BAPRAS
British Association of Plastic Reconstructive and Aesthetic Surgeons

RCS
ADVANCING SURGICAL STANDARDS

2014

Commissioning guide:

Massive Weight Loss Body Contouring

Sponsoring Organisation: British Association of Plastic, Reconstructive and Aesthetic Surgeons
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NICE accredited
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CONTENTS

Executive Summary

This document is about guidance for commissioning reconstructive procedures, post massive weight loss and is based on the best available evidence.

General criteria for body contouring surgery

- Age over 16 years
- Starting BMI above 40kg/m^2 or above 35kg/m^2 with co-morbidities AND current BMI of less than or equal to 28.0kg/m^2 AND weight stability of 12 months AND significant functional disturbance (both physical and psychological)

Exceptions to general criteria

- Starting BMI above 40kg/m^2 or above 35kg/m^2 with co-morbidities and 75% excess body weight lost– should be eligible for apronectomy only - if they are unable to slim down to a BMI of 28 or less. A BMI of up to 40kg/m^2 can be considered here.
- Weight stability of 12 months and significant functional disturbance applies here too.

Key Recommendations

- Request for central funding for body contouring surgery
- Development of registry of operations and complications (+/- quality of life measures) to which patient data are mandatorily submitted
- National use of referral document for GPs for body contouring surgery (Appendix 1)

This guidance will be reviewed in 2017.

Glossary

Term	Definition
Body mass index (BMI)	A measure for human body shape based on an individual's weight and height. BMI = body weight in kilograms / height in meters squared
Excess body weight	Calculation of change of BMI relative to a maximum normal BMI of 25kg/m^2
Massive weight loss	Loss of 50% or more excess body weight
SF-36v2®	QualityMetric's SF-36v2® health survey asks 36 questions to measure functional health and wellbeing from the patient's point of view. It is a practical, reliable and valid measure of physical and mental health that can be completed in five to ten minutes. For more information visit: http://www.qualitymetric.com/WhatWeDo/SFHealthSurveys/SF36v2HealthSurvey/tabid/185/Default.aspx

Significant functional disturbance	This includes infections, disability, time in hospital, smell, excoriation, severe intertrigo, evidence of significant interference with activities of daily life, ulceration and psychological disturbance (e.g. depression)
Weight stability	Weight stability described in this document allows for a maximum of 5kg increase or a 5kg decrease in weight.

Introduction

Body contouring surgery is reconstructive surgery following massive weight loss.

In 2010, 65.1% of all adults aged 16 years and over were overweight or obese. Morbid obesity rates (body mass index (BMI) ≥40kg/m^2) increased from 1.2% in 1995 to 2.7% in 2003, and fluctuated between 2.2% and 2.7% between 2008 and 2010.

Weight loss surgery or bariatric surgery is commissioned nationally across England. In adults with a BMI of more than 40kg/m^2 (or more than 35kg/m^2 with co-morbidities) in whom surgical intervention is considered appropriate, bariatric surgery is recommended as a treatment option in the National Institute for Health and Clinical Excellence (NICE) guidelines.[1]

As a result of the drive to tackle obesity, there are increasing numbers of patients with massive weight loss and skin redundancy. This has led to post-weight loss deformities of loose, ptotic skin envelopes and residual adiposities with resultant contour irregularities.[2] The resultant redundant skin presents new quality of life concerns in a range of areas such as mobility, decreased activity, body image dissatisfaction[3] and depression.[4] The excess skin causing physical discomfort, psychosocial problems, lost work days/productivity and concern about quality of life[5] in general has led to an increasing uptake of body contouring surgery,[6] to manage the complex problems[7] that span multiple parts of the body after massive weight loss.

NICE guidelines state that surgery for obesity should only be undertaken by a multidisciplinary team that can provide expertise including psychological support before and after surgery as well as information on or access to plastic surgery where indicated.[1] According to the 2004 review of bariatric surgical services in Scotland:[8]

- Plastic surgery is an integral part of an overall bariatric surgical service.
- Criteria for patients undergoing plastic surgery must be clearly defined.
- The number of patients being referred for this type of surgery is small at present but is likely to increase in the foreseeable future. This will have implications for waiting lists.

