in 0.5% Chlorine Solution, Wiping with 0.5% Chlorine Solution or 70% Alcohol as applicable)
		Proper handling of Soiled and infected linen			SI/OB	No sorting, Rinsing or sluicing at Point of use/ sterile area

		Staff know how to make disinfectant solution			SI/OB	Carbolic acid, chlorine solution, glutaraldehyde or any other disinfectant used
ME F4.2	Facility ensures standard practices and materials for disinfection and sterilization of instruments and equipment's	Equipment and instruments are sterilized after each use as per requirement			OB/SI	Autoclaving/ Chemical Sterilization
		Chemical sterilization of instruments/ equipment's is done as per protocols			OB/SI	Ask staff about method, concentration and contact time required for chemical sterilization.
		Glutaraldehyde solution is changed as per manufacturer instructions			OB/SI	Date of preparation & due date of change of solution is mentioned on container and staff is aware of when to change the chemical
		Autoclaved linen and Dressing are used for procedure			OB/SI	Gowns, draw sheets, Cotton, Gauze, bandages. etc.
		Instruments are packed as per standard protocol			OB/SI	Check for Window of autoclave drum is closed, drum is not filled more than 3/4th, instruments are not hinged
		Autoclaving of instruments is done as per protocols			OB/SI	Ask staff about temperature, pressure and time

		Regular validation of sterilization through chemical indicators			OB/SI/ RR	Indicators (temperature sensitive tape) that change colour after being exposed to certain temperature
		Regular validation of sterilization through biological indicator			OB/SI/ RR	Bacillus Thermophilus spores are used, for measuring biological performance of autoclaving process. Performed monthly. Label the spore ampule, place in horizontal position, kept at the bottom or farthest part of autoclave
		Maintenance of records of sterilization			OB/SI/ RR	Autoclave Register have column: Date, Time started, Time finished, Temp, pressure, Autoclave tape, spore test
		There is a procedure to ensure the traceability of sterilized packs			OB/SI/ RR	Each Sterilized pack is marked with Date/Time of sterilization, contents, name/ signature of the Technician
		Sterility of autoclaved packs is maintained during storage			OB/SI	Sterile packs are kept in clean, dust free, moist free environment

Standard F5	Physical layout and environmental control of the patient care areas ensures infection prevention					
ME F5.1	Functional area of the department are arranged to ensure infection control practices	Facility layout ensures separation of routes for clean and dirty items			OB	Facility layout ensures separation of general traffic from patient traffic. Separate disposal zone
		CSSD/TSSU has demarcated separate area for receiving dirty items, processes, keeping clean and sterile items			OB	Sterile & unsterile store are separately
ME F5.2	Facility ensures availability of standard materials for cleaning and disinfection of patient care areas	Availability of disinfectant as per requirement			OB/SI	Chlorine solution, Glutaraldehyde , carbolic acid, fumigation material
		Availability of cleaning agent as per requirement			OB/SI	Hospital grade phenyl, disinfectant detergent solution
ME F5.3	Facility ensures standard practices followed for cleaning and disinfection of	Spill management protocols are implemented			SI/RR	Spill management kit. staff training, protocol displayed

	patient care areas	Mercury Spill management Kit is available			SI/OB	Hospital should aspire to be mercury free. If used than Hg spill management kit should be available with gloves, cap, mask, goggles, polybag, Plastic container, torch
		Cleaning of patient care area with detergent solution			SI/RR	Washing of floor with luke warm water and detergent
		Standard practice of mopping and scrubbing are followed			OB/SI	Use of three bucket system for mopping
		Cleaning equipment's like broom are not used in patient care areas			OB/SI	Look in janitors closet
		Fumigation as per schedule			SI/RR	Check that Formalin is not used. safer commercially available disinfectants such as Bacillicidal are used for fumigation
		External footwears are restricted			OB	Adequate numbers are available at the entrance
		Entry to sterile zone is permitted only after hand washing, change of clothes, gowning & PPE			OB/SI	only persons really required are allowed to enter the sterile zone

