



## **Manual of Standard Operating Procedures for Labour Room and Operation Theatre under LaQshya Initiative**



**National Health Mission,  
Uttar Pradesh**



## Manual of Standard Operating Procedures for Labour Room and Operation Theatre under LaQshya Initiative



**National Health Mission,  
Uttar Pradesh**

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## FOREWORD

The National Health Mission has taken the decision to implement Standard Operating Procedures for all public health care facilities, as an approach to standardizing the guidelines for health care practitioners to ensure efficiency and effectiveness while securing safety in the care delivered.

This approach assists practitioners to meet an acceptable standard of best practice for all procedures each and every time. This Standard Operating Procedure Manual for Labour room and Operation Theatre services is developed in accordance with the LaQshya guidelines developed by NHM division and NHSRC, Ministry of Health & Family Welfare, Govt. of India.

This manual promotes universal access to care, privacy and confidentiality, respectful maternity care and patient safety as pillars for ensuring that every pregnant woman seeking obstetric services in the health facilities across the State, will receive quality antenatal, intra-natal and postnatal care.

This document would provide the health care personnel as to how the work processes and procedures are streamlined and provides an in depth understanding of the user needs. As Minister of Health, I wish this document be used as a generic standard and take the opportunity to congratulate the expert group that has put in countless number of man hours for the preparation of the document and all members of the consensus meeting for their participation and contribution.

**Sidharth Nath Singh**

प्रो० रीता बहुगुणा जोशी

मंत्री

महिला कल्याण, परिवार कल्याण,  
मातृ एवं शिशु कल्याण एवं पर्यटन



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उ०प्र० सचिवालय

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## FOREWORD

Although there has been overall advances in maternal health outcomes yet ensuring skilled and respectful care during delivery remains a challenge. This manual has been developed to determine responsibility of care providers; resolve questions or concerns in relation to care required; provide information in relation to clinical interventions, patient outcomes and patient care, essential for evidence based practices and ensure that health professionals and other care providers keep records of their professional practice in accordance with standard policies and procedures.

Treatment given to pregnant women when delivering in public health facilities require much improvement. They are unable to make choices or follow practices that put them in control of their own experience. The Ministry of Health is grateful to all the stakeholders who contributed to the development of the Standard Operating Procedures (SOPs) of Labour Room and Operation Theatre services. The primary purpose of the SOPs is to describe the steps that staff should normally follow in care of pregnant woman from conception to delivery.

This will enable health professionals and other care providers use quality information to reflect on their practice and implement changes based on evidence. As Minister of Health, I feel confident that all the health care professionals, managers, and support staff will ensure that the goals of this programme are achieved and maintained.

(Prof. Rita Bahuguna Joshi)

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## **PREFACE**

With the growing recognition of respectful patient centric care and safety challenges in health care especially with regards to surgical procedures, the National Health Mission, Uttar Pradesh through its Quality Assurance Division, has developed the SOPs of Labour Room and Operation Theatre. It is hoped that by providing clear guidelines, it will assist in the efficiency of the Labour room and Operation Theatre in the provision of high quality, evidence-based medical care to all pregnant women.

The Labour room and Operation theatre teams that work effectively together to use its knowledge and abilities can avert a considerable proportion of life-threatening complications. Improving patient safety is determined by how well caregivers work together as a team, how effectively they communicate with one another and with patients, and how carefully the care delivery processes and supporting systems of care are designed.

The aim of these SOPs is to provide information on the preoperative, operative and post-operative processes that should be adhered to in order to improve the safety of patients undergoing surgical procedures. All healthcare workers especially those working closely with operation theatres are mandated to utilize this very important resource to ensure safety of all surgical procedures at all times. Consideration will also be given to ensuring that patients receive an integrated and holistic approach to Maternal Health care.

The Ministry of Health & Family Welfare, Uttar Pradesh, requires that the management of each facility offering obstetric care would develop strategies to ensure implementation of these SOPs in the particular unit. Systems should also be introduced to facilitate monitoring for compliance in the use of the SOP.

I wish to congratulate Quality Assurance Division, SPMU, National Health Mission for their contribution towards the development of these SOPs.

( Prashant Trivedi )

**Pankaj Kumar**  
I.A.S  
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## ACKNOWLEDGEMENT

Every pregnant woman has the right to be treated using the safest technology available in health facilities. This requires two main aspects, knowledgeable and well trained caring healthcare workers, and validated systems in Labour room and Operating theatres and sterile services that will ensure safety for the patients and to reduce harm. Therefore, all health-care professionals and institutions have obligations to provide safe and quality health care and to avoid unintentional harm to patients.

To ensure effective implementation of women's rights-centered approaches in maternal health services, a Standard Operating Procedure Manual of Labour room and Operation Theatre has been developed by Quality Assurance division of National Health Mission, Uttar Pradesh. The insightful inputs given by Child Health Division, Maternal Health Division, UNICEF and Technical Support Unit, IHAT helped in firming up the guidelines within a set time period.

The operating theatre is a dynamic and complicated area, where the safety of patients' undergoing surgery requires great priority. The rapid development in technology, medicine and nursing, have led to new increased needs in the management of the operating theatre. Pre-operative preparation is essential and should be checked and rechecked to ensure no errors occur. During surgical procedures, several things can go wrong such as the operation on the wrong site or organ or location or even the wrong person. Patient harm can occur due to the lack of standardized pre-operative, operative and post-operative processes.

The technical contribution by Dr. Archana Verma, General Manager and her team member Dr. Preeti Madaan, State Consultant Public Health of Quality Assurance Division, State Programme Management Unit, National Health Mission, Uttar Pradesh needs a special mention for her robust and sound contribution and collating all available information.

I hope these Standard Operating Procedures and accompanying compendium of checklists facilitate to build a sound and credible quality system in Labour room and Operation Theatres at Public Health Facilities in provision of Respectful Maternity care to all pregnant women.

  
(Pankaj Kumar)



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### Programme Officer's Message

'Quality' is the core and most important aspect of services being rendered at any health facility. The clinicians at the health facility particularly public health facilities mostly deliver their services based on their clinical knowledge. Mostly patients' expectations go beyond only cure and includes courtesy, behavior of staff, cleanliness of the facility and delivery of prompt and respectful service.

Pain in labour is expected and anticipated. This adds to the fear that some patients experience and leads to much anxiety. Antenatal education and pain relief have become a major factor in preparing patients for childbirth and reducing the anticipated anxiety. This SOP therefore, has considered the various approaches which can be used to assist the patient through the birth of the baby.

As anyone who works in healthcare will attest, patient-centered care has taken center stage in quality provision of healthcare. Under **National Quality Assurance Programme and LaQshya Initiative**, measures are being taken using the principles of patient-centered care such as Respect for patients' preferences, Coordination and integration of care, Information and Education, Physical & Emotional comfort, involvement of family members and near kin like birth companion during delivery, Access to care and Continuity & transition

#### Suggestive actions for effective implementation:

- Communication training for new clinicians and retraining as needed on the basis of patient ratings of clinician communication and Behavior change communication workshops could be organized for the staff to develop behavioral skills.
- Surveying patients regularly about their care experience, and using results to identify opportunities to improve communication at the individual clinician level.
- A Quality circle may be formed in the health facility with internal colleagues as well as outside colleagues who are regularly invited to share their expertise, and it fosters improvements to internal care delivery initiatives.

However the implementation and sustainability of quality efforts need rigorous monitoring, continuous support and encouragement by the supervisors and most importantly the ownership of the staff working at the facility.

(Dr. Archana Verma)  
GM (Quality Assurance)



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# Standard Operating Procedures for District Women Hospital Uttar Pradesh

## SOP - Labour Room



**National Health Mission - Uttar Pradesh**

## **Objectives of Labour Room**

- 1. Improve Quality of care during the delivery and immediate post-partum period.**
- 2. Effectively manage obstetric complications and high-risk pregnancies.**
- 3. Provide Respectful Maternity Care (RMC) to all pregnant women coming to the facility.**
- 4. Stabilization of complications and ensure timely referrals to an appropriate facility and enable an effective two way follow-up system.**
- 5. Enhance satisfaction of beneficiaries visiting the health facilities.**
- 6. Ensure 100% compliance to administration of Oxytocin after birth.**
- 7. Ensure 100% compliance to use of real time partograph during delivery.**
- 8. Ensure zero stock out of necessary drugs and consumables.**

## SOP 3: Labour Room

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### 1. Purpose:

To develop a system for ensuring care of pregnant women from antenatal to postnatal period and also address the needs of the new born. It includes a comprehensive approach to reduce maternal, neonatal, infant and less than 5 mortality and protect them from likely health risks they may face.

### 2. Scope:

It covers pregnant woman during the period, from day of her registration for first ANC to 42 days post-delivery & new born.

### 3. Responsibility:

In-charge of hospital, Service Provider in OBG Department, Paediatrician, Medical officer and staff nurse /ANM

### 4. Procedure:

#### SOP for receiving and assessment of the patient of delivery

S.No.	ACTIVITY	RESPONSIBILITY	REFERENCE DOCUMENT
4.1	<p><b>Service Provision-</b> All the maternal and Child Health</p> <p>Services are provided as per IPHS for District Hospitals and Operation Guidelines for Maternal &amp; Child Health issued by MoHFW, Government of India. This Includes-</p> <ol style="list-style-type: none"><li>1. Antenatal Care including Management of High Risk Pregnancies referred form level 1 and institutions</li><li>2. 24X7 services for Emergency Obstetric Care &amp; New-born care</li><li>3. Emergency Care of Sick Infants</li><li>4. Family Planning Services</li><li>5. Counselling</li></ol>	Facility-in-charge	IPHS for District Hospital

4.1.1	<p><b>Labor Room preparation</b>  The labor Room is prepared and kept ready before hand with all necessary equipment as per the Labor Room checklist</p> <ul style="list-style-type: none"> <li>○ Adequate privacy for the mother with curtains and visual blocks is ensured</li> </ul>	Staff Nurse(primary)	
4.2	<p><b>Communication with pregnant woman and her family</b></p> <ul style="list-style-type: none"> <li>○ Mother and accompanying family members are greeted respectfully</li> <li>○ It is ensured that no derogatory comments are made</li> <li>○ LR procedure is explained to the mother and the attendant</li> <li>○ Consent of the mother is taken before starting any physical and vaginal examination</li> </ul>	Staff Nurse(primary)	
4.2.1	<p><b>Supportive care in Labour Room</b></p> <ul style="list-style-type: none"> <li>○ Mother is encouraged to walk around and pass urine frequently</li> <li>○ A relative is allowed to stay with the women as birth companion</li> <li>○ Mother is instructed to eat and drink frequently. She is advised to take light food like-tea, milk, biscuits etc. and avoid heavy meals.</li> <li>○ She is advised to adopt posture of her choice and do slow and deep breathing during contractions</li> </ul>	Staff Nurse(primary)	
4.2.2	<p><b>Procedure for Admission / Shifting / Referral –</b></p> <ul style="list-style-type: none"> <li>● The Pregnant women are admitted to the hospital either when they arrive in labor or when they nearing the delivery.</li> <li>● Pregnant woman is diagnosed for high risk signs such as mal presentation, and indicated for elective C-Section surgery are admitted 2-3 days prior to expected date.</li> <li>● Pregnant Women, received in Casualty/ Emergency, are attended by EMO and are directed towards labour room if no immediate resuscitation/ intervention is required.</li> <li>● Pregnant women directly reaching labour room are received by Medical Officer / nursing staff on duty.</li> <li>● Medical officer /Staff nurse analyzes condition of the patient along with history and reviews old records, including referral slip, if available, to assess any complications associated with pregnancy.</li> <li>● If pregnant woman is in first stage of labour she is shifted to pre partum observation beds where vitals and dilation is monitored on periodic basis and partograph is established.</li> <li>● If pregnant woman is in active first stage of Labour she is shifted to labour room.</li> <li>● Pregnant woman with eclampsia is shifted and treated in Eclampsia room.</li> </ul>	Medical Officer/ Staff Nurse	

	<ul style="list-style-type: none"> <li>• Pregnant woman requiring emergency C-Section is shifted to pre operative ward of OT immediately after preparation.</li> <li>• Pregnant women in false labour / Observation are monitored and subsequently discharged.</li> <li>• When the condition of the patient is such that she cannot be handled in the Facility due to the complications or due to lack of facilities, timely referral is done for the next higher appropriate facility with full record by ambulance services.</li> <li>• For every admitted pregnant woman bed head ticket is generated and entry is done in IPD register.</li> </ul> <p><b>Shifting of Patient to concerned Ward</b></p> <ul style="list-style-type: none"> <li>• Patient is shifted to the concerned in-patient facilities accompanied by the patient attendant.</li> <li>• Stretcher/wheel chair/Trolley are used for shifting of patient as required.</li> </ul>		
4.2.3	<p><b>Procedure for requisition of diagnostic test and receiving of the reports</b></p> <ul style="list-style-type: none"> <li>• If any laboratory test is required to be done then the Treating Doctor prescribes the test on the Lab/ X-ray/ USG requisition form.</li> <li>• In routine cases, Staff nurse collects the sample after identifying the patients with two identifiers and sends it to the Laboratory with the requisition form.</li> <li>• In emergency cases where patient needs to be transferred to OT for emergency LSCS, Laboratory technician (in-house / outsourced) is informed by the staff nurse. Lab technician comes to the ward and collects the sample. Rapid test kits are another alternative for emergency tests.</li> <li>• A separate Lab registration number is generated and given to the patient's attendant for collection of report.</li> <li>• Report is received within the defined Turn Around Time from the Lab.</li> <li>• In routine cases, if X-Ray, ECG or USG needs to be done, nurse informs the concerned technician, and at appointed date &amp; time the patient is transferred to the concerned department for the investigation.</li> <li>• Report is received within the defined Turn Around Time from the Radiology (X-ray / USG) department.</li> </ul>		
4.2.4	<p><b>Arrangement of intervention for Labour room</b></p> <ul style="list-style-type: none"> <li>• The Nurse-in-charge maintains inventory for the necessary equipment, drugs &amp; consumables and other facilities required for the delivery.</li> <li>• The Nurse-in-charge timely indents after scientific calculation of consumption of necessary drugs &amp;</li> </ul>	Nurse-in-charge / CMS / Hospital Manager / Departmental Nodal Officer for Quality	Checklist for Labour room preparedness