Variation of provision

In England there is no standardised guidance for provision of body contouring following massive weight loss. In a recent study carried out by Mukherjee *et al*, out of the 67 respondents of 147 of the primary care trusts in England, only 54 had referral guidelines for plastic surgery and 23 excluded all post-bariatric surgery body contouring procedures.[9] According to a study carried out by Butler, 95.1% of plastic surgery units in the country

offer some form of reconstructive surgery following massive weight loss, with a large variation of what is available between each unit, and 4.9% of units do not offer any surgery owing to lack of primary care trust funding.[10,11] Butler found that 56% of units do not offer psychology or psychiatry screening, for 14% this information was unknown and only 24% of all the plastic surgery units in the UK offer it routinely.

A recent study [12] showed that 37.7% of patients who were approved in Scotland for post-bariatric body contouring would not have fulfilled the Leeds criteria,[13] which set out the funding request policy for low volume services or treatments that are not routinely commissioned. This is another example of the postcode lottery that exists for the commissioning of plastic surgery services.[14, 15]

Access to body contouring surgery

According to a cohort study published in 2013, of 34 patients who had not yet applied for plastic surgery, 13 had been told by their general practitioners (GPs) that they would not qualify for plastic surgery on the National Health Service despite losing more than 75% of their excess body weight.[12]

Why is this surgery a priority?

Research demonstrates significant improvements in patients' physical function, emotional wellbeing, body image satisfaction, identity shifts, sexual vitality, greater wellbeing and quality of life once they have undergone body contouring surgery following massive weight loss.[16-18] Highton *et al* found that 92% of 86 surgeon members of the British Obesity and Metabolic Surgery Society felt that patients face functional problems relating to skin redundancy after massive weight loss and a high percentage of patients complain about this problem.[19]

One series of 122 patients (2000–2005) were reviewed for patient satisfaction and quality of life.[20] Another retrospective case series (12 years) involving 151 central body lifts revealed both patient and physician satisfaction.[21] Neither of these studies had comment on the methods or instruments used for quality of life measures. Klassen *et al* demonstrated an improvement in quality adjusted life years following massive weight loss body contouring.[22]

Al-Hadithy et al demonstrated that the QualityMetric SF-36® health survey parameters for physical function, bodily pain, general health, vitality and overall physical health are significantly better in bariplastic surgery patients than in those who only had bariatric surgery. Previous studies have shown that physical dimensions of the SF-36® improve after bariatric surgery[23] and other studies have demonstrated that body image and quality of life improves following abdominoplasty in non-bariatric[24] and bariatric patients.[25, 26] Early data demonstrate a greater change in physical health and functional outcome over psychological outcome for the patients who had received body contouring surgery. Following plastic surgery in the bariatric population patients had more active lifestyles, improved self-confidence and greater career progression.[27, 28]

1 High value care pathway for body contouring surgery

Referral pathway

Referral to plastic surgery should be encouraged through the primary care sector if the patient fulfils the criteria, using the referral tool (Appendix 1).

Psychological assessment should be included as part of the patient pathway, to be undertaken by a clinician with experience in treating obese patients. If patients have been referred through a bariatric multidisciplinary team, then the psychological assessment is unlikely to need repeating but if no previous psychological assessment has been performed, this will need to be arranged prior to referral to plastic surgery.

General criteria for body contouring surgery

- Age over 16 years
- Starting BMI above 40kg/m^2 or above 35kg/m^2 with co-morbidities AND current BMI of less than or equal to 28.0kg/m^2 AND weight stability of 12 months AND significant functional disturbance (both physical and psychological)

Body contouring surgery creates large wounds. The current evidence favours this surgery when patients have 'fully deflated'. Performing BCS at higher BMI's is associated with higher risk of complications.[29-44] After reviewing British Obesity & Metabolic Surgery Society (BOMSS) input the group decided to increase the BMI from 27 to 28 for reconstructive body contouring surgery. This BMI level is considered safe for surgery.

Exceptions to general criteria

- Starting BMI above 40kg/m^2 or above 35kg/m^2 with co-morbidities and 75% excess body weight lost – should be eligible for apronectomy **only** – if they are unable to slim down to a BMI of 28 or less. A BMI of up to 40kg/m^2 can be considered here.
- Weight stability of 12 months and significant functional disturbance applies here too.

