

Healthcare Operations Utilization Management Protocol

Breast Reduction Surgery

Number
SUR018

HEALTH PLAN OF NEVADA, INC. SM SIERRA HEALTH AND LIFE INSURANCE COMPANY, INC. [®]

For Sierra Health-Care Options products, please review plan documents prior to issuing a determination.

Description	After evaluating relevant benefit document language (exclusions or limitations), refer to Coverage sections of this document to determine coverage.
This policy describes the criteria used to evaluate requests for breast reduction surgery.	

Coverage	All reviewers must first identify member eligibility, any federal or state regulatory requirements and the plan benefit coverage prior to use of this policy.
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Commercial Coverage Rationale

Description:

Macromastia (breast hypertrophy) is an increase in the volume and weight of breast tissue relative to the general body habitus. Breast hypertrophy may adversely affect other body systems, musculoskeletal, respiratory, and integumentary. Macromastia is distinguished from large normal breasts by the presence of persistent, painful symptoms and physical signs. Reduction mammoplasty is performed to reduce the size of the breasts and help ameliorate symptoms caused by hypertrophy.

Covered Indications:

Reduction mammoplasty is considered **medically necessary** when there are signs and/or symptoms resulting from the enlarged breasts (macromastia) that have been present for at least six months and have not responded adequately to non-surgical interventions.

Non-surgical interventions preceding reduction mammoplasty should include, but are not limited to, both of the following interventions as appropriate:

1. Determining the macromastia is not due to an active endocrine or metabolic process; **and/or**
2. Determining that dermatological signs and/or symptoms are refractory to, or recurrent following, a completed course of medical management.

Reduction mammoplasty is **medically necessary** where there is the presence of significantly enlarged breasts and the presence of at least one of the following signs and/or symptoms:

1. Headaches; **and/or**
2. Shoulder pain; **and/or**
3. Upper or lower back pain from macromastia and unrelieved by conservative analgesia, supportive measures (garment, etc.), **and/or** physical therapy; **and/or**
4. Upper or lower back pain from macromastia that has resulted in significant arthritic changes in the cervical or upper thoracic spine, optimally managed with persistent symptoms **and/or** significant restriction of activity; **and/or**

5. Nipple position greater than 21 cm below sternal notch; **and/or**
6. Persistent intertrigo, i.e. redness and erythema, with or without ulceration, below breasts; **and/or**
7. Intertriginous maceration or infection of the inframammary skin refractory to dermatological measures; **and/or**
8. Shoulder grooving with skin irritation or ulceration by supporting garment (bra strap).

Reduction mammoplasty is **medically necessary** when there is the presence of significantly enlarged breasts and if there is a documented failed course of conservative treatment for relevant presenting symptoms. Conservative treatment includes:

1. Physical therapy with a minimum of 4 to 8 visits with physical therapy or chiropractic care; **and/or**
2. A minimum of 2 to 4 months of home exercise in rehabilitation; **and /or**
3. A trial of nonsteroidal anti-inflammatories (NSAIDS); **and/or**
4. Intertrigo treated with topical or oral antifungal agents.

The amount of tissue that must be removed in order to relieve symptoms will vary and depend on the variations in the range of height, weight, and associated breast size that cause symptoms. The following guidelines may be used to address the patient's weight and amount of breast tissue removed:

Patient's Weight	Breast Tissue Removed
95 – 119 lbs	300 grams excised per breast
110 – 130 lbs	400 grams excised per breast
130 + lbs	500 grams excised per breast

Reduction mammoplasty is **not medically necessary** for one or more of the following indications:

1. Cosmetic surgery (defined by the American Society of Plastic Surgeons as surgery to reshape normal structures of the body in order to improve the patient's appearance and self-esteem; **or**
2. Failure to satisfy all required indications; **or**
3. Absence of persistent signs or symptoms as defined (see INDICATIONS).

Medicare and Medicaid Coverage Rationale

Medicare does not have a National Coverage Determination for Breast Reduction Surgery.

Medicare does have a Local Coverage Determination for Nevada for Breast Reduction Surgery.

The Local Coverage Determination is as follows:

Indications and Limitations of Coverage:

According to the American Society of Plastic Surgeons, the specialty of plastic surgery includes reconstructive surgery and cosmetic surgery.

