

# AMERICAN ACADEMY OF PEDIATRICS

## The Role of the Primary Care Pediatrician in the Management of High-risk Newborn Infants

Committee on Practice and Ambulatory Medicine and Committee on Fetus and Newborn

**ABSTRACT.** Quality care for high-risk newborns can best be provided by coordinating the efforts of the primary care pediatrician and the neonatologist. This ideally occurs in the newborn period, during the critical care and convalescing periods, and through the time of discharge. This statement offers guidelines for the primary care pediatrician involved in providing neonatal care, and discusses his/her individual and shared responsibilities, roles, and relationships with the neonatologist and the neonatal intensive care unit.

Significant improvements in the successful treatment of high-risk newborns and critically ill neonates have been realized. These improvements have resulted from the rapid development of technology applied to the care of high-risk newborns and the regionalization of centers for the care of the critically ill newborn. These changes necessitate the primary care pediatrician having a better understanding of neonatal problems and the ability to coordinate patient care with the neonatologist. To prevent changes in the financing and delivery of health care services from jeopardizing the provision of vital high-risk newborn services, primary care pediatricians and neonatologists must develop an understanding of their individual and shared responsibilities. In this joint statement, the Committee on Practice and Ambulatory Medicine and the Committee on Fetus and Newborn of the American Academy of Pediatrics (AAP) address these concerns and offer guidelines for the primary care pediatrician involved in providing neonatal care.

Tertiary level centers should be staffed by full-time neonatologists, while secondary level centers may be staffed by part-time neonatologists. The practice of neonatologists at these centers is usually based on referrals. It is the primary care pediatrician who makes the referrals to the neonatologist and who will assume responsibility for the case once critical care is no longer needed. Although the primary care pediatrician usually does not assume principal ongoing responsibility for the infant needing critical care, he or she should demonstrate expertise in several aspects of care of the seriously ill neonate.

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.  
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### GUIDELINE I

In order to make timely decisions, the primary care pediatrician should be knowledgeable regarding problems that may occur in the perinatal period and should be able to accomplish the following:

1. Provide immediate and appropriate resuscitation and stabilization of the newborn infant. A critically ill neonate requires an organized plan of action and immediate availability of personnel and equipment as described in the *Textbook of Neonatal Resuscitation*,<sup>1</sup> published by the AAP and the American Heart Association.
2. Identify high-risk infants and conditions that may require specialized care. Examples include the following:
  - Cardiac disorders that require special diagnostic procedures or surgery
  - Gestational age less than 32 weeks or birth weight less than 1500 g
  - Suspected group B streptococcus infection, sepsis/meningitis, and other serious congenital infections
  - Infants not showing full recovery 6 hours after asphyxia
  - Congenital malformations requiring special diagnostic procedures or surgical care
  - Neonatal seizures
  - Conditions requiring exchange transfusions
  - Persistent or increasing respiratory distress beyond 1 hour of age
  - Infants failing to progress as expected in the neonatal period for any reason

These examples are for use as guidelines only; consideration must be given to individual patient needs and institutional capabilities in implementation of the guidelines.

3. Determine which care option is suitable for a given case:
  - Newborn remaining in the care of the primary care pediatrician within a specialty or regular newborn nursery
  - Transfer of newborn to an intensive care setting
  - Consultation with a neonatologist to determine care options for the newborn
  - Transfer of the care of the newborn to a neonatologist.