	<p>consumables.</p> <ul style="list-style-type: none"> <li>• The Nurse-in-charge maintains buffer stock of necessary drugs &amp; consumables.</li> <li>• Functionality of required equipment and Availability of Drugs &amp; consumables is ensured and checked on daily basis.</li> <li>• Any breakdown of equipment or shortage of supply is intimated to Facility Administration and immediate corrective actions are taken.</li> <li>• AMC and annual calibration of critical equipment is done annually.</li> </ul>		
4.2.5	<p><b>Procedure for Blood Transfusion-</b></p> <ul style="list-style-type: none"> <li>• Blood transfusion may be required in conditions like postpartum hemorrhage leading to shock and severe anemia.</li> <li>• Transfusion is prescribed only when the benefits to the woman are likely to outweigh the risks.</li> <li>• Functional linkage to 24X7 blood bank facility is available in hospital.</li> <li>• In emergency life saving conditions blood is issued without replacement after recommendation from treating doctor / authorized person.</li> <li>• Cross matching of donor and recipient blood is mandatory before transfusion.</li> <li>• For High Risk patients attendants are told to arrange blood in advance.</li> <li>• Blood transfusion is closely monitored by skilled staff</li> <li>• Corrective action for Blood Transfusion Reaction, if any, is taken.</li> <li>• Blood Transfusion Reaction form is reported to concerned blood bank.</li> </ul> <p>Prior to requesting the transport of blood products, ensure:</p> <ul style="list-style-type: none"> <li>• The patient has an IV line established with saline and</li> <li>• The physician orders for transfusion have been documented</li> <li>• Informed consent has been obtained.</li> <li>• Blood is received from Established Blood Banks only against a requisition form along with the sample for grouping &amp; cross-matching, duly signed by the medical staff</li> <li>• Staff nurse/ Ward Attendant) collects blood components from blood storage, transports blood component in insulated container to location and delivers it to nurse in charge.</li> </ul>		

<ul style="list-style-type: none"> <li>• Inspect for abnormal color, cloudiness, clots and excess air.</li> <li>• Check with compatibility slip to ensure that the following information on the unit of blood is the same as that on the Blood compatibility <ul style="list-style-type: none"> <li>○ Blood unit number</li> <li>○ Collection date</li> <li>○ Expiry date</li> <li>○ ABO blood group and Rh group</li> <li>○ Patients name matching with the requisition slip/ case file</li> <li>○ Number of units supplied</li> </ul> </li> <li>• It is ensured that blood is stored in monitored refrigerators designated for the purpose which can maintain the temperature at 2 - 6 degrees celsius.</li> <li>• It is ensured that blood components are NOT kept at room temperature or in an unmonitored refrigerator.</li> <li>• If whole blood or packed red cells infusion is not started within 30 minutes of issue from the blood bank the unit is placed in a monitored refrigerator.</li> <li>• Thawed FFP is also placed in a monitored refrigerator and is stored only up to 24 hours after thawing; best infused before 6 hours after thawing.</li> <li>• Platelets are stored in a platelet incubator at 20–24 degrees celsius with constant agitation and are taken from the blood bank only at the time of infusion.</li> <li>• Aseptic technique and Universal Blood and body Substance Precautions are followed throughout; hand washing is in accordance with the policy.</li> <li>• Each unit of blood is checked at the bedside by two nurses or a nurse and a doctor, and documented.</li> <li>• Rate of transfusion is followed as mentioned below: <ul style="list-style-type: none"> <li>○ Adults; Start with 1 ml/min for first 15 minutes. If no reaction, increase to 4ml/minutes after 15 minutes.</li> <li>○ For Pediatric Transfusions, advice is taken from Treating Pediatrician.</li> </ul> </li> <li>• If patient shows evidence of a transfusion reaction the transfusion is immediately discontinued at cannula hub, infusion of 0.9% Sodium Chloride is started and the concerned physician responsible for the case/on duty is informed.</li> <li>• The transfusion reaction form duly completed is returned to the blood bank along with samples for investigations as instructed on the reaction form.</li> <li>• If no evidence or reaction and vital signs are stable after 15 minutes, the flow is adjusted to prescribed rate.</li> <li>• Vital signs are assessed one hour after transfusion and as necessary thereafter;</li> </ul>		
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	<ul style="list-style-type: none"> <li>• The patient is continuously assessed for delayed transfusion reactions.</li> <li>• No medications or solutions are added to or infused through the same tubing as blood components, except 0.9% Sodium Chloride</li> <li>• The administration set is only used for up to four hours from the time of starting the infusion of red cells.</li> <li>• Duration of a blood transfusion is not normally exceeding four hours per unit of blood.</li> <li>• Blood &amp; Blood Bags are discarded as per BMW policies.</li> </ul> <p><b>Compliance requirements:</b></p> <ul style="list-style-type: none"> <li>• Intake and Output sheet documents: <ul style="list-style-type: none"> <li>a. Amount of blood transfused</li> <li>b. Blood unit and number</li> <li>c. Start and finish time of transfusion</li> <li>d. Amount of saline infused</li> </ul> </li> <li>• Nurses document the patient’s response to the transfusion.</li> </ul>		
4.3	<b>History taking and examination of woman in Labour</b>		
4.3.1	<ul style="list-style-type: none"> <li>• <b>History of patient is taken</b> <ul style="list-style-type: none"> <li>○ Time of onset of contraction</li> <li>○ Frequency of pains</li> <li>○ Leaking/bleeding PV</li> <li>○ Baby movements</li> <li>○ Initiate safe birth checklist to manage and make appropriate referral</li> </ul> </li> <li>• Physical examination is done to check following parameters <ul style="list-style-type: none"> <li>○ Pulse, temperature, BP, pallor</li> </ul> </li> <li>• Abdominal examination is done to check following parameters <ul style="list-style-type: none"> <li>○ Fundal height</li> <li>○ Fetal lie &amp; presentation</li> <li>○ Fetal heart rate (FHR)</li> <li>○ Frequency, duration and intensity of contraction</li> </ul> </li> <li>• Per vaginal examination is performed <ul style="list-style-type: none"> <li>○ Strict asepsis (hand hygiene, sterile gloves and cleaning of vulva using antiseptic) is followed</li> <li>○ Cervical dilatation and effacement are determined</li> <li>○ Status of presentation and membranes is seen</li> <li>○ Color of liquor is noted if membrane is already ruptured</li> <li>○ Station of the presenting part is checked</li> <li>○ Determine adequacy of pelvis for a normal labor.</li> </ul> </li> <li>• Signs of true labor are looked for <ul style="list-style-type: none"> <li>○ Painful contractions</li> <li>○ Blood-stained mucus discharge from vagina (“show”)</li> <li>○ Formation of bag of water.</li> </ul> </li> </ul>	Staff Nurse(primary)	



Procedure for Emergency Obstetric care			
S.No.	ACTIVITY	RESPONSIBILITY	REFERENCE DOCUMENT
4.3.2	<p><b>Identification of complications and referral</b></p> <ul style="list-style-type: none"> <li>• Cephalo Pelvic Disproportion (CPD)</li> <li>• Heavy bleeding per vaginum: If one pad gets soaked every 5 minutes</li> <li>• Shock (fast and feeble pulse, systolic BP less than 90 mm Hg, cold and moist skin)</li> <li>• Convulsion</li> <li>• Dangerous fever (temperature more than 38C)</li> <li>• Respiratory difficulty</li> <li>• Fetal distress- FHR less than 120/minute or more than 160/minute, meconium stained liquor</li> <li>• Transverse lie, breech presentation</li> <li>• Previous caesarean section</li> <li>• Labor more than 24 h,</li> <li>• Preterm Labor (34wk or lesser)</li> <li>• Multiple births</li> <li>• Pregnancy Induced Hypertension (PH)</li> <li>• She is RH(-ve)</li> <li>• Prolapsed cord</li> </ul> <p><b>Bleeding PV:</b> no vaginal examination. Insert IV cannula, give IV fluids (normal saline or ringer lactate solution)</p> <ul style="list-style-type: none"> <li>• <b>Shock:</b> left lateral position with legs higher up than chest, give oxygen, insert IV cannula, give IV fluids (normal saline or ringer lactate solution)</li> <li>• <b>Convulsions:</b> Place the patient in left lateral position, clear airway, protect from injury and give oxygen. Treat the woman with magnesium Sulphate. <ul style="list-style-type: none"> <li>○ <b>Pre referral:</b> Loading dose in L1 and L2 Facilities is 10 gms IM (50%) (5 gms in each buttock) in the presence of Medical Officer.</li> <li>○ Loading dose – total dose 14 gms- 4 gm IV (20%) + 10 gm IM (50%) (5 gm in each buttock) in presence of MO in L3 Facilities</li> <li>○ <b>Maintenance Dose:</b> 5gm IM 4 hourly for 24 hours either from the last convulsion or delivery (whichever comes first)</li> <li>○ Additional dose to be given if convulsion occurs within 2 hours- 2 gm IV (20%)</li> </ul> </li> <li>• <b>Dangerous fever:</b> Insert an IV fluids (dextrose saline, normal saline or ringer lactate solution) and treat as advised</li> <li>• <b>Respiratory difficulty or Cyanosis:</b> check airway, suction to remove secretions if present and give oxygen</li> </ul>	Medical officer Primary) / Staff Nurse	As per standard treatment guidelines

	<ul style="list-style-type: none"> <li>• <b>Fetal Distress:</b> put the mother in left lateral position, give IV fluids and oxygen</li> <li>• <b>Preterm labor (34 wk or lesser):</b> initiate antenatal corticosteroids therapy: injection dexamethasone 6 mg IM start (and every 12 hourly, for a total of 4 doses)</li> <li>• <b>Prolapse cord:</b> Raise the buttocks higher than the shoulders. With the help of pillow or folded sheet under the buttock, the presenting part should be kept pushed up by inserting gloved hand in the vagina. Consider delivering in the PHC only if the woman is in advanced Labor. Expedite the delivery. Be prepared for resuscitation of the newborn as per the Section 1.7</li> </ul>		
<b>Trays to be kept in Labour room</b>			
	<p style="text-align: center;"><b>1. Delivery tray:</b></p> <p>Gloves, scissor, artery forceps, sponge holding forceps, urinary catheter, bowl for antiseptic lotion, gauze pieces and cotton swabs, speculum, sanitary pads, Kidney tray.</p> <p style="text-align: center;"><b>2. Episiotomy tray:</b></p> <p>Inj. Xylocaine 2%, 10 ml disposable syringe with needle, episiotomy scissor, kidney tray, artery forceps, Allis forceps, sponge holding forceps, toothed forceps, needle holder, needle (round body and cutting), chromic catgut no. 1, gauze pieces, cotton swabs, antiseptic lotion, thumb forceps, gloves.</p> <p style="text-align: center;"><b>3. Baby tray:</b></p> <p>Two pre-warmed towels/sheets for wrapping the baby, cotton swabs, mucus extractor, bag &amp; mask, sterilized thread for cord/cord clamp, Nasogastric Tube and gloves Inj. Vitamin K, needle of gauze 26 and syringe 1ml. (Baby should be received in a Pre-warmed towel. Do not use metallic tray.)</p> <p style="text-align: center;"><b>4. Medicine tray*:</b></p> <p>Inj. Oxytocin (to be kept in fridge), Cap Ampicillin 500 mg, Tab Metronidazole 400 mg, Tab Paracetamol, Tab Ibuprofen, Tab B complex, IV fluids, Tab. Misoprostol 200 micrograms, Inj. Gentamycin, Vit K, Inj. Betamethasone, Ringer lactate, Normal Saline, Inj. Hydrzaline, Tab. Nifedepin, Tab. Methyldopa, magnifying glass. (* Nevirapin and other HIV drugs only for ICTC and ART Centers)</p> <p style="text-align: center;"><b>5. Emergency drug tray: **</b></p> <p>Inj. Oxytocin (to be kept in fridge), Inj. Magsulf 50%, Inj. Calcium gluconate-10%, Inj. Dexamethasone, Inj. Ampicillin, Inj. Gentamicin, Inj. Metronidazole, Inj. Lignocaine-2%, Inj. Adrenaline, Inj. Hydrocortisone Succinate, Inj. Diazepam, Inj. Pheneraminemaleate , Inj. Carboprost, Inj. Fortwin, Inj.</p>		

	<p>Phenergan, Ringer lactate, normal saline, Betamexthazon, Inj. Hydrazaline, Nefidepin, Methyldopa, IV sets with 16-gauge needle at least two, controlled suction catheter, mouth gag, IV Cannula, vials for Drug collection. Ceftriaxone (3rd generation cephalosporins) - For L3 facility. (** – only for L2, L3 facilities)</p> <p><b>6. MVA/ EVA tray:</b> Gloves, speculum, anterior vaginal wall retractor, posterior vaginal wall retractor, sponge holding forceps, MVA syringe and cannulas, MTP cannula, small bowl of antiseptic lotion, sanitary pads, pads / cotton swabs, disposable syringe and needle, misoprostol tablet, sterilized gauze/pads, urinary catheter.</p> <p><b>7. PPIUCD tray***–</b> PPIUCD Insertion Forceps, Cu IUCD 380A/ Cu IUCD 375 in a Sterile package. Sim's speculum, Ring forceps or sponge holding forceps, , Cotton swabs, Betadiene solution  (*** – only for L3 facilities with PPIUCD trained provider)</p>		
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### SOP FOR INTRA PARTUM CARE

4.4	<p style="text-align: center;"><b>Identification of stage of labor</b></p> <ul style="list-style-type: none"> <li>● <b>1<sup>st</sup> stage ( latent phase)</b> cervical dilatation: 0-3 cm; weak and infrequent contractions</li> <li>● <b>1<sup>st</sup> stage ( active phase):</b> cervical dilatation 4 cm or more, strong and frequent contractions</li> <li>● <b>2<sup>nd</sup> stage:</b> cervix fully dilated till delivery of baby</li> <li>● <b>3<sup>rd</sup> stage:</b> after delivery of baby until delivery of placenta</li> </ul>	Staff Nurse (Primary)	
4.5	<b>Care during labor</b>		
4.5.1	<p style="text-align: center;"><b>1<sup>st</sup> stage</b></p> <ul style="list-style-type: none"> <li>● <b>Monitoring is done every 1 hour</b> <ul style="list-style-type: none"> <li>● BP, temperature and pulse</li> <li>● Uterine contractions and fetal heart rate</li> </ul> </li> <li>● <b>PV examination every 4 hours</b> <ul style="list-style-type: none"> <li>● Cervical dilatation, effacement, status of membranes, station of head, color of liquid if membrane ruptured.</li> <li>● Unless indicated vaginal examination is not performed more frequently than once every 4 hours</li> </ul> </li> <li>● If any complication is seen as in <b>Section 4.3.2</b> the medical officer</li> </ul>	Medical officer/Staff Nurse (Primary)	

