Policy Replaced by LCD L33436
Effective February 26, 2018

BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:
Mohs Micrographic Surgery

Policy #: 127
Category: Surgery
Latest Review Date: March 2017
Policy Grade: Replaced by LCD L33436

Background:
Blue Advantage medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:

1. Safe and effective;
2. Not experimental or investigational*;
3. Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:
   • Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient’s condition or to improve the function of a malformed body member;
   • Furnished in a setting appropriate to the patient’s medical needs and condition;
   • Ordered and furnished by qualified personnel;
   • One that meets, but does not exceed, the patient’s medical need; and
   • At least as beneficial as an existing and available medically appropriate alternative.

In accordance with Title XVIII of the Social Security Act, Section 1862(a)(10) cosmetic surgery or expenses incurred in connection with such surgery is not covered except as required for the prompt repair of accidental injury or for improvement of the functioning of a malformed body member.

*Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill Original Medicare for covered services that are related to clinical trials that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).
**Description of Procedure or Service:**
Mohs micrographic surgery (MMS) is a specialized surgical method for the excision of locally invasive, high risk skin cancers in such a way as to conserve maximal amounts of normal tissue while allowing for histological examination of the entire surgical margin to ensure complete removal of the skin cancer. Thin, horizontal layers of cancerous tissue are removed in a staged procedure. Each layer is microscopically examined for tumor invasion by the surgeon. The procedure is repeated until no cancer cells remain. The goal of MMS is complete tumor removal with a maximum preservation of normal tissues. The Mohs surgeon acts as a surgeon and pathologist for this procedure. The procedure is performed as outpatient and using local anesthesia.

**Policy:**
*Effective for dates on and after January 1, 2017 and prior to February 26, 2018:*
Blue Advantage will treat Moh’s micrographic surgery as a covered benefit when one or more of the following conditions are met:
- Performed in anatomic areas with high risk of recurrence of tumor: These areas would include involvement of the face (around the nose, mouth, eyes and central third of the face), external ear and tragus, temple, scalp, mucosal lesions, nail bed and matrix; **OR**
- Performed in areas of important tissue preservation, including the face, ears, hands, feet, and genitalia; **OR**
- Performed for history of recurrent malignant lesions regardless of anatomic site, or had positive margins on previous excision; **OR**
- Performed for history of previous irradiation therapy; **OR**
- Performed for large size lesions (2.0 cm or greater); **OR**
- Performed for rapidly growing lesions in any anatomic region; **OR**
- Performed for tumors that have ill-defined borders; **OR**
- Performed for tumors associated with high risk of metastasis including those arising in the following: Bowen’s disease, discoid lupus erythematosus, chronic osteomyelitis, lichen sclerosus et atrophicus, thermal or radiation injury, chronic sinuses and ulcers, adenoid type
- Performed for any of the following cancer displaying aggressive histologic patterns:
  - Basal cell carcinoma (BCC) Morpheaform (sclerosing)
  - Basosquamous (metatypical or keratinizing)
  - Perineural or perivascular involvement
  - Infiltrating tumors
  - Multi-centric tumors
  - Contiguous tumors (i.e. BCC and squamous cell carcinomas [SCCs])
  - SCCs ranging from undifferentiated to poorly differentiated and SCCs that are adenoid (acantholytic), adenosquamous, desmoplastic, infiltrative, perineural, periadnexal, or perivascular
Effective for dates of service on or after August 29, 2008 and prior to January 1, 2017:
Blue Advantage will treat Moh’s micrographic surgery as a covered benefit when one or more of the following conditions are met:

- Performed in anatomic areas with high risk of recurrence of tumor with ill-defined clinical borders. These areas would include involvement of the face (around the nose, mouth, eyes and central third of the face), external ear and tragus, temple, scalp, mucosal lesions, nail bed and matrix; OR
- Performed in areas of important tissue preservation, including the face, ears, hands, feet, and genitalia; OR
- Performed for history of recurrent malignant lesions regardless of anatomic site, or had positive margins on previous excision; OR
- Performed for history of previous irradiation therapy; OR
- Performed for large size lesions (2.0 cm or greater); OR
- Performed for tumors associated with high risk of metastasis including those arising in the following: Bowen’s disease, discoid lupus erythematosus, chronic osteomyelitis, lichen sclerosus et atrophicus, thermal or radiation injury, chronic sinuses and ulcers, adenoid type

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

Key Points:
According to the American Cancer Society, skin cancer is “by far the most common of all types of cancer.” They also report that the number of skin cancers has been increasing for many years. The most serious form of skin cancer, malignant melanoma, was expected in over 87,000 people in the year 2017.

The National Cancer Institute has listed the standard treatment options for skin cancer to include simple excision, Mohs micrographic surgery, electrodesiccation and curettage, cryosurgery, radiation therapy, topical chemotherapy, photodynamic therapy, and laser surgery. Mohs micrographic surgery has high cure rates with the most preservation of unaffected tissue. This method is complicated and requires special training.

According to the American Academy of Dermatology Association on Guidelines of Care for Mohs Micrographic Surgery, there are multiple well-accepted surgical and non-surgical approaches for the treatment of cutaneous neoplasms and skin cancers. Certain tumors, by virtue of their characteristics, may require a more precise level of treatment. MMS offers high cure rates for malignant skin tumors with maximum preservation of surrounding normal tissue. MMS
is not indicated in the treatment of all skin tumors. Data continue to accumulate supporting the efficacy of narrow surgical margins in the treatment of melanoma. MMS may prove a useful technique for certain types and locations of melanoma. MMS may be used in the treatment of several less common malignancies or tumors. These may have ill-defined clinical margins with subclinical extension that can be identified microscopically. MMS may be used alone or as an integral part of an overall treatment approach.

