UC DAVIS HEALTH

Neonatal Units Structure Standards

I. SETTING

The Neonatal Intensive Care Unit (NICU) and Special Care Nursery (SCN), collectively called the Neonatal Units (NU) are located on the fifth floor of the Davis Tower wing of the hospital. All 49 NU beds are equipped according to Title 22 regulations for intensive care, intermediate care and continuing care beds in a neonatal unit. The NU operates under standards set forth by Title 22, California Children's Service (CCS) and the Joint Commission (JC). The unit endeavors to meet the recommendations of the American Academy of Pediatrics (AAP) and the National Association of Neonatal Nurses (NANN).

II. PURPOSE

The purpose of the NU is to provide specialized nursing and medical care to neonates requiring hospitalization in a tertiary level nursery. Care is provided based on the concepts associated with Family Centered Care. Refer to Policy 2878: Patients' Visitors.

III. GOALS

The goals of the care provided in the NU include:

A. Provision of patient care that provides for the physical, psychosocial, developmental and spiritual needs of the patient and family unit.

B. Diagnosis and treatment of various pathologic conditions that lead to neonatal morbidity and mortality.

C. Provision of quality patient care that consists of assessing, planning, implementing and evaluating effectiveness of interventions.

D. Detection and prevention of complications of illness or treatment.

E. Acquisition of new knowledge and understanding of the care and treatment for the high-risk infant.

F. Preparation of infants for transition from the hospital to the home environment by providing teaching/learning experiences for the family.

G. Provision of efficient and cost-effective care for the patient.

IV. HOURS OF OPERATION

A. The NU function on a 24-hour basis.

B. The NU will be considered open with beds available unless designated closed by the Manager, Executive Director or Attending Neonatologist. If the staff feel the unit needs to be closed, the Manager and the Executive Director will be notified for consultation about nursing

issues and/or the Attending Physician for consultation about medical issues. If these individuals cannot be contacted, the decision will be left to their designees in charge.

C. High Census Contingency - Bed availability in the event of high census or the lack of sufficient nursing personnel within the NU, a joint decision between the Nurse Manager, Executive Director, Pediatric Officer of the Day (POD) and the Attending Neonatologist may result in a temporary diversion of current patients to other facilities or may result in a temporary diversion of transports from outlying areas for an interval that is re-evaluated at least every 12 hours.

D. In most instances, obstetrical referrals will not be refused because of NU bed availability. Should refusal become necessary, this decision must be made between the Neonatal Attending Faculty, the Attending Faculty of the Perinatal Unit and the POD.

V. PHILOSOPHY

We are focused on providing the highest quality care for our infants and families in order to achieve the best clinical and developmental outcomes.

VI. ADMINISTRATIVE/ORGANIZATION OF UNIT

A. Medical Services

A neonatal qualified physician is always on duty to evaluate patient admissions and unstable patients.

1. Medical Director: The Medical Director of the Neonatal Units is a board certified, CCS-paneled Neonatologist who is appointed yearly by the Director, Hospital and Clinics, with the concurrence of the Department of Pediatrics Chairperson. In conjunction with the Manager of the unit, the Medical Director approves and modifies all NU policies and procedures. The Medical Director is accountable to the Chief Medical Officer, Hospital Administration, the Department of Pediatrics Chairperson and the Chief of the Division of Neonatology. The Medical Director also has the following responsibilities:

    a. Schedules clinical rotations for neonatal faculty and fellows.

    b. Conducts monthly clinical division meetings.

    c. Monitors unit safety and quality assurance through monthly Morbidity and Mortality conferences.

    d. Participates in continuing education of the nursing staff.

    e. Represents the unit on hospital committees.

    f. Assists in the resolution of patient care issues.

    g. Provides input into the purchase of capital equipment and supplies.

    h. Oversees the NICU/SCN transport program.

2. Attending Neonatologist: The Attending Neonatologist is a board certified, CCS-paneled Neonatologist who is responsible for directing the care of all patients in the NU. This includes supervision of all assigned house officers, medical students and nurse practitioners. The attending Neonatologist approves all admissions and discharges to and from the unit. The attending Neonatologist makes daily patient care rounds, provides or over sees perinatal consultation services, communicates with the family of the patient, writes progress notes for each patient, and is available for consultation with house staff and nurses on a twenty-four-hour basis. The Attending Neonatologist is reviewed through the divisional and Pediatrics Department's quality assurance plans, as well as yearly by the Medical Staff Credentials Committee.

