

**Resident Curriculum
PL-1
Well Baby Nursery**

Patient Care

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

Patient Care: Goals and Objectives

Patient Care

Goal #1:

Assessment, Screening and Prevention (Normal Newborns). Assess newborns, using history, physical exam and routine screening procedures, and provide preventive counseling and intervention as indicated.

Objectives:

#1. Obtain and interpret information relevant to newborn health including:

1. Maternal medical, prenatal and obstetric history
2. Family history
3. Results of maternal screening tests (e.g., Rh), rubella, hepatitis B and C, serology for syphilis, HIV, tuberculosis, illicit drugs, blood type, group B streptococcus, herpes simplex virus, gonorrhea, and Chlamydia
4. Maternal medication use or substance use/abuse
5. Results of prenatal ultrasound testing

#2. Perform a neonatal physical examination and identify normal and abnormal findings related to:

1. Gestational age assessment and growth category (AGA, SGA, LGA)
2. Vital signs and measurements
3. General appearance and identification of anomalies
4. HEENT (red reflex, intact palate, short frenulum, caput, cephalohematoma)
5. Neck and clavicles
6. Neurologic system (symmetry ,tone, reflexes, suck, behavioral state, head size and shape, spine)
7. Respiratory effort
8. Skin
9. Chest and breasts
10. Heart
11. Lungs
12. Abdomen (including umbilical cord)
13. Genitalia
14. Femoral and brachial pulses
15. Hips (Ortolani and Barlow maneuvers)
16. Extremities

#3. Understand and demonstrate appropriate timing for newborn exams and define the key reasons for doing the exams (e.g., determine state of transition, assess risks, identify abnormalities, and demonstrate normal findings and behaviors to parents).

#4. Communicate effectively with parents and family in a professional and caring manner that honors family values and enhances their parenting skills and confidence.

Goal #2

Common Signs and Symptoms (Normal Newborns). Evaluate and appropriately treat or refer newborns with these commonly presenting signs and symptoms.

Objectives:

#1. Recognize, describe clinical significance and develop a strategy to evaluate and manage and/or refer newborns with these common newborn signs and symptoms:

1. Large birth marks (mongolian spots, hemangiomas, port wine spots)
2. Rashes and markings secondary to birth trauma
3. Papular and pustular rashes (erythema toxicum, pustular melanosis, staph. Pustulosis, milia)
4. Peripheral and central cyanosis
5. High or low temperature
6. Tachypnea
7. Heart murmur—asymptomatic and symptomatic
8. Abdominal distension and masses
9. Two vessel umbilical cords
10. Abnormal findings on the Barlow or Ortolani
11. Swollen breasts
12. Vaginal bleeding
13. Subconjunctival hemorrhages
14. Corneal opacities or absent red reflex
15. Facial palsy
16. Fractured clavicle
17. Brachial plexus injury
18. Cephalohematoma or caput
19. Ear tags, pits
20. Palate abnormalities (cleft, submucous cleft)

21. Polydactyly
22. Syndactyly
23. Plethora
24. Pallor
25. Respiratory distress
26. Abnominal mass
27. Genitourinary abnormalities (ambiguous genitalia, hypospadias, undescended testicle)
28. Microcephaly
29. Macrocephaly
30. Sacral dimple, pit, hair tuft

Goal #3: Common Conditions (Normal Newborns). Evaluate and appropriately treat or refer newborns with these commonly presenting conditions.

Objective:

#1. Recognize, describe clinical significance and develop a strategy to evaluate and manage and/or refer newborns with these common newborn clinical situations, including

1. Large and/or small for gestational age babies
2. Infant of a diabetic mother
3. Infant of substance abusing mother
4. Child with ABO/Rh incompatibility
5. Polycythemia
6. Premature/postmature infant
7. Jitteriness
8. Transient metabolic disturbances (hypoglycemia, etc.)
9. Delayed urination
10. Delayed stooling
11. Vomiting feeds/bilious emesis
12. Poor/delayed suck
13. Respiratory distress with feedings
14. Jaundice [See GOAL 3.23: Jau Infant with risk factor for DDH (girl breech, +family hx)
15. Infant with abnormalities on prenatal ultrasound (pyelectasia, hydronephrosis, choroids plexus cyst)
16. Dysmorphic infant or infant with known chromosomal abnormality (e.g. Trisomy 21)
17. Multiple births (near and at term)
18. Eye discharge
19. Abnormal newborn hearing screen results
20. Infant born to a mother with a significant medical condition (lupus, seizure disorder) or obstetrical condition (HELLP syndrome)

Goal #4: Infections (Normal Newborns). Assess and manage common infections in the normal newborn nursery.

Objective:

#1. Discuss methods for screening and, where appropriate, preventive treatment of mother and infant (chlamydia, CMV, gonorrhea, group B strep, hepatitis B, hepatitis C, HSV, HIV, tuberculosis, HPV, parvovirus, rubella, syphilis, toxoplasmosis, and varicella).

Goal #5 :Nutrition (Normal Newborns). Manage breast and bottle feeding in the newborn period.