	<p>is called in for further management</p> <ul style="list-style-type: none"> <li>• Refer to appropriate higher facility if no progress in cervical dilatation in 8 hours despite strong and frequent uterine contraction.</li> <li>• If after 8 hours contraction subsides and there is no progress of cervical dilatation-it is probably false Labor and woman is discharged. She is advised to keep a fetal movement count (10 movements in 12 hours) and return if labor pains recur or there is bleeding or leaking per vaginum</li> </ul>		
4.5.2	<p style="text-align: center;"><b>1<sup>st</sup> stage</b> Pregnant woman is not left alone</p> <p><b>Following signs are monitored every 30 minutes:</b></p> <ul style="list-style-type: none"> <li>○ Frequency of contraction</li> <li>○ FHR (fetal heart rate)</li> <li>○ If membranes ruptured color of liquor is noted</li> <li>○ For any complication as in <b>Section 1.3.2</b></li> </ul> <p><b>Mother is monitored every 4 hours for:</b></p> <ul style="list-style-type: none"> <li>○ Pulse, BP</li> <li>○ PV examination is done and following observations are looked for: <ul style="list-style-type: none"> <li>▪ Cervical dilatation and effacement, status of membrane and color of liquor</li> </ul> </li> <li>○ Descent of presenting part</li> </ul> <p>Partograph is plotted- when the woman reaches active labor.</p> <p>The following points are noted:</p> <ul style="list-style-type: none"> <li>• <b>Fetal condition</b> <ul style="list-style-type: none"> <li>○ Fetal heart rates are counted every half hour. Count the FHR for one full minute. The rate is counted immediately following a uterine contraction. If the FHR is &gt;160/minute or &lt;120/minute, it indicates fetal distress. It is managed as mentioned in <b>Section 1.3.2</b></li> <li>○ Woman is observed every 30 minutes for any leaking PV. If present, the color of the amniotic fluid is noted as visible at the vulva, recorded as <ul style="list-style-type: none"> <li>• Clear (mark .C.)</li> <li>• Meconium stained (mark .M.)</li> <li>• No liquor (mark .A.)</li> </ul> </li> </ul> </li> <li>• Labor- Plotting is done on the partograph once the woman is in active labor. <ul style="list-style-type: none"> <li>○ Active labor is present if cervical dilatation is 4 cm or more with at least 3 good uterine contractions (i.e. each lasting for more than 30-40 seconds) per 10 minutes.</li> </ul> </li> </ul>	Medical officer/Staff Nurse (Primary)	

	<ul style="list-style-type: none"> <li>○ Cervical dilatation is recorded in cm in the beginning and every 4 hourly</li> <li>○ Every half hour the number of good contractions (lasting over 30-40 seconds) in 10 minutes are recorded, and appropriate boxes are blackened</li> <li>○ Initial recordings are placed to the left of the Alert Line and normally the line should continue to remain to the left of the Alert Line). Write the time accordingly in the row for time.</li> <li>○ If the Alert Line is crossed (the graph moves to the right of the Alert Line) it indicates a prolonged labor. The time is noted when the Alert Line is crossed. Medical officer is called to reassess/monitor:</li> <li>● The woman is encouraged to empty the bladder. The woman is reassessed in 2 hours if no progress, the obstetrician is called in for further management.</li> <li>● Crossing of the Action line (the graph moves to the right of the action line) the obstetrician is called in for further management. <ul style="list-style-type: none"> <li>● Intervention Any drug administered during labor, is mentioned in the record including the time dose and route of administration.</li> <li>● Maternal Condition Maternal pulse and BP are recorded every half hour and plotted on the partograph. Both systolic and diastolic BP are recorded using a vertical arrow.</li> </ul> </li> </ul>		
1.5.3	<p><b>2<sup>nd</sup> stage- delivery of the baby</b> Findings are recorded regularly in labor record and partograph</p> <p>Following signs are monitored every 5 minutes:</p> <ul style="list-style-type: none"> <li>● Frequency, duration and intensity of contraction</li> <li>● FHR</li> <li>● Perineal thinning and bulging</li> <li>● Visible descent of the fetal head during contraction</li> <li>● Any complications as in Section 1.3.2</li> </ul> <p style="text-align: center;"><b>Delivering the baby</b></p> <ul style="list-style-type: none"> <li>● It is ensured that the newborn care corner is prepared and equipment for neonatal resuscitation are ready</li> <li>● It is ensured that the bladder is empty</li> <li>● The woman is encouraged to push if she has the urge to do so during contractions and relax in between.</li> <li>● Bearing down effort is not required until the head has descended into the perineum. Thus no active pushing is allowed</li> <li>● Controlled delivery of head is ensured by taking the following</li> </ul>	Medical officer/Staff Nurse (Primary)	As per standard treatment guidelines

	<p>precautions:</p> <ul style="list-style-type: none"> <li>○ The perineum is supported with the left hand during delivery and the anus is covered with a pad held in position by the side of the left hand and right hand is used to maintain the slight flexion of the head</li> <li>● Once head is delivered, assistance in delivery of the shoulders and the rest of the baby is provided</li> <li>○ Spontaneous rotation and delivery of the shoulders is waited for</li> <li>○ Gentle downward pressure is applied to deliver the top (anterior) shoulder</li> <li>○ The baby is lifted up towards mother's abdomen, to deliver lower (posterior) shoulder</li> <li>● The baby is placed on mother's abdomen in skin to skin contact (even before cutting the cord)</li> <li>● The time of birth is noted</li> <li>● The baby is dried immediately. The scrubbing of the vernix is avoided.</li> <li>● Baby's breathing is assessed while drying- <ul style="list-style-type: none"> <li>○ If baby is breathing well, no further action is taken. The clamping of the cord is delayed.</li> <li>○ If the baby is not breathing or he/she is gasping: Clamp and cut the cord and shift the baby to radiant warmer for resuscitation (Section 1.7)</li> </ul> </li> <li>● 10 IU oxytocin is given IM to the mother within 1 min of the delivery of the baby <ul style="list-style-type: none"> <li>○ If heavy bleeding 10 IU Oxytocin IM is repeated in 10 minutes</li> </ul> </li> <li>● Baby is placed on the mother's abdomen for skin-skin contact</li> <li>● Clamping and cutting of the cord- <ul style="list-style-type: none"> <li>○ If the baby is crying: the clamping of cord is delayed and the cord is tied and cut between 1-3 minutes</li> <li>○ Clamps are put on the cord at 2 cm and 5 cm from the baby's abdomen</li> <li>○ Cord is cut between the ties with a sterile blade.</li> <li>○ Oozing of blood from the stump is looked for. If there is oozing, a second tie is placed between the baby's skin and the first tie.</li> </ul> </li> <li>● Initiation of breast feeding is encouraged and ensured Immediately after birth or within an hour</li> </ul> <p>Precautions/ Emergency signs:</p> <ul style="list-style-type: none"> <li>● If the woman has tight perineum, which may interfere with delivery, episiotomy is given and the delivery of head is controlled carefully. <b>Routine episiotomy is not performed without indication</b></li> <li>● <b>Stuck shoulder (shoulder dystocia)</b> Medical</li> </ul>		
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	<p>officer/Obstetrician (who is readily available)is called for the help. Liberal episiotomy is done.</p> <p>The assistant is asked to apply supra-pubic pressure and the person who is conducting delivery applies gentle downward traction on the fetal head. If unsuccessful, patient is referred urgently to higher facility.</p>		
1.5.4	<p style="text-align: center;"><b>3<sup>rd</sup> stage- Delivery of the placenta</b></p> <ul style="list-style-type: none"> <li>• Signs of placental separation are looked for and placenta is delivered by controlled cord traction <ul style="list-style-type: none"> <li>○ <b>Signs of placental separation:</b> Lengthening of the cord, fresh gush of blood, supra-pubic bulge, and placenta lying in the vagina</li> <li>○ <b>Delivery of the placenta:</b> Left hand is placed over pubic symphysis and the fundus of uterus is pushed up. Right hand is used to apply controlled downward traction on the cord to pull the placenta out.</li> <li>○ If placenta does not descend, both cord traction and counter traction are released on the abdomen until uterus contracts again and then the above step is repeated</li> </ul> </li> <li>• <b>After delivery of the placenta:</b> It is checked if the uterus is well contracted and there is no heavy bleeding. Examination is repeated every 15 minutes for first hour- <ul style="list-style-type: none"> <li>○ If uterus is relaxed and there is heavy bleeding, the uterus is massaged and 10 IU oxytocin IM is given stat. 10 IU of oxytocin infusion (in 500 cc ringer lactate) is started at 60 drops per minute. Bladder is emptied.</li> <li>○ If bleeding persists and uterus is soft, continued massaging of uterus is done and bimanual compression is applied.</li> <li>○ IV fluids with 10 IU oxytocin are continued at 30 drops per minute, if bleeding gets controlled.</li> </ul> </li> <li>• <b>Check the perineum, cervix and vagina</b> for tears. Repair if needed.</li> <li>• Blood loss is estimated and recorded throughout third stage and immediately afterwards.</li> <li>• If blood loss equals to or more than 500 ml management of PPH is to be done as per standard guidelines. Intensive monitoring is done (every 30 minutes) for 4 hours for <ul style="list-style-type: none"> <li>▪ BP, Pulse</li> <li>▪ Respiratory rate</li> <li>▪ Uterine contraction to make sure it is well contracted</li> <li>▪ Vaginal bleeding</li> </ul> </li> <li>• The woman is assisted when she first walks after recovering</li> <li>• Mother and baby are kept in delivery room for a minimum of one hour after delivery of placenta</li> <li>• The placenta is disposed as per biomedical waste management rules, 2016</li> </ul>	Medical officer/Staff Nurse (Primary)	

	<p>The obstetrician is called in for further management if</p> <ul style="list-style-type: none"> <li>• Unable to remove placenta by 1 hour after delivery or if blood loss is more than 350 ml and bleeding still continues (more than 3 pads soaked in 5 minutes): the uterus is massaged until hard, oxytocin infusion @ 40- 60 drops /min is continued and pulse and BP are checked every 15 minutes.</li> </ul> <p><b>If baby is still born</b> Supportive care is given</p> <ul style="list-style-type: none"> <li>○ The parents are informed as soon as possible</li> <li>○ The possible causes of death are discussed with mother and her family</li> <li>○ Body is handed over to relatives</li> <li>○ The record is maintained in death register</li> </ul>		
4.6	<p><b>Care of mother and newborn after delivery</b></p> <ul style="list-style-type: none"> <li>• Findings, treatment and procedures are recorded in the patient’s labor record</li> <li>• Mother and baby are kept under observation in delivery room. They are not separated.</li> <li>• The mother and the newborn are not left alone</li> <li>• Breast feeding is ensured <b>within first hour</b></li> </ul>	Staff Nurse(Primary )	
4.6.1	<p><b>Care of mother</b></p> <p>Watch for vitals, urine output, bleeding per vaginum and uterine tone</p> <ul style="list-style-type: none"> <li>• Assessment is done every 30 minutes for next 2 hours, then every 6 hours up to 48 hours.</li> <li>• The woman is encouraged to pass urine</li> <li>• In case of excessive bleeding, the management of PPH is done as per standard guidelines</li> <li>• Mother is encouraged to eat and drink, and rest.</li> <li>• Birth companion is asked to stay with the mother and newborn. Mother and newborn are not to be left alone. The companion is instructed to call for staff nurse in case the mother has the following danger sign like: <ul style="list-style-type: none"> <li>○ Feels dizzy</li> <li>○ Severe headache, visual disturbance</li> <li>○ Pain in the abdomen</li> <li>○ Increased pain in the perineum</li> <li>○ Excessive bleeding</li> </ul> </li> </ul> <p>If unable to manage, MO is called for further Management</p>	Medical officer/Staff Nurse (Primary)	
1.6.2	<p><b>Care of the newborn:</b></p> <ul style="list-style-type: none"> <li>• The baby is dried. Vernix is not removed and the baby is not given a bath.</li> <li>• The mother and baby are allowed to remain together for skin-to-skin contact. Both of them are covered with a blanket.</li> <li>• The mother is encouraged and supported to continue breast-feeding. The newborn is not given anything other than own</li> </ul>	Staff Nurse (Primary)	



	<p>mother's milk.</p> <ul style="list-style-type: none"> <li>• The weight of newborn is measured <ul style="list-style-type: none"> <li>○ If birth weight &lt; 1800g then the baby is immediately referred to SNCU / higher facility.</li> </ul> </li> <li>• The baby is assessed every 30 minutes till 2 hours for: <ul style="list-style-type: none"> <li>○ <b>Any emergency signs</b>(mother and / or companion also to be explained) like: <ul style="list-style-type: none"> <li>• Lethargy or cyanosis</li> <li>• Pallor</li> <li>• Difficulty in breathing</li> <li>• Grunting</li> <li>• Fast breathing (&gt;60/min)</li> <li>• Chest in-drawing</li> <li>• Convulsions</li> </ul> </li> <li>○ Body temperature</li> <li>○ Bleeding from the umbilical cord.</li> </ul> </li> <li>• Breast-feeding is assessed <ul style="list-style-type: none"> <li>○ To see if the baby is able to attach correctly and is positioned well</li> <li>○ To check if the baby is sucking effectively</li> </ul> </li> </ul> <p>The Pediatrician/Obstetrician is called in case of any complication. If treatment is not possible at the facility, then the baby is referred to the higher facility immediately</p>		
1.7	<p><b>Neonatal Resuscitation</b></p> <p>Resuscitation is started immediately if the baby is not breathing or gasping</p> <p>Neonatal resuscitation is discontinued if there is no sign of life after 10 minutes of resuscitation. Prognosis of newborn is discussed with parents before discontinuing resuscitation.</p> <p>Paediatrician &amp; SNCU in charge is intimated for the further management.</p> <ul style="list-style-type: none"> <li>○ The baby is kept warm</li> <li>○ The cord is clamped and cut</li> <li>○ The baby is transferred to a dry, clean and warm surface like under a radiant heater</li> <li>○ The head is positioned in slight extension and turn the head to over side</li> <li>○ The airway is opened</li> <li>○ First the suction of mouth is done and then the nose if required <ul style="list-style-type: none"> <li>• The suction tube is introduced into the newborn's mouth 5-cm from lips and suck while withdrawing</li> <li>• The suction tube is introduced 3-cm into each nostril and suck while withdrawing until no mucus</li> </ul> </li> </ul>	MO/ Paediatrician/ Staff Nurse	

