



SOP

LaQshya Standard
Operating Procedures
for District Hospitals

Ministry of Health and Family Welfare
Maternal Health Division

2018

SOPs: OT/ CSSD/THEATRE STERILE SUPPLY UNIT

OBJECTIVES

- 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 (using H₂O₂)
- 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.

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.

Scope:

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

Responsibilities:

Operation Theatre In charge:

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

OT Nurse / Assistant:

- To prepare a final list of the planned surgeries in consultation with the HOD for the next day.



- To ensure that all the instruments / linen are autoclaved / sterilized.
- To perform routine Check & proper functioning of equipment with the help of Checklist.
- To ensure that infected cases are taken at the end of the list of surgeries for the OT
- To ensure that OT is fumigated; instruments / equipment are disinfected and cleaned when infected cases are operated.

Staff Nurses:

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

Sweeper:

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

Standard Procedures: SOP for CSSD/ OT

S.NO.	ACTIVITY	RESPONSIBILITY	REFERENCE DOCUMENT / RECORD
Schedule of Surgery			
1.1	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 call register
1.2	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 booking register
1.3	She forwards the details of the OT bookings to the OT In charge and Anaesthetist.		
1.4	OT list is finalized the day before surgery at 3:00 PM by the OT Nurse and the same is approved by OT in-charge & displayed on the notice board of the theatre.		Operating list
1.5	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.		
Preparation for surgery			
2.1	Sterilized instruments and linen are collected and arranged in respective OTs from TSSU, on the previous night	Night OT Nurse	
2.2	All OTs checked for readiness for surgery	Chief OT Nurse	
2.3	<ul style="list-style-type: none"> Anaesthesia trolley is checked and drugs are drawn up Anaesthesia machines/ Boyle's apparatus, ventilators, central gas supply and cylinders are checked All sutures needed for surgery listed and taken from OT Pharmacy List entered into register with date, patient ID, surgery type, and signed Unused sutures returned to OT Pharmacy, cancelled from Pharmacy register. 	OT Nurse / Anaesthesia Resident OT Nurse / OT Nurse	
2.4	<ul style="list-style-type: none"> Drugs needed for a surgery are listed out by OT Nurse Entry made in OT Pharmacy register with date, patient ID, surgery type, and signed Unused drugs are returned to OT Pharmacy, cancelled from Pharmacy register. 	OT Nurse	
Pre-operative Aesthetic Checks			
3.1	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 In-charge, OT is informed through the ward nurses. In emergency case pre anaesthesia check-up is done in emergency / OT. WHO Safe Surgical Checklist being used.	Anaesthetist	PAC form
3.2	After receiving of the patient at the OT, the anaesthetist verifies the identity of the patient against details	Anaesthetist	Case Sheet

	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.		
3.3	WHO Safe Anaesthesia checklist is used (Annexure I)		
3.4	Patient shifted to OT on sterile zone trolley	OT Nurse	
3.5	Patient transferred on to table and connected to Monitors	OT Nurse	
Pre-operative Procedure			
4.1	Surgeon gives written pre-operative instructions to ward nurse e.g. Nil orally, enema etc.). Ward nurse follows the instructions.	Surgeon/ Ward Staff nurse	
4.2	Written Consent for Surgery is obtained from the patient / patient's relatives.	Ward Staff Nurse	Consent Form
4.3	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	
4.4	Shifting of critically ill patients from ward / HDU / ICU with resuscitation equipment and drugs		
4.5	Preparation of patient [enema, bath, dress, handing over valuables / Jewellery, (if required) Trimming of hair] is done	OT Staff Nurse	
In Process Checks during Surgery			
5.1	All instruments and assisting nurses ready for surgery	OT Staff nurse	
5.2	WHO Surgical Safety checklist is used. (Annexure II)		
5.3	The scrub nurse checks all the instruments on the operating table and the hemostat clamps immediately before the operation.	Scrub nurse	
5.4	Patient is anaesthetized. WHO Safe Anaesthesia checklist is used (Annexure I)	Anaesthetist	
5.5	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	
5.6	Blood & Blood products required – Requisition slip filled and sent to Blood Bank	Anaesthesia Consultant / OT Nurse	
5.7	Patient vital parameters, lines, fluid intake and output, anaesthetic gas and drug administration, etc. are monitored and appropriate records maintained	Consultant Anaesthetist	
5.8	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	
5.9	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
5.10	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	Surgeon/ Scrub Nurse	