3. Neonatal Fellow: The Neonatal Fellow provides medical support for the Infant Transport Program, consultation to perinatal referral areas and assists the Attending Neonatologist and house staff with patient care and education. The Neonatal fellow is evaluated quarterly by the Division Chief of Neonatology and by the Director of the Fellowship Training Program.

4. House Staff: House staff are assigned to the NU by their departments in conjunction with the Department of Pediatrics. Night coverage is provided by a second-year pediatric resident or above. House staff provide direct patient care (write orders and assume primary responsibility for the patient) under the supervision of the Attending Neonatologist. The house staff are formally reviewed by the Attending Neonatologist with input from nursing, and a written evaluation is filed with the appropriate department. Unsatisfactory performances are reviewed further by the department.

5. All CCS approved Pediatricians providing intermediate and/or continuing care in the NICU will successfully complete and maintain evidence of a Neonatal Resuscitation Program (NRP) course every two years, and 36 hours of continuing medical education in neonatal medicine every three years.

6. Anesthesiology: A physician who is certified or eligible for certification, by The American Board of Anesthesiology shall be available at all times.

7. Surgeon: A surgeon experienced in neonatal surgery and a pediatric cardiologist shall be available to the neonatal service.

    a. Physicians

        I. Attending Neonatologists and Neonatal Fellows are assigned to cover both neonatal units. They have 24-hour responsibility for a specified period of time on a rotating basis. This schedule is prepared by the Division of Neonatology.

        II. Residents are assigned to both units for four weeks at a time on a rotating basis. There is a designated senior resident who acts as supervisor for the others. On-call night coverage is scheduled by the Department of Pediatrics.

        III. Twenty-four-hour coverage by a CCS-paneled pediatrician will be provided for unstable and critically ill infants at the discretion of the Attending Neonatologist. These infants could include, for example, but are not limited to: post-operative congenital heart surgery patients and

patients on ECMO.

b. Assignments and Staffing

I. Refer to PCS Structure Standards

B. Nursing Services

1. Organizational structure of the unit

a. Attachment 1: NU Organizational Chart

2. Communication pathways

a. Refer to PCS Structure Standards for Escalation Process/Chain of Command

3. Staffing

a. Manager: The Manager has 24-hour responsibility for the staffing, quality of care, instruction and supervision of all hospital employees assigned to the Neonatal Units.

b. Administrative Nurse II (ANII/Assistant Manager/Charge Nurse): The AN II has 12-hour shift responsibility for the day-to-day operations of the NICU and SCN. The AN II has direct responsibility for supervising the clinical care provided by staff. They act as a liaison between nursing and medical staff in addressing patient care needs and participate with house staff in patient care rounds and discharge planning.

c. Neonatal Clinical Nurse Specialist (CNS): The CNS, in collaboration with the Manager, and Neonatal Faculty staff identify teaching/learning needs, consult on complex patient care issues and participate in parent education and discharge planning as indicated.

d. Clinical Nurse Educator (CNE): provides continuous education to neonatal nurses and nurses throughout the Children's Hospital. Assists in facilitating the orientation process for newly hired nurses and coordinates education for partner hospitals.

e. Neonatal Nurse Practitioner (NNP): The NNP shares responsibility for the joint management of a designated group of patients, under the guidance of the neonatal faculty. They report to the Neonatal Unit manager, Chief of the Division of Neonatology and to the attending Neonatologist of the NICU/SCN.

f. Clinical Nurses

1) All RNs assigned to the Neonatal Unit are responsible for maintaining required competency in the neonatal subspecialty.

2) Nursing documentation must reflect the special care/intensive care status of the patient.

3) All RNs participate in individual patient teaching specific to the patient's needs. Patient education is completed and documented.

4) All nurses are expected to provide relevant input in formal patient management conferences to coordinate patient care activities and discharge planning.

g. The Clinical Transport Nurse functions in an expanded role under the direction of the Neonatologist and are governed by standardized procedures. The Transport Nurse is the resource nurse for a specific patient population or area of interest. The Transport Nurse is responsible for recommending standards of care for their specialty area. This includes writing protocols and procedures. In addition, the Transport Nurse is the resource for consultation and education regarding that specialty area. The Critical Care Transport Nurse with neonatal training or others who have comparable experience and the approval of the Manager may participate in the Neonatal Transport Role under the direction of the Neonatal Transport Program.

