Effective Date:	**July 1, 2016**
Initial Review Date:	April 27, 2016
Recent Review Date:	April 2, 2019
Next Review Date:	April 1, 2020
Clinical Policy ID:	CCP.1227

Clinical Policy Title: **Abdominoplasty, panniculectomy, and brachioplasty**

Policy Contains: Abdominoplasty; brachioplasty; panniculectomy; obesity; massive weight loss

About this policy:

AmeriHealth Caritas has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by AmeriHealth Caritas when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas will update its clinical policies as necessary. AmeriHealth Caritas's clinical policies are not guarantees of payment.

COVERAGE POLICY:

AmeriHealth Caritas considers abdominoplasty, panniculectomy, and brachioplasty following massive weight loss to be clinically proven and, therefore, medically necessary when all of the following criteria are met (American Society of Plastic Surgeons, 2017; Mechanick, 2013):

- A plastic surgeon performs the surgical procedure to modify the skin envelope, subcutaneous layer, and/or investing fascia.
- Surgery will correct functional impairment caused by excessive skin and subcutaneous tissue redundancy.
  - A functional impairment is defined as a direct and measurable reduction in physical performance of an organ or body part, resulting in difficulties in physical and motor tasks, independent movement, or performing basic life functions.
- There is photographic documentation of any of the following chronic or recurring conditions related to excess tissue and skin folds:
  - Intertrigo (bacterial or fungal infections).
  - Cellulitis.
  - Folliculitis.
  - Panniculitis.
  - Skin ulceration.
  - Skin or subcutaneous abscesses.

    - Monilial infection or fungal dermatitis.
    - Skin necrosis.
- Documentation of failure of at least three months of conservative non-surgical management by a physician other than the operating physician.
- Maintenance of a stable body weight during the most recent six months or longer.
    - If massive weight loss occurs as a result of bariatric surgery, the procedure should not be performed for at least 12 to 18 months after the bariatric surgery.

AmeriHealth Caritas considers panniculectomy after massive weight loss to be clinically proven and, therefore, medically necessary when all of the above criteria are met, and there is photographic documentation (with member standing) of at least a Grade 2 panniculus that hangs to or below the level of the pubis.

AmeriHealth Caritas considers abdominoplasty to be clinically proven and, therefore, medically necessary when performed in conjunction with a panniculectomy that meets the above criteria. In this case abdominoplasty is considered part of the panniculectomy procedure and is not separately reimbursable.

LIMITATIONS:

All other indications for abdominoplasty, panniculectomy, and brachioplasty after massive weight loss are considered not medically necessary, including, but not limited to:

- Improving cosmesis in the absence of a functional impairment.
- Relieving neck or back pain, as there is no evidence that reduction of redundant skin and tissue results in less spinal stress or improved posture or alignment.
- Repairing a diastasis recti.
- Minimizing the risk of hernia formation or recurrence.

Endoscopic abdominoplasty or mini-abdominoplasty is not medically necessary for any reason.

Panniculectomy when performed in conjunction with a primary abdominal surgical procedure will be considered as part of the primary surgery (e.g., incisional hernia repair) and not separately reimbursable.

- Note: All requests for panniculectomy in conjunction with repair of an incisional, umbilical, epigastric, or ventral hernia must be documented by the patient's medical record and computed tomography scan recording the diameter of the fascial defect.

ALTERNATIVE COVERED SERVICES:

- Analgesics.
- Antibiotics.
- Cortisone ointments.
- Drying agents.
- Topically applied skin barriers and supportive garments.

BACKGROUND:

Obesity and its associated medical morbidities carry substantial health risk. Treatments for obesity, including bariatric surgery, often result in massive weight loss. Definitions of massive weight loss vary: 100 pounds (approximately 45.45 kg) or more; 50 percent or greater loss of excess weight; or greater than 100 percent above the person's ideal body weight (Constantine, 2014; Manahan, 2006; Michaels, 2011).

A sudden change in body mass index can lead to redundant skin and soft tissue with poor tone. Surplus skin and malpositioned adipose deposits result in musculoskeletal strain from increased tissue weight and can cause functional limitation with walking, maintaining adequate hygiene, bowel and bladder habits, and sexual activity, as well as psychological issues associated with poor body image (Giordano, 2015). Bariatric surgery is associated with various metabolic complications and deficiencies that can disturb wound healing and are not typically found in other conditions resulting in massive weight loss such as diet and exercise or post-pregnancy (Chandawarkar, 2006; Giordano, 2015). Reshaping procedures may relieve these symptoms.