Objectives:

#1. Assess a newborn's nutritional status based on maternal medical and obstetrical history and infant's history (e.g., illness, feeding, stools, urination) and physical exam (e.g., weight expected for gestational age, subcutaneous fat, hydration, neurologic or oral/facial anomalies) and implement appropriate feeding plans

2. Counsel parents about feeding choices and assess for potential risks/difficulties

#3. Recognize and manage these conditions:

1. Common problems for breastfeeding infants and mothers.
2. Maternal use of medications that are transmitted via breast milk.
3. Maternal infections and risk of transmission (Hepatitis B, Hepatitis C, HIV)
4. Preserving breastfeeding while managing jaundice.
5. Newborn who is a poor feeder.
6. Feeding plans for the SGA or premature infant.
7. Feeding plans for the infant of a diabetic mother.
8. Feeding plans for the infant with a cleft palate.
9. Feeding plans for neurologically depressed/abnormal newborn

Goal #6: Anticipatory Guidance at Nursery Discharge. Provide anticipatory counseling at nursery discharge that relates to newborn behavior, family adjustment, injury prevention, and access to medical services.

Objectives:

#1. Discuss priorities for anticipatory counseling, especially in face of time constraints due to "early discharge"

#2. Provide routine counseling on topics such as:

1. Routine follow-up appointment time (e.g., 3-5 days of age for early discharge and breastfeeding infants).
2. How and when to contact the office for advice or earlier appointment.
3. For infants discharged early: warning signs of jaundice, infection, dehydration, and feeding problems; interaction with visiting nurse, need to do repeat newborn screening blood tests.
4. Needed medical, social, and WIC services.
5. Normal infant behaviors related to crying, sleep, and wakefulness and how to deal with common problems (hiccups, sneezes, vaginal bleeding, breast masses/discharge, care of umbilical cord, care of penis).
6. Postpartum adjustment including the need for rest and support, and the potential for postpartum "blues" (e.g., depression, anxiety, feelings of inadequacy, fear, resentment).
7. Uniqueness of each infant's temperament and how to identify and respond to this.
8. Potential for sibling rivalry and ways to handle this.
9. Injury prevention (e.g., car seat for discharge, crib safety, water temperature settings, smoke alarm, constant supervision of newborn with siblings or pets, sleep position, environmental exposures like cigarette smoke).
10. Significance of increasing jaundice, feeding problems or fever in this age group and the rapidity with which medical care should be sought.

Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

Medical Knowledge: Goals and Objectives

Goal #1:

Assessment, Screening and Prevention (Normal Newborns). Assess newborns, using history, physical exam and routine screening procedures, and provide preventive counseling and intervention as indicated.

Objectives:

#1. Obtain and interpret information relevant to newborn health including:

1. Maternal medical, prenatal and obstetric history
2. Family history
3. Results of maternal screening tests (e.g., Rh), rubella, hepatitis B and C, serology for syphilis, HIV, tuberculosis, illicit drugs, blood type, group B streptococcus, herpes simplex virus, gonorrhea, and Chlamydia
4. Maternal medication use or substance use/abuse
5. Results of prenatal ultrasound testing

#2. Perform a neonatal physical examination and identify normal and abnormal findings related to:

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14. Femoral and brachial pulses
15. Hips (Ortolani and Barlow maneuvers)
16. Extremities

Goal #2: Common Signs and Symptoms (Normal Newborns). Evaluate and appropriately treat or refer newborns with these commonly presenting signs and symptoms

Objective:

#1. Perform a neonatal physical examination and identify normal and abnormal findings related to:

1. Gestational age assessment and growth category (AGA, SGA, LGA)
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Goal #3: Common Conditions (Normal Newborns). Evaluate and appropriately treat or refer newborns with these commonly presenting conditions.

Objective:

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Goal #4: Infections (Normal Newborns). Assess and manage common infections in the normal newborn nursery.

Objective:

#1. Discuss methods for screening and, where appropriate, preventive treatment of mother and infant (chlamydia, CMV, gonorrhea, group B strep, hepatitis B, hepatitis C, HSV, HIV, tuberculosis, HPV, parvovirus, rubella, syphilis, toxoplasmosis, and varicella).

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Objectives:

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9. Injury prevention (e.g., car seat for discharge, crib safety, water temperature settings, smoke alarm, constant supervision of newborn with siblings or pets, sleep position, environmental exposures like cigarette smoke).
10. Significance of increasing jaundice, feeding problems or fever in this age group and the rapidity with which medical care should be sought.

Practice- Based Learning and Improvement

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which

their patients are drawn

- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

Practice- Based Learning and Improvement :Goals and Objectives

Goal 1: Infections (Normal Newborns). Assess and manage common infections in the normal newborn nursery.

Objective:

#1. Recognize and manage:

1. Newborn with signs of sepsis (e.g., fever, poor feeding, tachypnea, low temperature).
2. Infant born to mother with fever.
3. Infant born to mother with a history of a perinatal infectious disease (e.g., group B strep, chlamydia, syphilis, HSV).
4. Infant born to mother with prolonged rupture of membranes.
5. Infant born to mother who received antibiotic during delivery.

#2. Identify newborns at risk for bacterial sepsis by history, physical exam, and laboratory studies.