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Clinical UM Guideline

Subject:	Redduction Mammaplasty		
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Description

This document addresses reduction mammaplasty (plastic surgery of the breast intended to reduce volume by excision of tissue and often to improve shape and position), and does not apply to reconstructive procedures performed after surgery for breast cancer or other clinical indications, including removal of implants.

Note: For information related to mastectomy for gynecomastia and other breast procedures including reconstructive surgery and implants, refer to:

- SURG.00023 Breast Procedures; including Reconstructive Surgery, Implants and Other Breast Procedures
- CG-SURG-88 Mastectomy for Gynecomastia

Note: For information related to the use of liposuction for non-breast reduction surgery-related indications, refer to:

- ANC.00009 Cosmetic and Reconstructive Services of the Trunk and Groin

Note: For information related to the use of mammoplasty in gender reassignment surgery, refer to:

- CG-SURG-27 Gender Reassignment Surgery

Medically Necessary: In this document, procedures are considered medically necessary if there is a significant ~~physical~~ functional impairment, AND the procedure can be reasonably expected to improve the ~~physical~~ functional impairment.

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Cosmetic: In this document, procedures are considered cosmetic when intended to change a physical appearance that would be considered within normal human anatomic variation. Cosmetic services are often described as those that are primarily intended to preserve or improve appearance.

Clinical Indications

Medically Necessary:

Reduction mammaplasty is considered **medically necessary** when either of the following criteria (I or II) are met:

I. Individuals meeting BOTH of the following criteria (A and B):

A. Presence of one or more of the following ~~that has persisted for at least 1 year~~:
   1. A cervical or thoracic pain syndrome (upper back and shoulder pain), in which interference with daily activities or work has been documented. The pain is not associated with other diagnoses (that is, arthritis, multiple sclerosis, cervical spine disease, etc. have been adequately ruled-out by means of diagnostics, as applicable), and there has been at least 3 months of adequate conservative treatment with one or more of the following: special support garments (for example, special support bras, bras with wide straps), NSAIDs, physical therapy, or similar modalities; **or**
   2. Submammary intertrigo that is refractory to conventional medications and measures used to treat intertrigo, or shoulder grooving with ulceration unresponsive to conventional therapy; **or**
   3. Thoracic outlet syndrome (to include ulnar paresthesias from breast size) that has not responded to at least 3 months of adequate conservative treatment.

and

B. The preoperative evaluation by the surgeon concludes that an appropriate amount of breast tissue, from at least one breast, will be removed, based upon body surface area or total mass to be removed and that there is a reasonable prognosis of symptomatic relief. The request for surgery must include: the individual's height and weight; the size and shape of the breast(s) causing symptoms; the anticipated amount of breast tissue to be removed. Pictures may be requested to document medical necessity.

Note: Medical records from the primary care physician and other providers (for example, physiatrist, orthopedic surgeon, etc.) who have diagnosed or treated the symptoms prompting this request may also be required.

The appropriate amounts (in grams) of breast tissue must be anticipated for removal from at least one breast, which is based on the individual's total body surface area (BSA) in meters squared. **See Appendix** for a table relating BSA values to the minimum amount (weight) of breast tissue to be removed per breast.

To calculate body surface area see: http://www.medcalc.com/body.html.

or

II. Individuals, regardless of BSA, who are anticipated to have at least 1 kg. of breast tissue removed from each breast and who meet the following criteria:

A. Presence of one or more of the following ~~that has persisted for at least 1 year~~:
   1. A cervical or thoracic pain syndrome (upper back and shoulder pain), in which interference with daily activities or work has been documented. The pain is not associated with other diagnoses (that is, arthritis, multiple sclerosis, cervical spine disease, etc. have been adequately ruled-out by means of diagnostics, as applicable), and there has been at least 3 months of adequate conservative treatment with one or more of the following: special support garments (for example, special support bras, bras with wide straps), NSAIDs, physical therapy, or similar modalities; **or**
   2. Submammary intertrigo that is refractory to conventional medications and measures used to treat intertrigo, or shoulder grooving with ulceration unresponsive to conventional therapy; **or**
   3. Thoracic outlet syndrome (to include ulnar paresthesias from breast size) that has not responded to at least 3 months of adequate conservative treatment.