1) Transport nurses must demonstrate the following in their daily nursing practice:

a) Rapid analysis of critical information;

b) Accurate judgment-making ability;

c) Function with minimal supervision;

d) Perform routine tasks without difficulty (arterial sticks, intravenous sticks);

e) Function as a team player;

f) Project a positive professional image in the neonatal units and referring hospital.

2) Refer to Attachment 4: Neonatal Transport Team Structure Standards

h. Hospital Unit Service Coordinator (HUSC) III: HUSC IIIs are unit clerks. They are responsible for a multitude of secretarial and messenger duties that enable the unit to function more smoothly.

i. A Social Worker is assigned to all neonatal patients. This person interviews and counsels parents. Any care provider or parent/family member may consult with the unit Social Worker to discuss patient problems. The Social Workers documents their findings in the patient's progress notes. A Social Worker is available to staff and families 24 hours per day.

4. Nursing supervisors: The Nursing Supervisor provides assistance and supervision to the Neonatal Unit AN II and staff during the off-duty hours of the Manager. Problems that cannot be resolved by the Nursing Supervisor and AN II are referred to the Manager or Executive Director. Unit staff remains responsible for keeping the Manager aware of critical issues.

5. Organizational chart: UC Davis Health Executive Leadership

VII. UTILIZATION OF PATIENT CARE AREAS

A. Admission Criteria:

1. Infants admitted to the NICU are those in need of critical care services, which include specialized monitoring, nursing care and medical care. These patients may be direct admits from home, the Emergency Department, Labor and Delivery or transfer from another patient care unit or facility. Patients who are eligible for admission to the NICU (within the NU) include, but are not limited to:

   a. Hemodynamically unstable patients

   b. Patients requiring mechanical ventilation (not associated with ventilator support requirements)

   c. Patients receiving nitric oxide

   d. Infants requiring remote EEG monitoring

   e. Patients receiving Surfactant products

   f. Unstable micro-preemies

   g. Patients on Therapeutic Hypothermia Protocol

   h. Patients requiring ICP monitoring

   i. Patients requiring humidification for thermo and electrolyte regulation

   j. Patients requiring vital signs more frequently than every 2 hours

   k. Patients receiving medications requiring frequent assessment or titration (e.g., dopamine, dobutamine, nitroprusside, insulin, sedation/pain management)

   l. Patients who are receiving exchange transfusions

   m. Patients experiencing, or at high potential for, cardiac dysrhythmias requiring frequent interventions (i.e., chemical intervention)

   n. Patients experiencing desaturation episodes requiring intervention/oxygen titration greater than 4 times in one hour

   o. Patients recovering from a complex surgical procedure (e.g., PDA ligation, tracheostomy, craniotomy, bowel exploration/repair)

   p. Unrepaired gastroschisis, omphalocele, myelomeningocele

   q. Infants with unstable glucose requiring frequent glucose adjustments

   r. Patients with chest tubes

2. Infants admitted to the SCN (within the NU) are those in need of specialized neonatal nursing care. Infants admitted to the NU are managed by the Attending Neonatologist. Infants may be admitted to the SCN by a CCS-paneled Pediatrician who has completed the CME requirements for continuing education for this type of patient care. The following population is most appropriate for admission to the Special Care Nursery:

    a. Hemodynamically stable infants requiring vital signs every 3 hours or greater

    b. Patients requiring apnea/brady/desaturation monitoring and intervention less than 4 times every hour

    c. Patients who are hemodynamically stable who continue to require nasal CPAP (as identified by the Neonatal Attending)

    d. Patients requiring feeding every 2-4 hours, or continuous

    e. Patients requiring gavage feeding, having difficulty establishing breast feeding or requiring supplemental oxygen with feeding

    f. Patients requiring phototherapy

    g. Patients requiring central line maintenance for long term infusions (e.g., TPN, Lipids, antibiotics)

    h. Hemodynamically stable tracheostomy patients after the first tracheostomy change

    i. Patients requiring diagnostic work up for rule out sepsis, reflux, genetic or metabolic disorders

    j. Post-operative patients who are hemodynamically stable after minor surgery (e.g., inguinal hernia repair, ROP surgery)

    k. Patients who are hemodynamically stable and 12 hours or greater post exchange transfusion

    l. Hemodynamically stable, low birth weight infants who require feedings for growth

    m. Patients with mild temperature instability requiring an incubator

    n. Patients requiring home ventilation who are hemodynamically stable and awaiting initiation or return of home care ventilation