ME F5.5	Facility ensures air quality of high risk area	Positive Pressure in OT			OB/SI	OT to have an independent air handling unit with controlled ventilation such that the lay-up room and the OT table is under positive pressure
		Adequate air exchanges are maintained			SI/RR	Independent AHU also allows to maintain required number of Air exchange side. 20-25
Standard F6	**Facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste**					
ME F6.1	Facility Ensures segregation of Bio Medical Waste as per guidelines	Availability of colour coded bins & Bags at point of waste generation			OB	Adequate number. Covered. Foot operated
		Segregation of Anatomical and soiled waste in Yellow Bin			OB/SI	Check the bins
		Segregation of infected plastic waste in red bin			OB	Check the bins
		Display of work instructions for segregation and handling of Biomedical waste			OB	Pictorial and in local language
ME F6.2	Facility ensures management of sharps as per guidelines	Availability of functional needle cutters & Puncture Proof Box			OB	See if it has been used or just lying idle

		Availability of post exposure prophylaxis & Protcols			OB/SI	Ask if available. Where it is stored and who is in charge of that. Staff knows what to do in case of shape injury. Whom to report. See if any reporting has been done
		Glass sharps are disposed in Blue coded Card board box			OB	Boxes are thick enough to avoid sharp injuries.
ME F6.3	Facility ensures transportation and disposal of waste as per guidelines	Check bins are not Overfilled			SI	Not more than two-third.
		Disinfection of liquid waste before disposal			SI/OB	Through Local Disinfection

2.11.6 Hand Washing

Scenario: You are going to carry out a routine neonatal examination.

Steps	Total Mark	Remark
Remove rings, bracelets and watches	2	
Wet hands with clean running water and apply soap	2	
Rub hands vigorously on both sides in the following order:		
▪ Palms, fingers and web spaces	1	
▪ Back of hands	1	
▪ Fingers and knuckles	1	
▪ Thumbs	1	
▪ Fingertips and creases	1	
▪ Wrist	1	
Rinse thoroughly under clean running water	2	
Dry hands using clean towel or air-dry	2	
Use alcohol rub	2	

Rub both sides of hands for 30 seconds or until the solution is dry	2	
If hands are soiled or bloody	2	
Total Score	**20**	

Annexure 6.4: Protocols for Labour room entry and cleaning

Protocol for labor room entry

- Entry to the labour room should not be direct. Ideally a buffer zone needs to be created if possible for changing of shoes, wearing of mask and cap before entering the labour room.
- Entry to the labour room should be restricted to the pregnant woman, her birth companion, doctor, nurse/ANM on duty, cleaning staff periodic entry as per the SOP and protocols of cleaning.
- Before entering the labour room, slippers, cap and mask should be worn by all visitors including birth companion.
- Any visits of people other than on-duty staff, pregnant women and birth companion to the labor room should be short and timed to the task (such as cleaning etc.)
- Entry of male staff should be strictly restricted to those who are on duty or have been called for any accessories and fittings. They should be polite and respectful to the dignity and privacy of the women.

Protocol for labor room cleaning

Cleaning and disinfection of labour room	• The labour room along with all equipment and all surfaces should be cleaned every morning and all equipment and surfaces used should be cleaned after every delivery • Labour table should be cleaned in each shift and after each delivery with (a) cloth soaked in clean water and soap water if required (b) cloth soaked in chlorine solution • Cheatles forceps should not be kept in antiseptic, and should be autoclaved daily and kept in autoclaved bottle with the date and time labelled each day • Toilet should be cleaned with phenyl or lysol at start of each shift and after each delivery • The overhead tank supplying water to the labour room should be cleaned at least once a week
Daily at the beginning of the day	• The floor and sinks should be cleaned with detergent (soap water) or chlorine solution daily in the morning and thereafter