1. Reconstructive Surgery

- a. Reconstructive surgery is performed on abnormal structures of the body caused by congenital defects, developmental abnormalities, trauma, infection, tumors, or disease. It is generally performed to improve function but may also be done to approximate a normal appearance.

2. Cosmetic Surgery

- a. Cosmetic surgery is performed to reshape normal structures of the body to improve the patient's appearance and self-esteem.
- b. Cosmetic surgery performed purely for the purpose of enhancing one's appearance is not eligible for coverage. However, surgery to correct congenital defects, developmental abnormalities, trauma, infections, tumors, or disease may be covered because the surgery is considered reconstructive in nature.
- c. Cosmetic surgery performed to treat psychiatric or emotional problems is not covered.

If a noncovered cosmetic surgery is performed in the same operative period as a covered surgical procedure, benefits will be provided for the covered surgical procedure only.

Benefits are provided for complications arising from cosmetic surgery as long as infection, hemorrhage, or other serious documented medical complication occurs and the beneficiary has been officially discharged from the facility.

Payment will be made for the following procedures when performed for the reasons indicated:

1. Mammoplasty

- 1) Macromastia (breast hypertrophy) is an increase in the volume and weight of breast tissue relative to the general body habitus. Breast hypertrophy may adversely affect other body systems: musculoskeletal, respiratory, integumentary. Unilateral hypertrophy may result in symptoms following contralateral mastectomy.

2. Reduction mammoplasty is performed:

- 1) to reduce the size of the breasts and help ameliorate symptoms caused by the hypertrophy; and
- 2) to reduce the size of a normal breast to bring it into symmetry with a breast reconstructed after cancer surgery; and
- 3) to remove a contralateral breast that is likely to have cancer spread from the diseased breast or to have independently developed breast cancer.

Medicare medical necessity for reduction mammoplasty is limited to circumstances in which:

1. there are signs and/or symptoms resulting from the enlarged breasts (macromastia) that have not responded adequately to non-surgical interventions; **and**
2. to improve symmetry following cancer surgery on one breast.

Cosmetic surgery to reshape the breasts to improve appearance is not a Medicare benefit. Cosmetic signs and/or symptoms would include poorly fitting clothing and beneficiary perception of unacceptable

appearance.

Non-surgical interventions preceding reduction mammoplasty should include as appropriate, but are not limited to, the following:

1. Determining the macromastia is not due to an active endocrine or metabolic process
2. Determining the symptoms are refractory to appropriately fitted supporting garments, or following unilateral mastectomy, persistent with an appropriately fitted prosthesis or reconstruction therapy at the site of the absent breast.
3. Determining that dermatologic signs and/or symptoms are refractory to, or recurrent following, a completed course of medical management.

For Medicare purposes, a reasonable and necessary reduction mammoplasty could be indicated in the presence of significantly enlarged breasts and the presence of at least one of the following signs and/or symptoms:

1. Back pain from macromastia and unrelieved by:
 - 1) Conservative analgesia,
 - 2) Supportive measures (garment, etc.),
 - 3) Physical Therapy,
 - 4) Significant arthritic changes in the cervical or upper thoracic spine, optimally managed with persistent symptoms and/or significant restriction of activity.
2. Intertriginous maceration or infection of the inframammary skin refractory to dermatologic measures.
3. Shoulder grooving with skin irritation by supporting garment (bra strap).

The amount of breast tissue to be removed must be proportional to the body surface area (BSA) per the Schnur scale below:

BSA

- 1.40–1.50 Grams of tissue to be removed per breast 218-260
- 1.51–1.60 Grams of tissue to be removed per breast 261-310
- 1.61–1.70 Grams of tissue to be removed per breast 311-370
- 1.71–1.80 Grams of tissue to be removed per breast 371-441
- 1.81–1.90 Grams of tissue to be removed per breast 442-527
- 1.91–2.00 Grams of tissue to be removed per breast 528-628
- 2.01–2.10 Grams of tissue to be removed per breast 629-750
- 2.11–2.20 Grams of tissue to be removed per breast 751-895
- 2.21–2.30 Grams of tissue to be removed per breast 896-1068
- 2.31–2.40 Grams of tissue to be removed per breast 1069-1275

Medicare coverage of reduction mammoplasty is limited to those circumstances where the medical record supports the following:

1. The signs and/or symptoms have been present for at least six months
2. Medical treatment and/or physical interventions have not adequately alleviated symptoms.

