

# MEDICAL POLICY

<b>SUBJECT: HOME PHOTOTHERAPY FOR HYPERBILIRUBINEMIA</b>	<b>EFFECTIVE DATE: 10/18/01</b> <b>REVISED DATE: 08/15/02, 07/17/03, 05/19/04, 12/16/04, 10/20/05, 12/07/06, 08/23/07, 08/28/08</b> <b>ARCHIVED DATE: 08/27/09</b> <b>EDITED DATE: 08/26/10, 08/25/11, 08/23/12, 08/22/13, 08/28/14, 08/27/15, 08/25/16, 08/25/17, 08/23/18</b>
<b>POLICY NUMBER: 1.01.33</b> <b>CATEGORY: Equipment/Supplies</b>	<b>PAGE: 1 OF: 3</b>
<ul style="list-style-type: none"><li>• <i>If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.</i></li><li>• <i>If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit.</i></li><li>• <i>If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.</i></li></ul>	

## **POLICY STATEMENT:**

Based on our criteria and assessment of peer-reviewed literature, home phototherapy for neonatal jaundice has been medically proven to be effective and therefore, **medically appropriate** and considered a treatment option in lieu of a continued hospitalization or re-admission in carefully selected cases. All of the following selection criteria must be met for home intervention:

- I. Phototherapy should be provided prior to discharge for infants with a total serum bilirubin (TSB) level greater than or equal to 15 mg/dL;
- II. The infant is a healthy, term infant, older than 48 hours whose elevated bilirubin is not due to any primary hepatic disorder;
- III. TSB greater than 12 mg/dL and less than 18 mg/dL; and
- IV. Diagnostic evaluation (normal history and physical exam, normal lab values: CBC with differential, platelets, blood smear for red cell morphology, reticulocyte count, total and direct bilirubin, maternal and infant blood typing and Coombs test and urinalysis, including a test for reducing substances) has been initiated or completed.

## **POLICY GUIDELINES:**

- I. Prior authorization is contract dependent. Please contact the Customer (Provider/Member) Services Department of your local plan to determine contract coverage.
- II. Durable Medical Equipment rider/coverage is required.
- III. Phototherapy should be discontinued when the total serum bilirubin falls below 13 to 14 mg/dL.

The American Academy of Pediatrics (AAP) practice parameter, *Management of Hyperbilirubinemia in the Healthy Term Newborn* and practice guideline, *Management of Hyperbilirubinemia in the Newborn Infant 35 Weeks or More of Gestation* are located at: <http://pediatrics.aappublications.org/content/pediatrics/114/1/297.full.pdf>.

## **DESCRIPTION:**

An elevated bilirubin level may be toxic to the central nervous system causing neurological impairment even in a healthy term newborn. The total serum bilirubin (TSB) concentration level has been used as the relevant criterion for management of hyperbilirubinemia in newborns. Phototherapy changes bilirubin through structural photoisomerization into water-soluble lumirubin that is excreted in the urine. The effectiveness of phototherapy is related to the area of skin exposed, and the radiant energy and wavelength of light. There is no standardized method for delivering phototherapy. Phototherapy units differ widely, as do the types of lamps used in these units. Units can be freestanding or as part of a radiant warming device. Fiberoptic units have been developed that deliver light from a high intensity lamp to a fiberoptic blanket.

Newborn infants who develop hyperbilirubinemia may require therapeutic intervention (e.g., phototherapy) within the first 24 to 72 hours of life during hospitalization. Home phototherapy may be used as an alternative to hospital phototherapy for early discharge or prevention of re-admission in term infants with elevated TSB without the presence of hemolytic disease or any other pathologic process.

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**RATIONALE:**

Peer-reviewed literature has demonstrated that the management of neonatal jaundice (TSB 12-18 mg/dL) with home phototherapy to be a safe, effective method of lowering of TSB and allows for discharge home with the mother for continued bonding. Because devices available for home phototherapy may not provide the same degree of irradiance or surface-area exposure as those available in the hospital, home phototherapy should be used only in infants whose bilirubin levels are in the optional phototherapy range; it is not appropriate for infants with higher bilirubin concentrations.

**CODES:**      Number      Description

*Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*

**CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.**

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

**CPT:**              No specific code

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**HCPCS:**      E0202      Phototherapy (bilirubin) light with photometer  
                      S9098      Home visit, phototherapy services (e.g., Bili-lite), including equipment rental, nursing services, blood draw, supplies, and other services, per diem

**ICD10:**          P59.9          Neonatal jaundiced, unspecified

**REFERENCES:**

Agency for Healthcare Research and Quality. Evidence Report/Technology Assessment. Management of neonatal hyperbilirubinemia. #65 [<http://archive.ahrq.gov/clinic/epcsums/neonatalsum.htm>] accessed 7/24/13.

\*American Academy of Pediatrics. Practice parameter: management of hyperbilirubinemia in the healthy term newborn. Ped 1994 Oct; 94(4):558-65, reaffirmed 2000.

\*American Academy of Pediatrics. Clinical practice guideline. Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Ped 2004 Jul;114(1):297-316.

\*Atkinson LR, et al. Phototherapy: use in jaundiced newborns in a large managed care organization: do clinicians adhere to the guideline? Ped 2003 May;111(5Pt1):e555-61.

\*BlueCross BlueShield Association. Home Phototherapy for Neonatal Jaundice. Medical Policy Reference Manual # 1.01.07. archived 2010 Aug 12.

\*Bratlid D. Criteria for treatment of neonatal jaundice. J Perinatol 2001 Dec;21(Suppl 1):S88-92.

Kaplan M, et al. Post-phototherapy neonatal bilirubin rebound: a potential cause of significant hyperbilirubinemia. Arch Dis Child 2006 Jan;91(1):31-4.

Lazarus C, et al. Neonatal hyperbilirubinemia management: a model for change. J Perinatol 2009 Feb;29 Suppl 1:S58-60.

Maisels MJ. Neonatal jaundice. Pediatr Rev 2006 Dec;27(12):443-54.

Maisels MJ, et al. Phototherapy for neonatal jaundice. NEJM 2008 Feb 28;358(9):920-8.

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Mills JF, et al. Fiberoptic phototherapy for neonatal jaundice. Cochrane Library. Issue 2, 2003 [http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002060/pdf/abstract] accessed 7/24/12.

Newman TB, et al. Outcomes among newborns with total serum bilirubin levels of 25 mg per deciliter or more. NEJM 2006 May 4;354(18):1889-900.

Newman TB, et al. Numbers needed to treat with phototherapy according to American Academy of Pediatric Guidelines. Pediatrics 2009 May;123(5):1352-9.

Romagnoli C, et al. Which phototherapy system is most effective in lowering serum bilirubin in very preterm infants? Fetal Diag Ther 2006;21(2):204-9.

\*Seidman DS, et al. A prospective randomized controlled study of phototherapy using blue and blue-green light-emitting devices, and conventional halogen-quartz phototherapy. J Perinatol 2003 Mar;23(2):123-7.

\* Key article

**KEY WORDS:**

Bililights, Biliblanket, Jaundice, TSB.

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## CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

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Based on our review, home phototherapy for hyperbilirubinemia is not addressed in National or Regional CMS coverage determinations or policies.