Exclusion criteria

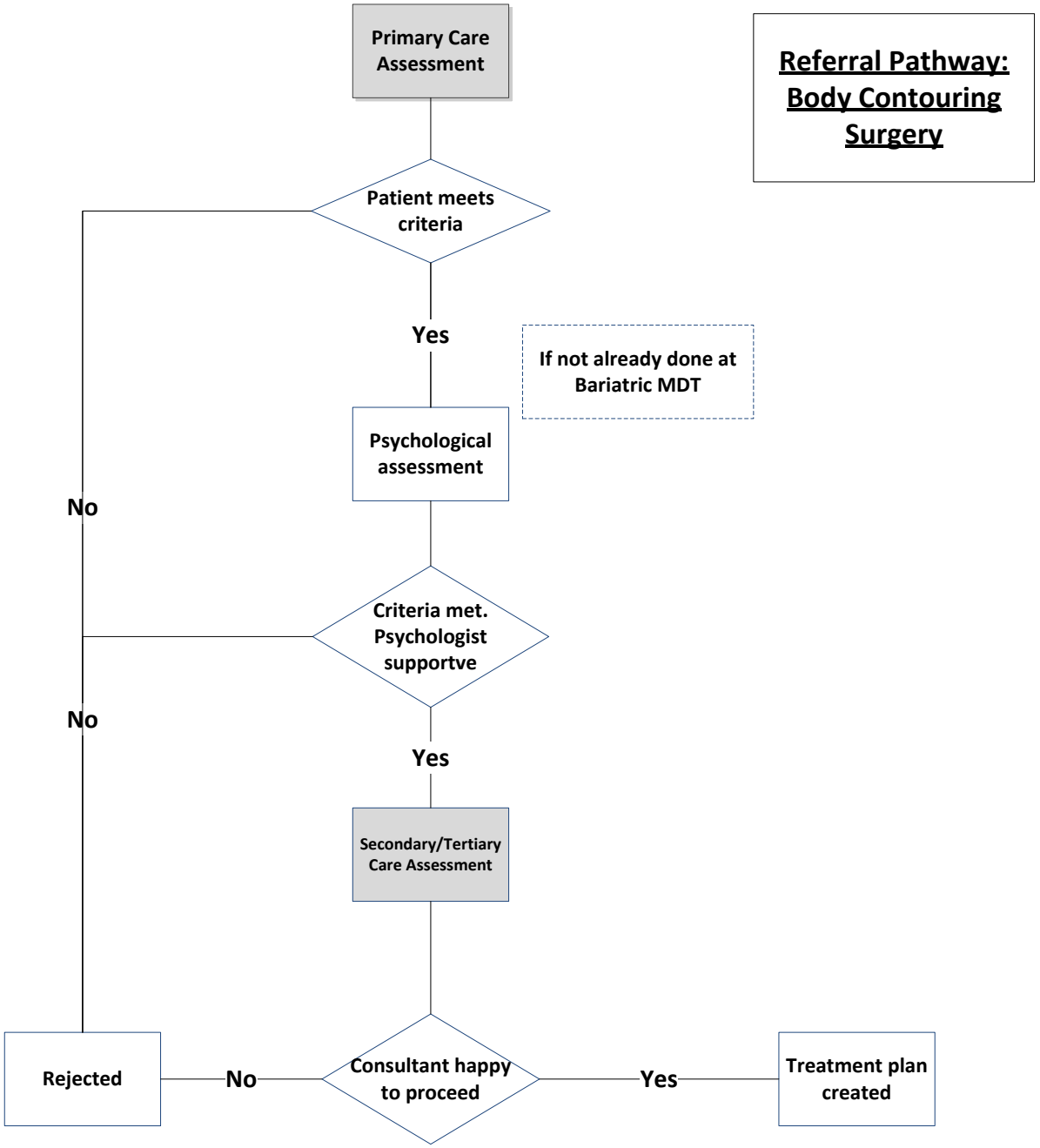
- Current smoker
- Active psychiatric or psychological condition that would benefit from diagnosis and treatment prior to referral for body contouring surgery or that would contraindicate surgery including:[25]
  - patients who have had an episode of self-harm within the last two years;
  - patients with a previous diagnosis of body dysmorphic disorder;
  - patients with a disproportionate view of the problem following consultation with a consultant Plastic Surgeon;
  - patients who currently have on going alcohol or drug misuse problems.