	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.		
5.11	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	
5.12	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	
Post-Operative Care of the Patient			
6.1	Post operation the patient is shifted to the Recovery Room or Post-Operative Ward and thereafter supervised by concerned specialist.	Ward Nurses	
6.2	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
6.3	Detailed post-operative care instructions are documented in the case sheet by the surgeon.	Surgeon	Case Sheet
6.4	Operation notes completed and post-operative instructions list attached and signed and any additions/deletions made	Operating Surgeon	
6.5	Anaesthesia chart during surgery completed and signed; Blood / Blood products given are duly noted including bag number and expiry	Anaesthetist	
6.6	Decision made to shift patient to ward after ensuring patient stable, not in pain and comfortable	Anaesthetist	
6.7	Post-operative pain medication name, frequency and mode of administration entered in case notes and signed	Anaesthetist	
6.8	Ward nurse informed about patient shifting Patient shifted to ward	Recovery Nurse	
6.9	Patient handed over to Ward nurse	Recovery Nurse / Ward nurse	
6.10	Anaesthetist supervises the Post-Operative Patient in the Post-Operative Ward (in case patient was transferred to Post-Operative Ward) for the progress.	Anaesthetist	
General Cleaning of OT and Annexes			
7.1	Used instruments are removed, washed and handed back to CSSD in OT complex for sterilization	Scrub nurse	
7.2	Dirty linen is removed and kept in Laundry collection area. Floors are mopped with disinfectant	Sanitary worker	
7.3	OT table, suction bottles cleaned and laryngoscopes are Disinfected	OT Nurse	
7.4	Anaesthesia machine cleaned and cleared of used drugs and disposables	OT Nurse	

Operation Theatre Asepsis and Environment Management			
8.1	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	
8.2	The staff nurse ensures that OT surfaces, tables and instruments are scrubbed with disinfectant agents on a daily basis.	Staff Nurse	
8.3	Cleaning of entire OT on weekends <ul style="list-style-type: none"> • All equipment, OT tables, anaesthesia machine, • Ventilator etc. are removed • Each OT is washed thoroughly with detergent and water paying special attention to the corner of OTs. • The OT and walls dried with dry duster and spray properly with 2% carbolic acid. • All the equipment is carbolized and placed properly in the OT. • The OT is closed and no one is allowed to enter unless there is a surgical case. 		
8.4	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
8.5	Culture from OT sent to microbiology laboratory after fumigation (Monthly)	OT nurse / ICN	
8.6	All personnel entering the OT wear OT gowns /dress including footwear and undergo proper scrubbing procedure to ensure sterility of the clean areas.		
OT Documentation			
9.1	The details regarding Anaesthesia are noted in the Anaesthesia Register.	Anaesthetist	Anaesthesia register
9.2	Anaesthetist notes down all the drugs and consumables, which are used during the surgery in Operation theatre	Anaesthetist	Operation theatre/ Indent Register
9.3	OT Nurse In-charge records the details of each surgery Performed	OT Nurse In-charge	Surgery Registers
9.4	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	
9.5	Staff Nurse maintains the Psychotropic and Narcotics Drugs Register of statutory requirements	Staff Nurse	Narcotic Drugs Register
9.6	Staff Nurses maintain the inventory of OT Consumables and medicines.	Staff Nurse	Inventory Register
9.7	Staff Nurses maintain the inventory of OT Consumables and medicines.	Staff Nurse	Inventory Register
9.8	Pharmacists maintain the records of the non-functional / damaged equipment and informs OT I/c and the Stores I	Pharmacist	Dead Inventory