## GUIDELINE II

The primary care pediatrician acts as an important communication link between the family and the personnel of the center providing critical care, whether or not they are both located in the same institution. In addition to providing support to the newborn's family, the primary care pediatrician should do the following:

1. The pediatrician should participate in the initial explanations of the medical problem(s) to the parents.
2. The pediatrician should facilitate the initial bonding process between the family and the newborn by arranging visitation time when possible and discussing the newborn's care with the parents.
3. The pediatrician should promote breastfeeding as the best nourishment for the ill or premature infant, and explore any reasons for choosing formula, in the event that this decision was based on misconception.
4. The pediatrician will sometimes serve as the major source of continuing information to parents, especially if the parents and the infant are separated by long distances. There may be instances in which it is desirable for the critical care personnel to communicate to the family primarily through the pediatrician.
5. The pediatrician should participate with the critical care personnel in discussions with the parents when a complicated course or poor outcome is expected.
6. The pediatrician should participate, when appropriate, in counseling the family with the neonatologist in the event the infant dies. When indicated, the pediatrician should arrange for genetic counseling.
7. The pediatrician should develop an awareness of the social, economic, or other factors that may have contributed to the high-risk state and communicate these to critical care personnel. These factors often continue into the period after treatment in the nursery; when appropriate, they should be taken into account in follow-up care.

There will be occasions where the primary care pediatrician will not previously know the family of the newborn or follow the infant after discharge. In such cases, it may be more appropriate to allow the neonatologist to assume some or all of the responsibilities as listed above, and allow the neonatologist to transition care to the family's chosen pediatrician toward the end of the hospitalization.

## GUIDELINE III

The primary care pediatrician should have the expertise to assume responsibility for the acute, though less critical, care of the infant. The convalescing newborn should be returned to the care of the primary care pediatrician, either when transferred back to the referring hospital or at the time of discharge home. The neonatologist and critical care personnel should communicate with the primary care physician to de-

termine the appropriate timing of the return of the infant.

## GUIDELINE IV

The primary care pediatrician should understand the need for proper continuity of care and be capable of providing it through the following measures:

1. Identifying the problems created by the high-risk birth and postnatal disease. These may involve poor growth, pulmonary problems, developmental delays, hearing and vision deficits, risk of child abuse or neglect, behavior disturbances, and learning disabilities, as well as problems relating to initial heightened risk (eg, congenital anomalies). Other problems that may develop include those of family dynamics (eg, divorce) secondary to the stressful situation.
2. Ensuring access to hearing screening and retinal examinations for infants in accordance with AAP guidelines.<sup>2,3</sup>
3. Acting as a medical case manager for newborns who have multiple medical and/or developmental problems as a result of high-risk birth or postnatal disease or, if necessary, assist the family in linking with an appropriate case manager. The primary care pediatrician should be aware and be capable of utilizing community services for both the newborn and the family as the needs arise.
4. Providing feedback to the neonatologist regarding the developmental and medical outcomes of the child.
5. Using, as part of the program of longitudinal care, a systematic schema for the developmental and behavioral assessment of these infants through at least 7 to 10 years of age, as defined in the *Academy's Guidelines for Health Supervision II*.<sup>4</sup>
6. Sharing, when indicated, the responsibility of providing continuity of care with the tertiary or secondary care center. The center will often provide some of the developmental and psychologic evaluations and, perhaps, treatment programs that may not be otherwise available. Accurate and timely records of such services should be made available to the primary care pediatrician.
7. Becoming aware of and capable of dealing with the issues surrounding the "vulnerable child."

## GUIDELINE V

The primary care pediatrician should share responsibility with the neonatologist for the development and delivery of effective services in the hospital and community for newborns at risk through the following means:

1. Sharing, when appropriate, the responsibility for nursing and laboratory services as well as providing the appropriate equipment and facilities for emergency or continuing care of the infant at risk.
2. Participating in health care planning, collaborating with local obstetricians regarding standards of perinatal care, and participating in regular perinatal review conferences in each hospital. These conferences should include review of community

perinatal morbidity and mortality statistics, intensive care outcome data, and identification of areas of unmet need.

3. Participating on committees to develop effective community programs of staff training, infant transport, and public information.
4. Sharing with the neonatologist the responsibility for the education of other physicians and nonphysician health care providers regarding provision of quality health care to high-risk newborns.

The American Academy of Pediatrics therefore recommends that both the resident training and continuing education of the pediatrician continue to include the knowledge and the skills needed to provide appropriate primary and secondary level care for all newborns.

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