3. The NU will maintain consistency with hospital isolation policies.

B. Admissions from Labor and Delivery

The Resuscitation Team consists of the staff as defined in Attachment 2, High Risk Deliveries.

1. Infants who do not meet gestational age or weight requirements to be admitted to Newborn Nursery will be admitted to the NU. Refer to Policy XV-3: Admitting Procedure for Newborn Nursery.

C. Admission of General Pediatric Overflow Patients

1. During periods of high census and limited bed availability, all patients will be reviewed for appropriateness of placement within the Children's Hospital. This will include General Pediatric Overflow patient placement on the NU. The POD and the Nursing Supervisor will be responsible for identification and triage of admission of general pediatric overflow patients. Inter-unit patient transfers will be approved by the Nursing Supervisor and the physician in consultation with the charge nurses of both units. When a patient transfers to another unit and remains on the same physician service, orders need not be rewritten.

2. All patients must have an attending physician who is a member of the academic faculty at UC Davis Health.

3. Patients who are eligible to be placed in the NU on General Pediatric Overflow status include, but are not limited to the following:

Patients 12 months of age or younger in the NICU.

a. Pre- and post-operative patients who are not at risk for life threatening complications either secondary to an extensive procedure or due to a preexisting diagnosis

b. Children with chronic respiratory disease who require BiPAP or CPAP for support (where this modality is not being used to avoid intubation), depending upon clinical status and attending physician determination.

B. Transfer Criteria

1. NU patients will be transferred from the NICU and/or SCN to other health care facilities when they no longer require the support or services offered by a Tertiary Center when it is advantageous to the diagnostic or care requirements of the patient or when it becomes necessary due to the census, limited space, limited manpower resources or insurance requirements. NICU patients can be transferred to the SCN when the patient no longer requires the support or services of the NICU.

2. When transfer occurs outside of the two units, the medical staff shall identify an appropriate facility, obtain consent for transport from the parent, write appropriate transfer orders and complete the Authorization to Transfer Physician Statement form. The transport team may be UC Davis Health based or from the receiving facility.

3. Patients transferred to other settings must have documented in the EHR that his or her need for continuing treatment, family continuing education and support for normal growth and development have been assessed

C. Discharge Criteria (Duration of stay)

1. Patients who are discharged home from the NU should meet discharge criteria;

   a. Temperature Control: Infant can maintain adequate axillary temperature (36.5 degrees Centigrade to 37.5 degrees Centigrade) when in crib with light covering: 1-2 blankets. Exception: to be determined by attending Neonatologist but may include infants with neurologic impairment of temperature control mechanisms.

   b. Weight Gain: Infant shows steady weight gain of 15 to 30 grams/day. Exception: to be determined by Attending Neonatologist but may include newborns less than five days of age (these newborns should not show greater than a 10 to15% loss of birth weight) and infants who are relatively fluid restricted or were relatively fluid overloaded at birth.

   c. Feeding: Infant can nipple and retain all feedings consistently without signs of respiratory distress, color change or fatigue. Exception: to be determined by Attending Neonatologist but may include infant with neurologic or physical impairment that interferes with oral feeding ability. Parent has learned to feed infant.

   d. Special Treatments: Infant is stabilized on a routine schedule of care or treatment which parents have learned and can demonstrate, (i.e., trach care, colostomy care, casts, etc.). Infant has no evidence of apnea or bradycardia or significant desaturation episodes for an interval deemed appropriate by the Attending Neonatologist.

   e. Medications: Medication dosages are stable. Parents can demonstrate how to give, and they express knowledge of side effects.

   f. Follow Up Care: Identification of, and communication with, a primary care physician (may be UCD). Appointments for follow up care arranged. High Risk follow up, specialty follow up, etc.

   g. Review of Lab Data: Review of record to verify recent satisfactory chest x ray (if previously abnormal), hematocrit or hemoglobin, reticulocyte counts, Newborn Screen (NBS), eye exam and hearing screen, if applicable.

   h. All routine Discharge Teaching has been completed: To include knowledge of feeding, bathing, temperature regulation, elimination patterns, infant safety, sleeping habits.

   i. Parent Readiness: Licensed Clinical Social Worker has interviewed parents and assessed parent needs.