	/c. They update the same in the Dead inventory register.		register
Central Sterile Supply / Theatre Sterile Supply Department			
10.1	<p>The TSSU is situated within the OT complex itself and consists of:</p> <ul style="list-style-type: none"> • Receiving area • Sterile Storage • Dispatch Area <p>CSSD may or may not be in the OT complex and consists of:</p> <ul style="list-style-type: none"> • Receiving area • Sterile Storage • Dispatch Area <p>Used instruments are removed, washed in OT side room and handed over to TSSU</p>	Scrub nurse	
10.2	<p>Receipt and Issue of Packs: 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.</p>	TSSU / CSSD Assistant	TSSU / CSSD Receipt & Issue Register
10.3	Instruments are received in CSSD by CSSD Nurse on duty as per the duty roster.	Scrub nurse	
10.4	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, name and signature of person handing over, and name and signature of person receiving.	Scrub nurse / OT Nurse	
10.5	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	
10.6	Instruments are disinfected with 1% bleach solution and washed with detergent (if applicable), sorted, packed, labelled, and autoclave indicator pasted and put through sterilization process as in TSSU / CSSD operations protocol	OT Nurse on duty for sterilization	
10.7	Dirty linen picked up in the OT and sent to laundry.	Sanitary worker / OT attendant	
10.8	Clean linen sent from laundry to CSSD	OT attendant	
10.9	Clean linen packed as per surgery requirements and Autoclaved	CSSD Nurse	
10.10	Linen stored and issued the same way as instruments	CSSD Nurse	
10.11	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	

General Cleaning of the Department			
11.1	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	
11.2	The Housekeeping staff is responsible for transporting the prepared packs from the point of generation to the Central Sterile Supply Department.	Housekeeping Staff	
11.3	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	
Return of Unutilized Packs			
12.1	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	
Maintenance and Calibration of Equipment			
13.1	Maintenance of the equipment is done as per the annual Maintenance contract (AMC) entered into with the vendor of the respective CSSD equipment.	Engineering & Maintenance Department of the hospital.	AMC Records
13.2	All equipment used in the department are appropriately calibrated at periodic intervals to ascertain whether they are performing at the expected level and a record of the same is maintained in the user department as well as the Administrative department	Respective department/ Administrative Department	Calibration Records and Stickers
Recall Procedure			
14.1	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

Reference Records: The list is as follows

S.NO.	RECORD	NAME RECORD NO.	RETENTION PERIOD
1	OT call register		
2	OT booking register		
3	List of Operations		
4	Fogging Record Register		
5	Anesthesia 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	Anesthesia 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 for Maintaining Records (For Fogging)

For each area OT:

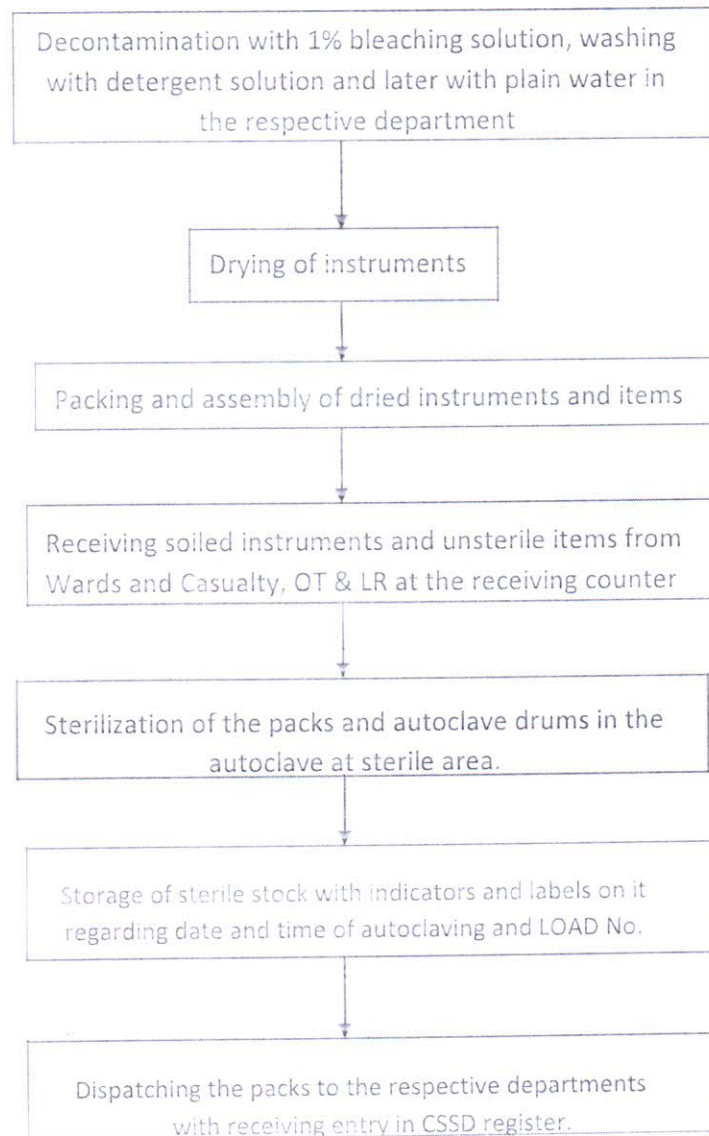
Date	Time of A/C Off	Time of Start	Time of opening	Agent used	Time when sealed	Cleaning	Cultures Taken	Time of re-commissioning area	Sign of. In-charge

If carbolization is done in any theatre, the O.T Nurse ensures that there is proper time gap between the two operations for removing the used material, cleaning and Bacillocid spray.

