THE NEONATE AT 24 TO 48 HOURS FOLLOWING EARLY DISCHARGE

This plan of care focuses on the infant who is discharged within 30 hr of birth. It is intended to be used in conjunction with the CP: The Neonate at Two Hours to Two Days of Age. Although early discharge may be detrimental to a few infants, newborn health appears to hinge more on the parent(s) level of knowledge and support at home. The home assessment at 24–48 hr following discharge involves evaluation of the newborn's ability to adapt positively to extrauterine life.

NEONATAL ASSESSMENT DATA BASE

To meet the stringent criteria for early discharge, the newborn must be a normal, healthy infant as determined by thorough physical examination: Gestational age, 38–42 wk; birth weight, 2500–4000 g; vital signs and temperature stable; Apgar score greater than 7 at 1 and 5 min; normal elimination pattern; and successful feeding.

DIAGNOSTIC STUDIES

Hct: 40%–61%
Coombs' Test: Negative
Screening tests, including PKU and thyroid tests, dependent on individual risk factors and agency policy

NURSING PRIORITIES

1. Support transition of newborn to extrauterine life.
2. Promote positive parent-infant interaction.
3. Provide support and information regarding home care of infant.

NURSING DIAGNOSIS:	**NUTRITION: altered, less than body requirements**
May Be Related To:	Inability to ingest adequate nutrients (because of fatigue, excessive oropharyngeal secretions)
Possibly Evidenced By:	Weight loss, decreased urine output, dry mucous membranes, poor skin turgor, sunken fontanels
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Be adequately hydrated with normal urine output. Display weight loss less than 10% of birth weight.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Weigh newborn. Compare weight with birth weight and discharge weight.	Nutrient needs are based on body weight. Weight gains or losses indicate adequacy of intake. Neonates need 100–120 kcal/kg (54 cal/lb) each day. Only breast milk or formula should be given. Feedings should be provided approximately every 3 hr (6–8 times a day) or on demand. Average fluid requirements are 5 oz/kg per 24 hr.
Determine condition of fontanels, skin turgor, amount of mucus production. Observe newborn for jitteriness or lethargy.	Depressed fontanels, poor skin turgor, and dry mucous membranes suggest dehydration. Jitteriness may indicate hypoglycemia.
Note frequency, amount, and appearance of stool and urine. Palpate abdomen for softness.	Evaluates adequacy of oral intake. Neonates should void at least twice in the first 24 hr after discharge, advancing to approximately 7 times per 24 hr. Presence of urates in urine indicates need for additional fluid intake. The neonate may pass stool 2–7 times per 24 hr. Stool is initially meconium and changes in accordance with diet.
Observe newborn for possible signs of regurgitation. Encourage parents to establish relaxed mood during feedings and to place infant on right side after feeding.	During the transitional period, neonates may normally regurgitate feedings. Calmness and self-assurance of parents helps neonate relax during feeding; proper positioning facilitates gastric emptying into intestines.
Review parents' feeding practices and knowledge, noting how often baby is nursing or feeding, how many minutes newborn nurses on each breast, and whether newborn takes additional water or formula during a 24-hr period. If possible, observe parents and infant during feeding.	Knowledgeable parents are better prepared to alter schedules and respond to feeding needs and changes. Anticipatory guidance increases their self-confidence and helps avoid problems. Excessive parental anxiety may interfere with mother's let-down reflex, increase neonate's anxiety, and result in poor oral intake. Note: In addition, milk supply is usually not yet well established for specific needs of neonate.
Assess reflexes associated with feeding, and note presence of oropharyngeal secretions.	Poor sucking and swallowing reflexes or excessive secretions may negatively affect intake.
Determine neonate's current sleep-wake pattern.	At 24 hr of age, a healthy neonate has not yet established a sleep-wake pattern and may be excessively tired as a result of birth stress. During the first 2–3 days, the neonate may sleep almost continuously (except for feeding), progressing to a schedule of approximately 12–16 hr/day.
Collaborative	
Review Dextrostix results. If newborn appears jittery or lethargic, provide feeding of dextrose solution and continue to observe.	Normal glucose levels are between 45 and 130 mg/dl; levels<45 mg/dl indicate hypoglycemia. Administration of dextrose solution should correct hypoglycemia.