2. All patients who meet criteria and are discharged from the NU must have an Eye Exam (Policy 4121: Retinopathy of Prematurity Exams) and NATUS Hearing Screen (Policy 16033: Neonatal Hearing Screening Program).

3. Infants who require technological support or hospice type care will be referred to the appropriate home care agency by the discharge planner.

D. High census contingency plan: Refer to Policy 1191: Full Capacity Management Plan

E. Interfacility Transports - The NU serve as referral nurseries for the northern counties of California up to the Oregon and Nevada borders.

1. The referring physician initiates the transport process by calling the 1-800-UCD4KIDS line. The Transfer Center obtains basic information from the referral physician while paging the Neonatologist. The Neonatologist confers with the referring physician. A conference call including the NICU charge nurse, NICU transport nurse and the Critical Care Transport Nurse will be initiated. Once a decision is made to transport the infant, the Neonatologist, in collaboration with the referring physician, transport staff and the NU charge nurse will determine the transport team composition. Composition of the transport team will be consistent with the medical needs of the patient being transferred.

2. Low risk infants may be transferred to UC Davis Children's Hospital by a neonatal transport nurse and a Critical Care Transport Team or a combination of team members

3. All neonates referred for transport to the NU will have a cord blood specimen requested. This request will come from the UC Davis MCP to the referring facility physician in charge. Refer to UC Davis Children's Hospital Critical Care Transport Team Structure Standards (currently in progress).

F. Unit Logbook

1. All NU patients will be recorded in the unit Logbook. Direct admits to the NICU will be circled in purple. Direct admits to the SCN will be circled in blue. Short-Stay and triage patients will be circled in yellow. Off service patients will be circled in brown. The unit logbook will contain the following information:

a. Date, time and place of birth; weight in grams, pounds and ounces; length in centimeters and inches; mother's and infant's blood types, infant's cord blood Coombs (if mother's blood type is RH negative).

b. Brief admission history.

c. Parent's address and phone number.

d. Date of NBS and hearing screen.

e. Date and time of discharge and to where (home, another facility, foster care, etc.).

f. Discharge diagnosis taken from the Medical Discharge Summary.

2. Transfers from other facilities will be circled in green.

3. Deaths will be circled in red. Date and time of death will be recorded in date of discharge column.

VIII. GOVERNING RULES

A. Patient Safety/Unit Traffic Control

1. General Safety: Nursing staff in the NU have the responsibility of ensuring that the patient's well-being and safety is protected at all times, this includes, but is not limited to the following:

    a. Patients admitted to the NU will be admitted to an open warmer or an incubator with the appropriate temperature settings. If an open warmer bed is utilized, a skin temperature probe will be secured appropriately, and the bed will be placed on ServoControl mode.

    b. All patients admitted to the NU will be assigned to an RN upon arrival.

    c. Incubator doors are to be closed and crib rails or open warmer bedsides are to be up at all times when the infant is not receiving direct care. The nurse must be in attendance at all times when the patient is being weighed, when the side rails are down or the incubator doors are opened.

    d. Infants are not to be held by visitors who exhibit signs of lethargy, poor muscle coordination or drug/alcohol intoxication. When parents are holding their infant, they must sit in a chair.

    e. Infants on supplemental oxygen will have emergency oxygen equipment accessible and filled O_2 tank with regulator at the bedside.

    f. Infants will be secured into infant seats or swings.

    g. In the event of an internal disaster or fire, refer to the Hospital Fire/Disaster plan.