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	

Work Flow Chart- CSSD



Before Birth : SAFE CHILDBIRTH CHECKLIST

CHECK-1 On Admission

Does Mother need referral?

- ☐ Yes, organized
☐ No

Refer to FRU/Higher centre if any of following danger signs are present, mention reason and given treatment on transfer note:

- ☐ Vaginal bleeding ☐ Severe abdominal pain
☐ High fever ☐ History of heart disease or other major illnesses
☐ Severe headache or blurred vision ☐ Difficulty in breathing ☐ Convulsions

Partograph started?

- ☐ Yes
☐ No: will start when ≥ 4 cm
☒ **NO OXYTOCIN/ other uterotonics for unnecessary induction/ augmentation of labor**

Start when cervix ≥ 4 cm, then cervix should dilate ≥ 1 cm/hr

- Every 30 min: Plot maternal pulse, contractions, FHR and colour of amniotic fluid
- Every 4 hours: Plot temperature, blood pressure, and cervical dilation in cm

Does Mother need

- Antibiotics?
- ☐ Yes, given
☐ No

Give antibiotics to Mother if:

- ☐ Mother's temperature $\geq 38^{\circ}\text{C}$ ($\geq 100.5^{\circ}\text{F}$)
☐ Foul-smelling vaginal discharge
☐ Rupture of membranes >12 hrs without labour or >18 hrs with labour
☐ Labour >24 hrs or obstructed labour
☐ Rupture of membranes <37 wks gestation

- Inj. Magnesium Sulfate?

- ☐ Yes, given
☐ No

Give first dose of inj. magnesium sulfate and refer immediately to FRU/Higher center OR give full dose (loading and then maintenance) if at FRU if:

- Mother has systolic BP ≥ 160 or diastolic ≥ 110 with ≥ 3 proteinuria OR BP systolic ≥ 140 or diastolic ≥ 90 with proteinuria trace to $+2$ along with any of:
- ☐ Presence of any symptom like:
• Severe headache • Blurring of vision • Difficulty in breathing
• Pain in upper abdomen • Oliguria (passing <400 ml urine in 24 hrs)
☐ Convulsions

Corticosteroid

- ☐ Yes, given
☐ No

Give corticosteroids in antenatal period (between 24 to 34 weeks) to mothers if:

- ☐ True pre-term labour
☐ Conditions that lead to imminent delivery like APH, Preterm Premature ROM, Severe PE/E Dose: Inj. Dexamethasone 6 mg IM 12 hourly - total 4 doses

HIV status of the mother:

- ☐ Positive
☐ Negative

If HIV+ and in labour:

- ☐ If mother is on ART, continue same
☐ If not on ART, start ART
☐ If ART is not available, refer immediately after delivery to ICTC/ART Centre/Link ART Centre for further HIV management

☐ Follow Universal Precautions

If HIV status unknown:

- ☐ Recommend HIV testing

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

Are soap, water, gloves available?

- ☐ Yes, I will wash hands and wear gloves for each vaginal exam
☐ No, supplies arranged

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

Explain to call for help if there is:

- Bleeding
- Severe abdominal pain
- Difficulty in breathing
- Severe headache or blurring vision
- Urge to push
- Can't empty bladder every 2 hours

Counsel Mother and Birth Companion on:

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

Name of Provider: Date: Signature:



After Birth : SAFE CHILDBIRTH CHECKLIST

CHECK-3 Soon After Birth (within 1 hour)

Is Mother bleeding abnormally?

- ☐ Yes, shout for help, refer if needed or treat if facilities available
- ☐ No

If bleeding ≥ 500 ml, or 1 pad soaked in < 5 min:

- Call for help, massage uterus, start oxygen, start IV fluids, start oxytocin drip 20 units in 500 ml of RL @ 40-60 drops/min, treat cause
- If placenta not delivered or completely retained: give IM or IV Oxytocin, stabilize, and refer to FRU/Higher centre
- If placenta is incomplete: remove if any visible pieces, and refer immediately to FRU/ higher centre

Does Mother need:

• Antibiotics?