NB: General health, social and lifestyle issues should also be taken into account before offering body contouring surgery to patients

If a patient meets the criteria for body contouring surgery, the GP may begin the pathway to surgery. If a patient is very deserving of surgery, but does not meet all the criteria, they can still be considered via the exceptional circumstances route. This will involve the completion of an IFR (individual funding request) form by the GP, and if approved the pathway may proceed to psychological and consultant plastic surgical assessment.

Where should surgery be undertaken?

Body contouring surgery should be undertaken at a centre where there is a bariatric multidisciplinary team or integrated links to a bariatric multidisciplinary team.



2 Procedures explorer for body contouring surgery

Users can access further procedure information based on the data available in the quality dashboard to see how individual providers are performing against the indicators. This will enable CCGs to start a conversation with providers who appear to be 'outliers' from the indicators of quality that have been selected.

The Procedures Explorer Tool is available via the Royal College of Surgeons website.

3 Quality dashboard for body contouring surgery

The quality dashboard provides an overview of activity commissioned by CCGs from the relevant pathways, and indicators of the quality of care provided by surgical units.

The quality dashboard is available via the Royal College of Surgeons website.

4 Levers for implementation

4.1 Audit and peer review measures

The following measures and standards are those expected at primary and secondary care. Evidence should be able to be made available to commissioners if requested.

Measure	Standard
BMI	Provider demonstrates adherence to BMI eligibility criteria
Multidisciplinary team (MDT) status	Provider has MDT in place or can demonstrate integrated links to MDT
Body contouring database	Provider can demonstrate collection of data

4.2 Quality specification/CQUIN (Commissioning for Quality and Innovation)

Measure	Description	Data specification (if required)
Referral	Referral for bariatric surgery patients as well as for patients who have lost weight through diet and exercise	Hospital data
Readmission rates for complications	Provider demonstrates a readmission rate of <10%	Data available from Hospital Episode Statistics
Psychological evaluation in patient pathway	Provider demonstrates access for patients to psychological evaluation, to be undertaken by a clinician with experience in treating obese patients	
Aspirational: patient reported outcomes measures	Provider can demonstrate collection of patient satisfaction and patient reported outcomes measures, for example by completing pages 3-5 of the referral tool at last plastic surgery clinic appointment	

5 Directory

5.1 Patient information for body contouring surgery

Name	Publisher	Link
Body reshaping – patient information guide	BAPRAS	http://www.bapras.org.uk/guide.asp?id=252

5.2 Clinician information for body contouring surgery

Name	Publisher	Link
Up-dated adult exceptional aesthetic referral protocol (June 2011)	NHS Scotland	http://www.sehd.scot.nhs.uk/mels/CEL2011_27.pdf
G43 Obesity: NICE guideline	NICE	http://guidance.nice.org.uk/CG43/NICEGuidance/

5.3 NHS Evidence case studies for body contouring surgery

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6 Benefits and risks of implementing this guide

Consideration	Benefit	Risk
Patient outcome	Ensure access to effective conservative, medical and surgical therapy. Reduce long-term follow-up for the chronic complications of skin redundancy (psychology, dermatology, clinical nurse specialist, physiotherapy).	Unrecognised deterioration on conservative therapy
Patient safety	Surgery will be undertaken in a specialist centre with appropriate support for the massive weight loss patient.	
Patient experience	Improve access to patient information, support groups and equitable access to body contouring service.	
Equity of access	Improve access to effective procedures.	
Resource impact	Reduce unnecessary referral and intervention. If referral pathway and tool use, streamline referral process, reduce consultant clinic time wastage and ensure audit	Resource required to establish MDT

of outcomes.

7 Further information

7.1 Research recommendations

- Research should be undertaken into the true cost of body contouring surgery. Cost varies across the UK and proper research is required to understand the average fee. 7.2 Other recommendations

- Request for central funding for body contouring surgery
- Development of registry of operations and complications (+/- quality of life measures) to which patient data are mandatorily submitted
- National use of referral document for GPs for body contouring surgery (Appendix 1)
- Wide dissemination of useful information on body contouring surgery to primary care and public (cf patient information leaflet)
- Patient support groups to be notified of this guidance
- Professional organisations (BAPRAS media company) can assist in disseminating the guidance information.
- GP surgeries need access to the guidance
- Appendix 1 data to be centrally collated at BAPRAS for use in further research.
- A review of the current evidence to be carried out in 5 years, and guidance adjusted according to new evidence.

