



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

<b>Department:</b>	Neonatal Intensive Care Unit (NICU)		
<b>Document:</b>	Departmental Policy and Procedure		
<b>Title:</b>	Assessment and Reassessment of Neonates in the Neonatology Department		
<b>Applies To:</b>	All NICU Staff		
<b>Preparation Date:</b>	January 05, 2025	<b>Index No:</b>	NICU-DPP-015
<b>Approval Date:</b>	January 19, 2025	<b>Version :</b>	2
<b>Effective Date:</b>	February 19, 2025	<b>Replacement No.:</b>	NICU-DPP-015 (1)
<b>Review Date:</b>	February 19, 2028	<b>No. of Pages:</b>	5

## 1. PURPOSE:

- 1.1 All patients cared for by neonatology department have their health care needs identified through a thorough assessment process that results in decisions about the patient's immediate and continuing needs for emergency, elective, or planned care, and when the patient's condition changes.
- 1.2 Ensure proper, timely reassessment of all patients at intervals appropriate to their condition and treatment to determine any change in diagnosis, their response to treatment and to plan for continued treatment or discharge.

## 2. DEFINITONS:

- 2.1 Patient assessment:
  - 2.1.1 Is an on-going dynamic process that takes place in all the neonatology department units and for all neonates in the postnatal wards
  - 2.1.2 Patient assessment consists of three primary processes:
    - 2.1.2.1 Collecting information and data on the patient's physical, psychological, nutritional, rehabilitation and social and economic status, and his/her past and present health and family history. It must include complete physical examination.
    - 2.1.2.2 Analysing the data and information, including the results of laboratory and imaging diagnostic tests to identify the patient's health care needs, discharge planning
    - 2.1.2.3 Developing a plan of care to meet the patient's identified needs
  - 2.1.3 Reassessment is a continuous process of data gathering to determine whether care decisions are appropriate and effective or there is need for changes or discharge. Reassessment is done by all the patient's health care practitioners.
  - 2.1.4 Discharge planning:
    - 2.1.4.1 Discharge planning:
    - 2.1.4.2 It is a multidisciplinary team work that starts on admission, with planning reassessed and updated continuously throughout the infant's hospital stay, and is finalized on discharge.
    - 2.1.4.3 It is accomplished by on-going teaching of the family, while the infant is hospitalized.
    - 2.1.4.4 It provides individualized follow up plan that meets infants and family's needs and resources

## 3. POLICY:

- 3.1 This policy is used in accordance with hospital policy; Assessment and Reassessment of MCH patients.
- 3.2 Patient assessment begins before the patient is admitted i.e. when he/she arrives to the emergency or outpatient departments or delivered in the hospital, and continues throughout the course of admission.
- 3.3 Initial assessments should include data to determine each patient's medical and family history, physical, psychological, nutritional, social, and rehabilitation status and needs. These data, in addition to results of laboratory and imaging diagnostic tests are used to establish a comprehensive information base for decision-making about each patient's plan of care, discharge planning and may trigger additional assessments.

- 3.4 Neonates are special population. Each patient's medical and nursing needs identified from the initial assessments are worked upon immediately for neonates who need resuscitation and emergency cases, within 15 minutes for urgent conditions and within a maximum of 8 hours for other patients. All events will be documented in the patient's medical record.
- 3.5 Patients for whom surgery is planned will have a complete preoperative assessment performed before the surgery and documented in the patient medical record.
- 3.6 Patients will be monitored and reassessed regularly and when a significant change occurs in their condition or diagnosis, to determine their response to treatment and to plan for continued treatment or discharge.
- 3.7 The scope, frequency and extent of reassessment are based on patient diagnosis, required level of care, response to current care interventions and whenever there is a change in the patient's condition.
- 3.8 Approved forms to document all assessment and reassessment data from all members of the multidisciplinary team are used and are kept in the patient medical record.
- 3.9 Medical, nursing, and other involved services responsible for patient care must collaborate in analysing and integrating patient assessments and prioritizing the most urgent/important patient care needs.
- 3.10 Patients are screened for nutritional status, functional needs, and other special needs and are referred for further assessment and treatment when necessary.
- 3.11 Parents/patient guardian are included in the decision process when needed.
- 3.12 Only qualified, hospital privileged individuals permitted by licensure, applicable laws and regulations, or certification perform the assessment.
- 3.13 All patients will be assessed for presence of pain according to neonatal pain assessment policy.
- 3.14 Neonates are managed as high risk for falls and must be secured against falls.