	<ul style="list-style-type: none"> <li>• Each suction is repeated if necessary</li> <li>○ Tactile stimulation is given</li> <li>○ Reposition</li> <li>○ If still no / irregular breathing and HR &gt; 100/ minute start ventilation <ul style="list-style-type: none"> <li>• Mask is placed to cover the chin, mouth and nose and form a seal</li> <li>• Ambu bag is squeezed and rising of chest is observed</li> <li>• If breathing or crying with more than 30 breaths per minute and no severe chest in-drawing, ventilation is stopped.</li> <li>• Evaluate after 30 sec, if HR increasing continue PPV. If HR &lt;60 per minute, start chest compressions in ratio of 3 chest compressions to one breath per minute</li> <li>• Discontinue when HR increases to more than 60 per minute and breathing stabilizes.</li> <li>• In case of deterioration inspite of PPV, call for additional help from medical expert for further resuscitation.(Ref to Annexure on NNR)</li> <li>• Baby is kept under observation in Radiant Warmer when baby is stabilized (HR &gt; 100 bpm &amp; breathing well) then kept in skin-skin contact with mother's chest</li> <li>• Baby is monitored every 15 minutes for breathing and warmth</li> <li>• If breathing is less than 30 breaths per minute or severe chest in drawing, ventilation is continued</li> <li>• Immediate referral to District Hospital is arranged.</li> </ul> </li> <li>○ If no breathing at all after 20 minutes of ventilation <ul style="list-style-type: none"> <li>• Ventilation is stopped. The baby is declared dead</li> <li>• Mother is explained and supportive care is given to her.</li> <li>• The event is recorded.</li> </ul> </li> </ul>		
<b>4.2</b>	<b>Management of High risk Pregnancy</b>		
4.2.1	<p><b>High Risk Pregnancy cases are patients who have associated problems with Pregnancy such as:</b></p> <ol style="list-style-type: none"> <li>1. Grand multipara</li> <li>2. Previous 3<sup>rd</sup> stage abnormalities / problems</li> <li>3. All major Medical Disorders</li> <li>4. Multiple Pregnancy</li> <li>5. All malpresentations</li> <li>6. BOH</li> <li>7. CPD</li> <li>8. APH</li> </ol>	<p>Medical Officer/ gynaecologist.</p> <p>Nurse in-charge</p>	Simplified Partograph

	<p>9. Previous LSCS</p> <p>10. PIH/ Eclampsia, Gestational Diabetes</p> <p>11. Recurrent premature labour</p> <p>12. Rh negative women with Rh positive husband</p> <p>13. Gynaecological abnormality</p> <p>14. Elderly primi</p> <p>15. History of Infertility</p> <p>16. Gross obesity</p> <p>17. Oligo/Polyhydramnios</p> <p>18. Extremes of age regardless of parity, &lt; 18 yrs / &gt; 35 yrs. Both are in need of attention, medical or social, due to various problems.</p> <p><b>Management of 1<sup>st</sup> stage of labour in High Risk Pregnancy:</b></p> <ul style="list-style-type: none"> <li>• The patient is informed about the condition, counselling is done and consent is taken by the nurse in-charge and medical officer.</li> <li>• A partograph is established by staff nurse.</li> <li>• Monitoring &amp; charting of uterine contraction, Foetal heart rate, emergency signs, cervical dilation, BP, temperature and Pulse is done on periodic basis depending upon low/ high risk pregnancy and progress is updated in partograph.</li> <li>• In any condition of unsatisfactory progress of labour due to prolonged latent phase, non progress of labour, prolonged active phase, foetal distress, cephalopelvic disproportion, obstruction, mal-presentation, mal-position, prolonged expulsive phase, the obstetrician is called in for further management.</li> <li>• Decision about induction or augmentation of labour, vacuum extraction, forceps delivery, Craniotomy or C-Section after careful assessment of patient and procedure is performed as per standard EmOC guidelines.</li> <li>• Paediatrician &amp; Anaesthetist is alerted of anticipated surgery and newborn complications.</li> <li>• OT In charge is also alerted for preparedness of Operation Theatre in case surgery is required.</li> </ul>		
4.2.2	<p><b>Management of 2<sup>nd</sup> stage of labour in High Risk Pregnancy:</b></p> <p>Uterine contraction, FHR, Perineal thinning &amp; Bulging, visible descent of foetal head during contraction and presence of any sign of emergency is monitored periodic basis depending upon the low or high</p>	Nurse in-charge	Guideline for pregnancy care and management

	<p>pregnancy.</p> <p>Paediatrician on call is informed about the imminent delivery in advance and as soon as patient is shifted to second stage of labour/operation theatre (All deliveries are attended by Paediatrician on call).</p> <p>Episiotomy is performed if required.</p> <p>In case of shoulder dystocia, obstetrician is called in for further management.</p> <p>Delivery of baby and time of delivery is noted.</p> <p>Cord is tied and cut with a sterile blade after 2-3 minutes of delivery.</p> <p>Immediate newborn care is given.</p> <p>If newborn cries in 30 seconds newborn resuscitation is started.</p>		of obstetrics complication for MO.
<b>4.2.3</b>	<p><b>Management of 3<sup>rd</sup> stage of labour in High Risk Pregnancy:</b></p> <p>Inj. Oxytocin or Misoprostol is administered.</p> <p>Controlled cord traction is done for assist expulsion of placenta.</p> <p>Uterine massage is given to prevent PPH</p> <p>If there is retained placenta or PPH it is managed as per standard protocol.</p> <p>BP, Pulse, Temperature, vaginal bleeding is monitored periodically for three hours.</p> <p>In case the child delivered is dead, then the body is handed over to relatives and record is maintained in death register as still birth.</p>	<p>Medical Officer/ gynaecologist.</p> <p>Nurse in-charge</p>	<p>Labour Register</p> <p>Birth register</p> <p>Death Register.</p> <p>WI for Active Management of 3<sup>rd</sup> Stage of Pregnancy</p> <p>WI for PPH</p>
<b>4.2.4</b>	<p><b>Immediate Postpartum Care-</b></p> <ul style="list-style-type: none"> <li>• Assessment is done for contraction of uterus, bleeding and for vaginal/ perineal tear.</li> <li>• Sanitary Pad is placed under the buttock to collect the blood. Assessment of blood loss is done by counting the blood soak pads.</li> <li>• Vitals are monitored at periodic intervals.</li> <li>• Mother and newborn are kept together. Breast-feeding is encouraged.</li> <li>• Birth Companion is asked to stay with the mother. She was instructed to call for help in case of any danger sign.</li> <li>• Weight of newborn is measured.</li> <li>• Information of mother and newborn is recorded in labour register.</li> </ul> <p>Newborn and Mother is given identification tags.</p>	<p>MO/ Obstetrician/ Staff Nurse / Labor Room Companion / MAMTA</p>	<p>Guideline for pregnancy care and management of obstetrics complications for MO.</p> <p>Labor Room Register</p>
<b>4.2.5</b>	<p><b>Essential Care of New Born</b></p> <p>Essential new born care is given including maintain body temperature, maintaining airway &amp; breathing, breast feeding of new born, care of</p>	<p>Staff Nurse</p>	<p>WI for Immediate Newborn</p>

	cord and eyes.		Care WI for Preventing Hypothermia
<b>4.3</b>	<b>C-Section Surgery-</b> 24X7 availability of obstetrician or Medical Officer Trained in EmOC is ensured. Non-availability of obstetrician for procedure is immediately informed to Hospital Superintendent/ Hospital Manager so alternative arrangement can be made.	Obstetrician/ Hospital Superintendent / Hospital Manager	
<b>4.3.2</b>	<b>Preparing Women for Surgical Procedure-</b> <ul style="list-style-type: none"> <li>• Procedure to be performed and its purpose is explained to the woman. If the woman is unconscious, it is explained to her family.</li> <li>• Informed consent for the procedure is obtained from the women / relatives.</li> <li>• Woman's medical history is reviewed and checked for any possible allergies.</li> <li>• Blood sample is sent for haemoglobin or haematocrit and type and screen. Blood is ordered for if there is possibility of transfusion.</li> <li>• Area around the proposed incision site is washed with soap and water, if necessary.</li> <li>• Woman's pubic hair is not shaved as this increases the risk of wound infection. The hair may be trimmed, if necessary.</li> <li>• Vital signs are monitored and recorded. (Blood pressure, pulse, respiratory rate and temperature).</li> <li>• Premedication appropriate for the anaesthesia is administered.</li> <li>• Antacid is given to reduce stomach acid in case there is aspiration.</li> <li>• Bladder is catheterized if necessary and urine output is monitored.</li> <li>• Relevant information is passed on to other members of the team (doctor/midwife, nurse, anaesthetist, assistant and others) is ensured.</li> </ul>	OT In charge/ Obstetrician/ OT Nurse/ Anaesthetist	SOP for OT Management
<b>4.3.3</b>	<b>Criteria to distinguish between Newborn death and Still birth</b> <ul style="list-style-type: none"> <li>• <b>Live birth</b> is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn.</li> <li>• <b>Stillbirth or Intrauterine death or Fetal death</b> is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the fetus</li> </ul>		

	<p>does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.</p> <ul style="list-style-type: none"> <li>• <b>The peri natal period</b> commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth.</li> <li>• <b>The neonatal period</b> begins with birth and ends 28 complete days after birth. Neonatal deaths may be subdivided into early neonatal deaths, occurring during the first seven days of life (0-6 days), and late neonatal deaths, occurring after the seventh day but before the 28th day of life (7-27 days)</li> <li>• A decrease or cessation in sensations of fetal activity may be an indication of fetal distress or death, though it is not entirely uncommon for a healthy fetus to exhibit such changes, particularly near the end of a pregnancy when there is considerably less space in the uterus than earlier in pregnancy for the fetus to move about.</li> <li>• Still, medical examination, including a non stress test, is recommended in the event of any type of any change in the strength or frequency of fetal movement, especially a complete cease; most midwives and obstetricians recommend the use of a kick chart to assist in detecting any changes.</li> <li>• Fetal distress or death can be confirmed or ruled out via fetoscopy / doptone, ultrasound, and/or electronic fetal monitoring. If the fetus is alive but inactive, extra attention will be given to the placenta and umbilical cord during ultrasound examination to ensure that there is no compromise of oxygen and nutrient delivery.</li> <li>• The <b>World Health Organization</b> recommends that any baby born without signs of life at greater than or equal to 28 completed weeks' gestation be classified as a stillbirth.</li> </ul> <p><b>Causes of still birth:</b></p> <p>Problems with the placenta, which nourishes the baby, can lead to a stillbirth in around two thirds of cases. In a placental abruption, the placenta separates too soon from the uterine wall.</p> <p>Other causes of stillbirth include:</p> <ul style="list-style-type: none"> <li>• Umbilical cord problems also cause stillbirths. In a prolapsed umbilical cord, the cord comes out of the vagina before the baby, blocking the oxygen supply before the baby can breathe on its own.</li> <li>• A mother's medical condition that existed before or developed during the pregnancy can lead to stillbirth. Women are at increased risk if they have <u>type 1 diabetes</u> or untreated diabetes before or during pregnancy. <u>High blood pressure</u> - particularly</li> </ul>		
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	<p>pregnancy-induced high blood pressure or pre- <u>eclampsia</u> - is another major cause of stillbirth.</p> <ul style="list-style-type: none"> <li>• Sometimes the foetus may grow too slowly. This condition, called intrauterine growth restriction (IUGR), puts the foetus at risk of dying from lack of nutrition.</li> </ul> <p><b>Conditions Associated with Stillbirth:</b></p> <p><b>Infection</b></p> <ul style="list-style-type: none"> <li>• Severe maternal illness</li> <li>• Placental infection leading to hypoxemia</li> <li>• Fetal infection leading to congenital deformity</li> <li>• Fetal infection leading damage of a vital organ</li> <li>• Precipitating preterm labor with the fetus dying in labor</li> </ul> <p><b>Maternal medical conditions</b></p> <ul style="list-style-type: none"> <li>• Hypertensive disorders</li> <li>• Diabetes mellitus</li> <li>• Thyroid disease</li> <li>• Renal disease</li> <li>• Liver disease</li> <li>• Connective tissue disease (systemic lupus erythematosus)</li> <li>• Cholestasis</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>• Antiphospholipid syndrome</li> <li>• Heritable thrombophilias</li> <li>• Red cell alloimmunization</li> <li>• Platelet alloimmunization</li> <li>• Congenital anomaly and malformations</li> <li>• Chromosomal abnormalities including confined placental mosaicism</li> <li>• Fetomaternal hemorrhage</li> <li>• Fetal growth restriction</li> <li>• Placental abnormalities including vasa previa and placental abruption</li> <li>• Umbilical cord pathology including velamentous insertion, prolapse, occlusion and entanglement</li> <li>• Multifoetal gestation including twin–twin transfusion syndrome and twin reverse arterial perfusion</li> <li>• Amniotic band sequence</li> <li>• Central nervous system lesions</li> </ul>		

