

STANDARD OPERATING PROCEDURES (SOPs)

FOR
PEDIATRICS (01)



Department of Health & Family Welfare, GNCTD

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Quality Assurance Cell
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The SOPs have been prepared by a Committee of Experts and are being circulated for customization and adoption by all hospitals. These are by no means exhaustive or prescriptive. An effort has been made to document all dimensions / working aspects of common processes / procedures being implemented in provision of healthcare in different departments. This document pertains to Department of Pediatrics. The individual hospital departments may customize / adapt / adopt the SOPs relevant to their settings and resources. The customized final SOPs prepared by the respective Departments must be approved by the Medical Director / Medical Superintendent and issued by the Head of the concerned department. The stakeholders must be trained and familiarized with the SOPs and the existing relevant technical guidelines / STGs / Manuals mentioned in the SOPs must also be made available to the stakeholders.

DETAILS OF THE DOCUMENT

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AMENDMENT SHEET

S.No.	Page no.	Date of amendment	Details of the amendment	Reasons	Signature of the reviewing authority	Signature of the approval authority

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1. PEDIATRIC OUTPATIENT DEPARTMENT (OPD)

1.1 PURPOSE

To provide standardized attention and care to children who attend the hospital on ambulatory basis

1.2 SCOPE

This document provides guidelines for the registration, consultation, nutritional assessment and counseling, immunization and dispensing of medications in a children attending a pediatric OPD.

1.3 RESPONSIBILITY

The responsibility of implementing this SOP is both of the doctor and nurse in the pediatric OPD and also the registration clerks. Individual responsibilities are detailed later in this document.

1.4 PROCEDURE

Provides various activities to be performed in a pediatric OPD, the person responsible and the documents that should be maintained for verification of effectiveness of each activity.

SL. No.	Activity/description	Responsibility	Ref. doc/Record
1.4.1 OPD Registration			
1.4.1.1	There shall be an identified registration area with display of counters and time	Hospital administration	Display boards
1.4.1.2	Registration clerk shall make standardized entries of patient demographic data on a computerized database and generate an appropriate OPD card	Registration clerk	Patient entries on database
1.4.2 Consultation			
1.4.2.1	There shall be a large waiting area identifying it as the Pediatric OPD	Hospital administration	Display boards
1.4.2.2	All children shall be weighed before consultation	Nurse	Weight records
1.4.2.3	All under 5 children shall be assessed for their immunization status	Nurse Doctor	Immunization cards/register
1.4.2.4	All children shall be assessed by a doctor and those at high risk shall be given priority for consultation	Nurse Doctor	

1.4.3 Immunization			
1.4.3.1.	Cold chain maintenance and monitoring shall be done for all vaccines	Nurse	Temperature monitoring log
1.4.3.2.	All children shall be assessed for immunization and provided accordingly	Nurse	Immunization register/ National immunization schedule
1.4.3.3	All children shall receive an immunization card with Mother and Child Tracking System Number	Nurse/Data entry operator	Database of MCTS Number
1.4.3.4.	All syringes and needles shall be disposed as per standard biomedical waste disposal guidelines	Nurse	Biomedical waste guidelines / Biomedical waste bag disposal register
1.4.4 Nutritional services			
1.4.4.1.	All children (especially those under 5) shall be screened for their nutritional status	Nurse Doctor	Anthropometry charts
1.4.4.2.	Under nourished children shall be provided nutritional counseling	Nurse Dietician (where available) Doctor	Nutrition charts, Counseling registers
1.4.4.3.	Mothers with breast feeding problems shall be assessed and counseled	Nurse, lactation counselor (where available), doctor	Breast feeding assessment charts, counseling registers
1.4.5 IEC			
1.4.5.1.	There shall be adequate display of IEC material on prevention of childhood diseases, immunization and nutrition	Nurse Doctor	Displayed IEC material
1.4.5.2	All staff shall be considerate for the needs of the pediatric patient	All staff	Observation/ Record of training in soft skills
1.4.6 Pharmacy			
1.4.6.1.	There shall be a separate pharmacy for children	Hospital administration	Signage

1.4.6.2	There shall be adequate stock of pediatric formulations	Pharmacist	Pharmacy stock register
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1.5 PROCESS EFFICIENCY CRITERIA:

Indicators to measure the efficiency and effectiveness of patient care in pediatric OPD.

