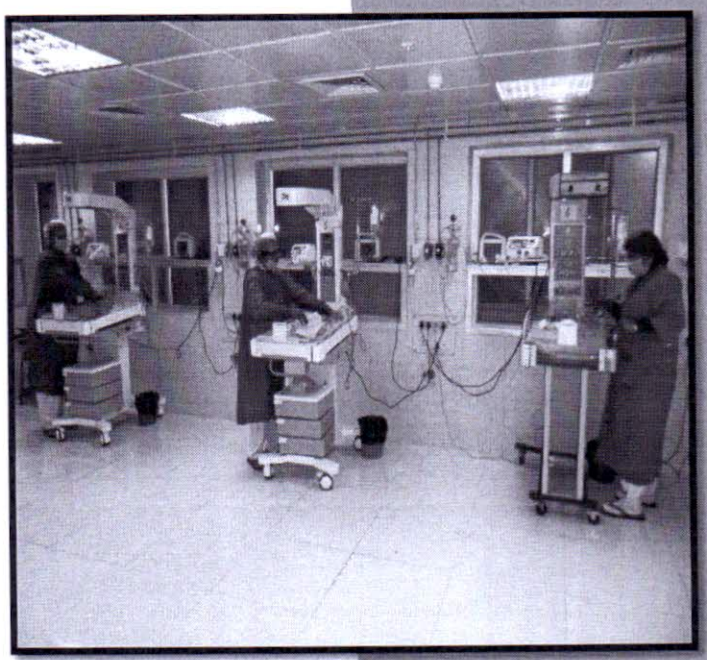
Standard Operating Procedures for District Women Hospitals- Uttar Pradesh

SOP SNCU



Objectives of Sick New Born Care Unit (SNCU)

1. **Manage Specific conditions- Post Asphyxia, Sepsis, (Pneumonia & Meningitis), Tetanus Neonatorum, Neonatal Jaundice**
2. **Measures to reduce deaths in SNCU**
3. **Enhancing the skill of the staff by regular CME**
4. **Follow the protocol for step-down of Newborn**

1. Purpose:

- Neonatal mortality contributes to about two thirds of infant deaths. There is an increasing need to focus on newborn care and survival for significant reduction in IMR.
- Strengthening the care of sick, premature, low birth weight newborns right from birth through the neonatal period.
- To provide all required services to in born as well as out born neonates referred to SNCU.
- To respond to the need and expectations of the attendants.

2. Scope:

To provide Intensive care services to sick new born babies both in-born and out-born.

3. Responsibility:

Pediatrician on duty/sister in-charge

- To receive the potential high risk sick new born referred from OT, LR and maternity ward (in born) or referred from other health facilities.
- To pay immediate attention, assessment, immediate management.
- It is the responsibility of pediatrician on duty at SNCU to attend the call from emergency for acutely sick new born baby.
- To provide immediate intensive care to acutely sick newborn and the treatment record should be mentioned in Bed Head Ticket.
- Triage management of Sick Inborn & Out-born Neonate
- Shifting of baby to step-down is sole responsibility of SNCU team
- To take decision for transferring the severely sick New Born to higher level
- To follow all quality parameters

4. Standard Procedure:

S.No.	Activity	Responsibility	Reference Document / Record
4.1	**Registration for admission in SNCU:**		
4.1.1	Registration is done at registration counter during OPD hours and at emergency department during non OPD hrs. Every patient who is registered is provided with an identification number and directed either towards the OPD/ Emergency department based on the	Treating Doctor, Nurse.	In-patient Admission Register / BHT

time of registration.

A written order for hospitalization by the doctor at the Paediatric OPD during OPD hours or the Medical officer at the emergency after OPD hours.

Criteria for babies to be admitted in SNCU

a) Criteria for babies to be admitted in SNCU for inborn babies:

1. Infants who are born prior to 34 weeks gestation
2. Infants weighing 1800 grams at birth (regardless of gestational age).