<b>4.4</b>	<b>Inpatient Care</b>		
<b>4.4.1</b>	<p><b>Post Natal Inpatient Care of Mothers</b></p> <p>After delivery, mother is shifted to the labour ward for post-natal care</p> <ul style="list-style-type: none"> <li>• Maternal health is monitored and every step shall be taken to improve well being and good health of mother &amp; new born.</li> <li>• Medication is administered when required and prescribed by the doctor.</li> <li>• The patient is encouraged for taking normal diet, plenty of fluids and start breast-feeding the child.</li> </ul>	Staff Nurse	SOP for IPD Management
<b>4.4.2</b>	<p><b>Post Natal Inpatient care of New Born</b></p> <p>After delivery; all new born not needing special care shifted to the Labour ward with mother for postnatal care and Postnatal ward is kept warm (25°C). New Born is kept with mother on the same bed right from the birth.</p> <p>Mother is encouraged to breast fed baby within 1 hr of delivery.</p> <p>Postnatal new born care includes review of labour and birth record, communication with mother, examination of baby, assessment of breastfeeding, cord care, skin &amp; eye care, administration of Vit K, counselling of mother, immunization BCG, OPV-0, Hepatitis B (HB-1) and follow-up.</p>		<p>F. IMNCI Manual</p> <p>Guidelines for antenatal care and skilled birth attendance at Birth</p>
<b>4.4.3</b>	<p><b>Shifting of Newborn to SNCU</b></p> <p>If the new born is has any of any of following condition it is shifted to new born care unit</p> <p>birth weight &lt; 1800 gms,</p> <p>Major congenital malformation</p> <p>Severe Birth Injury</p> <p>Severe Respiratory Distress</p> <p>PPV ≥ 5 Minutes</p> <p>Needing Chest Compression or drugs</p> <p>Any other indication decided by paediatrician.</p> <p>New born is kept under closed observation</p> <p>Birth Weight 1500-1800</p> <p>New Born needing IPPV</p> <p>Vigorous babies with fast breathing</p>	MO/ Staff Nurse/ Paediatrician	F. IMNCI Manual
<b>4.4.4</b>	<p><b>Discharge of Patient</b></p> <p>Discharge is done after delivery, depending upon the mother's condition but not less than 48 hours for normal delivery.</p>	Medical officer/ gynaecologist	Discharge slip



	<p>Discharge slip is prepared by the M.O. and entry is made in the discharge register by ward in-charge.</p> <p>Mother is briefed about postpartum care and hygiene, nutrition for self &amp; Newborn, Exclusive breastfeeding follow-up advice, keeping baby warm, complete immunization of newborn post partum visits, family planning.</p> <p>She is also counselled about the danger signs that should immediately reported to the hospital relating her and new born.</p>	nurse in-charge	Antenatal Care and Skilled Birth Attendance at Birth
4.5	<p><b>Payment to beneficiaries</b></p> <p>The payment under JSY is provided to the beneficiaries after 48 hour of stay in the hospital after delivery, The schedule of payment is informed to beneficiary by authorized personnel</p>	Hospital Superintendent Clerk	JSY Scheme JSY Register
4.6	<p><b>Postnatal care after discharge-</b> Postnatal Care is provided through MCH/ Obstetrics &amp; Gynaecology clinic</p> <p>Mothers referred to hospital for postnatal visits by ASHA/ANM for postpartum complication like PPH and puerperal sepsis, severe anaemia are assessed in OPD Clinic/ Emergency and admitted in the hospital if required.</p>	MO/ Obstetrician	
4.7	<p><b>Immunization</b></p> <ul style="list-style-type: none"> <li>The hospital immunization facility under universal immunization programme for children/new born/neonates which includes all vaccines e.g. OPV, DOT, TT, BCG, Measles etc. and register is maintained in the department by Sister In-Charge.</li> <li>Details of immunization given are entered on Mother and child protection card.</li> <li>Auto disable syringes are used for immunization.</li> <li>Any serious adverse event following immunization such as death, Hospitalization, disability and other serious events that are thought to be related with immunization are immediately reported to MS by Phone.</li> <li>Other Serious AEFIs such as anaphylaxis, TSS, AFP, encephalopathy, sepsis, event occurring in cluster are reported to district immunization officer within the prescribed time in prescribed format.</li> <li>All the serious AEFI are investigated by appropriate authorities and corrective action is taken.</li> </ul> <p>After each immunization parents are informed about-</p> <ul style="list-style-type: none"> <li>What vaccine is given and it prevents what.</li> <li>What are minor side effects and how to deal with them?</li> <li>When to come for next visit</li> </ul>	Immunization Nurse/ ANM	Universal Immunization programme Mother and Child Protection Card

	<ul style="list-style-type: none"> <li>To keep mother and child protection card safe and bring it on next visit.</li> </ul>		
<b>4.8</b>	<b>Counselling for the family Planning</b>		
	<ul style="list-style-type: none"> <li>The patient is referred from Obstetrics &amp; Gynaecology clinic / MCH Clinic and other consultation rooms to the counselling centre (if any) of hospital or counselled in PP clinic</li> <li>The clerk enters patient's details in the register and asks the patient to fill consent form</li> <li>The MO explains the couple on importance of family planning and the various permanent (NSV, Vasectomy, Female sterilization, Tubectomy) and temporary methods of family planning (PPIUCD Condoms)</li> </ul>	MO/ PP Centre In charge	Family planning registers.
<b>4.9</b>	<b>Integrated Management of Neonatal Sickness</b> Patients under age of 2 months are classified as sick young infants and patients under 5 year of age are classified as sick child. Their management is done as per Integrated Management Neonatal and Childhood Illness approach. This Includes: <ul style="list-style-type: none"> <li>Urgent Referral Services at facility (Red)</li> <li>Urgent Referral Facility at Out Patient Department (Red)</li> <li>Treatment Facility at OPD (yellow)</li> <li>Home Management (green)</li> </ul>	MO	IMNCI Guidelines & Guidelines for management of Sepsis in young infants.
<b>4.10</b>	<b>Emergency Triage Assessment &amp; Treatment-</b> Any sick young infant or child received in hospital is promptly attended and standard ETAT procedure followed for management.	MO/ Paediatrician/ Nursing Staff	WI- Steps in Management of Sick young Infants and Children.
<b>4.10.1</b>	<b>Triage-</b> Triage of all young infants and children is done in following categories as soon they arrive the hospital. -those Emergency signs (E) requiring Emergency Treatment - those Priority Signs (P) requiring rapid assessment and action - Non urgent (N) cases those can wait Triage is done by assessing Airway, Breathing, Circulation, Coma, Convulsion and Dehydration (ABCD). If no emergency sign is seen than priority signs are looked for.	MO/ Paediatrician/ Nursing Staff	WI- Triage
<b>4.10.2</b>	<b>Assessment &amp; Management of Emergency Signs in Newborns-</b> Assessment and management of Emergency signs done as per standard F IMNCI Protocols. If any signs of hypothermia or hypoglycaemia are	MO/ Paediatrician/ Nursing Staff	Relevant WI

	<p>present their management is done simultaneously.</p> <p><b>This includes -</b></p> <p>Assessment for breathing, central cyanosis and severe respiratory distress</p> <p>Is done and Basic Life Support is given if required.</p> <p>Assessment &amp; treatment of shock in young infant &amp; children with or without severe acute malnutrition.</p> <p>Assessment and treatment of coma and convulsions.</p> <p>Assessment and treatment of severe dehydration</p> <p>Assessment and treatment of Hypoglycaemia and Hypothermia</p>		
<b>4.11</b>	<p><b>Facility based care Sick Young Infant</b></p> <p>This includes fluid management, Management of Hypoglycaemia, Post resuscitation care of Asphyxiated newborn, management of septicaemia, meningitis, diarrhoea, tetanus neonatorum, Jaundice and monitoring of sick young infant.</p>	MO/ Paediatrician/ Nursing Staff	Checklist for Monitoring of Young Infants Guidelines for facility based new born care (FBNC)
<b>4.11.1</b>	<p><b>Management of Low birth Weight Neonates</b></p> <p>All low birth weight Vit. K intramuscular at birth.</p> <p>Neonates with birth weight less than 1800 gms are admitted in the hospital.</p> <p>Normal body temperature of neonate is maintained through Kangaroo Mother care or through radiant warmer/ incubator as advised by the paediatrician.</p> <p>Fluids and nutrition is provided as per birth weight or gestation of the neonate.</p>	MO/ Paediatrician/ Nursing Staff	WI for modes of providing fluid and feeding. Indication of Discharge of LBW neonates.
<b>4.11.2</b>	<p><b>Referral and Transport of Neonates-</b></p> <p>If management of newborn cannot be done at the hospital either due to lack of facilities (neonatal care unit) or due to need of tertiary care management, neonate is referred to higher centre or other hospital.</p> <p>Receiving facility is communicated about the patient.</p> <p>Neonate is stabilized with respect to temperature, airway, breathing, circulation and blood sugar.</p> <p>A doctor/nurse/health worker is arranged for accompanying the neonate to receiving hospital if possible.</p> <p>Parents/attendants of newborn are communicated about the condition</p>	MO/ Paediatrician/ Nursing Staff	

	<p>of new born and instructions are given for care of newborn during transport.</p> <p>A referral note is prepared and given to patient's attendants describing condition of new born, reason for referral and treatment given.</p>		
<b>4.13</b>	<p><b>Infection Control –</b></p> <p>Standard Infection Control Measures are taken to ensure prevent hospital acquired infections and safe work environment to service providers. These measures broadly includes –</p> <ul style="list-style-type: none"> <li>• Strict adherence to standard hand washing Practices</li> <li>• use of personal protective equipment when handling blood, body substances, excretions and secretions</li> <li>• appropriate handling of patient care equipment and soiled linen</li> <li>• prevention of needle stick /sharp injuries</li> <li>• environmental cleaning and spills-management</li> <li>• appropriate handling of Biomedical Waste</li> <li>• Regular culture surveillance of labour room is done to ensure safe patient care environment.</li> <li>• Regular monitoring of Episiotomy site infection rate</li> </ul>	Infection Control Nurse/ Staff Nurse/MO/Obs tetrician	Infection Control Manual SOP for Hospital Waste Management SOP for Housekeepin g Management National Infection Control Guidelines
<b>4.13</b>	<p><b>Environmental Cleaning and Processing of equipment in Labour Room-</b></p> <p>External foot wears are not allowed in the labour room. It mandatory to wear dedicated labour room sleepers before entering the labour room.</p> <p>After every procedure all working surfaces are disinfected.</p> <p>Only staff that is required for procedures is allowed in labour room. Traffic in labour room is kept minimal.</p>	Housekeeping Staff/ Hospital Manager	Infection Control Manual SOP on Housekeepin g
<b>4.14</b>	<p><b>Rights &amp; Dignity of pregnant women</b></p> <ul style="list-style-type: none"> <li>• Simple and clear language is used while communicating with pregnant women.</li> <li>• Pregnant woman is informed about the status of her health and supported to understand options and make decisions.</li> <li>• Woman is made to feel as comfortable as possible when receiving services.</li> <li>• Before any examination permission is taken from pregnant women and procedure is explained to her.</li> <li>• During the examination privacy of patient of pregnant women is maintained. Screens and curtains are provided in examination area and it is ensured that woman is protected from view of other people.</li> <li>• Pregnant women consent is taken before discussing with her family or parents.</li> </ul>	MO/ Staff Nurse/ Other service Providers	

	<ul style="list-style-type: none"> <li>Confidential information about pregnant women is never discussed with other staff members or outside the facility.</li> <li>Informed consent is taken before any invasive procedure.</li> <li>Any pregnant woman with HIV is not denied on basis of HIV status. Her HIV status is kept confidential except to people who are involved in care.</li> </ul>		
4.15	<p><b>Procedure for record maintenance including consent form</b></p> <ul style="list-style-type: none"> <li>All patients records including consent forms, store inventories, equipment, annual maintenance documents, complaints, staff records, waste disposal records are well documented and kept in relevant files by Nurse supervisor.</li> </ul> <p><b>Written consent form must comply to the following requirements:</b></p> <ul style="list-style-type: none"> <li>The name(s) of all the practitioner(s) immediately responsible for the patient is mentioned.</li> <li>Diagnosis is mentioned.</li> <li>A brief description of the recommended treatment or proposed procedure.</li> <li>A statement that relevant aspects of the treatment, or procedure, including indications, benefits, risks, and alternatives including no treatment have been discussed with the patient in language that the patient could understand; and that the patient indicated comprehension of the discussion.</li> <li>A statement that the patient had an opportunity to ask questions.</li> <li>The date and time the discussion took place and whether the patient consented to the treatment or procedure.</li> <li>The written signature of the practitioner writing the note (including the Practitioner’s legibly written name).</li> <li>Signature/Thumb impression of Patient/Next of Kin/Guardian as applicable and legible written name &amp; relationship with the patient.</li> <li>Date of Consent</li> <li>Consent form is filled completely with no blank space/ box.</li> <li>General consent is obtained at the time of admission, explaining the scope of such consent</li> <li>All procedures performed on the patient have separate consent taken for each of the procedures.</li> <li>Consent is signed by all the patients in Labour room. In case patient/ Next to Kin is illiterate then the thumb impression of the patient is taken which is witnessed by a neutral person.</li> <li>All consent forms are maintained in the patient case file &amp; are filed as such with the medical records department.</li> </ul>		
4.16	<b>Monitoring &amp; Quality Control</b>		
4.16.1	<p><b>Maternal Death Review</b></p> <p>All maternal deaths occurring in the hospital including abortion and ectopic gestation related deaths, in pregnant women and mothers after</p>	Treating MO, FNO, DNO	

	<p>within 42 days of termination of pregnancy are informed immediately by treating doctor to facility nodal officer MDR at the time of occurrence.</p> <p>The facility nodal officer (FNO) of the hospital inform the district nodal officer (DNO) and subsequently to state nodal officer within 24 hours.</p> <p>Facility nodal officer fill the primary informant format and sent it to (DNO)</p> <p>Maternal death is immediately investigated by medical officer treating the mother using facility based maternal death review format and submit it in triplicate to FNO within 24 hours.</p> <p>A facility Maternal Death Review committee is constituted as per MDR guidelines which reviews all maternal deaths occurred in monthly review meeting and suggest corrective action to improve the quality of care.</p> <p>Minutes of meeting of review meeting along with case summary are sent to district nodal officer.</p>		<p>FMDR Format</p> <p>Maternal Death Review Guidebook</p>
<p><b>4.16.2</b></p>	<p><b>Quality Assurance of Referral Services-</b></p> <p>Each woman who is referred to the district hospital is given a standard referral slip. This referral slip is sent back to the referring facility with the woman or the person who brought her after writing outcome of referral on it.</p> <p>Both the district hospital and the referring facility keep a record of all referrals as a quality assurance mechanism</p>	<p>Medical Superintendent</p>	

### To ensure Respectful Maternity care

<b>Points to remember and implement</b>
a. Ensure privacy of the woman in labour
b. Avoid Performing harmful practices
c. Provide complete information about the care provided to the patient
d. Take informed consent
e. Allow choice of position for birth
f. Avoid Verbal abuse (insult, intimidation, threats, coercion)
g. Provide choice of companion

h. Provide continuous support during delivery and avoid abandonment of care (i.e. leaving the woman alone or unattended)
i. Ensure confidentiality of the patient
j. Allow drink and food during labor
k. Provide liberty of movement during labor(e.g., walking, moving around)
l. Avoid discrimination based on ethnicity, race, or economic status, including denial of admission due to illegal immigration status
m. Keep mother and baby together 24 hours a day.Avoidunnecessary separation of mother and newborn after the birth
n. Prevention of institutional violence against women and babies, including disrespectful. Avoid Physical abuse (slapping/hitting)
o. Depriving the woman of services in the facility due to lack of payment demanded for it
p. Avoidance of the overuse of drugs and technology (such as oxytocin augmentation, episiotomy, cesarean section, incubation, sonograms)
q. Skin- to-skin contact of the newborn with the mother immediately after the birth for at least the first hour
r. Promoting breastfeeding on demand
s. Evidence based care that enhances & optimizes the normal processes of pregnancy, birth, and postpartum
t. Other

**Other:**

Incorporating training on the issue of labour and childbirth companionship, and on the importance of respecting women’s autonomy in making decisions during labour and childbirth, into pre- and in-service training for health-care providers and hospital quality managers could be one effective route towards achieving and sustaining this change.

