I. PURPOSE
To describe the nursing responsibilities related to the care of the Late Preterm Infants (35 0/7-36 6/7) on the Postpartum Unit admitted to the Newborn Nursery.

II. REFERENCES
Barfield, Wanda D., MD, MPH, FAAP, Lee, Kimberly G., MD, MS, IBCLC (2015). Late Preterm Infants. In UpToDate.com®


AWHONN Assessment and Care of the Late Preterm Infant Evidence-Based Clinical Practice Guideline 2nd Ed (2017).

III. DEFINITIONS
A. Population of Late Preterm Infants (LPIs) in the Newborn Nursery is any infant admitted born at 35 0/7-36 6/7 weeks of gestation.
1. Characteristics of the Late Preterm Infant include:
   a) Low birth weight
   b) Low body fat
   c) Poor thermoregulation
   d) Low glycogen stores
   e) Low tone
   f) Poor state regulation
   g) Immature immune system
   h) Immature suck and swallow
   i) Delay in bilirubin metabolism

2. The Late Preterm Infants compared with a term infant is more likely to have the following complications:
   a) Hypothermia
   b) Hypoglycemia
   c) Respiratory distress
   d) Hyperbilirubinemia
   e) Sepsis
   f) Poor feeding or infrequent feeds leading to inadequate maternal milk supply
   g) Poor suck and swallow leading to inadequate milk intake
   h) Excessive weight loss
   i) Failure to thrive
   j) Increased hospital readmission rate
IV. PROCEDURE:

1. All infants should have an established gestational age (GA) prior to delivery. Pediatric MD or NP should perform a thorough assessment including a Ballard when GA is undetermined.

PROCEDURE:

A. LPI ADMISSION CRITERIA to NBN/COUPLETT CARE

1. Criteria for admission to NBN/Couplet Care without ICN observation or ICN admission:
   a. 35 0/7-36 6/7 weeks GA and ≥2000g
   b. VSS and asymptomatic
   c. O2 sat ≥ 95% on room air
   d. Assessed by WB/PediMed provider within 1 hour of life (35 0/7-35 6/7 GA)
   e. Never had chest compressions
   f. PPV/CPAP < 10min
   g. Nursing acuity < 1:3 couplets

2. Criteria for admission to NBN/Couplet Care after ICN observation or ICN admission:
   a. Stable vital signs and stable blood glucose levels
   b. Able to tolerate oral feeds without desaturation.
   c. Cardiovascular and respiratory stability as determined on bedside evaluation by WB/PediMed Provider.
   d. Provider to provider discussion prior to transfer to couplet care.
   e. ICN Charge RN to Postpartum Charge RN communication prior to transfer to couplet care.

B. ASSESSMENT/VITAL SIGNS

1. Vital signs within the 1st hour of life, at 2, 4 and 6h, then Q4 hours for first 24 hours followed by Q6 hours. Notify provider if VS outside order parameters.
2. Assess infant every shift and prn changes in status.

C. THERMOREGULATION

1. Initiate and maintain skin-to-skin contact with the mother or parent as soon as possible after birth to facilitate temperature regulation of the infant. Extended skin-to-skin contact also improves stabilization of heart rate, respiratory effort, metabolic stability and early breastfeeding.
2. At birth, place infant skin-to-skin with parent. Cover infant’s head with a hat. Place warmed blanket over infant’s body. If unable to place infant skin-to-skin, place infant under radiant warmer. Keep room warm to conserve infant’s caloric expenditure.
3. Bathing: Delay infant bath for first 24 hours as per Infant Bathing Procedures.
4. If infant is unable to maintain a temp ≥36.5°C, cover infant’s head with a hat and place infant skin-to-skin with mother or under radiant warmer. Retake temperature in 30 minutes. If still, <36.5°C, notify MD of thermoregulation issues and as per call parameters in orders. If infant is unable to maintain temperature ≥36.5°C, transfer to higher level of care for evaluation and management.

D. RESPIRATORY DISTRESS

During the first 2 hours of life infants may have abnormal respiratory rates (RR 25-100 breaths per minute). Normalization is expected after this transitional period (RR 40-60 breaths per minute).

1. Monitor for signs of respiratory distress (nasal flaring, retracting, grunting, apnea) throughout infant’s hospitalization.
2. Notify provider of signs of respiratory distress with consideration to transfer infant to higher level of care.
3. Apnea, a pause in breathing >20 seconds, requires closer cardiovascular monitoring and transfer to higher level of care.

E. GLUCOSE SCREENING

The risk of hypoglycemia is reported to be three times greater in late preterm infants than in term infants. Decreased glycogen stores, stress, inadequate thermoregulation and feeding difficulties increase this risk.