	every three hours. The floor should be kept dry • All the table tops and other surfaces such as lamp shades, almirah, lockers, trollies, etc. should be cleaned with low level disinfectant (2% carbolic acid) • Monitor machines should be cleaned with 70% alcohol
After each delivery	• Table tops should be cleaned thoroughly with chlorine solution or disinfectant (2% carbolic acid) • Disposable absorbent sheet placed on the labor table should be changed • Any spillage of blood or body fluids on the floor should be soaked with chlorine solution for 10 minutes. Should be absorbed in a newspaper and then mopped. The newspaper should be discarded in appropriate plastic bin
Procedure for mopping	• Prepare 3 buckets with clear water. Put phenyl or lysol or bleaching solution in one of the buckets. (So that you have two buckets of clean water and one bucket containing disinfectant) • The clean water buckets should be labelled as 1st, 2nd and 3rd bucket. The 3rd bucket will be containing disinfectant • The cleaning begins on the floor starting from inside to outside. Towards the end, all corners and groves have to be cleaned • After each sweep of the floor, the mop should be dipped first in the 1st bucket then in the 2nd bucket and lastly in the 3rd bucket containing disinfectant • Mops should be cleaned in the dirty utility area and put in the stand under the sun with the mop head upward and tilted not straight • Mopping of floors should be done at least thrice a day and in-between whenever required • Mopping of floors should be done with water with detergent and disinfectant (phenolic based) in Negative Pressure Isolation rooms • In case of visible blood/body-fluids spills, the protocol of managing spills should be followed • All soiled mops should be treated as soiled linen and transported likewise in a covered (lid) container • At the end of each shift & a cleaning schedule for an area, all soiled mops should be sent through lift, in a hamper, to the laundry for washing

	• Mops should be visibly clean before starting cleaning of an area • Mops should be replaced after interim cleaning is done, as and when called for and mops kept in the wringer trolley should be well squeezed and out of the solution • Mops should be changed routinely and immediately following the cleaning of blood, body-fluids secretions and excretions, after cleaning contaminated areas, operation theatres or isolation rooms • Mops should not be left wet • Store mops dry in a designated well demarcated area away from the clean area • Mops should be washed in a laundry in a cycle dedicated for mops washing only with 1% Hypochlorite. This should be followed by a non-load disinfectant cycle with 1% Hypochlorite giving an exposure of 20 minutes at least • Personnel carrying out the cleaning and transporting the soiled mops should wear adequate PPE (gloves, mask, gown) • Trolleys transporting mops would be cleaned as per schedule with detergent followed by 1% hypochlorite 70% isopropyl alcohol -as per compatibility according to manufacturer's instructions • Hand-mops mounted on wipers should be used for the bathroom mopping after putting on gloves

Annexure 6.5: Universal infection prevention practice

Please refer to the link given below for latest amendments as per Bio-medical Waste Management(Amendment) Rules, 2018

1. gazette notifications- *http://envfor.nic.in/sites/default/files/Bio%20medical%20waste%20management%20(amendment)183847.pdf*

2. Implementation guidelines- refer pg no 55 onwards
http://mpcb.gov.in/biomedical/pdf/BMW_Rules_2016.pdf

Annexure 6.6: Personal Protective Equipment (PPE)

PPE are the items used to protect the healthcare worker from splashes of blood, body fluids, excretions or droplets or aerosolization of organisms from the respiratory tract (WHO). These consist of gloves, caps, eye-covers, masks, gowns and footwear. Using PPE provides a physical barrier between microorganisms and the wearer, and helps prevent transmission to other patients as well.

Preparation for Care

Ensure availability of all PPE in the labor room for healthcare workers and waste handlers.
Ensure availability of thick rubber utility gloves for the waste handlers.

Care Process

- Wear disposable, waterproof cap of an appropriate size which completely covers the hair.
- Wear protective eye-wear or goggles that fit over glasses.
- Wear standard disposable surgical splash proof mask. Change mask when wet, soiled or contaminated. Place the nose-clip on nose and let the exhaled air enter the mask in direction of vents. Tie the mask from behind.
- Wear a clean impervious water-repellant gown which is preferably disposable. The gown must be long enough to cover the clothing of the wearer. If the gown is not made of impermeable material, wear a disposable plastic apron over it.
- Wear waterproof and disposable shoe covers. If the labor room has clean slippers, change slippers before entering the labor room.
- Wear gloves after hand washing. Ensure that you have either dropped the sterile wrapper with gloves in sterile delivery tray before going for hand washing, or have asked someone to provide you the same.
- Hold one glove in a hand from the cuff side, and hold it downwards. Make a cone of fingers of the other hand and enter the glove keeping it stretched. Wear the glove, but do not uncuff it completely.
- Take the other glove from the gloved side by slipping the gloved hand below the cuff. Again using gravity and keeping it stretched, wear the second glove. Uncuff it completely. Then come back to the first glove and uncuff it completely.

- After use, take off the PPE and discard in an appropriate color coded bags (refer to table on BMW management). Send reusable gowns for cleaning. Decontaminate reusable soiled attire before discarding.