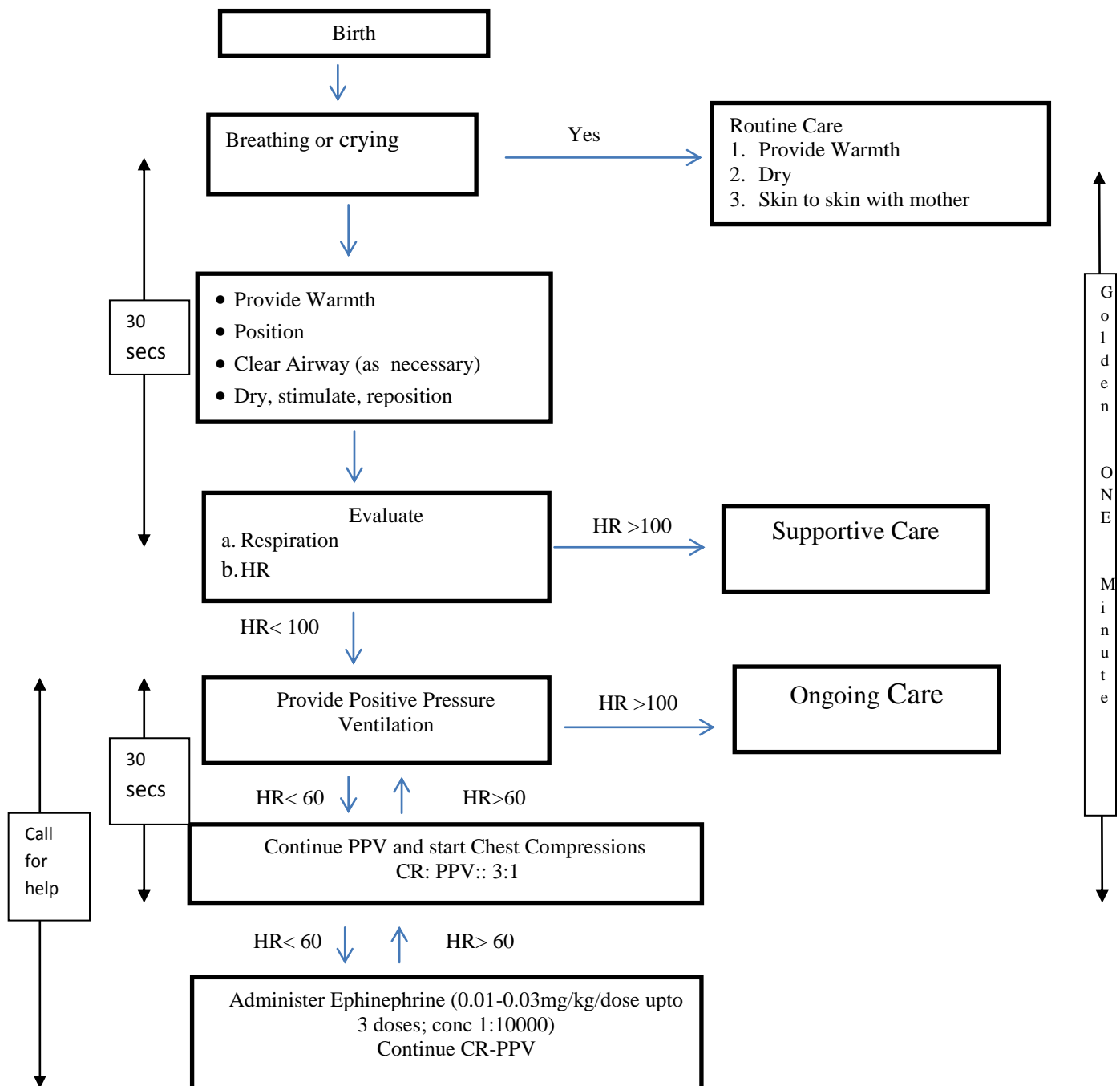
For implementation to be successful, it is crucial that health-care providers understand the benefits and potential caveats of labour companionship, as well as the importance of supporting pregnant women to decide whether they want a labour and childbirth companion, whom to choose and what role they want the companion to play on their behalf. A participatory approach is key to introducing labour companionship policies at the health-care facility.

Sensitization in communities and with women in particular is another important component of an implementation strategy for labour companionship, which will ensure that women are aware of their rights to select and have a companion and to make decisions related to their care during labour and childbirth.

- Provision of residence for mothers; active participation of parents in the care of hospitalized newborns; Parent training in newborn care; Siblings and grandparents visits;
- Hospital-based training in neonatal CPR;
- Prevention of excessive coercion—women being forced to undergo medical procedures.

A programme to allow women the support of a companion of choice during labour and childbirth can be implemented as a low-cost and effective intervention to improve the quality of care and ensure respectful maternity care.

### Neonatal Resuscitation Program



\* Endo-Tracheal Intubation can be considered at any level  
 \*\*Consider stopping NNR if no detectable HR for 10 mins





# Standard Operating Procedures for District Women Hospitals- Uttar Pradesh

**SOP Operation Theatre /  
Central Sterile Supply Department /  
Theatre Sterile Supply Unit**



Quality Assurance Division, SPMU, NHM, Uttar Pradesh

## **Objectives of OT/CSSD/TSSU**

- To provide skilled and efficient administration of anaesthesia for elective & emergency operation throughout the year.
- Training of all Doctors, OT Nurse & OT Sister.
- Safe & effective Sterilization & Fogging Procedure.
- Improving coordination among the surgeons & the surgical team
- Having control on the stock available in the OT, by assigning the work to different people & verifying them in regular intervals.
- Standardization of surgeries done in the Operation Theatre, specialty wise along with the surgery code.
- Streamlining of various processes related to implant Procurement, Billing & Consumables.

## **1. Purpose:**

To provide guideline/ instructions for Processes Related to Operation Theatre Functioning with the aims that

- ❖ Needs and expectations of patients are established,
- ❖ Patient satisfaction is enhanced on continual basis, and
- ❖ Feedback loop is established for continuous improvements.

## **2. Scope:**

It covers the total functioning of the Operation Theatre with relation to the patient and other OT specific processes

## **3. Responsibility:**

### **Operation Theatre In charge:**

- a) To schedule surgeries as per priorities and seriousness of cases.
- b) To ensure maintenance of OT and environmental cleanliness practices mentioned in the Infection Control and Hygiene procedures.
- c) To formulate the OT protocols and procedures.
- d) To support Nurse In-charge of OT for routine supervision of above mentioned issues.

### **OT Nurse / Assistant:**

- a) To prepare a final list of the planned surgeries in consultation with the HOD for the next day.
- b) To ensure that all the instruments / linen are autoclaved / sterilized.
- c) To perform routine Check & proper functioning of equipment with the help of Checklist.
- d) To ensure that infected cases are taken at the end of the list of surgeries for the OT,
- e) To ensure that OT is fumigated; instruments / equipment are disinfected and cleaned when infected cases are operated.

### **Staff Nurses:**

- a) To receive & hand over the patient along with case file, diagnostic reports duly filled and signed by concerned doctor.
- b) To facilitate the patients in filling the consent form with full signature, date and time.
- c) To prepare the patient for operation (ensuring site shaving, antiseptic application and draping of the site).
- d) To set up the OT table for specific operation or IUCD insertion with required instruments / linen / equipments.
- e) To assist the gynaecologist / surgeon during the entire process of operation/insertion
- f) To ensure the availability of cross-matched whole blood units before the commencement of operation and same is recorded.

### Sweeper:

- a) To clean / Scrub the OT, minor OT, recovery room and associated area as per procedure specifications provided according to Infection control programme.
- b) To collect waste and hand it over to the Biomedical Waste collection personnel.
- c) To assist OT I/C & Staff Nurse in Fumigation / Sterilization / Autoclaving inside PPU including OT, minor OT etc.

### 4. Standard Procedures

S.N.	Activity	Responsibility	Reference Document / Record
<b>Schedule of Surgery</b>			
1	The surgeon informs the OT nurse through an OT Call Register for OT booking. This slip includes the date and type of surgery to be performed.	OT Nurse/ Surgeon	OT call register
2	The OT Nurse records the request in the OT Booking Register. In case of any clash in schedule or non-availability, he informs the concerned surgeon.	OT Nurse	OT booking register
3	She forwards the details of the OT bookings to the OT In charge and Anesthetist.	OT Nurse	
4	OT list is finalized the day before surgery at 3:00pm by the OT Nurse and the same is approved by OT in-charge & displayed on the notice board of the theatre.	OT In charge	Operating list
5	Emergency cases are accorded priority by the OT in-charge of Operation Theatre. This may require rescheduling of planned surgeries which is intimated to the concerned authorities.	OT In charge	
<b>3.0 Preparation for surgery</b>			
3.1	Sterilized instruments and linen are collected and arranged in respective OTs from TSSU, on the previous night	Night OT Nurse	
3.2	All OTs checked for readiness for surgery	Chief OT Nurse	
3.3	<ul style="list-style-type: none"><li>• Anaesthesia trolley is checked and drugs are drawn up</li><li>• Anaesthesia machines/ Boyle's apparatus, ventilators, central gas supply and cylinders are checked</li></ul>	OT Nurse / Anaesthesia resident	
3.3	<ul style="list-style-type: none"><li>• All sutures needed for surgery listed and taken from OT Pharmacy;</li><li>• List entered into register with date, patient ID, surgery type, and signed;</li><li>• Unused sutures returned to OT Pharmacy, cancelled from Pharmacy register.</li></ul>	OT Nurse / OT Nurse	
3.4	<ul style="list-style-type: none"><li>• Drugs needed for a surgery are listed out by OT Nurse</li><li>• Entry made in OT Pharmacy register with date, patient ID, surgery type, and signed</li></ul>		

S.N.	Activity	Responsibility	Reference Document / Record
	<ul style="list-style-type: none"> <li>Unused drugs are returned to OT Pharmacy, cancelled from Pharmacy register.</li> </ul>	OT Nurse	
<b>4.0</b>	<b>Pre-operative Anesthetic Checks</b>		
4.1	A pre-operative evaluation of the patient is done by the anaesthetist for all cases admitted for surgery a day prior to the surgery. In case the patient is not deemed fit for surgery, the Surgeon and Nursing Incharge, OT is informed through the ward nurses. In emergency case pre anesthesia check up is done in emergency / OT.	Anaesthetist	PAC form
4.2	After receiving of the patient at the OT, the anaesthetist verifies the identity of the patient against details provided in the case sheet with the patient and the OT nurse does a quick evaluation of the patient's vitals and records the same in the case sheet.	Anaesthetist	Case Sheet
4.3	WHO Safe Anaesthesia checklist is used (Annexure I)		
4.4	Patient shifted to OT on sterile zone trolley	OT Nurse	
4.5	Patient transferred on to table and connected to Monitors	OT Nurse	
<b>5.0</b>	<b>Pre-operative Procedure</b>		
5.1	Surgeon gives written pre-operative instructions to ward nurse e.g. Nil orally, enema etc.). Ward nurse follows the instructions.	Surgeon/ Ward Staff nurse	
5.2	Written Consent for Surgery is obtained from the patient / patient's relatives.	Ward Staff Nurse	Consent Form
5.3	Ward nurse informed of patient shifting 15 minutes before patient is to be shifted. Patient shifted from ward to OT.	Pre op OT Nurse (on duty) / OT attendant	
5.4	Shifting of critically ill patients from ward / HDU / ICU with resuscitation equipment and drugs	Ward / ICU / HDU / Pre-op OT Nurse	
5.5	Preparation of patient [enema, bath, dress, handing over valuables / Jewellery, (if required) Trimming of hair] is done	OT Staff Nurse	
<b>6.0</b>	<b>In Process Checks during Surgery</b>		
6.1	All instruments and assisting nurses ready for surgery	OT Staff nurse	
6.1.1	WHO Surgical Safety checklist is used. (Annexure II)		
6.2	The scrub nurse checks all the instruments on the operating table and the hemostat clamps immediately before the operation.	Scrub nurse	
6.3	Patient is anaesthetized. WHO Safe Anaesthesia checklist is used (Annexure I)	Anaesthetist	
6.4	Patient's surgical area cleaned and draped; Painting is done starting from the centre to the periphery and the surgery conducted	Surgeon / EmOC trained surgeon	
6.5	Blood & Blood products required – Requisition slip filled and sent to Blood Bank	Anaesthesia Consultant / OT Nurse	