7.3 Evidence base

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7.4 Guide development group for Body contouring surgery

A commissioning guide development group was established to review and advise on the content of the commissioning guide. This group met once, with additional interaction taking place via email.

Name	Job Title/Role	Affiliation
Mark Soldin, Chair	Consultant Plastic Surgeon	BAPRAS
Fiona Hogg	Consultant Plastic Surgeon	BAPRAS
Jane Deville-Almond	Patient Representative	Chair, British Obesity Society
Ken Clare	Patient Representative	Chair, Weight Loss Surgery Info
Elaine Sassoon	Consultant Plastic Surgeon	BAPRAS
Isabel Teo	Plastics Registrar	BAPRAS
Nada Al-Hadithy	Plastics Registrar	BAPRAS
Maleeha Mughal	Plastics Registrar	BAPRAS
Jo Gilmartin	Lecturer in Health and Psychology	Leeds University
Kiranmayi Penumaka	GP	Halesowen Central Medical Practice
Nick Wilson-Jones	Consultant Plastic Surgeon	BAPRAS
Richard Welbourn	Consultant General Surgeon; President, British Obesity and Metabolic Surgery Society	British Obesity and Metabolic Surgery Society
Steve Lloyd	Chair	Hardwick CCG

7.5 Funding statement

The development of this commissioning guidance has been funded by the following sources:

- DH Right Care funded the costs of the guide development group, literature searches and contributed towards administrative costs.
- The Royal College of Surgeons of England and the British Association of Plastic, Reconstructive and

Aesthethic Surgeons provided staff to support the guideline development.

7.6 Conflict of Interest Statement

Individuals involved in the development and formal peer review of commissioning guides are asked to complete a conflict of interest declaration. It is noted that declaring a conflict of interest does not imply that the individual has been influenced by his or her secondary interest. It is intended to make interests (financial or otherwise) more transparent and to allow others to have knowledge of the interest.

The following interested were declared by the group:

Name	Job title/role	Declared interest
Miss Fiona Hogg	Consultant Plastic Surgeon	• Received fees from Ethicon to attend education events on massive weight loss body contouring surgery
Dr Jo Gilmartin	Lecturer in health and psychology	• Received pump priming funds for undertaking quality of life research which contributed to the commissioning guide
Mr Mark Soldin	Consultant Plastic Surgeon	• Received pump priming funds for undertaking quality of life research which contributed to the commissioning guide • Runs a private clinic in South West London
Miss Nada Al-Hadithy	Plastic Registrar	• Received funding from the William Rooney Plastic Surgery and Burns Research Trust to undertake Doctor of Medicine (MD) study
Mr Richard Welbourn	Consultant General surgeon	• Occasional mentorship fees for surgeons visiting the unit paid to employer – none received in 2013 • Sponsorship for attending conferences from Ethicon Endo-Surgery within the last year, previous sponsorship from Allergan and Covidien for attending conferences / courses and writing fees for published articles (in newsletters)

Appendix 1

The British Association of Plastic, Reconstructive and Aesthetic Surgery Post Bariatric Outcome Tool

What is the British Association of Plastic, Reconstructive and Aesthetic Surgery (BAPRAS) Post Bariatric Outcome Tool? (PBOT)

The underlying construct being measured is adjustment (psychological and functional) to problems of massive weight loss and massive weight loss body contouring (MWLBC). From a psychological perspective, this will manifest differently for each individual respondent. However, we believe that the basic structure of adjustment is common across most people. Adjustment comprises negative emotions of fear, social anxiety, shame and negative affect along with behavioural response of avoidance and withdrawal that frequently disrupts lifestyle. We believe that we have captured this in the patient reported outcome measure (PROM) with contextually relevant questions specific to this unique cohort of patients.