The term "body contouring" refers to any surgical procedure used to modify the skin envelope, subcutaneous layer, and/or investing fascia to rid the functional and esthetic impairment from skin after massive weight loss (Giordano, 2015). Several surgical techniques, each with its own modifications, may be used to address the needs of these patients, including (Giordano, 2015):

- Rhytidectomy (face and neck lift).
- Brachioplasty (arm lift) with or without liposuction.
- Mastopexy (breast lift) with or without mammoplasty.
- Abdominoplasty.
- Body lift:
  - Belt lipectomy (or lower body lift in which the lower body is treated front and back in its entirety).
  - Upper body lift that treats excess skin folds in the back.
- Panniculectomy.
- Thighplasty.

Skin redundancy and quality, lipodystrophy, and adherent folds, as well as the presence of varicose veins, lymphedema, and overall scar evaluation, must be considered with these complex and extensive procedures. The extent of the procedures and the patient's health and comorbidities will determine the facility setting, the type of anesthesia needed, recovery time, and physician follow-up visits. Patients may be seen intermittently for one to two years as final body contour continues to mature (American Society of Plastic Surgeons, 2017).

FINDINGS:

We found four systematic reviews/meta-analyses (Albino, 2009; Hasanbegovic, 2014; Khavanin, 2014; Staalesen, 2012a), seven additional individual studies (Bossert, 2013; Fischer, 2013; Srivastava, 2015; Staalesen, 2012b; van der Beek, 2011; Vindigni, 2015; Zammerilla, 2014), two professional guidelines (American Society of Plastic Surgeons, 2007; Mechanic, 2013), and no economic analyses for this policy. The evidence primarily consists of single-arm, retrospective case series

with few controls. Most patients were female and had achieved massive weight loss after bariatric surgery. The majority of procedures involved abdominal contouring most commonly performed for the treatment of skin conditions that were unresponsive to or required frequent medical treatment and had a negative effect on quality of life. Study objectives were to identify risk factors for complications, complication rates, and patient-reported outcomes associated with body contouring procedures after massive weight loss. The optimal patient selection criteria for these procedures are difficult to determine due to the retrospective nature of the studies. In general, weight stability and lower body mass index at the time of the body contouring procedure reduce the rate of complications and lead to better surgical outcomes. However, the evidence conflicts with respect to preoperative body mass index as an independent predictor of surgical complications, and there is no clear body mass index cut-off above which surgery should be refused (Au, 2008; Constantine, 2014; van der Beek, 2011). Based on limited evidence, professional guidelines support a stable weight close to normal for at least two to six months, typically requiring 12 to 18 months post-bariatric surgery, or at the 25 kg/mg^2 to 30 kg/mg^2 weight range (American Society of Plastic Surgeons, 2007; Mechanick, 2013). Assessment tools such as the Pittsburgh weight loss deformity scale and the Regnault breast ptosis scale can facilitate preoperative planning and quantifying improvement after surgery (Giordano, 2015; Zammerilla, 2014). Complications occurred in up to 50 percent of patients and depended on the extent and type of procedure. Most were related to wound healing and were considered minor and medically treatable. Minor complications included seroma, dehiscence, infection, and hematoma. Other complications following body contouring surgery in general may include (American Society of Plastic Surgeons, 2007): Lymphedema. Deep vein thrombosis or pulmonary embolus. Psychiatric difficulty. Residual localized fat and/or fat necrosis leading to contour irregularities. Temporary or permanent numbness. Unattractive or hypertropic scarring. Malposition of the umbilicus. Relapse or recurrent laxity. Complications after body contouring surgery are likely multifactorial (Albino, 2009; Fischer, 2013; Hasanbegovic, 2014). Multiple comorbidities, bleeding disorders, abnormal preoperative albumin levels, and malnutrition contribute to poor surgical outcomes, as do procedural complexity and pre-operative functional status. Complication rates were higher among patients with post-bariatric massive weight loss than massive weight loss from other causes. Abdominal contouring procedures, in particular, are associated with excessive blood loss and risk for postoperative hypovolemia. Evidence from research and professional guidelines regarding indications for surgery and choice of surgical techniques is lacking. Surgical approaches vary through incision length, incision placement, use of liposuction, and concomitant body contouring procedures. Surgeon and patient preferences and clinical presentation play major roles in determining choice of procedure. There are few validated patient-reported outcome measures for most body contouring procedures, with the exception of reduction mammoplasty. Troublesome skin condition was the most common indication for surgery, but its status was rarely reported as an outcome. The American Society of Plastic Surgeons (2007) notes there are few alternatives to surgery for such patients, as the excess skin and fat folds are virtually impossible to correct by diet, weight loss, or exercise. In summary, body contouring procedures appear to be safe and improve well-being and quality of life in carefully selected persons with skin redundancy after massive weight loss. Patient satisfaction is high, but pre-operative counseling is essential to achieving realistic expectations. Patients generally tolerate the potential for minor complications to achieve better functional and aesthetic outcomes. The evidence base with respect to indications, treatment methods, and outcomes should be strengthened through well-planned prospective studies and a patient registry. There is a particular need for documenting treatment outcomes in patients with body mass index ≥ 30 kg/m^2, who comprise a significant and growing portion of this surgical population. In 2017, we added one new meta-analysis of 28 studies with 1,380 total patients that assessed complication rates following circumferential contouring of the lower trunk (Carloni, 2016). Carloni et al found an overall complication rate of 37 percent (95 percent confidence interval 30 percent to 44 percent). Seroma, wound dehiscence, and scar irregularities comprised the majority of complications. Lower body lift-related techniques