Not Medically Necessary:

Breast reduction surgery is considered **not medically necessary** when the criteria above are not met.

The use of liposuction to perform breast reduction is considered **not medically necessary.**

Cosmetic and Not Medically Necessary:

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Breast reduction surgery is considered **cosmetic and not medically necessary** for the following conditions: poor posture, breast asymmetry, pendulousness, problems with clothes fitting properly and nipple-areola distortion or psychological considerations.

Coding

The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services may be Medically Necessary when criteria are met:

CPT

19318	Breast reduction

ICD-10 Procedure

	For the following, when specified as breast reduction:
0HBT0ZZ	Excision of right breast, open approach
0HBU0ZZ	Excision of left breast, open approach
0HBV0ZZ	Excision of bilateral breast, open approach
0H0T0ZZ	Alteration of right breast, open approach
0H0U0ZZ	Alteration of left breast, open approach
0H0V0ZZ	Alteration of bilateral breast, open approach
0J060ZZ	Alteration of chest subcutaneous tissue and fascia, open approach

ICD-10 Diagnosis

G54.0	Brachial plexus lesions (thoracic outlet syndrome)
L30.4	Erythema intertrigo
M54.2	Cervicalgia

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M54.6	Pain in thoracic spine
N62	Hypertrophy of breast
N64.81	Ptosis of breast

When services are Not Medically Necessary:
For the procedure and diagnosis codes listed above when criteria are not met, and for the following procedure and diagnosis codes

CPT

15877	Suction assisted lipectomy; trunk [when used to report breast reduction performed by liposuction method]

ICD-10 Procedure

0J063ZZ	Alteration of chest subcutaneous tissue and fascia, percutaneous approach
0JD60ZZ	Extraction of chest subcutaneous tissue and fascia, open approach
0JD63ZZ	Extraction of chest subcutaneous tissue and fascia, percutaneous approach

ICD-10 Diagnosis

N62	Hypertrophy of breast
N64.81	Ptosis of breast
N65.1	Disproportion of reconstructed breast

When services are Cosmetic and Not Medically Necessary:
For the procedure codes listed above for situations designated in the Clinical Indications section as cosmetic and not medically necessary.

Discussion/General Information

The most common method of breast reduction involves the surgical removal of skin, fat and breast tissue. The procedure is designed to reconstruct the breast with an aesthetically acceptable appearance while reducing the

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breast mass. Another proposed method of mammaplasty involves the suction of fatty tissue from the breast (liposuction). Any major surgical treatment has significant risks including the risks of general anesthesia, infection, and bleeding. In the event the individual develops symptoms of postoperative complications, such as elevated temperature, significant wound inflammation/increased drainage, inability to tolerate oral fluids or diet, or increased pain, continued inpatient stay protocols would be implemented that are consistent with medical review guidelines.

In some cases, excess breast mass and weight is believed to lead to medical problems such as submammary intertrigo, an inflammatory condition affecting the skin directly underneath the breast. Symptoms of intertrigo include redness, burning, itching, skin disintegration and cracking, and secondary infections. Another possible medical problem is thoracic outlet syndrome, which can lead to pain and loss of feeling in the arms or hands. In many instances, extremely large breasts (for example, macromastia or breast hypertrophy) have been associated with the development of back, neck and shoulder pain. Obviously, such symptoms have a significant negative impact on quality of life and may limit physical functioning. Removal of excess breast tissue results in a decrease in breast mass and weight, which should theoretically relieve the symptoms. In the absence of such symptoms, breast reduction has been used as a technique to enhance the appearance of the breast for cosmetic purposes.

When symptoms exist and cannot be alleviated by conservative methods (examples include pain medication, physical therapy, and skin ointments or powders), surgical intervention to reduce the size of the breasts may be indicated. In such cases, scientific studies have shown that a significant amount of breast tissue must be removed in order to alleviate physical symptoms. Debate has occurred surrounding what should be considered an adequate amount of breast tissue to be removed to achieve adequate symptomatic relief. The medical literature supports an approach based upon the measurement of body surface area such as the Schnur scale. Keeping with accepted medical opinion and medical evidence, the use of the Schnur scale ensures that an adequate amount of breast tissue be removed in order to maximize the probability of symptomatic relief. Additionally, specialty consensus opinion agrees that breasts are considered paired organs, and it is not possible to definitively relate symptoms to one breast or the other. Therefore, bilateral breast reduction mammaplasty may be considered appropriate if the amount of breast tissue anticipated for removal from at least one breast meets the minimum amount (weight) per the Schnur scale and all other criteria are met.