Description of the BAPRAS PBOT

The BAPRAS PBOS is a 77 item scale designed to fulfil thee purposes:

1. To streamline the referral process and ensure those patients being referred meet the national guidelines.
2. To measure distress and dysfunction due to problems of the side effects of massive weight loss.
3. To quantify patient reported outcomes following massive weight loss body contouring.

Referral Tool Component

The first 2 pages are to be completed by the referring doctor with the patient. In the UK, this is usually the general practitioner (GP). Page 1 facilitates the collection of demographic and clinical information relevant to patients considering massive weight loss body contouring. Page 2 collates known problems with excess skin, functional and psychological morbidity, past medical history and drug history.

PROM Component

The third to fifth pages are to be completed by the patient. This consists of questions for further demographic data collection and post-operative complication history which will aid screening of appropriate patients for surgery; and identify: adjustment to massive weight loss; functional impairment and perception of disfigurement.

There are two diagrams. One is a visual prompt so that the patient can highlight areas of concern on his/her body. The other is a visual analogue scale of how he/she perceives his/her size. The second visual analogue scale should be compared with the clinical photographs of the patient to identify how closely the patient's perception of his/her body image reflects objective assessment of the clinical photograph by the MDT panel.

The final part of the questionnaire is a blank space for patients to include any additional information they feel is important.

Administering the Score

The PBOT should be completed before referral to the plastic surgery unit, and will be reviewed with clinical photographs by the massive weight loss body contouring multi-disciplinary team (MDT). It can also be used at 3 months, 6 months and/or 1 year+ post massive weight loss body contouring in order to measure outcomes in this group of patients.

Scoring

Of the 77 items on the questionnaire, there are 41 items to score for the two components.

Score Component	Questions to Score	Minimum	Maximum
Referral Tool (Pages 1-2)	14 (of 30)	-26	16
PROM Component (Pages 3-5)	27 (of 47)	20	132

Referral Component Rules

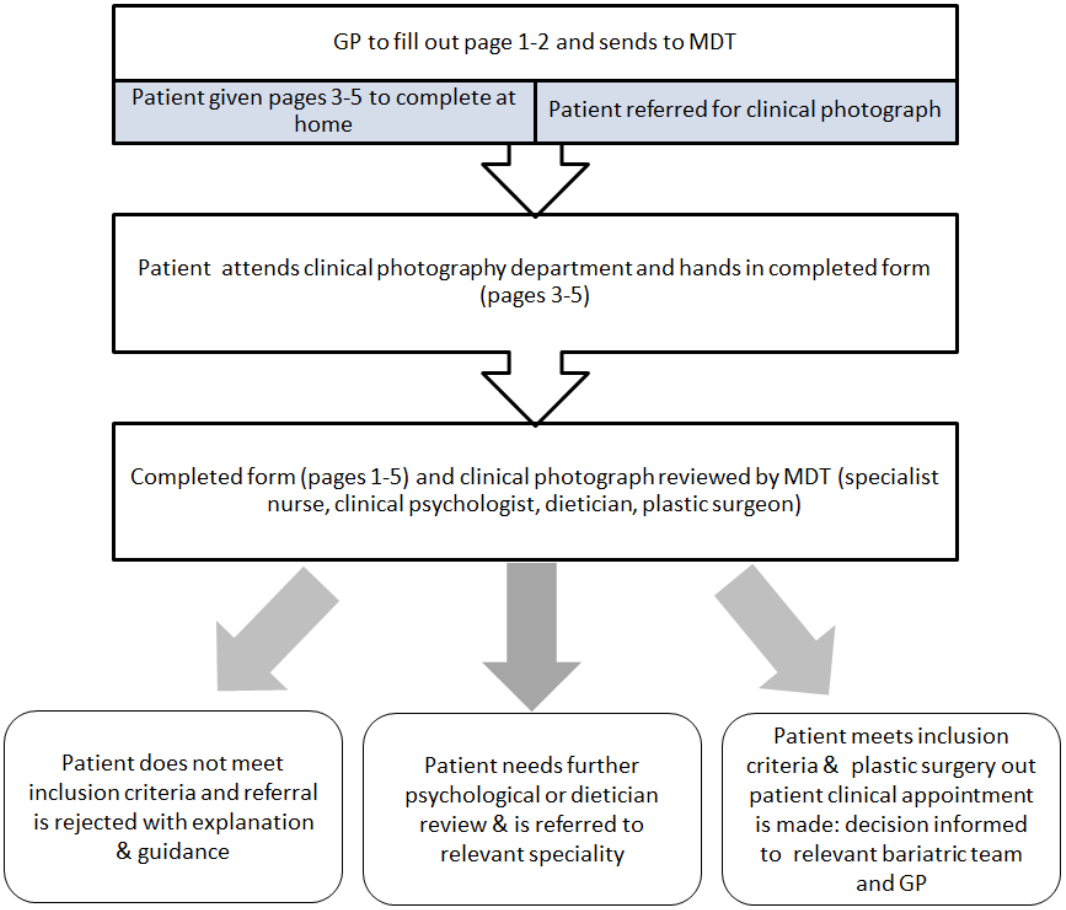
The referral component part of the PBOT directly reflects the inclusion criteria from the BAPRAS National Body Contouring Commissioning Guidelines.