1. Late preterm infants should be screened for hypoglycemia according to UCSF policy for late preterm infants. Refer to Screening and Management of Hypoglycemia in Late Preterm and Term Newborns (> 34 wks GA).
2. Late preterm infants born to mothers who are on medications for diabetes (type I, type II or gestational diabetes) will follow the policy for infants of diabetic mothers.
   1) Refer to Screening and Management of Hypoglycemia in Late Preterm and Term Newborns (>34 wks GA).
3. Encourage infant feeding within 1 hour of birth. Measure blood glucose 60 minutes after feeding.

F. HYPERBILIRUBINEMIA

1. Assess risk factors for hyperbilirubinemia, including ABO incompatibility and presence of maternal antibody for each infant.
2. Monitor for signs of jaundice regularly, at least once per shift with each assessment. Late preterm infants tend to have peak bilirubin levels at a later age than term infants.
G. FEEDING/NUTRITION

1. Place stable infant skin-to-skin with mother as soon as possible after delivery and encourage continuous skin-to-skin contact with mother or partner as much as possible during hospital stay while they are awake.
   a) Educate parents on safe sleep. We do not encourage co-sleeping.
2. Encourage initiation of breastfeeding within the first hour of life.
3. Encourage on demand, cue-based feeding but late preterm infants should be fed at least every 3 hours per Diet Specified orders.
4. Instruct mother on hand expression of colostrum as soon as possible, ideally during the first few hours of life. Any expressed colostrum should be fed to the baby using a spoon or oral syringe or dripped into the baby’s mouth at the breast.
5. Mothers of late preterm infants should also be instructed to pump their breasts after each nursing or nursing attempt for 10-20 minutes or about every 3 hours. Any expressed colostrum can be fed to the infant using a non-absorbent swab, spoon, oral syringe or SNS.
6. Weight losses greater than 3% by 24 hours of life, 5% at 48 hours and 7% by 72 hours of life are considered excessive for a late preterm infant and merit further evaluation and monitoring. Notify MD, PNP or lactation consultant of excessive weight loss.
7. Evaluate infant’s latch and document at least one LATCH score per shift. Notify provider or lactation consultant of LATCH score < 7.
8. Mothers should not skip feedings or breast pumping, even at night, as milk supply can be affected.
9. Inpatient consult to Lactation daily, within 24 hours of admission to couplet care and prn.
10. Feeding and Supplementation plan per Diet orders:
   a. Supplementation via SNS if the infant is able to latch well and suck at the breast.
   b. Consider slow flow nipple and bottle if infant is unable to take recommended volume via SNS, excessive weight loss or infant tiring at the breast.
   c. Supplement volume per Diet Specified orders
   d. Infant may receive donor breast milk (with signed consent) or formula if maternal breast milk volume is not meeting infant’s nutritional needs
11. Medical team and Lactation to re-evaluate feeding plan each day.
12. Transfer to ICN if poor or absent feeding cues, non-vigorous or stress behaviors.

I. PARENT EDUCATION

1. Educate parents regarding vulnerability of late preterm infant and Late Preterm Procedure.
2. Ensure parents have received Cub Club-Late Preterm Handbook.
3. Educate parents regarding need for hospitalization until infant meets criteria for discharge.
4. Encourage parents to bring in infant car seat early in order to ensure it is appropriate for infant.
5. Educate parents regarding feeding plan and follow-up resources.
6. Encourage and ensure appropriate Pediatric and Lactation follow-up.
DISCHARGE CRITERIA

Length of stay: Late preterm infants from 35 0/7-36 6/7 weeks gestation are not routinely eligible for discharge on day 1 of life. Discharge should be based on the infant’s feeding competency, thermoregulation, absence of illness and family preparedness. The late preterm infant will be ready for discharge when the following are met:

1. Consistent, adequate, oral intake
2. Well established feeding plan
3. Weight stable and/or weight loss not excessive
4. Temperature stability > 24 hours
5. Bilirubin stable

B. FOLLOW-UP AFTER DISCHARGE

1. A follow-up Pediatric appointment or home health visit should be scheduled within 24-48 hours of discharge.
2. Recommended primary care follow weekly until corrected gestational age of 40 weeks.
3. A follow-up Lactation appointment is recommended within 2-3 days of discharge for immature breastfeeding behaviors.

V. RESPONSIBILITY

For questions regarding this policy contact the Perinatal Educator or Clinical Nurse Specialist.

VI. HISTORY OF THE PROCEDURE

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VII. APPENDIX

Attached Cub Club-Late Preterm Handbook as Appendix

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