

### Home Phototherapy Criteria

1. The prior approval request must include submission of a completed Questionnaire for Home Phototherapy.
2. E0202 phototherapy (bilirubin) light with photometer is a daily rental rate.
3. Training and instructions on the proper and safe use of the home phototherapy equipment per the manufacturer's specifications is the responsibility of the provider and is included in the daily rental and is not separately reimbursable.
4. The goal of bilirubin lowering interventions such as phototherapy is a reduction of the risks associated with the neurotoxic effects of bilirubin as reflected in the development of acute bilirubin encephalopathy, kernicterus, and bilirubin-induced neurologic dysfunction.
5. Home phototherapy is ideally suited to treat physiologic jaundice of the newborn in a healthy infant who is feeding well, appears well, and is voiding and stooling normally whose total serum bilirubin (TSB) falls in the optional range to provide conventional phototherapy as delineated in figure 3 of reference #1 for the corresponding gestational age and for the infant's age in hours.

#### Home Phototherapy For Well Infants $\geq 38$ Weeks Without Risk Factors\*

Age (hours)	Total Serum Bilirubin Value (mg/dL)**
24	9-10
48	12-13
72	14.5-15.5
96	17-18
120	18-19

\*\* Initial determination for initiation of phototherapy and does not apply to subsequent days

#### Home Phototherapy For Well Infants $\geq 35$ -37 6/7 Weeks Without Risk Factors\*

Age (hours)	Total Serum Bilirubin Value (mg/dL)**
24	7-8
48	10-11
72	12-13
96	14-15
120	15-16

\*\* Initial determination for initiation of phototherapy and does not apply to subsequent days

6. Home phototherapy is not recommended as initial therapy when:
  - a. TSB value falls above the optional ranges in the above two tables

- b. Jaundice occurs within 24 hours of age and at this age when request is made for home phototherapy
  - c. Infants <35 weeks gestation
  - d. Infants with the following risk factors\*:
    - i. Isoimmune hemolytic disease
    - ii. G6PD deficiency
    - iii. Asphyxia
    - iv. Significant lethargy
    - v. Temperature instability
    - vi. Sepsis
    - vii. Acidosis
    - viii. Albumin <3 g/dL
7. Consideration includes a multi-factorial assessment of risk factors and gestational age in conjunction with serial samples of TSB.
  8. Decisions are not based on end-tidal carbon monoxide concentration corrected for ambient carbon monoxide or transcutaneous bilirubin level.
  9. Daily TSB must be sampled once home phototherapy is instituted.
  10. There is no standard for discontinuing phototherapy. The level at which to discontinue phototherapy depends on the age at which it was started, gestational age, and the contributing factors to and underlying cause of the hyperbilirubinemia. As an example, for infants readmitted for hyperbilirubinemia usually for TSB  $\geq$  18 mg/dL, phototherapy may be discontinued when TSB falls below 13-14 mg/dL .
  11. Phototherapy is contraindicated in the following:
    - a. Congenital porphyria
    - b. Family medical history of porphyria
    - c. Concomitant use of photosensitizing drugs or agents

#### References:

1. American Academy of Pediatrics, Subcommittee on Hyperbilirubinemia. Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. *Pediatrics*. 2004; 114 (1): 297-316
2. American Academy of Pediatrics. Technical Report: Phototherapy to Prevent Severe Neonatal Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. *Pediatrics*. 2011; 128 (4): e1046-e1052
3. Grabenhenrich J, Grabenhenrich L, Bührer C, Berns M. Transcutaneous Bilirubin After Phototherapy in Term and Preterm Infants. *Pediatrics*. 2014; 134 (5): e1324-e1329 abstract
4. Tan KI, Dong F. Transcutaneous Bilirubinometry During and After Phototherapy. *Acta Paediatrica*. 2003; 92 (3): 327-31 abstract
5. Zecca E, Barone G, De Luca D, Marra R, Tiberi E, Romagnoli C. Skin Bilirubin Measurement During Phototherapy in Preterm and Term Newborn Infants. *Early Human Development*. 2009; 85 (8): 537-540 abstract