S.No.	Indicator	Measurement
1	Proportion of under 12 months completely immunized	No. of children upto 12 months fully immunized/No of children upto 12 months attending outpatient

1.6 REFERENCES

- Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013
- Pocket Book of Hospital Care for Sick children. Guidelines for the management of common illnesses with limited resources. World health organization, 2005

2. NEWBORN CARE CORNER (NBCC)

2.1 PURPOSE

To ensure that all newborns at birth are provided standardized care in the delivery room. It is also to ensure that high risk neonates get appropriate and priority care at birth.

2.2 SCOPE

This document covers the care of newborn at birth. It also covers equipment maintenance, and documentation.

2.3 RESPONSIBILITY

The responsibility of implementing this SOP is primarily of the nurse in the delivery room. The subsequent section describes the individual responsibilities of the personnel.

2.4 PROCEDURE.

This section enlists the various activities to be performed in the NBCC, the person responsible and the document that needs to be maintained (from which the performance of the activity can be verified).

S.No	Activity	Responsibility	Reference document
2.4.1 Maintaining thermal environment			
2.4.1.1.	The radiant warmer shall be turned on before the birth a baby	Nurse	-
2.4.1.2.	There shall be a policy document on maintenance of thermal neutral environment	Doctor/Nurse	Thermal maintenance policy document/chart
2.4.1.3.	All newborns will be provided skin to skin care at birth	Nurse	Skin to skin care chart
2.4.2 Breast feeding			
2.4.2.1.	All well newborns shall be initiated on breast feeding within 1 hour of birth	Nurse	Baby case record
2.4.3 Newborn care			
2.4.3.1.	All neonate shall be weighed in delivery room within 15-30 minutes of birth	Nurse	Delivery register
2.4.3.2.	All newborns shall be examined for malformations, LBW, respiratory	Doctor/Nurse	Baby case record

	problems and other high risk problems within 15 min of birth		
2.4.3.3.	All neonates shall be given vitamin K at birth	Nurse	Delivery register/Baby case record
2.4.3.4.	All asphyxiated neonates shall be managed as per standard protocol	Doctor/Nurse	Resuscitation chart
2.4.4 Newborn Transfer			
2.4.4.1.	All newborns who need to be transferred to NICU or to higher centre shall be stabilized before transport, and accompanied by a nurse/doctor	Doctor/Nurse	Transfer protocol
2.4.5 Equipment Maintenance			
2.4.5.1.	An inventory of all items in the NBCC (equipment, disposables, drugs, etc) will be maintained	Nursing Sister	Stock books
2.4.5.2.	All equipment faults and repairs shall be documented	Nurse	Equipment maintenance register
2.4.6 Birth records			
2.4.6.1.	Record of every birth with details of newborns such as gender, birth weight, date and time of birth shall be recorded in register	Nurse	Birth register

2.5 PROCESS EFFICIENCY CRITERIA

This section provides a list of indicators that can be used to assess the efficiency of the NBCC care

S.No.	Indicator	Indicator measurement
1.	Proportion of newborns weighed at birth	No. weighed/Total live births
2.	Percentage of newborn breastfed within 1 hour	No. breast fed within 1 hour/Total live births
3.	Resuscitation rate	No. of newborns needing resuscitation/Total no. of live births
4.	Proportion of newborns transferred to SNCU	No. transferred to SNCU/Total live births

2.6 REFERENCE DOCUMENTS

- 2.7 Facility Based Newborn care. Operational Guide 2011, Ministry of Health and Family welfare, Government of India
- 2.8 Maternal and Newborn Health Toolkit, maternal Health Division, Ministry of Health and Family Welfare, Government of India, 2013
- 2.9 Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013

3.SPECIAL NEWBORN CARE UNIT / NEONATAL INTENSIVE CARE UNIT (NICU)

3.1 PURPOSE

To ensure that sick neonates admitted to SNCU are managed as per standard guidelines and are successfully discharged after their management. It is also to ensure that neonates do not develop iatrogenic complications during their SNCU stay.