- ☐ Yes, given
- ☐ No

Give antibiotics to mother if manual removal of placenta is performed, or if mother's temperature $\geq 38^{\circ}\text{C}$ ($\geq 100.5^{\circ}\text{F}$) and any of:

- ☐ Chills
- ☐ Foul-smelling vaginal discharge
- ☐ Lower abdominal tenderness
- ☐ Rupture of membranes > 18 hrs during labour
- ☐ Labour was > 24 hours

• Inj. Magnesium sulfate?

- ☐ Yes, given
- ☐ No

Give first dose of inj. magnesium sulfate and refer immediately to FRU/Higher center OR give full dose (loading and then maintenance) if at FRU if:

Mother has systolic BP ≥ 160 or diastolic ≥ 110 with $\geq +3$ proteinuria OR BP systolic ≥ 140 or diastolic ≥ 90 with proteinuria trace to $+2$ along with any of:

- ☐ Presence of any symptom like:
- Severe headache
 - Blurring of vision
 - Difficulty in breathing
 - Pain in upper abdomen
 - Oligouria (passing < 400 ml urine in 24 hrs)
- ☐ Convulsions

Does Baby need:

• Antibiotics?

- ☐ Yes, given
- ☐ No

Give baby antibiotics if antibiotics were given to mother, or if baby has any of:

- ☐ Breathing too fast (> 60 /min) or too slow (< 30 /min)
- ☐ Chest in-drawing, grunting
- ☐ Convulsions
- ☐ Looks sick (lethargic or irritable)
- ☐ Too cold (baby's temp $< 36^{\circ}\text{C}$ and not rising after warming)
- ☐ Too hot (baby's temp $> 38^{\circ}\text{C}$)
- ☐ Excessive crying

• Referral?

- ☐ Yes, organized
- ☐ No

Refer baby to NBSU/SNCU/FRU/higher centre if:

- Any of the above (antibiotics indications)
- Baby looks yellow, pale or bluish

• Special care and monitoring?

- ☐ Yes, organized
- ☐ No

Arrange special care/monitoring for baby if any of the following is present:

- ☐ Preterm baby
- ☐ Birth weight < 2500 gms
- ☐ Needs antibiotics
- ☐ Required resuscitation

• Syrup Nevirapine

- ☐ Yes, given and will continue upto 6 weeks
- ☐ No

Give if mother is HIV+:

- If mother has received > 24 weeks of ART, give syrup Nevirapine to baby for 6 weeks
- If mother has received < 24 weeks of ART or mother is not on ART, give syrup Nevirapine to baby for 12 weeks

- ☐ Started breastfeeding. Explain that colostrum feeding is important for baby.
- ☐ Started skin-to-skin contact (if mother and baby well) and KMC in pre-term and low-birth weight babies.
- ☐ Explain the danger signs and confirm mother/companion will call for help if danger signs present.

Name of Provider: Date: Signature:

Just Before and During Birth : SAFE CHILDBIRTH CHECKLIST

CHECK-2 Just Before and During Birth (or C-Section)

Does Mother need:

• Antibiotics?

- ☐ Yes, given
☐ No

• Inj. Magnesium sulfate?

- ☐ Yes, given
☐ No

Give antibiotics to Mother if any of the following are present:

- ☐ Mother's temperature $\geq 38^{\circ}\text{C}$ or $\geq 100.5^{\circ}\text{F}$
☐ Foul-smelling vaginal discharge
☐ Rupture of membranes >18 hrs with labour
☐ Labour >24 hrs or obstructed labor now
☐ Cesarean section

Give first dose of inj. magnesium sulfate and refer immediately to FRU/Higher center OR give full dose (loading and then maintenance) if at FRU if:

Mother has systolic BP ≥ 160 or diastolic ≥ 110 with $\geq +3$ proteinuria OR BP systolic ≥ 140 or diastolic ≥ 90 with proteinuria trace to $+2$ along with any of:

- ☐ Presence of any symptom like:
- Severe headache
 - Blurring of vision
 - Difficulty in breathing
 - Pain in upper abdomen
 - Oligouria (passing <400 ml urine in 24 hrs)
- ☐ Convulsions