2. IV Therapy: Peripheral IVs may be placed in the scalp or extremities and used for the infusion of TPN and other maintenance fluids, medications (including vasoactive agents) and blood products.

    a. All IVs will be infused via a volumetric pump, except where IV push is appropriate. IV sites require vigilant monitoring to minimize the risk of complications, especially infiltrations.

    b. The maximum glucose concentration infused through a peripheral IV is 12.5 percent.

    c. IV tubing will be changed per unit protocol.

    d. Refer to Attachment 5: Neonatal Peripheral IV

    e. Refer to Policy 13024: Peripheral Intravenous Line Care and Maintenance.

3. Patient Transportation

   a. Patients transported to other areas in the institution will be housed in either a transport bed, an incubator or an open crib. Every patient leaving the unit must be accompanied by a RN. An RCP will be required to accompany the patient, if the patient needs ventilatory support. If the patient's condition is unstable, a physician or appropriate designee is also expected to accompany the patient.

   b. The emergency transport box is to be utilized when patients are leaving the NU.

   c. Transport of Intubated Neonates to the Operating Room/Imaging Units is detailed in Attachment 3: Current ICU Patients – Transfer to and From OR Workflow

4. Patient Identification

   a. The infant should always wear at least one limb band. The limb band will have the infant's name, ID number, unit and date of birth. If the limb band will not stay on (the infant is too small) or if it is necessary to access the extremities for a procedure, the band may be removed and taped to the bed. The infant's bedside will have a patient identification card attached to it. Patients are to be rebanded as soon as possible. All patients going to the Operating Room must have two identification bands on.

   b. Infants born in-house should have an identification band placed, prior to arrival to the NU. This band should remain with the infant at all times, until transfer or discharge. Should this band be damaged to the point it is not clinically useful, an appropriate identification band shall be placed on the infant.

   c. Patients admitted to the area with the same last name must have name alert labels placed on the medical record.

   d. Refer to Policy 2702: Patient Identification and Safety Bands for the Hospitalized Patient

5. Patient Property: All personal toys and clothes should be labeled with the infant's name. Toys are not to be placed in the infant’s bed.

6. Monitoring:

   a. All patients admitted to the NU will be electronically monitored for heart rate, respiratory rate and oxygen saturation. Monitoring will not be discontinued without a physician order.

   b. Older chronic care infants who are stable and are deemed safe to be off the monitor while awake, may be temporarily discontinued from cardiac and respiratory monitor with a provider’s order.

   c. Prior to discharge patients that are deemed stable enough may stay with their

caregivers in a Home Simulation Room off of monitors.

d. All monitors will have alarm capabilities turned on and placed on "Auto Mode". Master alarms are not to be turned down or turned off unless the patient is not attached to the monitor. Cardiac alarm limits are to be set at a low of 80 and a high of 200. Respiratory alarm limits are set for a 20-second delay unless the physician orders different limits. Ventilator alarms limits will be determined by mode of ventilation and patient condition. Alarm sounds are to be audible enough to hear in the next room.

e. The high and low alarms for the oximeter are to be set as specified in the physician's orders. The alarm settings for the transcutaneous monitor are dependent upon the individual patient and are to be ordered by the physician. Criteria have been established for placement and removal of pulse oximetry

7. Oxygen Use: The routine use of oxygen is by physician order only. Emergency use of oxygen is acceptable when the patient's condition deteriorates rapidly necessitating immediate interventions. The physician is to be notified immediately when this occurs.

8. Infant Abduction: Refer to Policy 3304: Child Abduction, Missing or Runaway Prevention and Response Plan (Code Rainbow).

9. Suspected Child Abuse: Refer to Policy 1528: Reporting and Management of Suspected Child Abuse, Neglect and Sexual Abuse

10. Newborn Screening: Refer to Policy 4014: Newborn Screening Test

B. Equipment/Supplies/Medication

1. Emergency Supplies:

a. Locked Neonatal Resuscitation carts including the defibrillator are located in designated areas throughout the NU. These are checked daily by the charge nurse. Additional emergency supplies are located in each patient room and the beside nurse is responsible for checking this equipment at the beginning of each shift.

b. The defibrillator is checked daily for functioning and tested on battery power once a week.

c. The nurse assigned to the Delivery Room must check the Neonatal Resuscitation carts on Davis 3 each shift to ensure they are locked. The L&D staff will be responsible for exchanging the Neonatal Resuscitation cart after it is used. The checklist is in the main resuscitation room located on Davis 3.