*(*Neonates weighing less than 1.2 Kg should be referred to the higher centre after proper stabilization)*

3. Infants with an APGAR score of < 6 at 1 min and evidence of birth asphyxia or delayed cry after 5 minutes. (i.e. slow gasping respiration or no respiration at 1 minute).
4. After prolonged Resuscitation that is after using Bag and mask or Bag and tube.
5. Persistent respiratory Distress.
6. Shock or CRT > 3 seconds
7. Central cyanosis
8. Vomiting ---especially bile stained
9. Neonates with surgical problems should also be referred after stabilizing.
10. Any infant who is felt to be at risk by the nursing staff or Doctor
11. Any infant with a birth weight of <1800 grams & /or <34 weeks must be admitted to the SNCU for a minimum of 24 hours.
12. Transfer from Neonatal ward due to need for close monitoring or any deterioration in the condition of the Neonate.

b) Admission from postnatal ward to SNCU

The following signs and symptoms signify a sick infant and for admission from postnatal ward:

Delayed or persistent respiratory distress
Apnoeic or cyanotic spells
Abnormal behaviour or activity including recurrent vomiting, abdominal distention, lethargy,

	hypotonia, Seizures Suspected sepsis Evidence of bleeding or excessively pale infants. Jaundice if it occurs before 24 hours of age or bilirubin is equal to or exceeds a level of 15 mg/dl before 48 hours or if considered to be in phototherapy range according to reference charts. Persistent hypothermia not responding to simple measures. Hypoglycaemia –severe / recurrent / non-responding to feeds alone. **c) Admission criteria in SNCU for any baby < 28 days from the community** 1. Delayed cry after 5 minutes 2.Respiratory distress with Tachypnea, grunt , Chest in-drawing or central cyanosis 3. Central cyanosis or spells 4. Vomiting esp. Bile stained 5. Abdominal distension 6. Suspected sepsis but child unstable 7. Unstable Babies with congenital abnormality requiring investigation 8. Jaundice requiring Exchange transfusion 9.Neonates in shock (CRT > 3 seconds, poor skin colour , cold extremities, weak pulses and mottled skin) 10. Fits including subtle signs (refer to neonatal convulsion for details) 11. Low birth weight < 1800 gm or unstable baby. 12. Severe Asphyxia, RDS or is satisfying the above criteria of admission to SNCU. I) **Criteria for Transfer to Step Down:** a. Babies whose respiratory distress is improving and no longer require oxygen supplementation to maintain saturation b. Babies on antibiotics for completion of duration of therapy c. Low birth weight babies (< 1800 gms) who are otherwise stable(for adequate weight gain) d. Babies with jaundice requiring phototherapy but otherwise stable e. Babies admitted for any condition but are now thermo-dynamically and haemo-dynamically stable. **II) Criteria for transfer to Maternity ward**:		

	a. Babies who satisfy the criteria for transfer to step down ward but cannot be accommodated due to want of space in the Step down ward and whose mother is available for stay with the baby b. Babies who are comparatively less sick but need observation. Such babies shall be transferred to SNCU if their condition does not improve at the Maternity ward		
	Procedure for Admission / Shifting / Referral – • The Sick Newborns are admitted to the hospital either when they arrive in Emergency or on advice of paediatrician, if indicated, immediately after delivery or through OPD • Sick Newborns received in Casualty / Emergency are attended by EMO and directed towards SNCU if no immediate resuscitation / intervention is required. • Patient is received in SNCU after cross checking patient ID, patient file, reports, treatment already given, and treatment to be continued. • For every admitted Sick Newborn bed head ticket is generated and entry is done in SNCU Admission / Discharge register. • When the condition of the newborn is such that he/she cannot be handled in the Hospital due to the complications or due to lack of facilities, timely referral is done for the next higher facility with full record by ambulance services.		
	Procedure for requisition of diagnostic test and receiving of the reports • If any laboratory test is required to be done then the Treating Doctor prescribes the test on the Lab requisition form. • 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. • In case of emergency, Laboratory technician is informed by the staff nurse. Lab technician comes to the ward and collects the sample. • A separate Lab registration number is generated and given to the patient's attendant		