Schnur and colleagues (1991) reported the results of two surveys sent to 220 randomly selected, board certified plastic surgeons who performed reduction mammaplasties. A total of 92 plastic surgeons returned survey data of 600 women on whom reduction mammaplasty had been performed. Data obtained from the first survey included the height and weight of the individual, as well as the amount of breast tissue removed from each breast. The second survey resulted in an estimate of percentages of women who sought a reduction mammaplasty for purely cosmetic reasons, for purely medical reasons, and for mixed reasons. Based on the results obtained, the authors concluded that if the removed breast tissue weight was greater than the 22nd percentile, a woman's motivation for the surgery was medical, and if the removed breast tissue weight was less than the 5th percentile, the procedure was sought for cosmetic reasons. Those women whose removed breast tissue weight was between the 5th and the 22nd percentile reportedly had mixed reasons for requesting the procedure. In a subsequent outcome study, based on questionnaire responses from women who had undergone reduction mammaplasty, Schnur and colleagues (1997) reported that in properly selected individuals, reduction mammaplasty is a safe and effective procedure for relieving or improving symptoms related to symptomatic macromastia.

Chadbourne and colleagues (2001) conducted a systematic review and meta-analysis on 29 studies and 4173 individuals. A review of the literature was performed from 1985 until March 1999. Eligible studies were experimental and observational. The studies involved females with preoperative physical or psychosocial signs and symptoms who underwent reduction mammaplasty for breast hypertrophy. Outcomes assessed included postoperative signs and symptoms such as shoulder pain, shoulder (bra strap) grooving, and quality of life domains. Statistically significant improvement of signs and symptoms was seen between preoperative and postoperative periods. Limitations of the review include recall bias, a high proportion of individuals (25%) without follow-up results, and arbitrary outcome formats. Key limitations of this publication are the inherent limitations of "meta-analysis" for evaluating studies which are not randomized controlled trials, and that this study was not designed to determine a threshold for weight of tissue to be removed to produce symptom relief.

Collins and colleagues (2002) conducted a prospective, controlled study designed to evaluate the efficacy of breast reduction in alleviating symptoms of macromastia by comparing baseline and postoperative health status. Standard outcome instruments were utilized in the study and consisted of the SF-36, the EuroQol, the Multidimensional Body-Self Relations Questionnaire (MBSRQ), and the McGill Pain Questionnaire (MPQ). The study involved 179 subjects with matched preoperative and postoperative data sets, 96 controls, and 88 hypertrophy controls. The

women were mainly Caucasian, middle-aged, well-educated, and employed. Data from completed questionnaires were gathered preoperatively and at approximately 6 to 9 months post-surgery. Outcomes demonstrated that subjects preoperatively had lower scores ($p<0.05$) in all health domains of the SF-36 and in the mental and physical component summary scores. After surgery, the same group of subjects measured higher than national norms in seven of eight health domains. Preoperative pain scores measured with a Pain Rating Index (PRI) score from the MPQ were reported to be 26.6, and after surgery pain was stated to be lower with a score of 11.7. Study limitations included a lack of randomization and the possibility that women may have overstated their symptoms or lack of effectiveness of nonsurgical treatments. Also, the study was not designed to determine a threshold for weight of tissue to be removed to produce symptom relief, and there was no comparison of resection weight and extent of symptom relief.

Cunningham and colleagues (2005) analyzed complication data from the Breast Reduction Assessment: Value and Outcomes (BRAVO) study by Collins and colleagues (2002). Study data from 179 subjects post breast reduction surgery were analyzed, and results demonstrated an overall complication rate of 43% (77 individuals). The most common complication was delayed wound healing. Other complications included splitting sutures, hematoma, nipple necrosis, hypertrophic scars, fat necrosis, seroma, and infection. The authors noted that average preoperative breast volume, a vertical incision, and preoperative shoulder grooving were associated with an increased incidence of complications while age, smoking status, body mass index, weight of breast tissue resected, pedicle type, keyhole incision, free nipple grafting, operative time, use of epinephrine, drains, and liposuction were not associated with an increased incidence of complications. The major weaknesses of the study included the small sample size, possible inconsistencies in defining and reporting complications, and the introduction of a new technique (vertical scar) during the study period.