3.2 SCOPE

This documents covers the admission and discharge of neonates from SNCU, their management, and monitoring. It also covers the SNCU , equipment maintenance, and maintenance of records and their storage.

3.3 RESPONSIBILITY

The responsibility of implementing this SOP is both of the Doctor and Nurse in SNCU. The subsequent section describes the individual responsibilities of the personnel.

3.4 PROCEDURE.

This section enlists the various activities to be performed in the SNCU, the person responsible and the document that needs to be maintained (from which the performance of the activity can be verified).

S.No	Activity	Responsibility	Reference document
3.4.1 Admission and Discharge			
3.4.1.1.	The newborn on arrival in the SNCU shall be received by the staff on duty	Doctor/Nurse	-
3.4.1.2.	The admission procedure shall be completed as soon as the triaged newborn is stabilized	Nurse	Admission register
3.4.1.3.	All newborns discharged shall receive a discharge summary	Doctor	Discharge sheet
3.4.1.4.	All discharge formalities shall be completed as soon as discharge summary is prepared	Nurse	Discharge register
3.4.1.5.	All neonatal deaths shall be certified as per standard guidelines	Doctor	Death register/Death certificates/Newborn case record
3.4.1.6.	Formalities after neonatal death shall be completed as soon as death is certified	Nurse	Death register

3.4.2 Clinical Management			
3.4.2.1	Each newborn shall be triaged on arrival in SNCU	Doctor/Nurse	Triage chart/document
3.4.2.2	Newborn with emergency signs shall be managed as per guidelines	Doctor and Nurse	Triage chart/document Resuscitation chart
3.4.2.3.	The clinical assessment, investigative plan and treatment shall be completed within 1 hour of admission	Doctor	Newborn case record
3.4.2.4.	All newborns shall be managed as per standard clinical protocols	Doctor	Standard clinical protocols (Charts/document)
3.4.2.5.	All newborns shall be monitored regularly on a standard monitoring chart	Nurse	Monitoring charts
3.4.2.6.	All newborns shall be reassessed at regular intervals	Doctor	Newborn case records
3.4.2.7.	All treatments (IV fluids, feeds, drugs,etc) administered to the newborn shall be documented	Nurse	Treatment charts/register
3.4.2.8.	All neonates shall be managed in a thermo-neutral environment	Nurse	Patient temperature charts
3.4.2.9.	All procedures done on the newborn shall be documented and consent of parents taken where required	Doctor	Newborn case record
3.4.2.10.	All biological samples shall be collected using standard procedure	Doctor/Nurse	Protocol on procedures
3.4.2.11.	Patient samples for the laboratory shall be checked for label with patient ID in SNCU	Nurse	Laboratory dispatch register
3.4.2.12.	Reports received from the Lab shall be recorded in the patient's case record	Doctor/Nurse	Investigation chart in newborn case record
3.4.3 Visitor/Parent Entry in SNCU			
3.4.3.1.	Entry of parents/visitors into SNCU shall be regulated as per unit/hospital policy	Nurse	Visitor policy document
3.4.4 Newborn Referral			
3.4.4.1.	All newborns who need to be transported shall be stabilized before transport, have a referral slip and accompanied by a nurse/doctor	Doctor/Nurse	Referral/Transport protocol
3.4.5 Infection Control			
3.4.5.1.	All personnel entering and handling	Doctor/Nurse	Hand hygiene protocol

	newborns shall follow standard hand hygiene practices		
3.4.5.2.	All equipment shall be disinfected as per standard infection control protocols	Nurse	Disinfection protocol/Stickers on equipment
3.4.5.3.	SNCU walls and floors shall be cleaned and disinfected as per infection control protocol	Nurse	Disinfection protocol
3.4.5.4.	Biomedical waste shall be disposed as per standard infection control guidelines	Nurse	Biomedical waste guidelines/Biomedical waste bag disposal register
3.4.6 SNCU Maintenance			
3.4.6.1.	An inventory of all items in the SNCU (equipment, furniture, disposables, drugs, etc) shall be maintained	Nursing Sister	Stock books
3.4.6.2.	All equipment faults and repairs shall be documented	Nurse	Equipment maintenance register
3.4.6.3.	All Civil and electric faults in the SNCU shall be reported to the appropriate maintenance staff	Nurse	Fault complaint register
3.4.6.4.	Attendance and work of all SNCU outsourced/in-hospital staff shall be documented	Nursing sister/Nurse	Attendance and complaint register of staff
3.4.7 SNCU Records/Storage			
3.4.7.1.	Newborn case records after death/discharge shall be stored in an appropriate medical records unit	Nurse	Medical records dispatch register
3.4.7.2.	SNCU data as per guidelines shall be recorded and updated in the computer every day	Date Entry Operator/Doctor	Computer database