Annexure 6.7: Handwashing

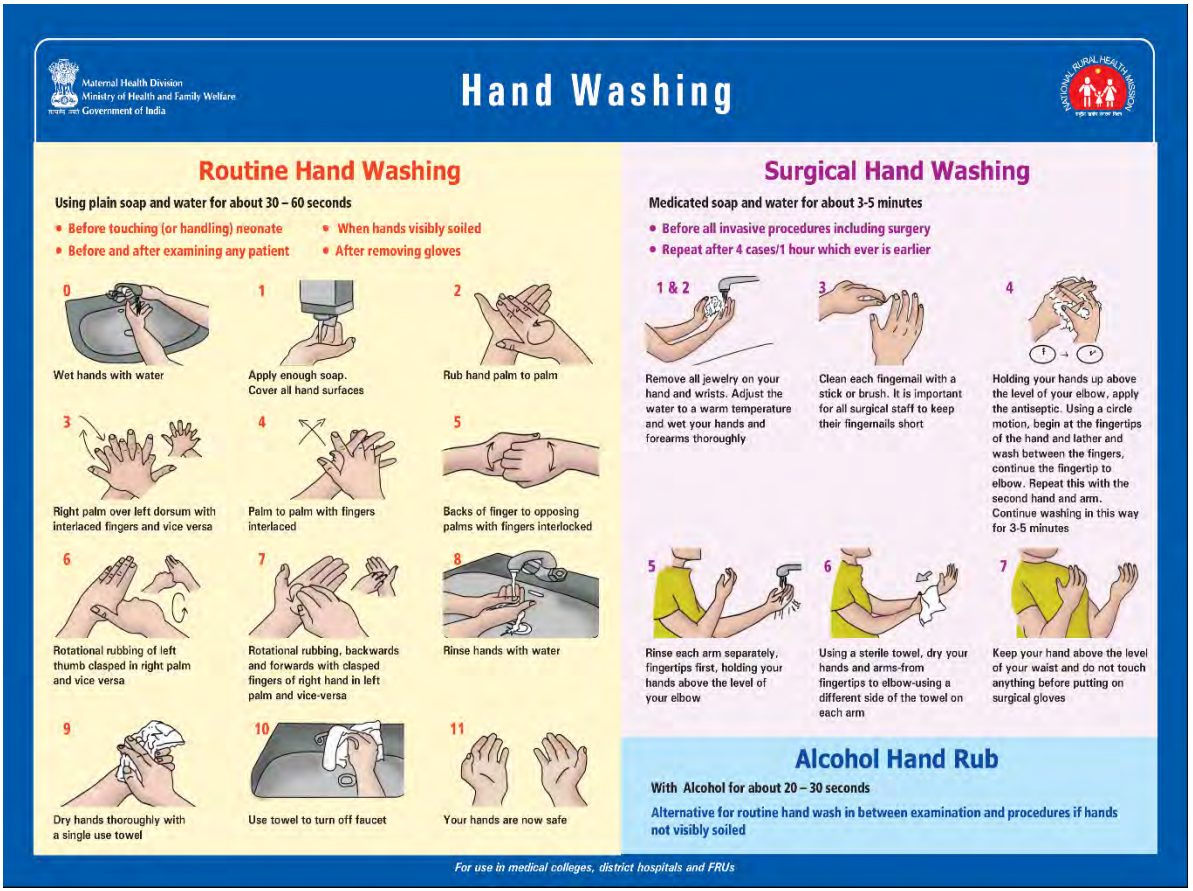
Hand washing is defined as washing hands with plain or antimicrobial soap and water (WHO). Hand washing prevents up to 70% of infections and is advocated as one of the most important universal work precaution.

Preparation for Care

Ensure all pre-requisites for hand washing are available in labor room, i.e. - deep-rooted sink, elbow operated taps, running water and antimicrobial soap. Remove all jewellery and watch from hands and wrists and roll the sleeves to above elbow level.

Care Process

For effective handwashing follow all six steps for about 30-60 seconds in a sequence



Annexure 6.8: Bio-medical waste

Bio-medical waste (BMW) is the waste generated during diagnosis, treatment or immunization of human beings. Proper waste disposal is important to minimize/ prevent the spread of infection(s) to hospital personnel and patients, and also to prevent the spread to the local community and environment.