- ☐ Skilled assistant identified and ready to help at birth if needed

Confirm essential supplies are at bedside/labour room:

For Mother

- ☐ Gloves
☐ Soap and clean water
☐ Oxytocin 10 units in syringe
☐ Pads for mother

Prepare to care for mother immediately after birth of baby (AMTSL)*

- Confirm single baby only (rule out multiple babies)
- Give inj. oxytocin 10 units IM within 1 minute
- Do controlled cord traction to deliver placenta
- Massage uterus after placenta is delivered, check for completeness (all Cotyledons and Membranes)

For Baby

- ☐ Two clean dry, warm towels
☐ Sterile scissors/blade to cut cord
☐ Mucus extractor
☐ Cord ligature
☐ Bag-and-mask

Prepare to care for baby immediately after birth

- Dry baby, wrap, and keep warm, give Vit. K, start breastfeeding
- If not breathing: clear airway and stimulate
- If still not breathing:
 - Cut cord
 - Ventilate with bag-and-mask
 - Call for help (Pediatrician/SNCU/NBSU/F-IMNCI trained doctor if available)

Name of Provider: Date: Signature:



CHECK-4 Before Discharge

Is Mother's bleeding controlled?

- ☐ Yes
☐ No, treat, observe and refer to FRU/
 higher centre if needed

Does mother need antibiotics?

- ☐ Yes, give and delay discharge
☐ No

Give antibiotics to mother if mother has temperature $\geq 38^{\circ}\text{C}$ or $\geq 100.5^{\circ}\text{F}$ with any of:

- ☐ Chills
☐ Foul-smelling vaginal discharge
☐ Lower abdominal tenderness

Does baby need antibiotics?

- ☐ Yes, give, delay discharge and refer to
 FRU/ higher centre
☐ No

Give baby antibiotics if baby has any of:

- ☐ Breathing too fast ($>60/\text{min}$) or too slow ($<30/\text{min}$)
☐ Chest in-drawing, grunting
☐ Convulsions
☐ Looks sick (lethargic or irritable)
☐ Too cold (baby's temp $<36^{\circ}\text{C}$ and not rising after warming)
☐ Too hot (baby's temp $>38^{\circ}\text{C}$)
☐ Stopped breastfeeding
☐ Umbilical redness extending to skin or draining pus

Is baby feeding well?

- ☐ Yes, encourage mother for exclusive breastfeeding for 6 months.
☐ No, help mother, delay discharge, refer to NBSU/ SNCU/ Higher centre if needed

- ☐ Discuss and offer family planning options to mother
☐ Confirm post delivery stay at facility for 48 hours in normal delivery and 7 days in C-section cases
☐ Explain the danger signs and confirm mother/companion will seek help/ come back if danger signs are present after discharge
☐ Arrange transport to home and follow-up for mother and baby

Thank mother for availing services from you

Danger Signs

Mother has any of:

- Excessive bleeding
- Severe abdominal pain
- Severe headache or visual disturbance
- Breathing difficulty
- Fever or chills
- Difficulty emptying bladder
- Foul smelling vaginal discharge

Baby has any of:

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

Name of Provider: Date: Signature:

Adapted from "WHO Safe Childbirth Checklist"



Discharge/ Referral Death Form (Tick (✓) whichever applicable)

Name of Facility:			
Block:		District:	
Name and signature of service provider:		Phone No.	

Name:	W/o or D/o:	Age (yrs):	MCTS No.
Date of admission: / /	Time of admission:	Date of Discharge/ Referral: / /	Time of Discharge/Referral:
Date of delivery: / /	Time of delivery:	Delivery outcome: Live birth Abortion Single Fresh Still birth Macerated Still birth Twins/Multiple	

Final outcome: Discharge/ Referred out (Tick (✓) whichever applicable)

Discharge summary:	Referral summary:
Condition of mother	Reason for referral
FP option (if provided)
Condition of baby	Facility name (referred to)
Sex of baby M F Birth weight (kgs).....
Pre-term: Yes No Inj. Vit K1: Yes No	Treatment given
Immunization: BCG OPV Hepatitis B
Advice on discharge:
Counselling on danger signs for mother and baby
Rest, nutrition and plenty of fluids
Tab iron Tab calcium.....
Treatment given
.....
Follow-up date

Notes on Discharge/ Referral/ Death

Safe Surgery & Safe Anesthesia

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

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.

