



Missouri Care

'Ohana Health Plan, a plan offered by WellCare Health Insurance of Arizona

OneCare (Care1st Health Plan Arizona, Inc.)

Staywell of Florida

Children's Medical Services Health Plan (CMS Health Plan)

WellCare (Arkansas, Connecticut, Florida, Georgia, Illinois, Kentucky, Louisiana, Mississippi, Nebraska, New Jersey, New York, South Carolina, Tennessee, Texas)

WellCare Prescription Insurance

Home Phototherapy for Hyperbilirubinemia

Policy Number: HS-127

Original Effective Date: 9/3/2009

Revised Date(s): 9/3/2010; 9/1/2011; 9/6/2012; 9/5/2013; 9/4/2014; 8/6/2015; 1/12/2017; 3/2/2017; 2/1/2018; 2/7/2019

APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

DISCLAIMER

The Clinical Coverage Guideline (CCG) is intended to supplement certain standard WellCare benefit plans and aid in administering benefits. Federal and state law, contract language, etc. take precedence over the CCG (e.g., Centers for Medicare and Medicaid Services [CMS] National Coverage Determinations [NCDs], Local Coverage Determinations [LCDs] or other published documents). The terms of a member's particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member's benefit plan may contain specific exclusions related to the topic addressed in this CCG. Additionally, CCGs relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. Providers are responsible for the treatment and recommendations provided to the member. The application of the CCG is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any. All links are current at time of approval by the Medical Policy Committee (MPC) and are subject to change prior to the annual review date. Lines of business (LOB) are subject to change without notice; current LOBs can be found at www.wellcare.com. All guidelines can be found at this site as well but selecting the Provider tab, then "Tools" and "Clinical Guidelines".

BACKGROUND

Hyperbilirubinemia is the most common condition requiring medical attention in newborns. 50% of term neonates and 80% of preterm neonates develop jaundice in the first week of life. The jaundiced skin and sclera in newborns is the result of accumulation of unconjugated bilirubin. In most infants, unconjugated hyperbilirubinemia reflects a normal transitional phenomenon. However, in some infants, serum bilirubin levels may raise excessively, which can be cause for concern because unconjugated bilirubin is neurotoxic. Therefore, the presence of neonatal jaundice frequently

requires diagnostic evaluation and treatment.¹

Important risk factors for severe hyperbilirubinemia include:⁵

- PredischARGE TSB or TcB measurement in the high-risk or high-intermediate-risk zone
- Lower gestational age
- Exclusive breastfeeding, particularly if nursing is not going well and weight loss is excessive
- Jaundice observed in the first 24 h
- Isoimmune or other hemolytic disease (eg, G6PD deficiency)
- Previous sibling with jaundice
- Cephalohematoma or significant bruising
- East Asian race

Hyperbilirubinemia neurotoxicity risk factors include:⁵

- Isoimmune hemolytic disease
- G6PD deficiency
- Asphyxia
- Sepsis
- Acidosis
- Albumin < 3.0 mg/dL

Additional risk factors for severe hyperbilirubinemia that Providers should consider with the gestational age and the pre-discharge TSB or TcB level:⁵

- Exclusive breastfeeding, particularly if nursing is not going well and/or weight loss is excessive (≥8 – 10%)
- Isoimmune or other hemolytic disease (eg, G6PD deficiency, hereditary spherocytosis)
- Previous sibling with jaundice
- Cephalohematoma or significant bruising
- East Asian race

In the hospital setting, phototherapy is delivered by exposing the infant to fluorescent light. When this type of light source is used, the infant's eyes are protected from the lights with a mask. The infant is positioned in an incubator wearing only a diaper, exposing as much of the infant's skin surface as possible. For those infants with very high bilirubin levels, intensive phototherapy may be used. This type of phototherapy employs two light sources such as fluorescent and fiber optic light.¹