3.5 PROCESS EFFICIENCY CRITERIA

This section provides a list of indicators that can be used to assess the efficiency of the SNCU care.

S.No.	Indicator	Indicator measurement
1.	Proportion of inborn admissions	Inborns neonates / Total admissions
2.	Proportion of outborn admissions	Outborn neonates / Total admissions
3.	Outborn death proportion	Deaths amongst outborn neonates/Total deaths

4.	Inborn death proportion	Deaths amongst inborn neonates/Total deaths
5.	Referral rate	No. of neonates referred/Total admissions
6.	Hospital Acquired infection rate	No. of neonates who acquired hospital infections/1000 SNCU patient days (Patient days= sum of length of stay of all SNCU patients in a month)
7.	Antibiotic usage rate	No. of neonates who received antibiotics/total admissions
8.	Bed occupancy rate/day	(Total inpatient days of care/ Bed days available) x 100
9.	Equipment breakdown rate (radiant warmer, phototherapy unit)	No. of days / hours breakdown each month / Total days / hours in use each month

3.6 REFERENCE DOCUMENTS

- a. Facility Based Newborn care. Operational Guide 2011, Ministry of Health and Family welfare, Government of India
- b. Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013

4. NUTRITION REHABILITATION CENTRE (NRC)

4.1 PURPOSE

To ensure proper management of children with severe malnutrition admitted in the NRC

4.2 SCOPE

This document covers the assessment, management, and follow-up of mothers of children with severe malnutrition admitted in NRCs. It also includes referrals and transfers to higher facility as indicated. The process also covers equipment and record maintenance.

4.2 RESPONSIBILITY

The responsibility of implementing this SOP is both of the nurse and doctor in the NRC. Individual responsibilities are detailed later in this document.

4.4 PROCEDURE

Provides various activities to be performed in a NRC, the person responsible and the documents that should be maintained for verification of effectiveness of each activity.

SL. No.	Activity/description	Responsibility	Ref. doc / Record
4.4.1 Admission and Discharge			
4.4.1.1	The SAM child on arrival shall be assessed on arrival for medical complications	Doctor/Nurse	Triage chart
4.4.1.2	There shall be a standard discharge and follow-up policy for SAM children	Doctor/Nurse	Discharge and follow-up policy document
4.4.2 Clinical Management			
4.4.2.1	Medical complications of SAM children shall be managed as per standard guidelines	Doctor	Medical management guidelines
4.4.2.2	SAM children shall be fed as per feeding guidelines	Nurse	Feeding guidelines/ Feeding charts

4.4.2.3	Mothers of SAM children shall be counselled and demonstrated about feeding and care of their children	Doctor/Nurse	Counselling guidelines
4.4.2.4	All children shall be monitored regularly on a standard monitoring chart	Nurse	Monitoring charts/Weight records
4.4.2.5	There shall be treatment guidelines for SAM children with HIV or TB	Doctor	Treatment guidelines
4.4.2.6	All treatments (IV fluids, feeds, drugs etc) administered to the child shall be documented	Nurse	Treatment charts/register
4.4.2.7	Laboratory reports received shall be recorded in patient case record	Doctor	Patient case record
4.4.2.8.	SAM children shall be provided with structured play therapy	Nurse	Protocol for play therapy
4.4.3 Transfer and Referral			
4.4.3.1	<p>Children in need of referral to higher Centre</p> <ul style="list-style-type: none"> The parents/attendants shall be counseled for the need for transfer The child shall be transferred only after the higher centre has been intimated and are ready to receive the child The child shall be transferred in an appropriately equipped ambulance accompanied by a doctor with a patient case summary and referral slip 	Doctor	Emergency transfer register / Patient case record
4.4 Inventory Management			
4.4.4.1	<p><u>Equipment maintenance</u></p> <ul style="list-style-type: none"> An inventory of all equipment shall be maintained 	Nursing sister	Equipment inventory book
4.4.4.2	<p><u>Drugs and consumables</u></p> <ul style="list-style-type: none"> An inventory of all drugs and consumables shall be maintained 	Nursing sister/Nurse	Drug/Consumable stock register
4.4.4.3	Patient case records after death/discharge shall	Nurse	Medical

