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.

Home Phototherapy for Hyperbilirubinemia

Policy Number: HS-127

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Clinical Coverage Guideline page 1

DISCLAIMER

The Clinical Coverage Guideline is intended to supplement certain standard WellCare benefit plans. 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 Clinical Coverage Guideline. When a conflict exists between the two documents, the Member’s Benefit Plan always supersedes the information contained in the Clinical Coverage Guideline. Additionally, Clinical Coverage Guidelines relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. 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. Note: The lines of business (LOB) are subject to change without notice; consult www.wellcare.com/Providers/CCGs for list of current LOBs.

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." 

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.

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 µW/cm² 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.

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.

- **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. Nevertheless, their efficacy in preventing kernicterus and their cost effectiveness are unknown.

**POSITION STATEMENT**

**Applicable To:**
- Medicaid

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; **AND,**
- Follow-up evaluations will be done by the physician or by home nursing visits.

**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., Bill-lite), including equipment rental, nursing services, blood
draw, supplies, and other services, per diem

ICD-9-CM Procedure Codes – No applicable codes.

DRAFT ICD-10-PCS Codes – No applicable codes.

Covered ICD-9-CM Diagnosis Codes
773.0 Hemolytic disease due to Rh isoimmunization
773.1 Hemolytic disease due to ABO isoimmunization
773.2 Hemolytic disease due to other and unspecified isoimmunization
773.4 Kernicterus due to isoimmunization
774.0-774.7 Other prenatal jaundice

Covered Draft 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
P58.0 - P58.9 Neonatal jaundice due to other excessive hemolysis
P59.0 - P59.9 Neonatal jaundice from other and unspecified causes


REFERENCES


MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

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<td>8/6/2015</td>
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