In the home setting, phototherapy is accomplished by using a blanket or a neck ring that emits fiber optic light. This light is directed below the infant's head and is less intense than fluorescent light, therefore masking the infant's eyes is not necessary. The infant can also be fed without interrupting therapy. If the serum bilirubin level is rising in spite of home phototherapy, the infant can be readmitted for intensive phototherapy in the inpatient setting.¹

The United States Preventive Services Task Force states that phototherapy is a common treatment for hyperbilirubinemia and found a lack of evidence pertaining to the harm of such treatment, however, potential effects include "weight loss, gastrointestinal problems, interruption of breastfeeding and disruption of the maternal-infant relationship, and possibly growth of melanocytic nevi."²

Goulet, Fall, D'Amour and Pineault suggests that a linkage between hospital-based and community-based services would reduce the risk of neonatal jaundice complications. Coordination of services improves monitoring of newborns through follow-up care (e.g., home health type services), reduces hospital readmission rates and costs related to such hospitalizations.³

American Academy of Pediatrics Guideline

The 2004 guideline issued by the American Academy of Pediatrics (AAP) defines "intensive phototherapy" as "irradiance in the blue-green spectrum (wavelengths of approximately 430-490 nm) of at least 30 $\mu\text{W}/\text{cm}^2$ per nm (measured at the infant's skin directly below the center of the phototherapy unit) and delivered to as much of the

infant's surface area as possible." The AAP guideline also indicates that readmission for infants receiving home phototherapy is generally due to rising levels of total serum bilirubin (TSB) to 18 mg/dL or higher. Phototherapy is usually discontinued when the serum bilirubin level falls below 13 to 14 mg/dL.⁴

The 2009 update to the AAP guideline noted the following new recommendations, both for the pre-discharge assessment of the risk of subsequent hyperbilirubinemia and for follow-up testing.⁵

- *Recommendation:* Universal pre-discharge bilirubin screening using total serum bilirubin (TSB) or transcutaneous bilirubin (TcB) measurements to help to assess the risk of subsequent severe hyperbilirubinemia.
- *Recommendation:* A more structured approach to the management and follow-up according to the pre-discharge TSB/TcB, gestational age, and other risk factors for hyperbilirubinemia. These recommendations represent a consensus of expert opinion based on the available evidence, and they are supported by several independent reviewers. Their efficacy in preventing kernicterus and cost effectiveness are unknown.

POSITION STATEMENT

Applicable To:

- Medicaid
- Medicaid – Florida (CMS Health Plan - CHIP)

Home phototherapy for hyperbilirubinemia **is considered medically necessary** if the following criteria are met:

- The infant is otherwise ready to be discharged from the hospital; **AND,**
- The infant is eating, voiding and stooling well and is alert; **AND;**
- A primary liver disorder is not the cause of the elevated serum bilirubin, **AND,**
- Total serum bilirubin is less than 20-22 mg/dL in term infants or less than 18 mg/dL in pre-term infants; ⁴ **AND,**
- Follow-up evaluations will be done by the physician or by home nursing visits.

MARKET SPECIFIC CRITERIA

Nebraska

Home phototherapy for hyperbilirubinemia is considered medically necessary if the following criteria are met:

- Infant evaluation by the physician and parent/caregiver training occurs before placement of equipment; **AND,**
- Documentation must be available with the supplier to show,
 - The physician certifies that the infant's condition meets the medical criteria outlined below and that the parent/caregiver is capable of administering home phototherapy; **AND,**
 - The provider certifies that the parent/caregiver has been adequately trained and consent forms used by the provider have been signed; **AND,**
- The infant's medical condition meets the following criteria:
 - Greater than or equal to 37 weeks gestational age and birth weight greater than 2,270 gms (5 lbs); **AND,**
 - Greater than 48 hours of age; **AND,**
 - Bilirubin levels at initiation of phototherapy (greater than 48 hours of age) are 14-18 mgs per deciliter; **AND,**
 - Direct bilirubin level less than 2 mgs per deciliter; **AND,**
 - History and physical assessment (if the service begins immediately upon discharge from the hospital, the newborn discharge exam will suffice); **AND,**

Required laboratory studies to include CBC, blood type on mother and infant, direct Coombs, direct and indirect bilirubin (additional laboratory data may be requested at physician's discretion). At a minimum, one bilirubin level must be obtained daily while the infant is receiving home phototherapy.