	be stored in an appropriate medical records unit		records dispatch register
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4.5 PROCESS EFFICIENCY CRITERIA

S.No	Indicator	Indicator Measurement
1.	Case fatality rate	Number of deaths amongst admitted children / Total admissions in NRC.
2.	Bed occupancy rate	(Total inpatient days of care / Bed days available) x 100
3.	Average weight gain	Weight gain of all children discharged in a month / Total children discharged in that month

4.6 REFERENCE DOCUMENTS:

1. Operational guidelines for facility based management of Children with severe acute malnutrition. Ministry of Health and Family Welfare, Government of India, 2011
2. Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013

5. PEDIATRIC INPATIENT (WARD)

5.1 PURPOSE

To ensure proper management of children admitted in a pediatric ward by trained professionals

5.2 SCOPE

This document provides guidelines for the admission, discharge, management and monitoring of children admitted in pediatric wards. It also provides guidelines for equipment maintenance and maintenance of records.

5.3 RESPONSIBILITY

The responsibility of implementing this SOP is both of the doctor and nurse in the pediatric ward. Individual responsibilities are detailed in this document.

5.4 PROCEDURE

Provides various activities to be performed in a pediatric ward, the person responsible and the documents that should be maintained for verification of effectiveness of each activity.

SL. No.	Activity/description	Responsibility	Ref. doc/Record
	5.4.1 Admission and Discharge		
5.4.1.1	The child on arrival shall be received by the staff on duty	Nurse	Emergency room register
5.4.1.2	Admission formalities shall be completed as soon as the patient is received	Nurse	Admission register / Patient case record
5.4.1.3	<p><u>End of Life care</u></p> <p>When a patient dies in the ward</p> <ul style="list-style-type: none"> The parents/attendants shall be counseled Death will be certified as per standard guidelines Death formalities shall be completed as soon as possible after the death is certified 	<p>Doctor</p> <p>Doctor</p> <p>Nurse</p>	Death records/Patient case record

5.4.2 Clinical Management			
5.4.2.1	All children shall be assessed on arrival and appropriately managed to ensure stabilization	Doctor	Triage chart/Document
5.4.2.2	The clinical assessment, investigation and treatment shall be completed within 30 minutes of admission	Doctor	Patient case record
5.4.2.3	All patients shall be managed as per existing Standard Treatment guidelines	Doctor	Standard Treatment Guidelines
5.4.2.4	All children shall be monitored regularly on a standard monitoring chart	Nurse	Monitoring charts
5.4.2.5	All children shall be reassessed at regular intervals	Doctor	Patient case records
5.4.2.6	All treatments (IV fluids, feeds, drugs etc) administered to the child shall be documented	Nurse	Treatment charts/register
5.4.2.7	Consent shall be obtained from attendants for all invasive procedures after explaining to them about the procedure	Doctor	Case sheet consent form
5.4.2.8	Nutritional assessment of all admitted patients shall be done and rational diet will be advised	Doctor / Dietician	Patient case sheet
5.4.2.9	Laboratory reports received shall be recorded in patient case record	Doctor	Patient case record
5.4.2.10.	Every patient shall be provided free diet	Nurse	Diet register
5.4.3 Transfer and Referral			
5.4.3.1	Critical children who need to be transferred to the ICU shall be stabilized and transferred only after ICU has been intimated and are ready to receive the child. During transfer the child shall be accompanied by a doctor.	Doctor	Emergency transfer register/Patient case record
5.4.3.2	Children in need of referral to higher Centre <ul style="list-style-type: none"> • The parents/attendants shall be counseled for the need for transfer • The child shall be transferred only after the higher centre has been intimated and are ready to receive the child • The child shall be transferred in an 	Doctor	Discharge register/Patient case record