Saariniemi and colleagues (2008) reported on a study assessing quality of life and pain in 82 women randomized to either reduction mammaplasty or a nonoperative group. Evaluations were performed at the onset of the study and 6 months later. The authors reported the mammaplasty group had significant improvements in quality of life as measured by the physical summary score of the Short Form (SF)-36 quality-of-life questionnaire (change of + 9.7 vs. + 0.7, $p<0.0001$), the utility index score (SF-6D) (+ 17.5 vs. + 0.6), the index score of quality of life (SF-15D) (+ 8.6 vs. + 0.06, $p<0.0001$), and the SF-36 mental summary score (+ 7.8 vs. – 1.0, $p<0.002$). There were also improvements in breast-related symptoms as measured by the Finnish Breast-Associated Symptoms questionnaire

score (– 7.9 vs. – 3.5, p<0.0001) and the Finnish Pain Questionnaire score (– 21.5 vs. – 1.0, p<0.0001). This study was limited by a small sample size and lack of long-term follow-up.

Gonzalez and colleagues (2012) reported on 178 women who had breast reduction surgery primarily for symptomatic macromastia. The Breast Q questionnaire was completed once after surgery, and retrospective chart reviews were also completed to assess individual outcomes and determine whether any correlation exists between outcomes and size or amount of breast tissue removed. Most of the women responded to the surgery satisfactorily with a mean response on the Breast Q questionnaire of 2.8 (2, somewhat agree; 3, definitely agree). The mean body mass index (BMI) reported was 28.3 kg/m and correlated significantly with the amount of breast tissue removed (p<0.0001). The mean combined total amount of breast tissue removed was 1221 g but did not correlate significantly with quality-of-life responses (p=0.57).

Gust and colleagues (2013) performed a retrospective analysis of all reduction mammaplasties recorded in the National Surgical Quality Improvement Program database for 2006-2010. Complication rates across multiple institutions were stratified by BMI. In addition, data on demographics, comorbidities, medical and surgical complications, reoperation, and mortality were collected through 30 days post-surgery. Of 2492 women included in the study, 55% were considered obese (BMI > 30). The overall surgical complication rate was 4.0%, increasing from 2.4% for BMI < 25 to 7.1% for BMI > 45 (p=0.006), with an adjusted odds ratio of 2.97 for BMI > 45 versus BMI < 25. The most common surgical complication was superficial surgical site infection found in 2.9% of the women. Superficial surgical site infection increased from 2.1% for BMI < 25 to 5.1% for BMI > 45 (p=0.03). The medical complication rate was 0.6%, and the reoperation rate was 2.1%. There were no deaths reported. Analysis showed that BMI ≥ 39 was associated with a significantly higher complication rate, with an odds ratio of 2.38. The authors concluded that reduction mammaplasty is a safe surgical procedure, even when performed on those with a high BMI. However, those with higher BMI have a greater risk of surgical site complications, and the risk should be discussed preoperatively with obese individuals.

In 2015, Strong and Hall-Findlay reported results of a custom-designed questionnaire given to women at routine follow-up appointments, asking them to rate their preoperative and postoperative symptoms related to macromastia. All subjects had a reduction mammaplasty performed by the senior author of this paper, and the same surgical technique was used for all. Of an initial 661 eligible subjects, a total of 410 remained in the study after excluding

questionnaires that were incomplete, had answers provided in an incorrect format, or were returned too early. A Schnur sliding scale percentile had been calculated for all participants. The subjects/questionnaires were divided into six groups based on the amount of tissue resected per breast. Information received was examined for a trend that would link a higher amount of tissue resected to a greater change in symptoms. Only subjects who had reported the particular symptom prior to surgery were included in this analysis. There was no statistically significant trend across the groups related to breast pain, shoulder grooves, rashes under the breast, headache, exercise intolerance, or lack of self-esteem. Statistically significant results were reported for symptoms related to back pain, neck pain and poor posture suggesting a potential relationship between greater amounts of tissue resected and increased symptom improvement. However, after post hoc tests were performed, there was no statistically significant difference reported between the groups for these three symptoms. The authors concluded their study demonstrated that for reduction mammaplasty "patients can experience significant symptomatic relief even when less than 250 g of tissue is resected from each breast." There were significant limitations of this study including the retrospective nature that relied on "patient recollection of preoperative symptoms" and the dependence upon one specific surgeon's techniques.