NURSING DIAGNOSIS:	**BODY TEMPERATURE, risk for altered**
Risk Factors May Include:	Extreme of age (immature regulatory mechanisms [hypothalamus], ineffective shivering mechanism, reduced subcutaneous fat, proximity of blood vessels to the skin surface, and large ratio of body surface to mass)
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Maintain axillary temperature between 97°F and 98°F (36.2°C and 36.8°C) when in an open crib with one blanket.
PARENT(S) WILL:	Identify/use individually appropriate measures to protect neonate.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Review importance of thermoregulation in the newborn and possible negative effects of excess chilling.	A thermoneutral home environment is needed to assist the infant's own thermoregulatory ability. Temperature fluctuations in the newborn require use of calories to regain balance at the cost of growth. In addition, chilling increases the risk of newborn jaundice because the affinity of serum albumin for bilirubin is diminished.
Demonstrate proper technique for assessing axillary temperature.	Improper technique may lead to inaccurate results.
Note signs of increased irritability, pallor, mottling, or lethargy; note restlessness and perspiration on head or face.	Indicates hypothermia or hyperthermia necessitating intervention.
Evaluate environment for thermal loss through conduction, convection, radiation, or evaporation (e.g., cool or drafty room, inadequate clothing on infant, or absence of head covering) or for thermal excess (e.g., crib in sunlight or near heaters).	Body temperature of newborn fluctuates quickly as the environmental temperature changes. Note: Cultural dictates may require bundling of neonate in excess of environmental needs necessitating sensitivity and additional discussion of temperature regulation and infant safety concerns.
Discuss appropriate actions to maintain newborn's temperature, such as appropriately bundling infant and covering head if axillary temperature is lower than 97°F (36.1°C) and rechecking temperature 1 hr later.	Information helps parents create an optimal environment. Wrapping neonate and putting cap on head helps retain body heat. Axillary temperature evaluates effectiveness of the interventions. Note: Informing parents that newborn's hands may remain cool even though body temperature is WNL reduces anxiety and inappropriate response.

NURSING DIAGNOSIS:	**INJURY, risk for CNS damage**
Risk Factors May Include:	Biochemical or regulatory function (inability to break down RBCs quickly enough during the transition period, leading to kernicterus

	associated with deposition of unconjugated bilirubin in the basal ganglia of the brain)
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Maintain bilirubin level WNL.
PARENT(S) WILL:	Identify signs of increasing jaundice. Verbalize understanding of treatment needs.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Inspect neonate's buccal membranes, sclera, and skin for jaundice. Instruct parents to observe infant for passage of meconium stool.	Yellowing sclera is the first sign of jaundice and is followed by yellowed skin tone on blanching; jaundice progresses in a cephalocaudal direction. Meconium stool may be delayed; loose/greenish-brown stools may indicate passage of bilirubin. Note: Upward of 80% of neonates develop physiological jaundice between days 2–9.
Review proper care of jaundiced neonate, providing anticipatory guidance. Refer to CP: Newborn: Hyperbilirubinemia.	Information is essential for parents to manage care appropriately and to identify changes in condition that warrant further assessment and treatment.
Collaborative	
Obtain blood specimen, as indicated, if jaundice is noted.	Determines bilirubin level in presence of jaundice. Decisions regarding treatment are based on serial serum bilirubin levels. Physiological jaundice becomes pathological at level above 12.8 mg/dl.
Arrange for medical follow-up regarding hyperbilirubinemia.	Prompt, responsible follow-up and treatment are necessary to avert serious complications and reduce need for hospital readmission.