	appropriately equipped ambulance accompanied by a doctor with a patient case summary and referral slip		
4.4 Patient Safety			
5.4.4.1	<u>Standard precautions will be followed for patient safety</u> <ul style="list-style-type: none"> All patients shall have an identification band For small children the beds shall have side railings All equipment will be disinfected as per standard infection control practice The area shall follow fire-safety guidelines 	Nurse/Purchase officer Nurse Nurse Doctor/Nurse	Patient tags Disinfection protocol Signages
5.4.4.2	Biomedical waste will be disposed as per standard infection control guidelines	Nurse	Biomedical waste guidelines/Biomedical waste bag disposal register
5.4.5 Inventory Management			
5.4.5.1	<u>Equipment maintenance</u> <ul style="list-style-type: none"> An inventory of all equipment shall be maintained The maintenance schedule, AMC details and details of repairs shall be documented 	Nursing Sister Purchase officer	Equipment inventory book Equipment files/register
5.4.5.2	<u>Drugs and consumables</u> <ul style="list-style-type: none"> An inventory of all drugs and consumables shall be maintained 	Nursing sister/ Nurse	Drug / Consumable stock register
5.4.5.3	There shall be a documented procedure for receipt of clean linen and dispatch of dirty linen to the laundry	Nurse	Laundry register
5.4.5.4	Patient case records after death / discharge shall be stored in an appropriate medical records unit.	Nurse	Medical records dispatch register

5.5 PROCESS EFFICIENCY CRITERIA:

Indicators to measure the efficiency and effectiveness of patient care in pediatric wards.

S.No.	Indicator	Indicator measurement
1.	Case fatality rate	Total deaths /Total admissions
2.	Bed occupancy rate	(Total inpatient days of care / Bed days available) x100

5.6 REFERENCES

1. Standard Treatment protocols advised by JAP / AAP / WHO / National Guidelines / Guidelines subscribed in standard textbooks.
2. Pocket Book of Hospital Care for Sick children. Guidelines for the management of common illnesses with limited resources. World health organization, 2005
3. Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013

6. PEDIATRIC EMERGENCY DEPARTMENT

6.1 PURPOSE

To ensure proper management of children attending pediatric emergency on 24x7 basis through trained professionals

6.2 SCOPE

This document covers the triage of all children coming to pediatrics emergency, appropriate management in time bound manner including emergency management, referrals and transfers to ward or other departments inside health facility and to higher facility when indicated. The process also covers equipment and record maintenance.

6.3 RESPONSIBILITY

The responsibility of implementing this SOP is both of the doctor and nurse in the emergency area. Individual responsibilities are detailed later in this document.

6.4 PROCEDURE

Provides various activities to be performed in a pediatric emergency ward, the person responsible and the documents that should be maintained for verification of effectiveness of each activity.

SL. No.	Activity/description	Responsibility	Ref. doc/Record
	6.4.1 Admission and Discharge		
6.4.1.1	The child on arrival shall be received by the staff on duty	Nurse	Emergency room register
6.4.1.2	Admission formalities shall be completed as soon as the patient is triaged and stabilized for those needing hospitalization	Nurse	Admission register /patient case record
6.4.1.3	<u>End of Life care</u> When a patient dies in the emergency ward <ul style="list-style-type: none"> • The parents / attendants shall be counselled • Death will be certified as per standard 	Doctor Doctor	Death records /Patient case record

