



Policy Statement—Hospital Stay for Healthy Term Newborns

COMMITTEE ON FETUS AND NEWBORN

KEY WORDS

newborn, hospital, discharge

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abstract

The hospital stay of the mother and her healthy term newborn infant should be long enough to allow identification of early problems and to ensure that the family is able and prepared to care for the infant at home. The length of stay should also accommodate the unique characteristics of each mother-infant dyad, including the health of the mother, the health and stability of the infant, the ability and confidence of the mother to care for her infant, the adequacy of support systems at home, and access to appropriate follow-up care. Input from the mother and her obstetrician should be considered before a decision to discharge a newborn is made, and all efforts should be made to keep mothers and infants together to promote simultaneous discharge. *Pediatrics* 2010;125:405–409

BACKGROUND

The hospital stay of the mother and her healthy term newborn infant (mother-infant dyad) should be long enough to allow identification of early problems and to ensure that the family is able and prepared to care for the infant at home. Many cardiopulmonary problems related to the transition from an intrauterine to an extrauterine environment usually become apparent during the first 12 hours after birth.¹ However, detection of significant jaundice,² ductal-dependant cardiac lesions,^{3,4} gastrointestinal obstruction,⁵ and other problems may require a longer period of observation by skilled and experienced health care professionals.⁶ The average length of stay of the mother-infant dyad after delivery declined steadily from 1970 until the mid-1990s.⁷ Early newborn discharge was implemented in the 1990s, but in response to the ensuing debate on the care and safety of mothers and their infants, most states and the US Congress enacted legislation that ensured hospital stay for up to 48 hours for a vaginal delivery and up to 96 hours after birth by cesarean delivery. Several subsequent studies have reported that the postpartum-length-of-stay legislation has led to an increase in postpartum length of stay, but the impact of this increase in length of stay on the rate of neonatal readmissions has been inconsistent.^{7–10}

Risk of Readmission

Criteria for newborn discharge include physiologic stability, family preparedness and competence to provide newborn care at home, availability of social support, and access to the health care system and resources. An inadequate assessment by health care providers

in any of these areas before discharge can place an infant at risk and may result in readmission. In several large epidemiologic studies, readmission rates were used to assess the adequacy of the newborn hospital length of stay. In these reports, readmissions after an early discharge varied from no increase to a significant increase.^{7,11–14} However, the differences in the definition of early discharge, postdischarge follow-up and support, and the timing of readmissions make it difficult to compare the results. In some of these studies the risk factors for readmission to identify infants who may benefit from either a longer hospital stay or close postdischarge follow-up were also evaluated. These studies identified jaundice, dehydration, and feeding difficulties as the most common reasons for readmission.^{14,15} Other frequently reported risk factors for readmission were Asian race, primiparity, associated maternal morbidities, shorter gestation or lower birth weight, instrumented vaginal delivery, male gender, and small size for gestational age.^{11,13–16} Close follow-up and better coordination of postdischarge care were important factors in decreasing the readmission rates.^{11,15}

Readiness for Discharge

Readiness for discharge of a healthy term infant is traditionally determined by pediatricians after a review of the mother's and family members' ability to provide care to a newborn infant at home. However, perceptions of readiness or unreadiness at the time of discharge often differ among pediatricians, obstetricians, and mothers.¹⁷ Factors associated with perceptions of unreadiness for newborn discharge include first live birth, maternal history of chronic disease or illness after birth, in-hospital neonatal illness, intent to

breastfeed, mothers with inadequate prenatal care and poor social support, and black non-Hispanic maternal race.^{12,17} Although no specific clinical tool is currently available to evaluate mothers' or families' perception of readiness for discharge after delivery, the American Academy of Pediatrics Safe and Healthy Beginnings toolkit contains a discharge-readiness checklist that can aid clinicians with preparation of a newborn for discharge. This tool was tested by 22 clinical practice teams during the Safe and Healthy Beginnings improvement project and focuses on risk for severe hyperbilirubinemia, breastfeeding support, and coordination of care to improve care for newborns.¹⁸ Nonetheless, all efforts should be made to keep mothers and infants together to promote simultaneous discharge. To accomplish this, a pediatrician's decision to discharge a newborn should be made jointly with input from the mother, her obstetrician, and other health care providers such as nursing staff and social workers who are involved in the care of mother and her infant.

RECOMMENDATIONS

The length of stay of a healthy term newborn should be based on the unique characteristics of each mother-infant dyad, including the health of the mother, the health and stability of the infant, the ability and confidence of the mother to care for her infant, the adequacy of support systems at home, and access to appropriate follow-up care. Input from the mother and her obstetrician and nursing staff should be considered before a decision to discharge a newborn is made, and all efforts should be made to keep mothers and infants together to promote simultaneous discharge. It is recommended that the following minimum criteria be met before discharge of a term newborn, defined as an infant born be-

tween 37 and 41 completed weeks of gestation.