<b>S.N.</b>	<b>Activity</b>	<b>Responsibility</b>	<b>Reference Document / Record</b>
6.6	Patient vital parameters, lines, fluid intake and output, anaesthetic gas and drug administration, etc. are monitored and appropriate records maintained	Consultant Anaesthetist	
6.7	The Scrub Nurse controls the number of sponges on the table. At the commencement and the closure of the surgical incision, the scrubbed nurse counts the sponges and satisfies herself that these are correct & informs the surgeon accordingly.	Scrub Nurse	
6.8	The surgeon verifies himself that all swabs have been counted for, before the closure of the surgical incision. In case of any discrepancy in the number of swabs, the surgeon records this fact on the case sheet of the patient and informs the SIC / CMS	Surgeon	Case Sheet
6.9	The surgeon keeps the scrubbed nurse informed of the location of swabs in the operational field to facilitate her counting. After the first count has been taken, the scrubbed nurse and the surgeon carefully check the number of swabs still in use. Before the closure of the incision a final count is done.	Surgeon	Scrub Nurse
6.10	Under the supervision of the surgeon the scrub nurse checks the instruments and hemostat clamps again before the closure of the surgical incision	Scrub nurse	
6.11	The scrub nurse counts all the needles on the table before the commencement of the operation. As a rule, the scrub nurse does not part with the second needle till the first is returned to her by the surgeon. In the event of more than one needle being in use simultaneously, the scrub nurse takes care to see that all the needles are returned to her. The scrub nurse makes a count of the needles before the closures of the surgical incision. In the event of any discrepancy, the surgeon is informed promptly.	Scrub nurse	
<b>7.0</b>	<b>Post Operative Care of the Patient</b>		
7.1	Post operation the patient is shifted to the Recovery Room or Post-Operative Ward and thereafter supervised by concerned specialist.	Ward Nurses	
7.2	A provisional Surgery Note containing the details of the surgery is prepared by the surgeon with his/her Signature before the patient is transferred out of OT complex.	Surgeon	Surgery Note
7.3	Detailed post operative care instructions are documented in the case sheet by the surgeon.	Surgeon	Case Sheet
7.4	Operation notes completed and post operative instructions list attached and signed and any additions/deletions made	Operating surgeon	
7.5	Anaesthesia chart during surgery completed and signed; Blood / Blood products given are duly noted including bag number and expiry	Anaesthetist	

S.N.	Activity	Responsibility	Reference Document / Record
7.4	Decision made to shift patient to ward after ensuring patient stable, not in pain and comfortable	Anaesthetist	
7.5	Post operative pain medication name, frequency and mode of administration entered in case notes and signed	Anaesthetist	
7.6	Ward nurse informed about patient shifting	Recovery Nurse	
7.7	Patient shifted to ward	Recovery Nurse	
7.8	Patient handed over to Ward nurse	Recovery Nurse / Ward nurse	
7.7	Anesthetist supervises the Post Operative Patient in the Post Operative Ward (in case patient was transferred to Post Operative Ward) for the progress.	Anesthetist	
<b>8.0</b>	<b>General Cleaning of OT and Annexes</b>		
8.1	Used instruments are removed, washed and handed back to CSSD in OT complex for sterilization	Scrub nurse	
8.2	<ul style="list-style-type: none"> <li>• Dirty linen is removed and kept in Laundry collection area</li> <li>• Floors are mopped with disinfectant</li> </ul>	Sanitary worker	
8.3	OT table, suction bottles cleaned and laryngoscopes are disinfected	OT Nurse	
8.4	Anaesthesia machine cleaned and cleared of used drugs and disposables	OT Nurse	
<b>9.0</b>	<b>Operation Theater Asepsis and Environment Management</b>		
9.1	The staff nurse conducts daily checks of the cleanliness of the OT. She ensures that all areas found soiled are again cleaned under her supervision.	Staff nurse	
9.2	The staff nurse ensures that OT surfaces, tables and instruments are scrubbed with disinfectant agents on a daily basis.	Staff Nurse	
	<b>Cleaning of entire OT on weekends</b> <ul style="list-style-type: none"> <li>▪ All equipment, OT tables, anesthesia machine, Ventilator etc are removed</li> <li>▪ Each OT is washed thoroughly with detergent and water paying special attention to the corner of OTs.</li> <li>▪ The OT and walls dried with dry duster and spray properly with 2% carbolic acid.</li> <li>▪ All the equipment is carbolized and placed properly in the OT.</li> <li>▪ The OT is closed and no one is allowed to enter unless there is a surgical case.</li> </ul>		
9.3	Staff nurse / OT in-charge ensures that the OT is fumigated on a weekly basis and / or after each infected case. After an infected case, OT is closed, cleaned and fumigated. The details of the fumigation will be recorded in the Fumigation Register.	OT In-charge	Fogging Record Register
9.4	Culture from OT sent to microbiology laboratory after fumigation (Monthly)	OT nurse / ICN	

S.N.	Activity	Responsibility	Reference Document / Record
9.5	All personnel entering the OT wear OT gowns /dress including footwear and undergo proper scrubbing procedure to ensure sterility of the clean areas.		
<b>OT Documentation</b>			
1	The details regarding Anesthesia are noted in the Anesthesia Register.	Anaesthetist	Anaesthesia register
2	Anesthetist notes down all the drugs and consumables, which are used during the surgery in Operation theatre	Anaesthetist	Operation theater Indent Register
3	OT Nurse In-charge records the details of each surgery performed	OT Nurse In-charge	Surgery Registers
4	OT Nurse In-Charge prepares a monthly statement of surgeries performed and submits the same to the OT in charge & CMS / SIC	OT Nurse In charge	
5	Staff Nurse maintains the Psychotropic and Narcotics Drugs Register of statutory requirements.	Staff Nurse	Narcotic Drugs Register
6	Staff Nurses maintain the inventory of OT Consumables and medicines.	Staff Nurse	Inventory Register
7	Pharmacists maintain the records of the nonfunctional / damaged equipment and informs OT I/c and the Stores I /c. They update the same in the Dead inventory register.	Pharmacist	Dead Inventory register
<b>Central Sterile Supply / Theatre Sterile Supply Department</b>			
	The TSSU is situated within the OT complex itself and consists of: <ul style="list-style-type: none"> <li>- Receiving area</li> <li>- Sterile Storage</li> <li>- Dispatch Area</li> </ul> CSSD may or may not be in the OT complex and consists of: <ul style="list-style-type: none"> <li>- Receiving area</li> <li>- Sterile Storage</li> <li>- Dispatch Area</li> </ul>		
	Used instruments are removed, washed in OT side room and handed over to TSSU	Scrub nurse	
	<b>Receipt and Issue of Packs:</b> Receipt of items from various point of generation from 9.00 am to 1.00 pm. Issue of sterile packs from the CSSD from 3.00 pm to 6.00 pm. However departments like OT, ICU, Emergency Department etc are exempted from the above mentioned time dimensions since it is difficult to restrict their activity within specific time limit due to the emergency nature of care provided by them.	TSSU / CSSD Assistant	TSSU / CSSD Receipt & Issue Register
	Instruments are received in CSSD by CSSD Nurse on duty as per the duty roster.	Scrub nurse	
	Entry is done in CSSD receipt register including date, time, washed / not washed / chemical wash, type of instruments, procedure used for, and case infected or not,	Scrub nurse / OT Nurse	



S.N.	Activity	Responsibility	Reference Document / Record
	name and signature of person handing over, and name and signature of person receiving.		
	Instruments are checked in front of scrub nurse for any damage, missing piece, etc. with the help of the instruments stock / sets register	OT Nurse	
	Instruments are disinfected with 1% bleach solution and washed with detergent (if applicable), sorted, packed, labeled, and autoclave indicator pasted and put through sterilization process as in TSSU / CSSD operations protocol	OT Nurse on duty for sterilization	
	Dirty linen picked up in the OT and sent to laundry.	Sanitary worker / OT attendant	
	Clean linen sent from laundry to CSSD	OT attendant	
	Clean linen packed as per surgery requirements and autoclaved	CSSD Nurse	
	Linen stored and issued the same way as instruments	CSSD Nurse	
	Operations, maintenance and calibration of equipment in CSSD (as per CSSD protocol) maintained and stock, maintenance, purchase indents against condemnation of records maintained.	OT Manager	
<b>General Cleaning of the Department</b>			
1	The general working area of the CSSD is mopped everyday.	Housekeeping staff	
<b>General treatment of Items before Sterilization</b>			
1	The items to be sterilized at the Central Sterile Supply Department are washed with detergent, sorted and packed at the respective point of generation (Wards, ICUs, Emergency Department, OTs, and OPDs etc).	CSSD Assistant	
2	The Housekeeping staff is responsible for transporting the prepared packs from the point of generation to the Central Sterile Supply Department.	Housekeeping Staff	
3	OT linen is sent directly to the laundry for cleaning. The laundry washed linen are received, packed & forwarded to the CSSD for sterilization.	Laundry Staff	
<b>Return of Unutilized Packs:</b>			
	In case the packs which are sterilized in the CSSD remains unutilized in the respective user departments for a period of 72 hours, the same are returned to the CSSD department for re-sterilization.	Respective Departments	
<b>Maintenance and Calibration of Equipments</b>			
1	Maintenance of the equipment is done as per the annual maintenance contract (AMC) entered into with the vendor of the respective CSSD equipments.	Engineering & Maintenance Department of the hospital.	AMC Records
2	All equipment used in the department are appropriately calibrated at periodic intervals to ascertain whether they	Respective department/	Calibration Records and stickers

S.N.	Activity	Responsibility	Reference Document / Record
	are performing at the expected level and a record of the same is maintained in the user department as well as the Administrative department	Administrative Department	
<b>Recall Procedure :</b>			
1	Whenever sterilization indicators show a fault in the sterilization system, all packs sterilized in the same lot / the same cycle, are immediately called back from the respective areas. The recalled packs are sent for re-sterilization after correcting the indicated errors.	CSSD Nurse	Recall Register

## 5. Reference Records

S.N.	Record	Name Record No.	Retention Period
1	OT call register		
2	OT booking register		
3	List of Operations		
4	Fogging Record Register		
5	Anaesthesia register		
6	Operation theatre Indent register		
7	Surgery register for OB&G		
8	Psychotropic and Narcotic drugs register		
9	Dead Inventory register		
10	Pre operative checklist		
11	Duties of the OT Nurse		
12	Anaesthesia case record		
13	Operations notes		
14	Nurses' Theatre duty roster		
15	OT Nurses' duty roster		
16	Support staff duty roster		
17	Protocol for shifting out of Recovery room		
18	Organizational chart and job description of all staff		
19	CSSD Issue & Receipt register		
20	CSSD stock register (Instruments and instrument trays/sets)		
21	TSSU list of machines and equipment with repair / maintenance / calibration record		
22	CSSD instruments condemnation procedure and manual		

## FORMAT OF MAINTAINING RECORDS (For Fogging)

For each area OT:

Date	Time of A/C Off	Time of Start	Time of opening	Agent used	Time when sealed	Cleaning	Cultures taken	Time of re-commissioning area	Sign of. In-charge
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If carbolization is done in any theater, the O.T Nurse ensures that there is proper time gap between the two operations for removing the used material, cleaning and Bacillocid spray.

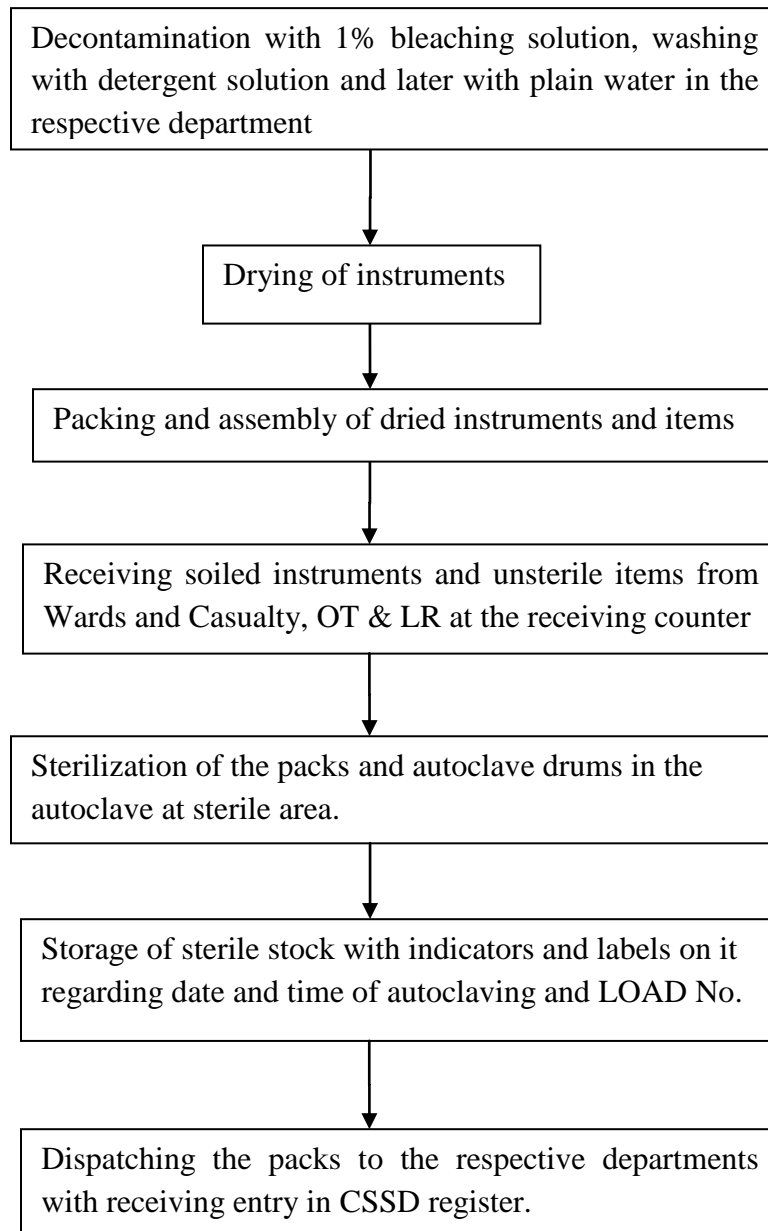
### 6. Process Efficiency Criteria

S.N.	Activity	Process Efficiency Criteria	Benchmark/ Standard/ Target
1	Infection Control	Surgical Site Infection rate	
2	Schedule	Surgery Cancellation Rate	
3	Utilization	OT Utilization Rate	
4	Outcome	Major Surgeries per doctor	

### 7. Reference Documents

1. WHO Surgical Safety Checklist
2. Safe Anaesthesia Checklist
3. Safe Birth Checklist
4. Hospital Infection Control Manual
5. National Infection Control Guidelines

## **WORK FLOW CHART- CSSD**





1

## On Admission

**Does mother need referral?**

- No  
 Yes, organized

Check your facility's criteria

**Partograph started?**

- No, will start when  $\geq 4$ cm  
 Yes

Start plotting when cervix  $\geq 4$  cm, then cervix should dilate  $\geq 1$  cm/hr

- Every 30 min: plot HR, contractions, fetal HR
- Every 2 hrs: plot temperature
- Every 4 hrs: plot BP

**Does mother need to start:***Antibiotics?*

- No  
 Yes, given

Ask for allergies before administration of any medication

Give antibiotics to mother if any of:

- Mother's temperature  $\geq 38^\circ\text{C}$
- History of foul-smelling vaginal discharge
- Rupture of membranes  $> 18$  hrs

*Magnesium sulfate and antihypertensive treatment?*

- No  
 Yes, magnesium sulfate given  
 Yes, antihypertensive medication given

Give magnesium sulfate to mother if any of:

- Diastolic BP  $\geq 110$  mmHg and 3+ proteinuria
- Diastolic BP  $\geq 90$  mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, epigastric pain

Give antihypertensive medication to mother if systolic BP  $> 160$  mmHg

- Goal: keep BP  $< 150/100$  mmHg

- Confirm supplies are available to clean hands and wear gloves for each vaginal exam.**

- Encourage birth companion to be present at birth.**

- Confirm that mother or companion will call for help during labour if needed.**

Call for help if any of:

- Bleeding
- Severe abdominal pain
- Severe headache or visual disturbance
- Unable to urinate
- Urge to push

This checklist is not intended to be comprehensive and should not replace the case notes or partograph. Additions and modifications to fit local practice are encouraged. For more information on recommended use of the checklist, please refer to the "WHO Safe Childbirth Checklist Implementation Guide" at: [www.who.int/patientsafety](http://www.who.int/patientsafety).