NURSING DIAGNOSIS:	**PARENTING, risk for altered**
Risk Factors May Include:	Lack of support between/from significant other(s), lack of knowledge, ineffective or no available role model, unrealistic expectations for self/infant/ partner, unmet social/emotional maturation needs of client/partner, presence of stressor (e.g., financial, housing)
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—PARENT(S) WILL:	Verbalize realistic expectations of infant's needs. Identify individual methods and resources for meeting infant needs.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Reassess risk factors that may have been identified during prenatal or intrapartal periods (e.g., unwanted pregnancy, previous abortion, or lack of support systems).	Follow-up of risk factors is important to evaluate progress or areas of need. Early discharge is ideal for many families, but some clients who are at high risk for child abuse may also be included within the early discharge population.
Observe parent-infant interaction. Talk with parents about their perceptions of, and feelings toward, the newborn. Reinforce positive bonding efforts.	Because of their dependent state, infants are vulnerable to negative parental behaviors, inadequate nurturing, and abuse. The "taking-in" phase, during which the mother is still trying to assimilate the details of labor and delivery, lasts 2–3 days. Stress and inadequate help in the home during this early period may negatively affect transition to the childrearing phase, interfering with proper nurturing, with possible failure of the newborn to thrive or to develop a sense of trust during infancy.
Assist parents to identify the resources available to them, e.g., community or support services, home health aide, or mother's helper.	Enables parents to anticipate availability and appropriateness of resources. Mother normally needs additional assistance to meet the needs of her newborn, her family, and herself and to cope with unanticipated stress during the initial postpartal period.
Make arrangements for follow-up phone calls or visits as appropriate.	Provides support and the opportunity to note progress. Frequency of calls or visits depends on needs of the individual situation; three visits in the 1st wk is desirable but is often dependent on financial resources/access to community programs.
Provide parents with a contact phone number. Encourage them to call to ask questions, discuss concerns, or seek assistance.	Knowing that someone is available to help if needed may lessen parents' stress.
Collaborative	
Refer for professional mental health counseling if indicated.	Postpartal stress may trigger depression, which is more likely to resolve quickly and not progress to more severe depression if the mother obtains help from skilled professionals.

NURSING DIAGNOSIS:	**GAS EXCHANGE, risk for impaired**
Risk Factors May Include:	Excessive production of mucus and/or amniotic fluid remaining in the lungs; decreased hemoglobin levels
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Maintain patent airway with unlabored breathing and respirations at 30–60/min.

	Be free of signs of respiratory distress.
PARENT(S) WILL:	List signs reflecting respiratory distress and appropriate actions.

ACTIONS/INTERVENTIONS	**RATIONALE**
Independent	
Auscultate breath sounds bilaterally to note respiratory rate and quality.	Neonate should breathe 30–60 times per minute without signs and symptoms of respiratory distress or congestion. Absence of lung sounds or persistence of crackles or rhonchi indicates possible aspiration of amniotic fluid or persistent fluid in lung tissue.
Encourage parent(s) to position neonate on abdomen or right side; demonstrate clearing of nares, as needed, with bulb syringe and possible elevation of the head of the crib mattress by 30 degrees using a rolled blanket under the mattress, as appropriate.	Enhances air movement and reduces risk of aspiration. Promotes drainage of mucus and relieves pressure of diaphragm on lungs. Note: Recommended position for sleep is supine (on back) or side to reduce risk of SIDS, unless neonate has difficulty handling mucus when prone or side position is preferred.
Assist parent(s) in learning signs of neonatal distress (e.g., grunting, retractions, nasal flaring, or tachypnea), noting when they should contact healthcare provider.	Reduces anxiety and provides guidelines for parents so they know the appropriate times at which to seek help.
Collaborative	
Obtain heel-stick Hct, as indicated.	May be required routinely or if respiratory distress is noted. Hct below the normal range of 43%–61% reduces oxygen-carrying capacity and may compromise respiratory function.
Provide healthcare referral if respiratory rate is not within normal range.	Immediate care may be needed to prevent development of serious respiratory problems.