2. Special Equipment:

a. All patient care equipment is inspected by Clinical Engineering for safety and maintenance, and a label is affixed indicating the inspection date and when the next inspection is due. The color of this label changes every year. Inspection dates should be checked prior to using equipment. Clinical

Engineering also has all inspection information on file.

b. The Neonatal area contains many special equipment and supply items, per Title 22, JC, CCS and AAP. These include, but are not limited to:

I. Warming cabinet

II. Radiant warmers, thermostatically controlled

c. Cardiac monitoring equipment

d. Fixed and portable surgical lights

e. Emergency call system

f. Clocks with sweep second hand

g. Emergency supplies such as packing, medications, syringes and needles

h. Oxygen and suction for infants

i. Antibiotic prophylactic agent for infants' eyes

j. Neonatal resuscitation carts

k. Suction equipment and supplies

l. Defibrillator

m. Solutions and supplies for IV fluids, blood, plasma, or blood substitutes

n. Footstool

o. One or more comfortable chairs

p. Toilet and hand washing facilities for staff and visitors

q. Isolettes

r. Open cribs

s. Bili lights

t. Newborn Hearing Screening machine

u. CCTV for teaching and patient education

v. Enclosed storage unit for clean supplies for each infant

w. Diaper receptacles with a cover, foot control and disposable liner

x. Hamper with disposable liner for soiled linen

y. Wall thermometer and hygrometer

z. Accurate scales

aa. One hand washing sink with controls not requiring direct contact of the hands for each pod.

bb. Transilluminators

cc. Otoscopes and ophthalmoscopes

dd. Intravenous infusion pumps

ee. Enteral feeding pumps

ff. Near Inferred spectroscopy units

gg. EEG monitors

hh. Blanketrol cooling units for hypothermia induction.

3. Medications:

a. The NU is on a unit dose system. Pharmacy dates and labels all medications on the unit dose system. Nursing staff will recalculate all doses to verify accuracy and a two-nurse check will be required prior to the administration of any high-risk medication.

b. External preparations will be stored separately from internal medications.

c. Emergency Medication Sheets will be prepared for every NU and will be readily accessible at the patient's bedside. A new sheet shall be generated weekly and as needed per patient status.

C. Infection Prevention and Control

1. All staff in the NU are expected to comply with hospital infection control policies. Additional infection control guidelines may be implemented as recommended by the AAP Guidelines for Perinatal Care.

2. Personnel in NU are to have rubella and rubeola titers drawn. Those personnel with negative antibody titer are to be immunized against rubella and rubeola.

3. Personnel in the NU are encouraged to obtain hepatitis B titers and immunization as indicated.

4. All employees without a positive history of varicella will have titers drawn by Employee Health.

5. Initial hand washing prior to beginning the shift on the Unit shall consist of a nail cleaning and either a 2-minute scrub or Avaguard scrub. Refer to Policy 11023: Hand Hygiene.

6. All staff, including consulting services, will not have anything below the elbows when in a patient care area. This includes all forms of watches, bracelets, rings with stones, long sleeves, and lab coats. A single plain band without any stones is acceptable. Refer to the hand hygiene policy for information pertaining to nail polish.

7. There is one respiratory isolation bed on the Unit. Any questions regarding management of potentially infectious conditions should be directed to the Infection Control Department or to the Manager or Shift Supervisor.

8. The Centers for Disease Control and Prevention (CDC) recommend that health care workers employ blood and body fluid precautions for all patients. The CDC recommends this because medical history and examination cannot reliably identify all patients infected with HIV or other blood borne pathogens. This practice is known as Universal Precautions and shall be adhered to in the following manner by all staff. Refer to Policy 11025: Standard and Transmission Based Precautions for Infection Prevention.

9. Personnel with oral HSV lesions should cover the lesions. If any exudate exists, refrain from touching the lesion and use good hand washing technique.

10. The Neonatal unit follows hospital-wide standards of infection control.

D. Consultation/Outreach Education

The Medical Staff and Nursing Staff provide consultation services to UC Davis Health staff and to the community as needed. In addition, Outreach education services can be obtained from Community Affairs, Safe Kids, 1-800-UCD4KIDS and from UC Davis Health CN&ME Department.

E. Visiting Regulations

Refer to Policy 2878: Patients' Visitors.