Mosterd et al published the results of a prospective randomized controlled trial with 5 years follow-up of surgical excision versus Moh’s micrographic surgery for primary and recurrent basal-cell carcinoma of the face. A total of 612 patients were randomly assigned to either surgical excision or MMS. The primary outcome was recurrence of carcinoma diagnosed clinically by visual inspection with histological confirmation. Findings revealed that in the primary basal cell carcinoma (pBCC) 113 were lost to follow-up and there were 11 recurrences identified. Seven occurred in patients with surgical excision and four treated with MMS. In the recurrent basal cell carcinoma (rBCC), 202 were treated, 56 BCCs in 52 patients were lost to follow-up. Two BCCs recurred in two patients treated with MMS and ten BCCs recurred in ten patients. The difference in the number of recurrences between treatments was not significant for pBCC, but significantly favored MMs in rBCC. Treatment of facial rBCC with MMS leads to a significantly lower number of recurrences than treatment with surgical excision. Recurrence after surgical excision for pBCC is shown to be higher than after MMS the difference in this study is not statistically significant. When choosing between two equally effective treatments, other factors such as cost, cosmetic outcome, preference, and practical use should also be considered. The authors concluded that MMS is preferred over surgical excision for the treatment of facial rBCC, on the basis of significantly fewer recurrences after MMS than after surgical excision. However, because there was no significant difference in recurrence of pBCC between treatment groups, treatment with surgical excision is probably sufficient in most cases of pBCC.

In 2014, van Loo et al reported long term results of a randomized controlled trial which compared surgical excision (SE) with Mohs micrographic surgery (MMS) on 612 basal cell carcinomas (408 high risk facial primary BCCs and 204 facial recurrent BCCs). The authors found that for “primary BCC, the 10-year cumulative probabilities of recurrence were 4.4% after Mohs and 12.2% after surgical excision. For recurrent BCC, cumulative 10-year recurrence probabilities were 3.9% and 13.5% for MMS and SE, respectively.”

In 2015, Kika et al reported on the long term outcomes of patients with squamous cell carcinoma of the nail. Mohs technique was performed in 43 cases, and patients were followed for 5 years. Only 2 patients had a recurrence and disarticulation was performed. In these 2 patients, there were no further tumor recurrences in the follow up 4-5 years. The authors conclude that “Mohs surgery provides the highest cure rate for the treatment of nail SCC. It allows the evaluation of periosteal invasion and therefore bone invasion to be reliably distinguished from inflammation or compression. This technique reduces the number of unnecessary amputations, a critical consideration for patient’s quality of life.”

In 2016, Sin et al retrospectively reported on recurrence rates of periocular basal cell carcinoma following Mohs in 480 patients from 2001 - 2006. The follow-up time was 30 months (range 1-120 months). According to the authors, 390 of the 480 patients identified were included. The size
of the majority of BCCs were 6-10mm and nodular. The authors concluded that Mohs should be the treatment of choice for both primary and recurrent periocular BCCs.

**Practice Guidelines and Position Statements**
American Academy of Dermatology, American College of Mohs Surgery, American Society for Dermatologic Surgery, American Society for Mohs Surgery
In 2012, the AAD, ACMS, ASDA and ASMS published appropriate use criteria for Mohs micrographic surgery. This report demonstrates the rating of appropriateness of MMS for 270 different clinical scenarios. Included in the report were aggressive features which are considered high risk for recurrence. For Basal Cell Carcinoma, aggressive features include Morpheaform/fibrosing/sclerosing, infiltrating, perineural, metatypical/keratotic, and micronodular.

**Key Words:**
Mohs Micrographic Surgery, MMS, skin cancer, basal cell carcinoma, squamous cell carcinoma, melanoma, malignant melanoma, chemosurgery, Mohs chemosurgery

**Approved by Governing Bodies:**
Not applicable

**Benefit Application:**
Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

**Current Coding:**

<table>
<thead>
<tr>
<th>CPT codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17311</td>
<td>Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (e.g., hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels; first stage, up to 5 tissue blocks</td>
</tr>
<tr>
<td>17312</td>
<td>Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (e.g., hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels;</td>
</tr>
</tbody>
</table>
each additional stage after the first stage, up to 5 tissue blocks (list separately in addition to code for primary procedure)

17313  Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (e.g., hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; first stage, up to 5 tissue blocks

17314  Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (e.g., hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; each additional stage after the first stage, up to 5 tissue blocks (list separately in addition to code for primary procedure)

17315  Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (e.g., hematoxylin and eosin, toluidine blue), each additional block after the first 5 tissue blocks, any stage (list separately in addition to code for primary procedure)

**Note regarding use of E&M services submitted concurrently with 17311-17315:**
An E&M code with either modifier 25 or 59 would only be submitted if the medical records document that a separate and identifiable E&M service unrelated to the Moh’s procedure was performed during the same session.

**References:**

Policy History:
Adopted for Blue Advantage, June 2008
Available for comment July 15-August 28, 2008
Medical Policy Group, January 2008
Medical Policy Group, June 2009
Medical Policy Group, June 2011
Medical Policy Group, June 2012
Medical Policy Group. March 2017
Available for comment April 4 through May 18, 2017
Medical Policy Group, January 2018

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member’s plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield’s administration of plan contracts.