were associated with a higher rate of overall complications than belt lipectomy-related techniques (*P* = .002), but the authors had no explanation for that finding. These authors called for higher-quality evidence from randomized controlled trials to confirm these results. The new information is consistent with previous findings. Therefore, no policy changes are warranted. In 2018, we added an updated guideline by the American Society of Plastic Surgeons (2017). No policy changes are warranted. In 2019, we identified no newly published, relevant literature to add to the policy. The policy ID was changed from CP# 18.03.03 to CCP.1227.

BILLING AND CODING:

Below are National Coverage Determinations, Local Coverage Determinations, and the most commonly submitted codes subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate Centers for Medicare & Medicaid Services references and coding manuals, and bill accordingly.

NATIONAL COVERAGE DETERMINATIONS:

No National Coverage Determinations were identified as of the writing of this policy.

LOCAL COVERAGE DETERMINATIONS:

A52729 Cosmetic vs. Reconstructive Surgery.
L33428 Cosmetic and Reconstructive Surgery.
L34698 Cosmetic and Reconstructive Surgery.
L35090 Cosmetic and Reconstructive Surgery.
L35163 Plastic Surgery.
L37020 Plastic Surgery.

COMMONLY SUBMITTED CODES:

Codes	**Code description**	**Comments**
15830	Excision, excessive skin and subcutaneous tissue (includes lipectomy); abdomen, infraumbilical panniculectomy	
15832-15839	Excision, excessive skin and subcutaneous tissue	
15847	Excision, excessive skin and subcutaneous tissue (includes lipectomy), abdomen (e.g., abdominoplasty) (includes umbilical transposition and fascial plication) (List separately in addition to code for primary procedure)	
15876-15879	Suction assist lipectomy	
E65	Localized adiposity	
L30.4	Erythema intertrigo	
L98.7	Excessive and redundant skin and subcutaneous tissue	
M79.3	Panniculitis, unspecified	

POLICY UPDATES:

Date	Researcher	Update
April 2, 2019	E. Adams	No newly published, relevant literature added. Deleted one reference. No policy changes. Policy ID changed from CP# 18.03.03 to CCP.1227.
April 27, 2016	E. Adams	Initial policy.

REFERENCES:

On February 8, 2019, we searched PubMed and the databases of the U.K. National Health Services Centre for Reviews and Dissemination, Agency for Healthcare Research and Quality, and Centers for Medicare & Medicaid Services. Search terms were: "weight loss" (MeSH), "reconstructive surgical procedures" (MeSH), "body contouring" (MeSH), and free text terms "panniculectomy," "abdominoplasty," "brachioplasty," and "body lift." We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

Albino FP, Koltz PF, Gusenoff JA. A comparative analysis and systematic review of the wound-healing milieu: implications for body contouring after massive weight loss. *Plast Reconstr Surg.* 2009;124(5):1675-1682. Doi: 10.1097/PRS.0b013e3181b98bb4.

American Society of Plastic Surgeons Practice Parameter for Surgical Treatment of Skin Redundancy for Obese and Massive Weight Loss Patients. https://www.plasticsurgery.org/documents/Health-Policy/Guidelines/guideline-2017-skin-redundancy.pdf. Published 2007. Updated June 2017. Accessed February 8, 2019.

Au K, Hazard SW, 3rd, Dyer AM, et al. Correlation of complications of body contouring surgery with increasing body mass index. *Aesthet Surg J.* 2008;28(4):425-429. Doi: 10.1016/j.asj.2008.04.003.