For Medicare and Medicaid Determinations Related to States Outside of Nevada:

Please review Local Coverage Determinations that apply to other states outside of Nevada.

<http://www.cms.hhs.gov/mcd/search>

Important Note: Please also review local carrier Web sites in addition to the Medicare Coverage database on the Centers for Medicare and Medicaid Service's Website.

Research Evidence

Background

Reduction mammoplasty is a frequently requested procedure. Evidence to define clinical criteria for functional breast reduction is weak. Therefore it is difficult to determine when breast reduction surgery is cosmetic.

Heavy breasts change the center of gravity and increase the tension in a woman's neck muscles. Cervical lordosis and thoracic kyphosis may result from abnormally heavy breasts shifting the center of gravity. Patients frequently complain of low back pain from lumbar lordosis compensating for thoracic kyphosis necessary to maintain an upright posture. Hypertrophic breast tissue may also cause breast pain and discomfort.

Neurologic symptoms of the upper extremities have been associated with heavy breasts. Three brachial plexus cords pass between the clavicle and the top of the upper ribs, then under the attachment of the pectoralis minor muscle to the coracoid process of the scapula. As the shoulder is pulled forward by the excessive weight of the breasts, the space for the brachial plexus is narrowed. Patients with large breasts may develop difficulty expanding the chest wall due to resistance from the breasts. Patients with respiratory difficulty may be further impaired by the weight of breasts. Dermatologic symptoms may also result from heavy breasts. Intertrigo may result from prolonged sweating between or beneath the breasts. Excessively heavy breasts may also result in surgical sternal wound dehiscence.

The surgical procedure for breast reduction includes reshaping the breast, gland resection and reposition of the nipple-areolar complex. The procedure is usually done under general anesthesia and may be performed in either an inpatient or outpatient setting.

In the past, the use of liposuction in breast reduction surgery has been mainly used as adjunct, for sculpturing or fine contouring to achieve a better cosmetic result. Some authors reported that they do the liposuction first to make surgery of the gland tissue easier. There are newer reports on ultrasound assisted tumescent liposuction performed as stand alone procedures for breast reduction. Liposuction of the breasts involves a three-stage method. In the first stage, the breasts are filled with a tumescent fluid. In the second stage, a fine micro-cannula is used to suction the fat and fluid in

multiple directions around the breast. In stage three, the micro-cannula is passed right under the epidermis, the upper layer of skin, to enhance the skin retraction. This is known as superficial liposculpture. The use of liposuction as the sole procedure for breast reduction may be considered cosmetic.

Research

There is no published evidence that defines the normal size and position of the female breast. Bolger, et al, and Serletti, et al, classified macromastia as breast reductions requiring removal of 800 gm/breast. To determine motivation for the breast reduction surgery, Schnur and Hoehn, et al, recorded the height, weight, and amount of breast tissue removed from 591 women. The amount of tissue was plotted against body surface area. The surgeons were then asked to indicate which patients had the surgery for symptomatic, cosmetic and combined medical and cosmetic reasons. The surgeons reported that 78% of the patients had surgery for entirely medical reasons and that 17% were performed for combined cosmetic and medical reasons.

A retrospective study of 61 women who underwent reduction mammoplasty self-reported improvement in, or elimination of neck, back, shoulder and breast pain, grooving from brassiere straps, poor posture, skin irritation, and social embarrassment. Symptom relief and improved body image occurred independently of preoperative body weight as there were few differences found between obese and non-obese women concerning the resolution of physical symptoms or improvement in body image.

In a study done by Makki, et al, a patient satisfaction survey was sent to 296 patients who had reduction mammoplasty from January 1987 to December 1996. A response rate of 55.4% (164 patients) was attained. The charts of these patients were reviewed retrospectively. The mean age at the time of surgery was 29.7 years and the mean preoperative weight was 166.9 lbs. (75.9 kg.). Seventy-eight respondents listed the relief of physical symptoms of large breasts as their primary reason for the surgery. An average of 1,037 grams of tissue was resected per breast. Ninety-one percent of subjects realized improvement of symptoms and 65% were asymptomatic.