Manahan and colleagues (2015) conducted a large, retrospective review of consecutive breast reduction procedures performed at a single institution. Medical records were assessed for demographics, medical history, physical examination, intraoperative data, and postoperative complications. Seventeen surgeons performed 2152 consecutive breast reductions on 1148 subjects using a variety of common breast reduction techniques. Average age was 36 years, average follow-up was 6.3 months, and average BMI was 33.5 kg/m^2. Complications included scars (14.5%), nonsurgical wounds (13.5%), fat necrosis (8.2%), infection (7.3%), wounds requiring negative pressure wound therapy or reoperation (1.4%), and seroma (1.2%). A body mass index (BMI) greater than or equal to 35 kg/m increased risk of infections, seromas, fat necrosis, and minor wounds. Cardiac disease increased risk for reoperation for scars and fat necrosis. Tobacco use and age over 50 years increased the infection risk. Secondary surgery increased rates of seromas. Previous hysterectomy/oophorectomy increased risk of wound reoperations and exogenous hormone supplementation trended toward decreasing infections. The authors concluded that a number of risks were predictors of complications after reduction mammaplasty. Also, they highlighted a need for "large studies with rigorous statistical methods."

Kraut and colleagues (2017) performed a systematic review of observational studies to determine the impact of reduction mammaplasty on the ability to breastfeed. The researchers reviewed 51 studies that included 31 different reduction surgery techniques. They found a pattern in which the breastfeeding success average was higher depending upon the preservation of the column of subareolar parenchyma: no preservation 4% (interquartile range [IQR] 0-38%), partial preservation 75% (IQR 37-100%), and full preservation 100% (IQR 75-100%). The researchers concluded that the surgical technique is an important consideration for women of childbearing age who plan to breastfeed and should be discussed prior to surgery. Limitations of the review included the high risk of bias and incomplete reporting in some of the studies. The researchers noted that further studies are needed to confirm the findings.

In a systematic review and meta-analysis, Myung and colleagues (2017) evaluated the relationship between obesity and surgery complications after reduction mammaplasty. Surgical complications that were analyzed included infection, delayed wound healing, wound dehiscence, hematoma, seroma, and tissue necrosis. A total of 26 studies, mostly retrospective, were included in the review. The researchers compared obese (n=3752) and non-obese (n=3152) subjects and found that surgical complications were collectively higher in the obese group (relative risk [RR] 1.45; 95% CI, 1.21 to 1.75), with skin and fat necrosis especially prevalent (RR 2.01; 95% CI, 1.54 to 2.63). In addition, the researchers found that the risk of surgical complications gradually increases with the severity of obesity. They concluded that obesity risk is not high when compared to other types of surgeries, but "every surgeon should consider the risks and benefits of reduction mammaplasty carefully during patient selection and should appropriately plan the surgery."

In a prospective, longitudinal study, Nuzzi and colleagues (2017) evaluated the effects of reduction mammaplasty on the quality of life in adolescents with macromastia. The researchers compared adolescents who had reduction mammaplasty (n=102) with a healthy control group that had no history of breast complaints (n=84). The criteria for the mammaplasty group included female individuals ages 12-21 with symptomatic bilateral macromastia and no previous history of breast surgery. Macromastia was evaluated using a symptom profile, physical exam, and modified Schnur criteria. Participants completed four self-administered validated surveys: the Short-Form 36v2 (SF-36), the Rosenberg Self-Esteem Scale (RSES), the Breast-Related Symptoms Questionnaire (BRSQ), and the Eating Attitudes Test-26 (EAT-26). The surveys were completed at baseline, 6 months, 1 year, 3 years, and 5 years. After surgery, the mammaplasty group had significant score improvements in several domains, including physical

functioning, role-physical, bodily pain, vitality, social functioning, role-emotional, and mental health (p<.001). At 6 months, the mammaplasty group scored similarly to or better than the control group on the surveys, and the benefits continued at the 5 year follow-up. The researchers found that age and weight did not significantly affect the results. The researchers concluded that "reduction mammaplasty significantly improves the breast-related symptoms and self-reported physical and psychosocial wellbeing of adolescent patients with macromastia."