When marking the referral tool component, to qualify for next stage of screening process for massive weight loss body contouring they must score > 8: points in the referral tool. Of these 8 points, 3 must come from the first 3 questions, i.e., the patients must score at least 1 for questions 1-3.

ANY psychiatric history should warrant referral to clinical psychologist for further enquiry.
ANY patients who have a discrepancy of more than 2 points between their self-assessment on the visual analogue scale of size and shape and the objective assessment of the panel should warrant referral to the clinical psychologist.

PROM Score Rules

The PROM component of the PBOT is a means of identifying which patients are adjusting to their new body habitus and which patients are having difficulty with coming to terms with their new shape. It is also a method of collecting data on satisfaction with the care they received, outcomes and contour. It will not alter which patients will meet the inclusion criteria for provision of massive weight loss body contouring on the NHS but should help collect data on this new cohort of patients to provide the best evidence based care in the future.


GP to fill out page 1-2 and sends to MDT
Patient given pages 3-5 to complete at home
Patient referred for clinical photograph
Patient attends clinical photography department and hands in completed form (pages 3-5)
Completed form (pages 1-5) and clinical photograph reviewed by MDT (specialist nurse, clinical psychologist, dietician, plastic surgeon)
Patient does not meet inclusion criteria and referral is rejected with explanation & guidance
Patient needs further psychological or dietician review & is referred to relevant speciality
Patient meets inclusion criteria & plastic surgery out patient clinical appointment is made: decision informed to relevant bariatric team and GP

Appendix 2: Referral Tool

Pages 1-2: For the referrer to complete			
Patient name:			Date of referral:
Date of birth: NHS number:			Name of referrer:
Address:			Address:
Phone number:			Phone number:
Funding secured:	Yes ☐	No ☐	Email:

Maximum ever weight (kg):	Weight lost (kg):	Current weight (kg):	Current height (m):

Length of time maintained at current weight:	Weight fluctuation of ≥5kg in the last 6 months? Yes ☐ No ☐

Plastic surgery procedure desired:	1. 2.

Method of weight loss: please select any applicable from below:		
Diet ☐	Exercise ☐	Surgery ☐

Type of Bariatric Surgery			Not Applicable (please move on) ☐		
		Date & Details	Surgical Approach Please select one from below:		Date
Gastric Balloon	☐				
Gastric band	☐		Laparoscopic	☐	
Gastric sleeve	☐		Lap converted to open	☐	
Roux en Y	☐		Open	☐	
Duodenal Switch	☐				
Complications or additional information					

As a **result of the excess skin** the patient suffers with (please tick all that apply):						
Skin condition	Dermatitis ☐	Hidradenitis ☐	Intertrigo ☐	Infection ☐	Lymphoedema ☐	Ulceration ☐
Evidence of Functional impairment	Yes ☐ Give details:					No ☐
Evidence of Psychological impairment	Yes ☐ Give details:					No ☐

Past Medical History: Please write:		
Please tick if there is any history of the following:		Date of diagnosis & details
Active delusional or schizophrenic illness	☐	
Body dysmorphic disorder	☐	
Eating disorder	☐	
History of self-harm in last 2 years	☐	
Major depressive illness	☐	
Obsessive compulsive disorder	☐	
Substance abuse problem	☐	

Psychiatric History: (Please write)	
Drug History: Please write:	Any history of recreational drug use? Please give information
Allergies:	

