MEDICAL POLICY



MEDICAL POLICY DETAILS		
Medical Policy Title	Home Phototherapy for Hyperbilirubinemia	
Policy Number	1.01.33	
Category	Contract Clarification	
Original Effective Date	10/18/01	
Committee Approval	10/18/01, 08/15/02, 07/17/03, 05/19/04, 12/16/04, 10/20/05, 12/07/06, 08/23/07, 08/28/08,	
Date	08/19/21, 08/18/22, 08/17/23	
Current Effective Date	N/A	
Deleted Date	N/A	
Archived Date	08/27/09	
Archive Review 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, 08/27/20, 08/19/21, 08/18/22, 08/17/23	
Product Disclaimer	• If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.	
	• If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit.	
	If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit	
	• If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) 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.	
	• If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.	

POLICY STATEMENT

Based upon our criteria and assessment of the peer-reviewed literature, home phototherapy for neonatal jaundice has been medically proven to be effective and, therefore, is considered a **medically appropriate** 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 coverage of home intervention:

- I. The phototherapy is 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. The infant's TSB is greater than 12 mg/dL and less than 18 mg/dL; and
- IV. Diagnostic evaluation, including 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 coverage under the member's subscriber contract or rider is required.
- III. Phototherapy should be discontinued when the total serum bilirubin falls below 13 to 14 mg/dL.

Medical Policy: HOME PHOTOTHERAPY FOR HYPERBILIRUBINEMIA

Policy Number: 1.01.33

Page: 2 of 3

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: https://publications.aap.org/pediatrics

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. Through structural photoisomerization, phototherapy changes bilirubin 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.

RATIONALE

Peer-reviewed literature has demonstrated that the management of neonatal jaundice (TSB 12-18 mg/dL) with home phototherapy is a safe, effective method of lowering TSB, allowing the newborn to be discharged 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

- 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.
- Code Key: Experimental/Investigational = (E/I), Not medically necessary/appropriate = (NMN).

CPT Codes

Code	Description
No specific code(s)	

Copyright © 2023 American Medical Association, Chicago, IL

HCPCS Codes

Code	Description
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

Medical Policy: HOME PHOTOTHERAPY FOR HYPERBILIRUBINEMIA

Policy Number: 1.01.33

Page: 3 of 3

ICD10 Codes

Code	Description
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 07/07/23.

- *American Academy of Pediatrics. Practice parameter: management of hyperbilirubinemia in the healthy term newborn. <u>Ped</u> 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 2022 Aug; 150(3).
- *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.
- *Bratlid D. Criteria for treatment of neonatal jaundice. <u>J Perinatol</u> 2001 Dec;21(Suppl 1):S88-92.

Chang PW, Waite WM. Evaluation of Home Phototherapy for Neonatal Hyperbilirubinemia. <u>J Pediatr</u> 2020;220:80-85.

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

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

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 07/07/23.

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

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

Noureldein M, et al. Home phototherapy for neonatal jaundice in the UK: a single-centre retrospective service evaluation and parental survey. BMJ Paediatr Open 2021 May 18;5(1):e001027.

Pettersson M, et al. Home phototherapy for hyperbilirubinemia in term neonates-an unblinded multicentre randomized controlled trial. Eur J Pediatr 2021 May;180(5):1603-1610.

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. <u>J Perinatol</u> 2003 Mar;23(2):123-7.

*Key Article

KEY WORDS

Bililights, Biliblanket, Jaundice, TSB.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

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