Bruhman and Tschopp conducted a retrospective study of 114 women, evaluating long-term effects of reduction mammoplasties. Average tissue reduction was 1,266 grams and average follow-up interval was 7.7 years. Ninety-one percent of the patients noticed a decrease in shoulder, neck and back pain, and lessening of brassiere shoulder grooves. Nine percent noticed no change at all, and only one patient complained of increased breast pain postoperatively. The authors found a significant correlation between the amount of tissue resected and pain relief after surgery. No correlation was found for either weight gain or follow-up time and regaining of physical complaints.

In a meta-analysis of 29 published studies done by Chadbourne et al, reduction mammoplasty was associated with a statistically significant improvement in physical signs and symptoms. Although there is no conclusion as to the volume of tissue removed which would improve the physical signs and symptoms associated with the macromastia. The mean total removed from bilateral breasts was 1429.4 gm with a range of 100 to 8132 gms.

Sigurdson et al., (2007) stated that breast hypertrophy is a common condition that can be associated with significant morbidity. Symptoms emphasized in the literature include physical problems such as pain, intertrigo, and exercise restrictions. The purpose of this study was to explore the suffering experienced by women with breast hypertrophy and to evaluate the importance of different symptoms. Twenty-one women with breast hypertrophy were divided into five focus groups guided by a facilitator. Open discussion was encouraged to generate a comprehensive list of symptoms experienced by women with breast hypertrophy. Subjects then completed an iterative process to determine the relative importance of each symptom. Conversations were recorded, transcribed, and analyzed using Nvivo software. A weighted list of 45 dominant symptoms was created from an initial pool of 128. Physical pain symptoms predominated in the older age group, whereas younger women expressed more psychological symptoms. Difficulties experienced by these women transcended all aspects of their lives. Back, neck, and shoulder pain were considered most troublesome, followed by exercise difficulties, poor posture, and low self-esteem. This study provides insight into the burden of breast hypertrophy and has implications for the objective assessment of this condition in the clinical setting. 9 Sigurdson et al., 2007)

A study by Findikcioglu et al., (2007) found that macromastia usually is associated with the physical and psychological symptoms reported comprehensively by many studies. Reduction mammoplasty seems to be the most reasonable solution for these symptoms, and many articles have reported improvement of these complaints after surgery. Some authors have postulated that the anatomic mechanisms of postural aberrations are heavy breasts and related pain symptoms. However, limited numbers of studies have tried to explain the effect of the heavy breasts on the vertebral column. This study enrolled 100 females in four groups according to their breast cup sizes (groups A, B, C, D). All four groups were compared with each other statistically using one-way analysis of variance (ANOVA) followed by a post hoc test according to the body mass index (BMI) as well as the thoracic kyphosis, lumbar lordosis, and sacral inclination angles. The BMI was significantly higher in the D cup-sized breast group. There was a statistically significant difference between groups A and D in terms of the thoracic kyphosis and the lumbar lordosis angles, and between groups B and D in terms of the lumbar lordosis angle. No statistically significant difference was detected between the groups in terms of the sacral inclination angle. Breast size seems to be an important factor that affects posture, especially the thoracic kyphosis and lumbar lordosis angles. (Findikcioglu et al., 2007)

Professional Society

American Society of Plastic Surgeons (ASPS): Recommended Insurance Coverage Criteria for Third-Party Payers-Reduction Mammoplasty (2002)

According to the 2002 position paper by the American Society of Plastic Surgeons, coverage for breast reduction surgery should be based on the documentation of symptoms of macromastia, independent of body weight or amount of breast tissue removed.

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History/Update Approval

03/20/2008
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Corporate Medical Affairs Committee

Coding

The Current Procedural Terminology (CPT) codes and HCPCS codes listed in this policy are for reference purposes only. Listing of a service code in this policy does not imply that the service described by this code is a covered or non-covered health service. Coverage is determined by the benefit document.

CPT codes:

15877	Suction assisted lipectomy; trunk
19316	Mastopexy
19318	Reduction mammoplasty
19499	Unlisted procedure, breast

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