1. Clinical course and physical examination at discharge have not revealed abnormalities that require continued hospitalization.
2. The infant's vital signs are documented as being within normal ranges, with appropriate variations based on physiologic state, and stable for the 12 hours preceding discharge. These ranges include a respiratory rate below 60 per minute and no other signs of respiratory distress, a heart rate of 100 to 160 beats per minute, and axillary temperature of 36.5°C to 37.4°C (97.7–99.3°F) measured properly in an open crib with appropriate clothing.^{19–21}
3. The infant has urinated regularly and passed at least 1 stool spontaneously.
4. The infant has completed at least 2 successful consecutive feedings, with assessment to verify that the infant is able to coordinate sucking, swallowing, and breathing while feeding.
5. There is no significant bleeding at the circumcision site.
6. The clinical risk of development of subsequent hyperbilirubinemia has been assessed, and appropriate management and/or follow-up plans have been instituted as recommended in American Academy of Pediatrics clinical practice guidelines for management of hyperbilirubinemia.²
7. The infant has been adequately evaluated and monitored for sepsis on the basis of maternal risk factors and in accordance with current guidelines for prevention of perinatal group B streptococcal disease.²²
8. Maternal blood test and screening results are available and have been reviewed, including:

- maternal syphilis and hepatitis B surface antigen status; and
 - screening tests, including a test for HIV, performed in accordance with state regulations.
9. Infant blood tests are available and have been reviewed such as cord or infant blood type and direct Coombs test results, as clinically indicated.²
 10. Initial hepatitis B vaccine has been administered according to the current immunization schedule.²³
 11. Newborn metabolic and hearing screenings have been completed per hospital protocol and state regulations.
 12. The mother's knowledge, ability, and confidence to provide adequate care for her infant have been assessed for competency regarding:
 - breastfeeding or bottle feeding (the breastfeeding mother and infant should be assessed by trained staff regarding breastfeeding position, latch-on, and adequacy of swallowing)²⁴;
 - the importance and benefits of breastfeeding for both mother and infant;
 - appropriate urination and defecation frequency for the infant;
 - cord, skin, and genital care, including circumcision care, for the infant;
 - the ability to recognize signs of illness and common infant problems, particularly jaundice; and
 - infant safety (such as use of an appropriate car safety seat, supine positioning for sleeping, maintaining a smoke-free environment, and room sharing).^{24–26}
 13. Family, environmental, and social risk factors have been assessed, and the mother and her other family members have been educated about safe home environment. If risk factors are identified, discharge should be delayed until they are resolved or a plan to safeguard the infant is in place. This plan may involve discussions with social services and/or state agencies such as child protective services. These risk factors include but are not limited to:
 - untreated parental substance abuse or positive urine toxicology results in the mother or newborn;
 - history of child abuse or neglect;
 - mental illness in a parent who is in the home;
 - lack of social support, particularly for single, first-time mothers;
 - mothers who live in a shelter, a rehabilitation home, or on the street;
 - history of domestic violence, particularly during this pregnancy;
 - communicable illness in a parent or other members of the household²⁷; and
 - adolescent mother, particularly if other above-listed conditions apply.
 14. A medical home for continuing medical care for the infant has been identified and a plan for timely communication of pertinent clinical information to the medical home is in place. For newborns discharged less than 48 hours after delivery, an appointment should be made for the infant to be examined by a licensed health care professional, preferably within 48 hours of discharge based on risk factors but no later than 72 hours in most cases.^{10,11,15,28,29} If this cannot be ensured, discharge should be deferred until a mechanism for follow-up evaluation is identified. The follow-up visit can take place in a home or clinic setting as long as the health care professional who examines the infant is competent in newborn assessment and the results of the follow-up visit are reported to the infant's physician or his or her designee on the day of the visit.
 15. Barriers to adequate follow-up care for the newborn, such as lack of transportation to medical care services, lack of easy access to telephone communication, and non-English-speaking parents, have been assessed and, whenever possible, assistance has been given to the family to make suitable arrangements to address them. The purpose of the follow-up visit is to:
 - weigh the infant; assess the infant's general health, hydration, and extent of jaundice; identify any new problems; review feeding pattern and technique; and obtain historical evidence of adequate urination and defecation patterns for the infant;
 - assess quality of mother-infant attachment and details of infant behavior;
 - reinforce maternal or family education in infant care, particularly regarding infant feeding and safety such as breastfeeding, back to sleep, and child safety seats;
 - review the results of outstanding laboratory tests, such as newborn metabolic screens, performed before discharge;
 - perform screening tests in accordance with state regulations

and other tests that are clinically indicated, such as bilirubin measurement;

- verify the plan for health care maintenance, including a method for obtaining emergency services, preventive care and immunizations, periodic evaluations and physical examinations, and necessary screenings; and
- assess for parental well-being including postpartum depression in the mother.

16. Obstetrical care, newborn nursery care, and follow-up care should be considered independent services to be reimbursed as separate packages and not as part of a global fee for maternity-newborn labor and delivery services.

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CONCLUSIONS

Each mother-infant dyad should be evaluated individually to determine the optimal time of discharge. The timing of discharge should be the decision of the physician caring for the infant and based on these guidelines. Local implementation of these guidelines is best accomplished through the collaborative efforts of all parties concerned. Institutions should develop guidelines in collaboration with appropriate community agencies, and third-party payers, to establish hospital-stay and follow-up programs for healthy term infants that implement these recommendations.

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