	for collection of report. • Report is received within the defined Turn Around Time from the Lab.		
5.1.2	**Providing continuous monitoring:** The doctors & nurses are always present in the SNCU for Bedside monitoring periodically as per SNCU protocols o Hemodynamic parameters o Respiratory parameters o Temperature o Urine Output o Drainage (from tubes) o Blood sugar/Electrolytes Entry is made in patient SNCU chart	Treating Doctor / On duty Nursing Staffs.	
	Arrangement of intervention for SNCU • The Nurse-in-charge maintains inventory for the necessary equipment, drugs & consumables and other facilities required for the delivery. • The Nurse in-charge timely indents after scientific calculation of consumption of necessary drugs & consumables. • The Nurse in-charge maintains buffer stock of necessary drugs & consumables. • Functionality of required equipment and Availability of Drugs & consumables is ensured and checked on daily basis. • Any breakdown of equipment or shortage of supply is intimated to Hospital Administration and immediate corrective actions are taken. • AMC and annual calibration of critical equipment is done annually.		
	Documented Procedure for Inventory Management: • Indent of drugs, consumables & other items is prepared. • This demand is forwarded to Facility in-charge for approval. After approval from Facility In-charge the indent is forwarded to Store In-charge for issuance of the items. • Items are received from Store. • The items received are verified with respect to		

	complete specification such as quantity, quality, date of manufacture, date of expiry (as applicable), make etc. • In case of any discrepancy, the Store In-charge is informed and items are replaced. • The details of Ok materials are entered in Stock Register. • The ok materials are stored/kept at identified location may be in store, Almirah or at user place as required. • The safe storage facilities for vulnerable, hazardous or inflammable items are ensured. • After the issue of items, the Stock Register is updated regularly. • Daily consumption record for all items is maintained. • The inventory is managed according to the monthly estimated requirement based on average monthly or quarterly consumption. • The physical verification of items is carried out periodically with respect to quantity, quality, Expiry etc.		
5.1.3	**Documentation:** • The documentation in the Nursing services starts with the initiation of the Inpatient case sheet and end with the making of the Discharge slip of the patient at the time of discharge of the patients. **Documentation includes:** • Bed Head Ticket • Admission Register • General Medication Order • Patient Hand over register • Discharge Register • Death Register • Call Book for Superintendent, Medical Officer, Ward Master, Nursing Superintendent • Transfer out Register	Ward In-charge	Bed Head Ticket Admission Register General Medication Order Patient Hand over register Discharge Register Death Register Call Book Transfer out Register
5.1.4	**Infection Control –** • Standard Infection Control Measures are taken to ensure prevent hospital acquired infections and safe work environment to service		

	providers. These measures broadly includes – • Strict adherence to standard hand washing Practices • Use of personal protective equipment when handling blood, body substances, excretions and secretions • Appropriate handling of patient care equipment and soiled linen • Prevention of needle prick /sharp injuries • Environmental cleaning and spill-management • Appropriate handling of Biomedical Waste • Regular culture surveillance of infection prone area like SNCU is done to insure safe patient care environment.		
5.1.5	**Environmental Cleaning -** • External foot wears are not allowed in the SNCU. It is mandatory to wear dedicated SNCU sleepers before entering the labour room. Aprons, Masks and caps are used by Doctors & Nursing Staff is in dress. The shoe covers, masks and caps are provided to mother if she is entering in the breastfeeding room of SNCU. • After every procedure all working surfaces are disinfected. • Only doctor & staff are allowed while performing the procedure in SNCU. Traffic in SNCU is kept minimal.		
5.1.6	**Diagnostic tests in SNCU-** ***Availability of at the point of care:*** Serum billirubin, Plasma glucose, Serum Creatnine, Complete Blood Count, Platelet, C reactive protein, Prothrombin time, Arterial Blood Gas analysis with PH measurement analysis.		
5.1.7	**Key Protocols:** 1) Assessment and treatment of new borns with emergency signs 2) Triage of sick new born(in SNCU & EMERGENCY) 3) Grading and management of hypothermia 4) Expression of breast milk 5) Assisted feeding of low birth weight neonates 6) IV fluid therapy for new born 7) Management of hypoglycemia		