F. Staff Emergency/Code Pink

1. NU staff intervene in all code situations in the NICU or SCN. An overhead Code Pink or Pediatric Code Blue may be called for a patient in the NU. Code Pink situations are paged throughout the hospital. Code Blue will be paged overhead should an adult code in the Neonatal Units. An adult code cart is available in the NU.

    I. Refer to Policy 2704: Code Pink – Neonatal Emergency Event

    II. Refer to Policy 6006: Responding to Medical Emergency Situations (Including Code Blue)

2. All codes are to be documented in the EHR. Parents are to be notified of the code by the physician ASAP after the code.

3. NICU staff will respond to all Code Pink overhead pages. In addition, a NU RN will be assigned the Code Pink role each shift.

G. Discharge Planning/Utilization Review

1. A multidisciplinary team will meet each week to discuss the discharge planning needs of the NU patients. Pertinent findings from the conference are recorded in the patient's medical record. The attending Neonatologist or designee will identify the primary care provider and communicate the discharge plan to him/her. The hospital discharge planner will coordinate post discharge services.

2. The Patient Services Department performs utilization review at UC Davis Health. A Utilization Review Nurse is assigned to each inpatient unit. Utilization review is a process to determine medical necessity for the acute level of care and appropriate utilization of services. The Utilization Review Nurse monitors the patient's stay for appropriateness of admission, validates the need for acute hospitalization and monitors services to assure appropriate and cost-effective use of resources. Medical record documentation must reflect the need for acute hospitalization on admission and throughout the patient's stay. The Utilization Review Nurse frequently contacts physicians regarding the plan of treatment, estimated length of stay, medical stability for transfer or information as requested, in an effort to coordinate reviews with third party payors to secure authorization and reimbursement for care. The Patient Services Department utilizes InterQual as their standardized review criteria and Physician review is available, as appropriate. The Utilization Review Nurse also acts as a liaison between the payor and UC Davis Health physicians.

IX. STAFF ORIENTATION/DEVELOPMENT/EDUCATION

A. Orientation

1. The Orientation Program in the NU is individualized to meet the needs of the employee. The employee is provided information regarding general safety management issues, and safety practices specific to the neonatal patient. The Orientation Program provides the individual with information that is needed to provide appropriate care to the neonatal patient.

2. Upon successful completion of the Orientation Program, the new orientee should have acquired the work experience and awareness of resource personnel to provide nursing care to his or her own assigned group of patients.

B. Counseling/evaluation

1. Counseling and evaluation will be completed in a manner consistent with negotiated contracts for each employee group

2. All employee interactions will be based on the Just Culture Model. Refer to Clinical Policy 1056

C. Interviews: conducted per UCDHS Human Resources guidelines.

D. Staff Development

1. Refer to PCS Structure Standard

E. Proficiency/competency

1. Refer to Clinical Policy 19014

II. QUALITY AND SAFETY MEASURES

A. Quality Management Program

This program is overseen by a steering committee consisting of the Medical Director, the Manager, the Clinical Nurse Specialist and the Chair of the NU Performance Improvement Committee. Work groups and ad hoc task force groups are formed to work on identified performance improvement issues during following activities:

1. The NU ensures performance though a variety of committees including, but not limited to: monthly staff meetings, monthly unit-based practice council meetings, morbidity and mortality reviews, clinical division meetings, and a variety of work groups and ad hoc task forces. Staff participate in unit performance improvement activities by attending scheduled meetings or by bringing ideas or concerns forward to the Manager or ANII's to be discussed at the meeting.. Pertinent performance issues are referred to the Neonatal Divisional Mortality and Morbidity conference for follow-up and further referrals as appropriate. Issues may also be referred to the Department of Pediatrics Quality Improvement Committee.

2. Shift-to-shift reports are conducted by staff at the patient's bedside. The nurse evaluates the following for completeness and appropriateness: general charting, the IV solution to ensure that the solution infusing is correct as ordered by the physician, the ventilator settings are correct as ordered by the physician, the medications that were given are charted, the information shared with the physician is documented and reflects follow-up and patient response if indicated.

3. Incidents that directly impact upon the delivery of patient care or patient outcome are documented on the Confidential Report of Incident form. A summary report of these incidents is discussed at the NU Performance Improvement Committee. Unit based performance improvement monitors and chart audits.