The American Society of Plastic Surgeons (ASPS) (2011a; 2011b) issued a document on criteria for third-party payers and a companion practice guideline for reduction mammaplasty. In 2012 Kallianen reviewed the ASPS guidelines and affirmed their recommendations. The ASPS indicates level I evidence has shown reduction mammaplasty is effective in treating symptomatic breast hypertrophy which is defined as the following:

> Syndrome of persistent neck and shoulder pain, painful shoulder grooving from brassiere straps, chronic intertriginous rash of the inframammary fold, and frequent episodes of headache, backache, and neuropathies caused by heavy breasts caused by an increase in the volume and weight of breast tissue beyond normal proportions.

The ASPS also indicates volume or weight of breast tissue resection should not be criteria for reduction mammaplasty. If two or more symptoms are present all or most of the time, reduction mammaplasty is appropriate. Their position is largely based on observational studies which lack randomized control groups and have a potential for selection bias.

The use of liposuction, as the primary tool or as an adjunct for reduction mammaplasty, has not been demonstrated to improve health outcomes in the medical literature. While there have been case series reported (Habbema, 2009; Sadove, 2005), a clinical trial comparing the use of liposuction to standard surgical reduction mammaplasty has not been conducted, and the procedure has not been accepted as a standard of care.

Definitions

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Intertrigo: A skin condition that occurs in locations where two opposing skin surfaces meet, such as beneath pendulous breasts. Redness, burning, itching, infections, and occasionally skin disintegration and cracking characterize this condition.

Thoracic outlet syndrome: A condition resulting from constant pressure on the area between the neck and shoulder where many nerves and blood vessels are located. Symptoms may include pain, weakness, or numbness in the arm on the affected side.

References

Peer Reviewed Publications:

1. Bruhlmann Y, Tschopp H. Breast reduction improves symptoms of macromastia and has long-lasting effect. Ann Plastic Surg. 1998; 41(3):240-245.
2. Chadbourne EB, Zhang S, Gordon MJ, et al. Clinical outcomes in reduction mammaplasty: a systemic review and meta-analysis of published studies. Mayo Clin Proc. 2001; 76(5):503-510.
3. Chao JD, Memmel HC, Redding JF, et al. Reduction mammaplasty is a functional operation, improving quality of life in symptomatic women: a prospective, single-center breast reduction outcome study. Plast Reconstr Surg. 2002; 110(7):1644-1652.
4. Collins ED, Kerrigan CL, Kim M, et al. The effectiveness of surgical and nonsurgical interventions in relieving the symptoms of macromastia. Plast Reconstr Surg. 2002; 109(5):1556-1566.
5. Cunningham BL, Gear AJ, Kerrigan CL, Collins ED. Analysis of breast reduction complications derived from the BRAVO study. Plast Reconstr Surg. 2005; 115(6):1597-1604.
6. Dabbah A, Lehman JA Jr, Parker MG, et al. Reduction mammaplasty: an outcome analysis. Ann Plast Surg. 1995; 35(4):337-341.
7. Davis GM, Ringler SL, Short K, et al. Reduction mammaplasty: long-term efficacy, morbidity, and patient satisfaction. Plast Reconstr Surg. 1995; 96(5):1106-1110.
8. Di Giuseppe A. Breast reduction with ultrasound-assisted lipectomy. Plast Reconstr Surg. 2003; 112(1):71-82.
9. Glatt BS, Sarwer DB, O'Hara DE, et al. A retrospective study of changes in physical symptoms and body image after reduction mammaplasty. Plast Reconstr Surg. 1999; 103(1):76-82.