NURSING DIAGNOSIS:	**KNOWLEDGE deficit [Learning Need], regarding infant care**
May Be Related To:	Lack of recall and/or incomplete information presented; misinterpretation
Possibly Evidenced By:	Verbalizations of concerns/misconceptions; hesi-tancy in/or inadequate performance of activities
DESIRED OUTCOMES/EVALUATION CRITERIA—PARENT(S) WILL:	Carry out infant care tasks appropriately. Assume responsibility for own learning. Verbalize the rationale for specific actions.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Encourage parents to voice concerns. Provide explanations and answer questions while physical assessment is performed.	Helps determine parents' ability to care appropriately for newborn. The first 48-hr period after delivery is one of great transition for parents, especially for mothers, who must now recall and apply information related to newborn care as learned in prenatal classes or during the brief hospital stay. New, unexpected areas of needed information may arise as parents actually assume their caregiving roles.
Provide oral and written/pictorial information, as needed, about home management and care of the neonate, and indications for notifying healthcare provider.	Decreases anxiety, increases self-confidence, and promotes quality care for the neonate; helps ensure prompt treatment of problems. Note: Hospital readmissions during the 1st wk of life are usually because of jaundice, dehydration, or sepsis.
Evaluate home environment for presence of heat, running water, cleanliness, electricity; number of persons in household; size of home, and facilities, crib, and clothing for the baby.	Identifies necessary items that are lacking or conditions that present safety/health concerns. Promotes problem-solving activities.
Provide appropriate information related to infant safety. (Refer to CP: The Neonate at 2 Hours to 2 Days of Age; ND: Injury, risk for.)	Helps reduce incidence of accidental injury or trauma.
Ascertain parents' understanding of nutritional needs, feeding behaviors, and techniques.	Provides opportunity to reinforce knowledge and clarify misconceptions.
Discuss plans for follow-up appointments for tests, such as PKU or thyroid screening tests, as indicated.	Determines parent's awareness of the need for further testing. PKU testing is performed after milk stool is noted in breastfed neonates, or within 72 hr after bottle feeding is begun.
Assist parents in scheduling first appointment with healthcare provider.	Establishes importance of checkup for the infant and provides parents with opportunity to have their questions answered. Note: Based on cultural practices, some clients may be reluctant to leave home with newborn for 20–40 days following delivery.
Refer to other healthcare providers, community agencies, e.g., social services; Women, Infants, and Children (WIC) program; or support groups (e.g., La Leche League).	Helps to promote high-level wellness and family independence. Parents are more likely to use services that are familiar or recommended to them.

NURSING DIAGNOSIS:	**INFECTION, risk for**
Risk Factors May Include:	Thin, permeable skin and extra portals of entry (umbilical cord, circumcision); immature immunologic system; lack of normal intestinal flora
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Be free of signs of infection.
PARENT(S) WILL:	Identify individual risk factors and appropriate actions.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Wash hands, and instruct parents to do so before handling infant.	Minimizes introduction of bacteria and spread of infection.
Observe newborn for skin abnormalities (e.g., blisters, petechiae, pustules, plethora, or pallor).	These abnormalities may be signs of infection. (Refer to CP: The Neonate at 2 Hours to 2 Days of Age; ND: Infection, risk for.)
Discuss skin care, including bathing every other day, or less often, as indicated, and using mild antibacterial soap. Recommend sponge bathing until umbilical cord detaches.	Guidelines for parents help them protect fragile skin of newborn from excessive drying or damage. Note: Foreskin of uncircumcised penis should not be retracted for cleaning; rather, external washing and rinsing are sufficient.
Inspect umbilical cord.	The umbilical cord is an open site susceptible to infection. It should show evidence of beginning dryness, and no bleeding, exudate, odor, or oozing should be present by the 2nd day of life.
Review appropriate cord care. Ensure that clothes and diaper do not cover stump. Provide information regarding the normal progression of cord resolution.	Reduces likelihood of infection; promotes drying. Cord should fall off by the 2nd wk of life. Note: Knowing it does not hurt the baby when the cord detaches provides reassurance to parents.
Inspect site of circumcision, if performed. Note undue bleeding, oozing, or swelling. (Refer to CP: Circumcision.)	Complete healing of circumcision does not occur until 7–10 days after the procedure.
Observe for/discuss signs of infection. Assess axillary temperature as indicated.	Infection in the neonate may be manifested by pallor, irritability, lethargy, poor feeding, vomiting, diarrhea, loose stools, oliguria, or temperature instability. Parental awareness promotes early recognition and increases likelihood of prompt medical attention.
Recommend avoiding contact with family members or visitors who have infections or have recently been exposed to infectious processes.	Because the neonate is more susceptible when exposed to some infections, visitors should be screened. Note: Communicability is usually highest during the incubation period of many diseases.