	guidelines <ul style="list-style-type: none"> Death formalities shall be completed as soon as possible after the death is certified 	Nurse	
6.4.2 Clinical Management			
6.4.2.1	All children shall be triaged on arrival and appropriately managed to ensure stabilization	Doctor	Triage chart /Document
6.4.2.2	The clinical assessment, investigation and treatment shall be completed within 30 minutes of admission	Doctor	Patient case record
6.4.2.3	All patients shall be managed as per existing Standard Treatment guidelines	Doctor	Standard Treatment Guidelines
6.4.2.4	All children shall be monitored regularly on a standard monitoring chart	Nurse	Monitoring charts
6.4.2.5	All children shall be reassessed at regular intervals	Doctor	Patient case records
6.4.2.6	All treatments (IV fluids, feeds, drugs,etc) administered to the child shall be documented	Nurse	Treatment charts/register
6.4.2.7	Laboratory reports received shall be recorded in patient case record	Doctor	Patient case record
6.4.3 Transfer and Referral			
6.4.3.1	Critical children who need to be transferred to the ICU shall be stabilized and transferred only after ICU has been intimated and are ready to receive the child. During transfer the child will be accompanied by a doctor.	Doctor	Emergency transfer register/ Patient case record
6.4.3.2	Non critical patients shall be shifted to the pediatric ward after they have been stabilized	Doctor/Nurse	Emergency transfer register/ Patient case record
6.4.3.3	Children in need of referral to higher Centre	Doctor	Emergency transfer

	<ul style="list-style-type: none"> The parents/attendants shall be counseled for the need for transfer The child shall be transferred only after the higher centre has been intimated and are ready to receive the child The child shall be transferred in an appropriately equipped ambulance accompanied by a doctor with a patient case summary and referral slip 		register/ Patient case record
6.4.4 Patient Safety			
6.4.4.1	Standard precautions will be followed for patient safety <ul style="list-style-type: none"> All patients shall have an identification band For small children the beds shall have side railings All equipment shall be disinfected as per standard infection control practice The area shall follow fire-safety guidelines 	Nurse/ Purchase officer Nurse Doctor/Nurse	Patient tags Disinfection protocol Signages
6.4.4.2	Biomedical waste shall be disposed as per standard infection control guidelines	Nurse	Biomedical waste guidelines/Bio medical waste bag disposal register
1.5 Inventory Management			
6.4.5.1	<u>Equipment maintenance</u> <ul style="list-style-type: none"> An inventory of all equipment shall be maintained The maintenance schedule, AMC details and details of repairs shall be documented 	Nursing Sister Purchase officer	Equipment inventory book Equipment files / register
6.4.5.2	<u>Drugs and consumables</u> <ul style="list-style-type: none"> An inventory of all drugs and consumables shall be maintained 	Nursing sister/ Nurse	Drug /Consumable stock register
6.4.5.3	Patient case records after death/discharge shall be stored in an appropriate medical records unit	Nurse	Medical records dispatch register

6.5 PROCESS EFFICIENCY CRITERIA

S.No	Indicator	Indicator Measurement
1.	Proportion of patients who need emergency care	Number of patients needing emergency care / Total number of children attending emergency each month
2.	No of deaths within 2 hours of admission	Number of deaths within 2 hours / Total deaths in emergency ward each month
3.	ICU referral rate	Number transferred to ICU / Total admissions in emergency ward each month
4.	Referral rate to higher facility	Number of patients referred to higher facility / Total number attending emergency ward each month

6.6 REFERENCE DOCUMENTS

3. WHO Standard Treatment Guidelines
4. WHO Tools and Guidelines for Quality Improvement of Hospital Care for Sick Newborn, Children and Pregnant Women
5. Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013

7. PEDIATRIC INTENSIVE CARE UNIT (PICU)

7.1 PURPOSE

The purpose is to ensure that children admitted to a pediatric intensive care unit (PICU) receive the level of care appropriate for their condition and patient satisfaction is enhanced with continuous improvements.

7.2 SCOPE

This policy is applicable to all patients Transferred / Admitted to PICU. This document covers the admission and discharge of patients to / from PICU, their management, and monitoring. It also covers the PICU equipment maintenance, and maintenance of records and their storage

7.3 RESPONSIBILITY

The responsibility of implementing this SOP is both of the Doctor and Nurse in the PICU. Ancillary staff such as the technical staff would also have individual responsibilities. The subsequent section describes the individual responsibilities of the personnel.

7.4 PROCEDURE.

This section enlists the various activities to be performed in the PICU, the person responsible and the document that needs to be maintained (from which the performance of the activity can be verified).