10. Gonzalez F, Walton RL, Shafer B, et al. Reduction mammaplasty improves symptoms of macromastia. Plast Reconstr Surg. 1993; 91(7):1270-1276.
11. Gonzalez MA, Glickman LT, Aladegbami B, Simpson RL. Quality of life after breast reduction surgery: a 10-year retrospective analysis using the Breast Q questionnaire: does breast size matter? Ann Plast Surg. 2012; 69(4):361-363.
12. Gray LN. Update on experience with liposuction breast reduction. Plast Reconstr Surg. 2001; 108(4):1006-1010.
13. Gust MJ, Smetona JT, Persing JS, et al. The impact of body mass index on reduction mammaplasty: a multicenter analysis of 2492 patients. Aesthet Surg J. 2013; 33(8):1140-1147.
14. Habbema L. Breast reduction using liposuction with tumescent local anesthesia and powered cannulas. Dermatol Surg. 2009; 35(1):41-50; discussion 50-52.
15. Hooper DM, Ricciardelli EJ, Goel VK, Aleksiev A. Biomechanical changes in the low back following reduction mammaplasty surgery. Clin Biomech (Bristol, Avon). 1997; 12(7-8):525-527.
16. Kaminer MS, Tan MH, Hsu TS. Limited breast reduction by liposuction. Skin Therapy Lett. 2002; 7(10):6-8.
17. Kerrigan CL, Collins ED, Kim HM, et al. Reduction mammaplasty: defining medical necessity. Med Decis Making. 2002; 22(3):208-217.
18. Kerrigan CL, Collins ED, Kneeland TS, et al. Measuring health state preferences in women with breast hypertrophy. Plast Reconstr Surg. 2000; 106(2):280-288.
19. Kompatscher P, von Planta A, Spicher I, et al. Comparison of the incidence and predicted risk of early surgical site infections after breast reduction. Aesthetic Plast Surg. 2003; 27(4):308-314.
20. Kraut RY, Brown E, Korownyk C, et al. The impact of breast reduction surgery on breastfeeding: systematic review of observational studies. PLoS One. 2017; 12(10):e0186591.
21. Manahan MA, Buretta KJ, Chang D, et al. An outcomes analysis of 2142 breast reduction procedures. Ann Plast Surg. 2015; 74(3):289-292.
22. Matarasso A. Suction mammaplasty: the use of suction lipectomy to reduce large breasts. Plast Reconstr Surg. 2000; 105(7):2604-2607.
23. Matarasso SL. Liposuction of chest and back. Dermatol Clin. 1999; 17(4):799-804.
24. Miller AP, Zacher, Berggren RB, et al. Breast reduction for symptomatic macromastia: can predictors for operative success be identified? Plast Reconstr Surg. 1995; 95(1):77-83.

25. Miller BJ, Morris SF, Sigurdson LL, et al. Prospective study of outcomes after reduction mammaplasty. Plast Reconstr Surg. 2005; 115(4):1025-1031.
26. Mosteller RD. Simplified calculation of body-surface area. N Engl J Med. 1987; 317(17):1098.
27. Myung Y, Heo CY. Relationship between obesity and surgical complications after reduction mammaplasty: a systematic literature review and meta-analysis. Aesthet Surg J. 2017; 37(3):308-315.
28. Netscher DT, Meade RA, Goodman CM, et al. Physical and psychosocial symptoms among 88 volunteer subjects compared with patients seeking plastic surgery procedures to the breast. Plast Reconstr Surg. 2000; 105(7):2366-2373.
29. Nuzzi LC, Firriolo JM, Pike CM, et al. The effect of reduction mammaplasty on quality of life in adolescents with macromastia. Pediatrics. 2017; 140(5). pii: e20171103.
30. Saariniemi KM, Keranen UH, Salminen-Peltola PK, Kuokkanen HO. Reduction mammaplasty is effective treatment according to two quality of life instruments. A prospective randomised clinical trial. J Plast Reconstr Aesthet Surg. 2008; 61(12):1472-1478.
31. Sadove R. New observations in liposuction-only breast reduction. Aesthetic Plast Surg. 2005; 29(1):28-31.
32. Schnur PL, Hoehn JG, Ilstrup DM, et al. Reduction mammaplasty: cosmetic or reconstructive procedure? Ann Plast Surg. 1991; 27(3): 232-237.
33. Schnur PL, Schnur DP, Petty PM, et al. Reduction mammaplasty: an outcomes study. Plast Reconstr Surg. 1997; 100(4):875-883.
34. Seitchik MW. Reduction mammaplasty: criteria for insurance coverage. Plast Reconstr Surg. 1995; 95(6):1029-1032.
35. Sood R, Mount DL, Coleman JJ 3rd, et al. Effects of reduction mammaplasty on pulmonary function and symptoms of macromastia. Plast Reconstr Surg. 2003; 111(2):688-694.
36. Strong B, Hall-Findlay EJ. How does volume of resection relate to symptom relief for reduction mammaplasty patients? Ann Plast Surg. 2015; 75(4):376-382.
37. Wagner DS, Alfonso DR. The influence of obesity and volume of resection on success in reduction mammaplasty: an outcomes study. Plast Reconstr Surg. 2005; 115(4):1034-1038.