## 2

## Just Before Pushing (Or Before Caesarean)

**Does mother need to start:***Antibiotics?*

- No  
 Yes, given

*Magnesium sulfate and antihypertensive treatment?*

- No  
 Yes, magnesium sulfate given  
 Yes, antihypertensive medication given

Ask for allergies before administration of any medication

Give antibiotics to mother if any of:

- Mother's temperature  $\geq 38^{\circ}\text{C}$
- History of foul-smelling vaginal discharge
- Rupture of membranes  $> 18$  hrs
- Caesarean section

Give magnesium sulfate to mother if any of:

- Diastolic BP  $\geq 110$  mmHg and 3+ proteinuria
- Diastolic BP  $\geq 90$  mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, epigastric pain

Give antihypertensive medication to mother if systolic BP  $> 160$  mmHg

- Goal: keep BP  $< 150/100$  mmHg

**Confirm essential supplies are at bedside and prepare for delivery:***For mother*

- Gloves  
 Alcohol-based handrub or soap and clean water  
 Oxytocin 10 units in syringe

*For baby*

- Clean towel  
 Tie or cord clamp  
 Sterile blade to cut cord  
 Suction device  
 Bag-and-mask

Prepare to care for mother immediately after birth:

Confirm single baby only (not multiple birth)

1. Give oxytocin within 1 minute after birth
2. Deliver placenta 1-3 minutes after birth
3. Massage uterus after placenta is delivered
4. Confirm uterus is contracted

Prepare to care for baby immediately after birth:

1. Dry baby, keep warm
2. If not breathing, stimulate and clear airway
3. If still not breathing:
  - clamp and cut cord
  - clean airway if necessary
  - ventilate with bag-and-mask
  - shout for help

- Assistant identified and ready to help at birth if needed.**

## 3

## Soon After Birth (Within 1 Hour)

**Is mother bleeding abnormally?**

- No
- Yes, shout for help

If bleeding abnormally:

- Massage uterus
- Consider more uterotonic
- Start IV fluids and keep mother warm
- Treat cause: uterine atony, retained placenta/fragments, vaginal tear, uterine rupture

**Does mother need to start:**

*Antibiotics?*

- No
- Yes, given

Ask for allergies before administration of any medication

Give antibiotics to mother if placenta manually removed or if mother's temperature  $\geq 38$  °C and any of:

- Chills
- Foul-smelling vaginal discharge

If the mother has a third or fourth degree of perineal tear give antibiotics to prevent infection

*Magnesium sulfate and antihypertensive treatment?*

- No
- Yes, magnesium sulfate given
- Yes, antihypertensive medication given

Give magnesium sulfate to mother if any of:

- Diastolic BP  $\geq 110$  mmHg and 3+ proteinuria
- Diastolic BP  $\geq 90$  mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, epigastric pain

Give antihypertensive medication to mother if systolic BP  $> 160$  mmHg

- Goal: keep BP  $< 150/100$  mmHg

**Does baby need:**

*Referral?*

- No
- Yes, organized

Check your facility's criteria.

*Antibiotics?*

- No
- Yes, given

Give baby antibiotics if antibiotics given to mother for treatment of maternal infection during childbirth or if baby has any of:

- Respiratory rate  $> 60$ /min or  $< 30$ /min
- Chest in-drawing, grunting, or convulsions
- Poor movement on stimulation
- Baby's temperature  $< 35$  °C (and not rising after warming) or baby's temperature  $\geq 38$  °C

*Special care and monitoring?*

- No
- Yes, organized

Arrange special care/monitoring for baby if any:

- More than 1 month early
- Birth weight  $< 2500$  grams
- Needs antibiotics
- Required resuscitation

**Started breastfeeding and skin-to-skin contact (if mother and baby are well).**

**Confirm mother / companion will call for help if danger signs present.**

4

## Before Discharge

 **Confirm stay at facility for 24 hours after delivery.**
**Does mother need to start antibiotics?**

- No
- Yes, given and delay discharge

Ask for allergies before administration of any medication  
 Give antibiotics to mother if any of:

- Mother's temperature  $\geq 38^{\circ}\text{C}$
- Foul-smelling vaginal discharge

**Is mother's blood pressure normal?**

- No, treat and delay discharge
- Yes

Give magnesium sulfate to mother if any of:

- Diastolic BP  $\geq 110$  mmHg and 3+ proteinuria
- Diastolic BP  $\geq 90$  mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, epigastric pain

Give antihypertensive medication to mother if systolic BP  $> 160$  mmHg

- Goal: keep BP  $< 150/100$  mmHg

**Is mother bleeding abnormally?**

- No
- Yes, treat and delay discharge

If pulse  $> 110$  beats per minute and blood pressure  $< 90$  mmHg

- Start IV and keep mother warm
- Treat cause (hypovolemic shock)

**Does baby need to start antibiotics?**

- No
- Yes, give antibiotics, delay discharge, give special care

Give antibiotics to baby if any of:

- Respiratory rate  $> 60/\text{min}$  or  $< 30/\text{min}$
- Chest in-drawing, grunting, or convulsions
- Poor movement on stimulation
- Baby's temperature  $< 35^{\circ}\text{C}$  (and not rising after warming) or baby's temperature  $\geq 38^{\circ}\text{C}$
- Stopped breastfeeding well
- Umbilicus redness extending to skin or draining pus

**Is baby feeding well?**

- No, establish good breastfeeding practices and delay discharge
- Yes

 **Discuss and offer family planning options to mother.**
 **Arrange follow-up and confirm mother / companion will seek help if danger signs appear after discharge.**
**Danger Signs****Mother has any of:**

- Bleeding
- Severe abdominal pain
- Severe headache or visual disturbance
- Breathing difficulty
- Fever or chills
- Difficulty emptying bladder
- Epigastric pain

**Baby has any of:**

- Fast/difficult breathing
- Fever
- Unusually cold
- Stops feeding well
- Less activity than normal
- Whole body becomes yellow



# Anesthesia Safety Checklist



## Before induction of anesthesia

**Is an experienced and trained assistant available to help you with induction?**

- Yes
- Not applicable

**Has the patient had no food or drink for the appropriate time period?**

- Yes
- Not applicable

**Is there intravenous access that is functional?**

- Yes

**Is the patient on a table that can be rapidly tilted into a head-down position in case of sudden hypotension or vomiting?**

- Yes

**Equipment check:**

- If compressed gas will be used, is there enough gas and a reserve oxygen cylinder?
- Anesthetic vaporizers are connected?
- Breathing system that delivers gas to the patient is securely and correctly assembled?
- Breathing circuits are clean?
- Resuscitation equipment is present and working?
- Laryngoscope, tracheal tubes and suction apparatus are ready and clean?
- Needles and syringes are sterile?
- Drugs are drawn up into labelled syringes?
- Emergency drugs are present in the room, if needed?

# Safe Surgery & Safe Anesthesia

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## OPERATING ROOM (OR)

The operating theatre is a room specifically for use by the anesthesia and surgical teams and must not be used for other purposes.

### **An OR requires the following:**

- Good lighting and ventilation
- Dedicated equipment for procedures
- Equipment to monitor patients, as required for the procedure
- Drugs and other consumables for routine and emergency use

### **Ensure that procedures are established for the correct use of the O.R. and all staff is trained to follow them:**

- Keep all doors to the O.R. closed, except those required for the passage of equipment, personnel and the patient
- Store some sutures and extra equipment in the O.R. to decrease the need for people to enter and leave the O.R. during a case
- Keep to a minimum the number of people allowed to enter the O.R., especially after an operation has started
- Keep the O.R. uncluttered and easy to clean
- Between cases, clean and disinfect the table and instrument surfaces
- At the end of each day, clean the O.R.: start at the top and continue to the floor, including all furniture, overhead equipment and lights. Use a liquid disinfectant at a dilution recommended by the manufacturer
- Sterilize all surgical instruments and supplies after use and store them somewhere protected and ready for the next use

---

## SPONGE AND INSTRUMENT COUNTS

It is essential to keep track of the materials being used in the O.R. in order to avoid inadvertent disposal, or the potentially disastrous loss of sponges and instruments in the wound.

**It is standard practice to count supplies (instruments, needles and sponges):**

- Before beginning a case
- Before final closure
- On completing the procedure

The aim is to ensure that materials are not left behind or lost. Pay special attention to small items and sponges.

Create and make copies of a standard list of equipment for use as a checklist to check equipment as it is set up for the case and then as counts are completed during the case.

Include space for suture material and other consumables added during the case.

When trays are created with the instruments for a specific case, such as a Caesarean section, also make a checklist of the instruments included in that tray for future reference.

***Leave the O.R. ready for use in case of emergency***

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## OPERATIVE PROCEDURE LIST

An operative procedure list is needed whenever the surgical team will perform several operations in succession. The list is a planned ordering of the cases on a given day.

Elements such as urgency, the age of the patient, diabetes, infection and the length of the procedure should all be considered when drawing up the list.

Operate on “clean” cases before infected cases since the potential for wound infection increases as the list proceeds.

Also consider other factors when making up the operative list: children and diabetic patients should be operated on early in the day to avoid being subjected to prolonged periods without food.

**Ensure that between operations:**

- Operating theatre is cleaned
- Instruments are re-sterilized
- Fresh linen is provided

It is essential to have clear standard procedures for cleaning and the storage of operating room equipment; these must be followed by all staff at all times.

The probability of wound infection increases in proportion to the number of breaches of aseptic technique and the length of the procedure.

# POSTOPERATIVE CARE

**If the patient is restless, something is wrong**

**Look for the following in the Recovery Room:**

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- Airway obstruction
- Hypoxia
- Hemorrhage: internal or external
- Hypotension and/or hypertension
- Postoperative pain
- Hypothermia, shivering
- Vomiting, aspiration
- Residual narcosis
- Falling on the floor

**The recovering patient is fit for the ward when he or she is:**

---

- Awake, opens eyes
- Extubated
- Breathing spontaneously, quietly and comfortably
- Can lift head on command
- Not hypoxic
- Blood pressure and pulse rate are satisfactory
- Appropriate analgesia has been prescribed and is safely established

# 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

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- SITE MARKED/NOT APPLICABLE**

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- ANAESTHESIA SAFETY CHECK COMPLETED**

---

- PULSE OXIMETER ON PATIENT AND FUNCTIONING**

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- 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?**

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- 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**

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- SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT**

# Oxygen Cylinder

Daily																										
Wipe Dust																										
Fill Humidifier bottle																										
Parts Tightly Fitted																										
Parts moving freely																										
Check oxygen flow																										

# WEEKLY

Check for Leakage			
Check trolley			
Limescale in Humidifier bottle			
Check for adequate flow			

# Maintenance Checklist

## Nebulizer

<b>Daily</b>																														
Clean Mouthpiece and medicine																														
Wipe Dust																														
Parts Tightly Fitted																														
Parts moving freely																														
All Holes are unblocked																														

<b>WEEKLY</b>			
<b>Clean filter</b>			
<b>Main plug, Cable &amp; socket</b>			
<b>Compressor fan</b>			
<b>Check for adequate flow</b>			

# Maintenance Checklist Suction Machine

Daily																													
Wipe Dust																													
Wash bottle & tubing																													
Clean filter																													
Chick Cables																													
Check parts tightly filled																													

## WEEKLY

WEEKLY			
Check round bottle seal			
Check for cracked tubes			
Main plug, Cable & socket			
Check for adequate Vacuum control			



# Maintenance Checklist

## Weighing Scale

<b>Daily</b>																																							
Wipe Dust																																							
Cracked & damaged part																																							
Check Flat base																																							
Check Cables																																							
Check zero																																							

<b>WEEKLY</b>			
<b>Check part tightly fitted</b>			
<b>Check Battery</b>			
<b>Main plug, Cable &amp; socket</b>			
<b>Check accuracy with known weight</b>			

# Maintenance Checklist

## Multiparamonitor

<b>Daily</b>																												
Wipe Dust																												
Clean probe with alcohol																												
Check Alarms																												
Check cables																												
Check operation on healthy subject																												

<b>WEEKLY</b>				
<b>Check for loose screws</b>				
<b>Main plug, Cable &amp; socket</b>				
<b>Check Indicators &amp; visual displays</b>				
<b>Check probe disconnection alarm</b>				

## Maintenance Checklist

### Oxygen Concentrator

<b>Daily</b>																																	
Wipe Dust																																	
Fill Humidifier bottle																																	
Parts Tightly Fitted																																	
Parts moving freely																																	
Check oxygen flow																																	

<b>WEEKLY</b>			
<b>Clean filter</b>			
<b>Main plug, Cable &amp; socket</b>			
<b>Limescale in Humidifier bottle</b>			
<b>Check for adequate flow &amp; Alarms</b>			





























# LAQSHYA लक्ष्य