#### 4. PROCEDURE:

- 4.1 All neonates admitted to the neonatology intensive, intermediate and isolation care, observation, healthy baby unit, postnatal and post-caesarean wards will have complete history and physical examination. Follow the neonatology guidelines "Assessment of neonates; Physical Examination", "Neurological examination", and "Assessment of gestational age and intrauterine growth".
- 4.2 Documentation:
  - 4.2.1 Assigned neonatology physicians document initial assessment of all newborns delivered in the hospital the "Newborn Form". It is documented within 1 hour for high-risk neonates and within a maximum of 24 hours for healthy appearing neonates.
  - 4.2.2 For admitted neonates, assigned physician document the initial plan of care including complete history and physical examination on the "Physician Newborn Assessment Form".
  - 4.2.3 When further space is needed, added information are documented on the multidisciplinary progress notes of the patient medical record.
  - 4.2.4 Assessment of gestational age by Ballard score is documented on the "Estimation of Gestational Age by Maturity rating form".
  - 4.2.5 Assessment of appropriateness of weight, length and head circumference for gestational age is documented.
  - 4.2.6 Pediatric surgeons document preoperative patient assessment on the multidisciplinary progress notes of the patient medical record.
  - 4.2.7 Other involve healthcare professionals document their assessment of their designated assessment forms and as required on the multidisciplinary progress notes.
- 4.3 Assessment and management of neonates immediately after delivery in the hospital:
  - 4.3.1 Steps of the Neonatal Resuscitation Program NRP are followed for assessment and management of all newborns who are delivered in the hospital delivery, operating or obstetric emergency room delivery rooms.
  - 4.3.2 Medical and nursing staffs who participate in the assessment and management of the newborns in the delivering rooms hold a valid certificate of NRP.
  - 4.3.3 At the age of 1, 5 and 10 minutes, newborns delivered at any place in the hospital are assessed by APGAR score for color, heart rate, reflex irritability, muscle tone and respiration.

- 4.3.3.1 The Apgar score describes the condition of the newborn infant immediately after birth and is a tool for standardized assessment.
- 4.3.3.2 It also provides a mechanism to record fetal-to-neonatal transition
- 4.3.3.3 If the Apgar score is less than 7 at 5 minutes, the assessment should be repeated every 5 minutes up to 20 minutes.
- 4.3.3.4 The Apgar score is affected by gestational age, maternal medications, resuscitation, and cardio-respiratory and neurologic conditions.
- 4.3.4 Cord blood gases are analysed for high risk newborns.
- 4.3.5 Assessment for criteria that indicate hypothermia therapy is done in the delivery room for all newborns with suspected hypoxic ischemic encephalopathy.
- 4.3.6 For high risk neonates attended by physician, he/she obtains maternal history including:
  - 4.3.6.1 Mother's name, medical record number, age, parity, consanguinity, blood type and Rh, serology results, hepatitis B & group B streptococci status, maternal disease and medications used during pregnancy, generic name and number of doses of glucocorticoids and antibiotic therapy given during labour, evidence of chorioamnionitis, results of ultrasound or biophysical profile and time done during pregnancy.
  - 4.3.6.2 Information regarding the delivery e.g. its method and duration, results of Continuous Cardio-Tocography (CTG), method and duration of rupture of membranes & presence or absence of meconium in amniotic fluid.
  - 4.3.6.3 Previous neonatal or siblings' death or child abuse.
- 4.4 Assessment of healthy newborns:
  - 4.4.1 Should be done in the delivery and postpartum rooms.
  - 4.4.2 Should be done in the postnatal and post-caesarean wards: Care of newborns in the postnatal and post-caesarean wards.
  - 4.4.3 Risk assessment for developing severe hyperbilirubinemia.
  - 4.4.4 Screening for early detection of Critical Congenital Heart disease using pulse oximetry.
  - 4.4.5 The well baby unit of the neonatology department.
- 4.5 Assessment and management of neonates who require resuscitation at any place in the hospital is done in accordance with the steps of NRP "Neonatal Resuscitation".
- 4.6 Assessment and reassessment of the nutritional status of all neonates is done:
  - 4.6.1 On admission physical examination with appropriateness for gestational age documented on the growth chart.
  - 4.6.2 Reassessment is done daily by the neonatology medical team for admitted neonates with caloric calculation and documentation on the progress notes and growth charts.
  - 4.6.3 For patients receiving total parenteral nutrition, daily assessment of weight gain and balanced intake is provided "Total Parenteral Nutrition administration to neonatal patients".
  - 4.6.4 Consultation of nutritionist is done for certain cases e.g. need for increased caloric intake, inborn errors of metabolism, renal impairment.
- 4.7 Patients are assessed for functional needs. Certain groups will require continued reassessment e.g. tetanus neonatorum, hypoxic ischemic encephalopathy, Erb's palsy.
- 4.8 Social and psychological status of the family is assessed e.g.:
  - 4.8.1 Home safety for the infant's care, family problems, parents refusing discharge e.g. of malformed babies, infants who require home healthcare services.
  - 4.8.2 Cultural and language barriers are identified; translation is offered whenever needed.
  - 4.8.3 History of maternal postpartum depression, child abuse, divorce.
- 4.9 Pain assessment is done on admission and at regular intervals.
- 4.10 Educational Needs: The multidisciplinary care team will do initial assessment and reassessment of the educational needs of the neonate and his /her caregiver all through the admission, according to patient needs.
- 4.11 Discharge planning: It aims at safe transition of the hospitalized infant to home care. When indicated, it is initiated on admission, continued all through hospital stay, and finalized on discharge. It is accomplished by: early assessment, reassessment and continuously updating planning, with on-going teaching of the family, while the infant is hospitalized.