Government Agency, Medical Society, and Other Authoritative Publications:

1. American Society of Plastic Surgeons. Reduction mammaplasty Recommended Criteria for Third–Party Payer Coverage from the American Society of Plastic Surgeons (ASPS). May 2011a (reaffirmed October 2017). Available at: http://www.plasticsurgery.org/Medical_Professionals/Health_Policy_and_Advocacy/

This Clinical UM Guideline is intended to provide assistance in interpreting Healthy Blue's standard Medicaid benefit plan. When evaluating insurance coverage for the provision of medical care, federal, state and/or contractual requirements must be referenced, since these may limit or differ from the standard benefit plan. In the event of a conflict, the federal, state and/or contractual requirements for the applicable benefit plan coverage will govern. Healthy Blue reserves the right to modify its Policies and Guidelines as necessary and in accordance with legal and contractual requirements. This Clinical UM Guideline is provided for informational purposes. It does not constitute medical advice. Healthy Blue may also use tools and criteria developed by third parties, to assist us in administering health benefits. Healthy Blue's Policies and Guidelines are intended to be used in accordance with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

Health_Policy_Resources/Recommended_Insurance_Coverage_Criteria.html. -Accessed on ~~September 16, 2020~~January 8, 2021.
2. American Society of Plastic Surgeons. Reduction Mammaplasty Practice Guidelines. May 2011b. Available at: http://www.plasticsurgery.org/Documents/medical-professionals/health-policy/evidence-practice/Reduction%20Mammaplasty_%20Evidence%20Based%20Guidelines_v5.pdf. Accessed on ~~September 16~~January 8, 202~~0~~1.
3. Kalliainen LK; ASPS Health Policy Committee. ASPS clinical practice guideline summary on reduction mammaplasty. Plast Reconstr Surg. 2012; 130(4):785-789.

Websites for Additional Information

1. American Academy of Orthopaedic Surgeons. Thoracic Outlet Syndrome. Last reviewed March 2018. Available at: https://orthoinfo.aaos.org/en/diseases--conditions/thoracic-outlet-syndrome/. Accessed on January 8~~September 16~~, 202~~0~~1.

Index

History

Status	Date	Action
Revised	02/11/2021	Medical Policy & Technology Assessment Committee (MPTAC). Removed 1 year requirement from criteria I. A and II. A in medically necessary statement.
Reviewed	11/05/2020	~~Medical Policy & Technology Assessment Committee (~~MPTAC~~)~~ review. References and Websites sections updated. Reformatted Coding section; added diagnosis codes and updated 19318 with 01/01/2021 descriptor change.
Reviewed	11/07/2019	MPTAC review. References and Websites sections updated.

Reviewed	01/24/2019	MPTAC review. Discussion/General Information, References, and Websites sections updated.
New	01/25/2018	MPTAC review. Initial document development. Moved content of SURG.00086 Reduction Mammaplasty to new clinical utilization management guideline document with the same title.

Appendix

Minimum Weight of Breast Tissue Removed, per Breast, as a Function of Body Surface Area Schnur Sliding Scale

Body Surface Area (meters squared)	Minimum weight of tissue to be removed per breast (grams)
1.35	199
1.40	218
1.45	238
1.50	260
1.55	284
1.60	310
1.65	338
1.70	370
1.75	404
1.80	441
1.85	482
1.90	527
1.95	575
2.00	628
2.05	687
2.10	750

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2.15	819
2.20	895
2.25	978
2.30 or greater	>= 1000

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