CODING

CPT®* Codes – No applicable codes.

Covered HCPCS Level II (DME) ®* Codes

- 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

ICD-10-PCS Codes – No applicable codes.

Covered ICD-10-CM Diagnosis Codes

- P55.0** Rh isoimmunization of newborn
P55.1 ABO isoimmunization of newborn
P55.8 Other hemolytic diseases of newborn
P55.9 Hemolytic disease of newborn, unspecified
P57.0-P57.9 Kernicterus due to isoimmunization (P57.0)
P58.0 - P58.9 Neonatal jaundice due to other excessive hemolysis unspecified (P58.9)
P59.0 - P59.9 Neonatal jaundice from other and unspecified causes (P59)

Coding information is provided for informational purposes only. The inclusion or omission of a CPT, HCPCS, or ICD-10 code does not imply member coverage or provider reimbursement. Consult the member's benefits that are in place at time of service to determine coverage (or non-coverage) as well as applicable federal/ state laws.

REFERENCES

1. Screening of infants for hyperbilirubinemia to prevent chronic bilirubin encephalopathy. United States Preventive Services Task Force Web site. <http://www.uspreventiveservicestaskforce.org/uspstf/uspshyperb.htm>. Published October 2009. Accessed January 30, 2019.
2. Goulet L, Fall A, D'Amour D, Pineault R. Preparation for discharge, maternal satisfaction, and newborn readmission for jaundice: comparing postpartum models of care. *Birth*. 2007;34(2):131-139.
3. Management of neonatal hyperbilirubinemia. Technology Assessment Number 65. Agency for Healthcare Research and Quality Web site. <https://archive.ahrq.gov/clinic/eptsums/neonatalsum.htm>. Published 2002. Accessed January 30, 2019.
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5. Hyperbilirubinemia in the Newborn Infant ≥35 Weeks' Gestation: An Update With Clarifications. *Pediatrics*. 2009;124(4):1193-1198.(doi: 10.1542/peds.2009-0329). <http://pediatrics.aappublications.org/content/124/4/1193>. Accessed January 30, 2019.
6. Comparative Effectiveness of Fiberoptic Phototherapy for Hyperbilirubinemia in Term Infants. Hayes Directory. www.hayesinc.com. Published March 24, 2016 (updated June 12, 2018). Accessed January 30, 2019.
7. Utilization Management and Quality Review Manual Nebraska Medicaid, 2014, Phototherapy equipment (471 NAC 18-004.45A) http://www.nemedicalauth.com/sites/default/files/UM_QM%20reviews%20of%20NE1_1%20-%20review_STATE_Upload.pdf. Accessed January 30, 2019.

MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

Date	Action
2/7/2019, 2/1/2018	<ul style="list-style-type: none"> • Approved by MPC. No changes.
3/2/2017	<ul style="list-style-type: none"> • Added Verbiage specific to Nebraska Medicaid market.
1/12/2017	<ul style="list-style-type: none"> • Approved by MPC. No changes.
8/6/2015	<ul style="list-style-type: none"> • Approved by MPC. Updated ICD-9 and ICD-10 codes only.
9/4/2014	<ul style="list-style-type: none"> • Approved by MPC. Inclusion of AAP2009 recommendations. No changes to coverage.
9/5/2013, 9/6/2012	<ul style="list-style-type: none"> • Approved by MPC. No changes.
12/1/2011	<ul style="list-style-type: none"> • New template design approved by MPC.
9/1/2011	<ul style="list-style-type: none"> • Approved by MPC. No changes.