S.No	Activity	Responsibility	Reference document
	7.4.1 Admission and Discharge		
7.4.1.1.	The child shall be received in the PICU accompanied by either a doctor or a nurse	Doctor/Nurse	-
7.4.1.2.	The child's stability shall be assessed immediately on arrival and history and treatment received reviewed	Doctor/Nurse	Admission register /Patient case record
7.4.1.3.	All children discharged / transferred out will receive a discharge summary	Doctor	Discharge sheet

7.4.1.4.	All deaths will be certified as per standard guidelines	Doctor	Death register/Death certificates/Patient case record
7.4.1.5.	Formalities after death shall be completed as soon as death is certified	Nurse	Death register
7.4.2 Clinical Management			
7.4.2.1	Each child will be triaged on arrival in PICU	Doctor/Nurse	Triage chart /document
7.4.2.2	Children with emergency signs shall be managed as per guidelines	Doctor and Nurse	Triage chart/document Resuscitation chart
7.4.2.3	The clinical assessment, investigative plan and treatment will be completed within 1 hour of admission	Doctor	Patient case record
7.4.2.4	All children shall be managed as per standard clinical protocols	Doctor	Standard clinical protocols (Charts/document)
7.4.2.5	All children shall be monitored regularly on a standard monitoring chart	Nurse	Monitoring charts
4.2.6.	All children shall be reassessed at regular intervals	Doctor	Patient case records
7.4.2.7	All treatments (IV fluids, feeds, drugs,etc) administered to the child shall be documented	Nurse	Treatment charts/ register
7.4.2.8	All procedures done on the child shall be documented and consent of parents obtained where necessary	Doctor	Patient case record
7.4.2.9	All biological samples will be collected using standard procedure	Doctor/Nurse	Protocol on procedures
7.4.2.10	Patient samples for the laboratory will be checked for label with patient ID in PICU	Nurse	Laboratory dispatch register
7.4.2.11	Reports received from the Lab will be recorded in the patient's case record	Doctor/Nurse	Investigation chart in patient case record
7.4.3 Visitor/Parent Entry in SNCU			
7.4.3.1	Entry of parents/visitors into PICU shall be regulated as per unit/hospital policy	Nurse	Visitor policy document
7.4.4 Patient transport			
7.4.4.1	All children who need to be transported shall be stabilized before transport, and accompanied by a nurse/doctor	Doctor/Nurse	Referral/Transport protocol

7.4.5 Infection Control			
7.4.5.1	All personnel entering PICU and handling children will follow standard hand hygiene practices	Doctor/Nurse	Hand hygiene protocol
7.4.5.2	All equipment will be disinfected as per standard infection control protocols	Nurse	Disinfection protocol/Stickers on equipment
7.4.5.3	PICU walls and floors will be cleaned and disinfected as per infection control protocol	Nurse	Disinfection protocol
7.4.5.4	Biomedical waste will be disposed as per standard infection control guidelines	Nurse	Biomedical waste guidelines/Biomedical waste bag disposal register
7.4.6 SNCU Maintenance			
7.4.6.1	An inventory of all items in the SNCU (equipment, furniture, disposables, drugs, etc) will be maintained	Nursing Sister	Stock books
7.4.6.2	All equipment faults and repairs shall be documented	Technician	Equipment maintenance register
7.4.6.3	All Civil and electric faults in the SNCU will be reported to the appropriate maintenance staff	Technician/ Nurse	Fault complaint register
7.4.6.4	Attendance and work of all PICU outsourced/in-hospital staff shall be documented	Nursing sister/Nurse	Attendance and complaint register of staff
7.4.7 PICU Records/Storage			
7.4.7.1	Patient case records after death/discharge will be stored in an appropriate medical records unit	Nurse	Medical records dispatch register

7.5 PROCESS EFFICIENCY CRITERIA

This section provides a list of indicators that can be used to assess the efficiency of the PICU care

S.No.	Indicator	Indicator measurement
1.	Case fatality rate	Total deaths in PICU / Total PICU admissions
2.	Ventilation rate	Total children ventilated / Total PICU admissions
3.	Bed occupancy rate	(Total inpatient days of care/Bed days available)x100

4.	Hospital Acquired infection (HAI) rate	No. of children who acquire HAI / 1000 patient days of PICU stay
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7.6 REFERENCE DOCUMENTS

- a. Operational guidelines for Quality assurance in Public Health Facilities, Ministry of Health and Family Welfare, Government of India, 2013



Department of Health & Family Welfare, GNCTD