Preparation for Care
Ensure availability of color coded bins for waste segregation at the point of generation. Ensure that the transport facilities for disposal and treatment of BMW are available at the health facility.

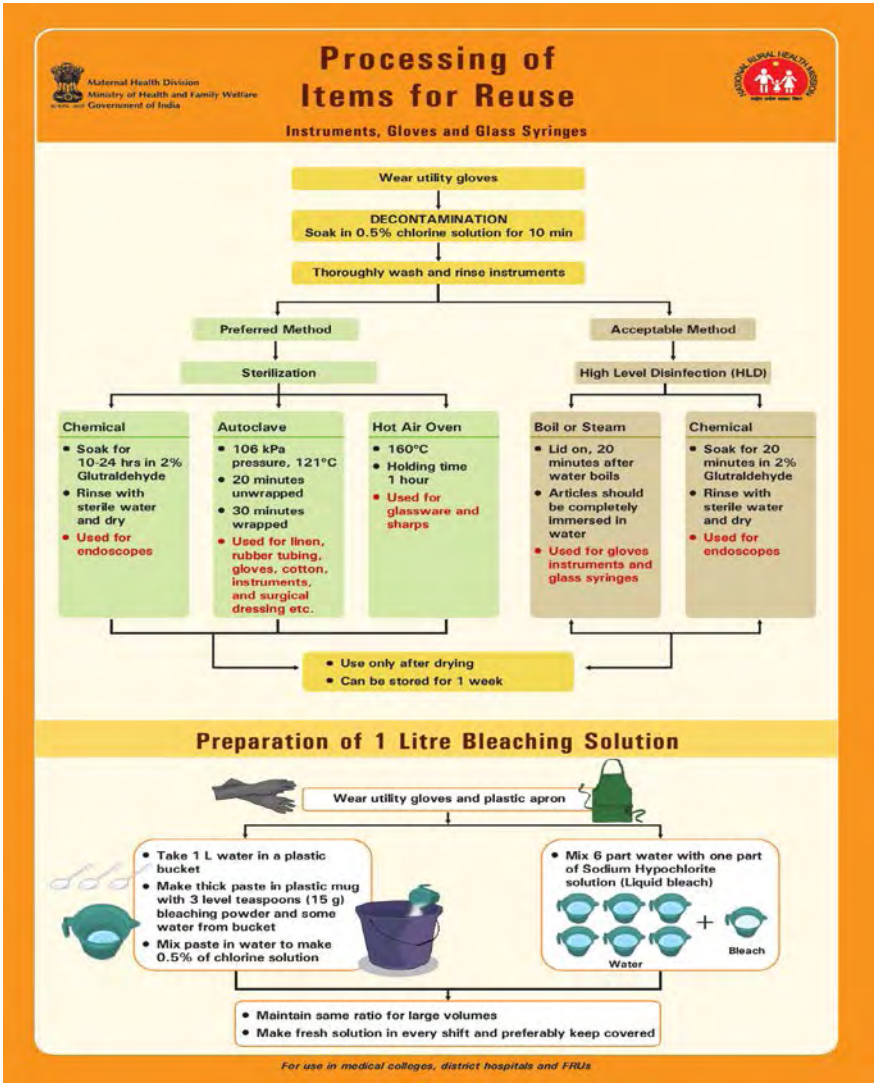
Care Process
There are four components for BMW management plan: Segregation; Disinfection (decontamination using 0.5% chlorine solution); Proper Storage before Transportation; and Safe Disposal.
General/non-contaminated waste: General waste such as kitchen waste, paper bags, waste paper, disposable glasses and plates, leftover food etc. should be segregated in black color bin.
BMW/contaminated waste: The segregation and disposal of BMW should be done as mentioned below in the table.

Category	Type of Bag or Container to be used	Type of Waste
Yellow	Yellow coloured non-chlorinated plastic bags	Human and animal anatomical waste, soiled waste, expired or discarded medicines, chemical waste, chemical liquid waste, microbiological and lab waste, discarded contaminated linen and mattresses
Red	Red coloured non-chlorinated plastic bags or containers	Contaminated recyclable waste such as tubing, IV bottles, bags, syringes and gloves
White (Translucent)	Puncture proof, Leak proof, tamper proof containers	Waste sharps including metals
Blue (Blue coloured marking)	Puncture proof, leak proof boxes/ container with blue colored marking	Glassware and metallic body implants

Annxure 6.9: Processing of instruments

Processing of used items implies decontaminating, cleaning, sterilizing or disinfecting and storing the instruments and items. Decontamination using 0.5% chlorine solution kills upto 80% infections including

- HIV, Hepatitis B and C. Sterilization means killing of 100% infection causing organisms and spores.