Adapted from "WHO Safe Surgery & Safe Anesthesia"

Postoperative Care

If the patient is restless, something is wrong

Look for the following in the Recovery Room:

- 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

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

SIGN IN		TIME OUT		SIGN OUT	
<input type="checkbox"/>	PATIENT HAS CONFIRMED: • IDENTITY • SITE • PROCEDURE • CONSENT	<input type="checkbox"/>	CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE	<input type="checkbox"/>	NURSE VERBALLY CONFIRMS WITH THE TEAM:
<input type="checkbox"/>	SITE MARKED/NOT APPLICABLE	<input type="checkbox"/>	SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM: • PATIENT • SITE • PROCEDURE	<input type="checkbox"/>	THE NAME OF THE PROCEDURE RECORDED
<input type="checkbox"/>	ANAESTHESIA SAFETY CHECK COMPLETED	<input type="checkbox"/>	ANTICIPATED CRITICAL EVENTS SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?	<input type="checkbox"/>	THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)
<input type="checkbox"/>	PULSE OXIMETER ON PATIENT AND FUNCTIONING	<input type="checkbox"/>	ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?	<input type="checkbox"/>	HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)
<input type="checkbox"/>	KNOWN ALLERGY? NO YES	<input type="checkbox"/>	NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?	<input type="checkbox"/>	WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED
<input type="checkbox"/>	DIFFICULT AIRWAY/ASPIRATION RISK? NO YES, AND EQUIPMENT/ASSISTANCE AVAILABLE	<input type="checkbox"/>	HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES? YES NOT APPLICABLE	<input type="checkbox"/>	SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT
<input type="checkbox"/>	RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)? NO YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED	<input type="checkbox"/>	IS ESSENTIAL IMAGING DISPLAYED? YES NOT APPLICABLE		

[illegible]

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

02

Maintenance Checklist

Nebulizer

[illegible]

unblocked

WEEKLY

Clean filter					
Main plug, Cable & socket					
Compressor fan					
Check for adequate flow					

Maintenance Checklist

Suction Machine

[illegible]

WEEKLY

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

(25)

Daily
Wipe Dust
Cracked & damaged part
Check Flat base
Check Cables
Check zero

WEEKLY				
Check part tightly fitted				
Check Battery				
Main plug, Cable & socket				
Check accuracy with known weight				

Maintenance Checklist

Multiparamonitor

[illegible]

WEEKLY

WEEKLY				
Check for loose screws				
Main plug, Cable & socket				
Check Indicators & visual displays				
Check probe disconnection alarm				

Checklist for Examination room in LR Complex for the month of -

S.N.	Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	Wheelchair and / or stretcher																															
2	Examination table with Foot step																															
3	Foetoscope / Doppler																															
4	Intact and working Table and Chair for Doctor																															
5	Functional BP apparatus																															
6	Functional Stethoscope																															
7	Functional Thermometer																															
8	Wall clock																															
9	Functional Adult weighing scale																															
10	Measuring tape																															
11	Fully equipped Emergency Tray																															
12	Hub cutter																															
13	Puncture Proof container																															
14	Colour coded bins with corresponding colour liners																															
15	Curtain / screen for privacy																															
16	Partograph																															
17	Cetrimide swabs																															
18	Disposable gloves																															
19	Records / Registers																															
20	Utility gloves																															
21	MCP card																															
22	Safe motherhood booklet																															
23	IUCD Client Card																															
24	Sterilized swabs																															
25	Sterilized instruments																															
26	Functional hand washing area																															

Checklist for Pre-delivery Room in LR Complex for the month of.....

S.N	Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	Functional Foetoscope																															
1	Doppler																															
2	Foot step at every bed																															
	Bed Head Tickets /																															
4	Patient File																															
	Functional BP																															
5	zipparatus																															
	Functional																															
6	Stethoscope																															
	Functional																															
7	Thermometer																															
8	Wall clock																															
9	Functional IV Stand																															
	Fully equipped																															
10	Emergency Tray																															
11	Hub cutter																															
	Puncture Proof																															
12	container																															
	Colour coded bins																															
	with corresponding																															
13	colour liners																															
14	Partograph																															
15	Cetrimide swabs																															
16	Disposable gloves																															
17	Records / Registers																															
18	Utility gloves																															
19	Sterilized swabs																															
20	Sterilized instruments																															