- 4.12 Reassessment;
- 4.12.1 Patients are reassessed throughout the care process at intervals based on their needs and plan of care. Continuous data gathering is done to assess patient status and determine significant changes or continuation of the same needs of the patient.
  - 4.12.2 Reassessment is conducted by the neonatology team including consultant as follows:
    - 4.12.2.1 Regularly daily (once or more according to acuity of cases) on all patients admitted to the neonatal intensive and intermediate care units. Complete reassessment is done to determine if medications and other treatments have been successful, need for further planning, needs of consultation, or the patient can be transferred to another level of care, referred or discharged.
    - 4.12.2.2 In response to a significant change in the patient's condition.
    - 4.12.2.3 If the patient's diagnosis has changed and the care needs require revised planning.
  - 4.12.3 Qualified neonatology physicians are physically available in the units 24 hours a day, 7 days a week all year through.
  - 4.12.4 Vital signs (temperature, heart and respiratory rates, blood pressure, pulse oximeter and pain assessment score) are continuously monitored and documented in the patient medical records for all neonates during their hospital stay:
    - 4.12.4.1 Frequency of monitoring is as follows and more frequently as needed:
      - 4.12.4.1.1 Neonatal intensive care every 2 hours
      - 4.12.4.1.2 Intermediate care every 4 hours
      - 4.12.4.1.3 Well baby unit and postnatal and post-caesarean wards: every 4 hours
    - 4.12.4.2 Special situations e.g. SpO<sub>2</sub> limits for congenital cyanotic heart disease, persistent pulmonary hypertension, will need specific written orders.
    - 4.12.4.3 Alarm limits of the monitors are set about 10% higher and lower than the acceptable range for the vital signs.
  - 4.12.5 Formal treatment team meetings or patient conferences with other colleagues are held for patients with complex or unclear needs.
  - 4.12.6 Assigned physicians and healthcare workers update parent/patient guardian regularly about the plan of care of the patient and inform them if the patient condition or diagnosis change. They are included in decision making when needed.

## 5. MATERIAL AND EQUIPMENT:

- 5.1 Vital signs monitor
- 5.2 ICU monitoring sheet/form
- 5.3 Initial Assessment and Reassessment Form

## 6. RESPONSIBILITIES:

- 6.1 Assigned neonatology consultants, specialists and residents
- 6.2 Assigned neonatology staff nurses.
- 6.3 Neonatal respiratory therapist
- 6.4 Hospital social workers



## 7. APPENDICES:

N/A

## 8. REFERENCES:

- 8.1 Saudi Central Board for Accreditation of Healthcare Institutions. CBAHI. Third Edition.1436 - 2015.
- 8.2 Joint commission international Accreditation Standards for hospitals. Sixth Edition.

9. APPROVALS:

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