Preparation for Care

- Ensure availability of 0.5% chlorine solution in close proximity to the labor tables/point of use, color
- coded bins at all appropriate places such as yellow bin with each labor table, disinfectants, cleaning and mopping equipment, and autoclave for sterilization of equipment

Care Process

Process the used items as guided below:

- **Decontamination:**
  - Prepare 0.5% chlorine solution.

- Place the solution in a twin bucket (with fenestrated inner bucket), in close proximity to the
- labor table or at the point of use.
- Unhinge and immerse all used instruments in the inner bucket completely.
- Keep these instruments immersed for 10 minutes for decontamination.

- **Cleaning**: Remove the instruments, and wash and scrub them with a detergent under running water.
- **Sterilization or high level disinfection (HLD)**: Send all instruments for autoclaving (sterilization) or boil them in a boiler (HLD).
- **Storage**: Store the sterile instruments packed in sterile trays, without opening the lid or exposing them for upto 7 days. If unused after 7 days, re-sterilize the tray. Once the lid is opened, the tray should be used within 24 hours.
- **Handling instruments:** Use sterile cheatles forceps to take out the sterile instruments from trays or to take out autoclaved pads and linen from the drums, while preparing for delivery. The cheatles forceps is to be stored in a sterile metal jar with half lid. The forceps and jar should be autoclaved/HLD once every 24 hours.

Annexure 6.10: Management of spills: Body fluids/chemicals and mercury

Cleaning of body fluids / chemical spills

Small volumes of Body fluids must be managed by following actions

- Cover the spill with a newspaper, blotting paper / paper towel or dry mud.
- Pour 5 % phenyl or freshly prepared hypochlorite solution having 1% chlorine on it and wait for 30 minutes for contact.
- Wear gloves and collect it with a plastic scoop and put it in a plastic container Wet mop the area with Phenyl.

Large volumes of Body fluids must be managed by following actions

- Wear gloves
- Mop with absorbent cotton / gauze and discard it in the infectious waste bin
- Cover the spill with a newspaper, blotting paper / paper towel or dry mud.
- Pour 5 % phenyl or freshly prepared hypochlorite solution having 1% free chlorine on it and wait for 30 minutes for contact
- Wet mop the area with phenyl

Handling of mercury spills

In the event of any mercury spillage due to breakage of instrument the following measures are to be taken: -

Do's	Don'ts
• Remove people and pets from the spill area • Close all interior doors to the spill area • Turn off heating and air conditioning systems • Open all exterior windows and doors.	• Remove people and pets from the Do not touch the mercury. Never vacuum; it will release mercury vapour into the air • Never use a broom; it will break up the mercury • Never pour mercury down the drain • Never walk around in contaminated clothing or shoes • Never put mercury- contaminated items in the washing machine

Clean-up Instructions – Mercury Spill Management

- Remove all jewelry, mercury binds with the metal
- Put on rubber or latex gloves
- Pick up broken glass carefully; wrap in a paper towel, and place in a glass container with 5 to 10 ml of water
- Use a regular syringe for sucking the mercury droplets. Left out small beads are to be gathered with two cardboards and then scooped
- Place in water in a glass container
- Locate any remaining mercury with the flashlight; the beads will reflect the light making them easier to locate
- Pick up any remaining beads and place in water in the glass container
- Seal the glass container and label as "mercury waste" and place in a safe corner
- Place all materials used in the clean-up, including gloves, in a trash bag
- Seal the trash bag with tape and label as "mercury waste"
- Wash the area with mercury neutralizing agents like 20% calcium sulphide or sodium thiosulphate solution (if the chemicals are available.)
- Wash your hands, face, and any other areas of your body exposed to the mercury
- Keep the room ventilated for a minimum of 48 hours.