	8) Assessment and management of jaundice in newborn babies 9) Assessment and management of respiratory distress 10) Assessment of neonatal sepsis 11) Administration of commonly used drugs 12) Resuscitation algorithm 13) Management of newborn with seizures 14) Administration of Dopamine in a newborn with hemodynamic compromise 15) Identifying intrauterine growth retardation in new born 16) Assessing gestation of new born baby-expanded new ballard score 17) Housekeeping protocol 18) Breastfeeding		
5.1.8	**Procedure for maintenance of Infrastructure of SNCU to ensure Safety and Security:** It is ensured that • Fixtures and furniture like cupboards, cabinets, and heavy equipments , hanging objects are properly fastened and secured • Switch Boards, other electrical installations are intact and do not have temporary connections and loosely hanging wires • There is a mechanism for periodic check / test of all electrical installation by competent electrical Engineer • Dedicated earthling pit system is available • Earth resistance is measured twice in a year and recorded • Power boards are marked as per phase • Floors of the SNCU are even and non slippery • Windows / ventilators in the SNCU are intact and sealed • Maintenance of crash cart – emergency drugs, tracheal intubation equipment & defibrillator (as in SNCU protocol) • Maintenance of Oxygen, air, vacuum wall outlets		
	Procedure for Preventive-Breakdown maintenance and calibration of equipment • Regular maintenance of electronic equipment		

	like ventilators, monitors, infusion pumps, breathing circuits, flow meters, nebulizers etc is ensured. • The staff nurse maintains and up-dates the history sheet and log book of the equipment that is issued to them in their unit. • The departmental head keeps a folder in the department that contains files for all equipment containing their history sheets and log books. • The whole idea is to track the performance of the equipment and to keep a record of its functioning. This also helps in timely preventive maintenance and calibration of the equipment as per its requirements and renewal of CMC/ AMC before it expires. • The maintenance and calibration requirements are normally identified using the operational & maintenance manuals. Where maintenance manuals are not available, these are based on knowledge and experience. • For all new procured instruments / devices, it is ensured that these manuals are safely kept in the department. • When any instrument / device break down, Maintenance Dept. is informed and record is maintained in complaint book and breakdown register. • Preventive maintenance schedules are prepared based on manufacturers' recommendations finally approved by the Head of the Department and the Facility In-charge. • Review of Preventive Maintenance record is done periodically. • All preventive maintenance jobs done are recorded in History Card maintained for each equipment/ device		
5.1.9	**<u>Discharge Policy of SNCU</u>** **Discharge is given when:** 1) All acute problems have been resolved or no longer active. 2) Baby is accepting breast feeding or spoon feeds well. 3) There is adequate weight gain in baby for 3 consecutive days. 4) Mother is confident for managing the baby.	Treating Doctor, Nurse	Discharge Summary / Discharge Register

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	5) At the time of discharge the baby weight is more than 1.5 kg. 6) Counselling of parents for Retinopathy of Prematurity if weight < 1800 gm and esp. in children < 32 weeks Date, time and day for follow up is specifically mentioned and no generalization. For eg. to come after a week A pre discharge physical examination including Weight, Head Circumference and length is done. Medications are demonstrated on the dose, drug, duration and method of administration to mother. Emergency phone number of the facility is given to parents. Various problems, investigations and course during hospital stay are properly noted. At the time of discharge, the discharge advice is obtained from the doctor of SNCU. The Nursing staff on duty explains the treatment details and the follow up of the medications that the neonate has to continue even after getting discharged.		
5.1.10	**Transportation and referral** • In the district hospitals with provision of a functional /affordable transport for sick neonates • It is linked to a transport service that reaches within 30 minutes and transport patient to referral centre. • Monitored care is provided during transport. • Communication contact with the vehicle driver directly or routed through a call centre. • The ambulance service is free of cost. • An assured referral facility linkage is a facility which provides management of complications including surgical emergencies and blood transfusion and which agrees to provide these services on a cashless basis to any patient referred from the referring facility. This may		

	be a public hospital or an accredited private hospital through a public-private partnership arrangement. • The effort is to have a network of referral centres within one or two hours of any facility providing Sick New Born Care.		

Reference Documents:

1. Procedure for indoor management
2. Procedure for Infection Control
3. Procedure for biomedical waste management
4. Procedure for admission Discharge Management
5. State Protocol for SNCU
6. FBNC Manual
7. Standard Maternal Newborn Toolkit

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