Checklist for Labour room for the month of

S.N.	Critical Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
21	Functional Adult Ambu bag, mask, laryngoscopes and blades																															
22	Functional Paediatric Ambu bag, mask, laryngoscopes and blades at NBCC																															
23	Labelled plastic jars for drugs and injectibles with dates of expiry written on them against each drug																															
24	Functional Shadowless lamp																															
25	Running water in the toilet																															
26	Functional Door Latch in the toilet																															
27	Adequate illumination in the toilet																															
28	Functional Leg support / Foot rest at every Labour Table																															
29	Daily Records of Room temperature and humidity meter																															
30	Disposable gloves (no. of deliveries per day X 4)																															
31	Disposable syringe (2ml) = avg no. of deliveries per day																															
32	Disposable syringe (5ml) = avg no. of deliveries per day																															
33	Draw sheets (no. of deliveries per day X 2)																															
34	Disposable plastic apron = avg no. of deliveries per day																															
35	Cord clamp = avg no. of deliveries per day																															

Checklist for Labour room for the month of

S.N.	Essential Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
51	Functional hand washing area																															
52	Functional Wall clock with seconds hand																															
53	Curtain / screen for privacy																															
54	Delivery trolley																															
55	Stepping stool for every Labour Table																															
56	Functional AC																															
57	Small Yellow and Red bins at the Labour Table side																															
58	companion																															
59	Kick basin for general waste																															
60	connection																															
61	Mosquito repellent																															
62	Switch Boards & other electrical installations are intact																															
63	Display of Intranatal protocols																															
64	Wheelchair / stretcher trolley																															
65	Display of SBA Quality protocols																															
66	Separate mop for labour room is used																															
67	Freshly prepared 0.5 % chlorine solution																															

[illegible]

Checklist for OT Complex for the month of.....

S.N.	Critical Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	Functional Hydraulic O.T. Table as per case load																															
2	Functional O.T. Light																															
3	Functional Shadowless Focus Lamp																															
4	Functional Electric panel for Anaesthesia machine																															
5	Electrocautery machine																															
6	Functional Boyle's apparatus																															
7	Functional Bain's circuit																															
8	Functional Piped Oxygen Gas Supply / Filled Oxygen cylinders																															
9	Functional Piped Nitrogen Gas Supply / Filled Nitrogen Gas Cylinders																															
10	Adequate quantity of Inj. Oxytocin kept in fridge																															

S.N.	Critical Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
11	Fully Equipped Emergency Tray with Expiry dates on the list of medicines																															
12	Adequate quantity of Emergency Drugs																															
13	Adequate quantity pre warmed towels or sheets for wrapping the baby (2 per LSCS case)																															
14	Functional Mucus Extractor																															
15	Functional Ambu Bag & Mask (0 & 1 no.)																															
16	Sterilized thread for cord / cord clamp																															
17	Functional Radiant Warmer																															
18	Baby Tray																															
19	Functional Nasogastric tube																															
20	Adequate quantity of Disposable syringes & IV sets																															
21	Adequate quantity of Dressings																															

S.N.	Critical Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
22	Adequate quantity of Antiseptic solutions																															
23	Adequate quantity of consumables for newborn care																															
24	Adequate quantity of sterile gloves																															
25	Adequate quantity of masks																															
26	Adequate quantity of caps																															
27	Functional BP apparatus																															
28	Functional Thermometer																															
29	Functional Pulse Oxymeter																															
30	Functional Multiparamonitor																															
31	Sterile LSCS Set																															
32	Sterile Hysterectomy Set																															
33	Functional Glucometer																															
34	HIV Rapid Diagnostic Kit																															
35	Functional Adult Ambu Bag & Mask																															
36	Laryngoscope with 3 blades																															
37	Batteries for Laryngoscope																															

S.N.	Critical Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
50	Adequate quantity of surgical sets for Hernia & Hydrocoele																																
53	Functional Refrigerator																																
S.N.	Essential Items																																
51	Separate mops for Sterile zone and clean zone																																
	Separate mop for Protective zone and Circulation area																																
	Signal Lock for autoclave																																
52	Chemical indicators for sterilization being used																																
55	Biological Indicators for sterilization being used																																
56	Hospital graded mattress on OT Tables																																
57	Functional IV Stands																																
58	Tray for monitors																																
59	Clean Bed pans																																
60	Adequate quantity of Sanitary Pads																																

Ministry of Health and Family Welfare
Maternal Health Division
2018

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