Method of disposal of mercury: The mercury should be then disposed of by handing it over to the appropriate agency for recycling

Annexure 6.10 OSCE on Personal Protective Equipment

Scenario: You are going to deliver a baby on the labour ward.

Steps	Total Mark	Score	Remark
Demonstrate how you would use personal protective equipment to protect yourself and the patient			
Shoe covers	1		
Waterproof apron	1		
Eye cover	1		
Cap	1		
Mask	1		
Gown	1		
Gloves	1		
Put on the sterile gloves using the following procedure:			
Ask assistant to open the outer package of the gloves	1		
Open the inner wrapper exposing the cuffed gloves with the palm facing upwards	1		
Pick up the first glove by the cuff, touching only the inside portion of the cuff	1		
Hold the cuff in one hand and slip the other hand into the glove ensuring that the fingers enter the corresponding finger of the glove	1		
Pick up the second glove by sliding the fingers of the	1		
gloved hand under the cuff of the second glove			
Put the second glove on the ungloved hand by maintaining a steady pull through the cuff until the fingers reach the end of the corresponding finger of the glove	1		
Adjust the cuff until the gloves fit comfortably and cover both the wrists.	1		
After the procedure, how would you remove the contaminated gloves?			
Grasp one of the gloves near the cuff and pull downwards towards the fingers	1		
Grasp the second glove and pull downwards	1		
Pull off the two gloves at the same time, being careful to touch	1		

only the inside surfaces of the gloves with your bare hands			
Place them in a container of 0.5% chlorine solution	1		
What precautions should you take to avoid contaminating sterile gloved hands?			
Don't touch unsterile items with gloved hands	1		
Keep gloved hands above waist level	1		
Total score:	**20**		

Annexure 7: Additional OSCE Checklists

Annexure 7.1 Inhaler and Nebulizer

Scenario: A boy aged one and a half, a known asthmatic, arrives in your clinic. He is short of breath and wheezing.

Steps	Total Mark	Score	Remark
▪ Wash hands (participant has to mention)	1		
▪ Measure the correct dose of medication to be used in the nebulized chamber (specify the dose)	1		
▪ Add normal saline to make the volume up to 3 ml	1		
▪ Connect the nebulizer tubing to the port on the compressor	1		
▪ Turn on compressor and check the nebulizer for misting	1		
▪ Connect the mouthpiece or mask to the T-shaped elbow	1		
▪ Hold the nebulizer in an upright position	1		
▪ Ensure the mask is a good fit	1		
Your patient is now stabilized; how would you teach the parents how to use the multi-dose inhaler (MDI) with spacer? Please demonstrate your teaching			
▪ Check expiry date	1		
▪ Shake the container	1		
▪ Remove the cap from the inhaler	1		
▪ Insert the inhaler mouthpiece into the slot of the spacer	1		
▪ Attach mask to the mouthpiece of the spacer	1		

▪ Instruct the mother to hold the child in the proper position	1		
▪ Place the mask over the child's nose and mouth so that there is a good seal with the face	2		
▪ Press down on the inhaler canister to spray 1 puff of medicine into the spacer	1		
▪ Allow the child to breathe normally for 5 breaths	1		
Here the facilitator would prompt: How do you know the medicine is dispersed? ▪ Momentary misting of the spacer and hissing noise	1		
When to administer next dose?			
▪ Wait for 2–3 minutes, shake the inhaler and repeat steps	1		
Total score:	**20**		

Annexure 7.2 Pregnancy Detection Test

Scenario: 27-year-old woman with missed period attends your health centre. She is otherwise fit and well.

Steps	Total Mark	Score	Remark
How would you confirm her pregnancy?			
Explain what you are doing and why	1		
Ask woman to collect her urine sample in the container	1		
Check expiry date on test kit and read instructions	2		
Take out the test card from packaging and place on flat surface	2		
Use dropper to put 2–3 drops of urine in the correct place on the test kit	1		
How long should you wait?			
As per manufacturer's instructions	1		
How would you read the test?			

1 band = not pregnant	2		
2 bands = pregnant	2		
0 bands = test kit failed, try again with new test kit	2		
Test is positive – what would you do next?			
Explain to the patient that she is pregnant	2		
Encourage her to attend ANC	2		
Register on MCP card/MCTS system	2		
Total score	**20**		

Ministry of Health & Family Welfare
Government of India