Bossert RP, Dreifuss S, Coon D, et al. Liposuction of the arm concurrent with brachioplasty in the massive weight loss patient: is it safe? *Plast Reconstr Surg.* 2013;131(2):357-365. Doi: 10.1097/PRS.0b013e3182789de9.

Carloni R, Naudet F, Chaput B, et al. Are there factors predictive of postoperative complications in circumferential contouring of the lower trunk? A meta-analysis. *Aesthet Surg J.* 2016;36(10):1143-1154. Doi: 10.1093/asj/sjw117.

Chandawarkar RY. Body contouring following massive weight loss resulting from bariatric surgery. *Adv Psychosom Med.* 2006;27:61-72. Doi: 10.1159/000090964.

Constantine RS, Davis KE, Kenkel JM. The effect of massive weight loss status, amount of weight loss, and method of weight loss on body contouring outcomes. *Aesthet Surg J.* 2014;34(4):578-583. Doi: 10.1177/1090820x14528208.

Fischer JP, Wes AM, Serletti JM, Kovach SJ. Complications in body contouring procedures: an analysis of 1797 patients from the 2005 to 2010 American College of Surgeons National Surgical Quality Improvement Program databases. *Plast Reconstr Surg.* 2013;132(6):1411-1420. Doi: 10.1097/PRS.0b013e3182a806b3.

Giordano S. Removal of excess skin after massive weight loss: challenges and solutions. *Open Access Surgery.* 2015;8:51-60. https://www.dovepress.com/removal-of-excess-skin-after-massive-weight-loss-challenges-and-soluti-peer-reviewed-fulltext-article-OAS. Accessed February 25, 2018.

Hasanbegovic E, Sorensen JA. Complications following body contouring surgery after massive weight loss: a meta-analysis. *J Plast Reconstr Aesthet Surg.* 2014;67(3):295-301. Doi: 10.1016/j.bjps.2013.10.031.

Khavanin N, Jordan SW, Rambachan A, Kim JY. A systematic review of single-stage augmentation-mastopexy. *Plast Reconstr Surg.* 2014;134(5):922-931. Doi: 10.1097/prs.0000000000000582.

Masoomi H, Rimler J, Wirth GA, et al. Frequency and risk factors of blood transfusion in abdominoplasty in post-bariatric surgery patients: data from the nationwide inpatient sample. *Plast Reconstr Surg.* 2015;135(5):861e-868e. Doi: 10.1097/prs.0000000000001161.

Mechanick JI, Youdim A, Jones DB, et al. Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient--2013 update: cosponsored by American Association of Clinical Endocrinologists, the Obesity Society, and American Society for Metabolic & Bariatric Surgery. *Endocr Pract.* 2013;19(2):337-372. Doi: 10.4158/ep12437.gl.

Reavey PL, Klassen AF, Cano SJ, et al. Measuring quality of life and patient satisfaction after body contouring: a systematic review of patient-reported outcome measures. *Aesthet Surg J.* 2011;31(7):807-813. Doi: 10.1177/1090820x11417426.

Srivastava U, Rubin JP, Gusenoff JA. Lower body lift after massive weight loss: autoaugmentation versus no augmentation. *Plast Reconstr Surg.* 2015;135(3):762-772. Doi: 10.1097/prs.0000000000001043.

Staalesen T, Elander A, Strandell A, Bergh C. A systematic review of outcomes of abdominoplasty. *J Plast Surg Hand Surg.* 2012;46(3-4):139-144. Doi: 10.3109/2000656x.2012.683794.(a)

Staalesen T, Olsen MF, Elander A. Complications of abdominoplasty after weight loss as a result of bariatric surgery or dieting/postpregnancy. *J Plast Surg Hand Surg.* 2012;46(6):416-420. Doi: 10.3109/2000656x.2012.717898.(b)

van der Beek ES, van der Molen AM, van Ramshorst B. Complications after body contouring surgery in post-bariatric patients: the importance of a stable weight close to normal. *Obes Facts.* 2011;4(1):61-66. Doi: 10.1159/000324567.

Vindigni V, Scarpa C, Tommasini A, et al. Breast Reshaping Following Bariatric Surgery. *Obes Surg.* 2015;25(9):1735-1740. Doi: 10.1007/s11695-015-1613-y.

Zammerilla LL, Zou RH, Dong ZM, et al. Classifying severity of abdominal contour deformities after weight loss to aid in patient counseling: a review of 1006 cases. *Plast Reconstr Surg.* 2014;134(6):888e-894e. Doi: 10.1097/prs.0000000000000763.

APPENDIX:

No additional information was identified for this section during the writing of this policy.