Any additional information:

Page 3-6: For the patient to complete		
Patient Name:	Date of Completion:	Date of Birth:

Describe and date the surgery you have had for weight loss and body contouring:					
Describe any complications you may have experienced from the surgery above:					
Have you had any weight fluctuation in the last 6 months? (Tick the box which applies to you)	None ☐	0-5kg ☐	>5-10kg ☐	>10-20kg ☐	>20kg ☐

For the above surgery please tick the box which applies to you	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I am satisfied with the medical care I received					
I am satisfied with the outcome of my most recent surgery					
I am satisfied with my scar					
I am satisfied with my contour					

Have you **ever** smoked?	What was the most you **ever** smoked?		**If you are smoking now**, how much do you smoke?	
☐ Yes ☐ No (move onto the next question)	Very rarely	☐	Very rarely	☐
	Socially (≤2 cigarettes per week)	☐	Only socially (≤2 cigarettes per week)	☐
	< 5 cigarettes per day	☐	< 5 cigarettes per day	☐
	5-10 cigarettes per day	☐	5-10 cigarettes per day	☐
	11-20 cigarettes per day	☐	11-20 cigarettes per day	☐
	21-40 cigarettes per day	☐	21-40 cigarettes per day	☐
	>40 cigarettes per day	☐	>40 cigarettes per day	☐
If you have quit, when did you quit:				

Marital status (please check one):	Please tick	Current occupation (please write): _____		Please describe what you eat on a daily basis:
Single	☐	Full time employment	☐	
Married	☐	Self employed	☐	
Divorced	☐	Part time employment	☐	
Separated	☐	Student	☐	
Widowed	☐	Unemployed	☐	

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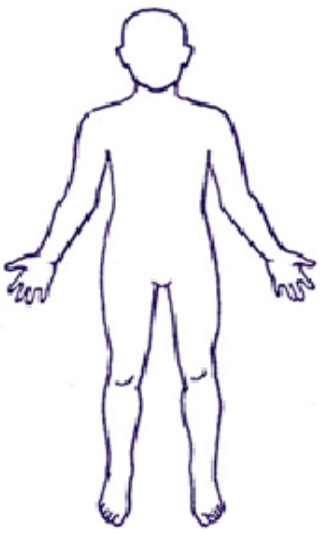
Body Contouring

Living with significant other	☐	Other:_____		
Have you had a pregnancy in the last 12 months?	No ☐	Yes ☐	Please give details	
Have you experienced the death of a close family member in last 12 months?	No ☐	Yes ☐	Please give details	
Have you experienced a relationship breakdown in the last 12 months?	No ☐	Yes ☐	Please give details	

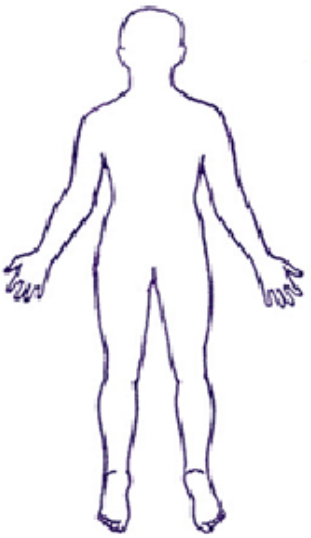
How frequently do you exercise?		If you exercise, how long do you exercise each time?		Where do you do most of your exercise?	
Not at all	☐	Less than 15 minutes	☐	Inside	☐
Once per month or less	☐	15 - 30 minutes	☐		
Several times per month	☐	31 - 60 minutes	☐	Outside	☐
Once per week	☐	61 - 120 minutes	☐		
Several times per week	☐	More than 120 minutes	☐		
Once per day	☐				
Several times a day	☐				

If you exercise, please indicate the types of exercise you do (fill in all that apply).									
Cycling	☐	Stationary bike	☐	Swimming	☐	Stairmaster	☐	Zumba	☐
Running	☐	Treadmill	☐	In-line skating	☐	Weight training	☐	Aerobics	☐
Walking	☐	Cross trainer	☐	Dancing	☐	Yoga	☐	Pilates	☐
Other (please write):									

Is there a part of your appearance that you are concerned with? Use the diagram to record where and write why you are concerned:



Front



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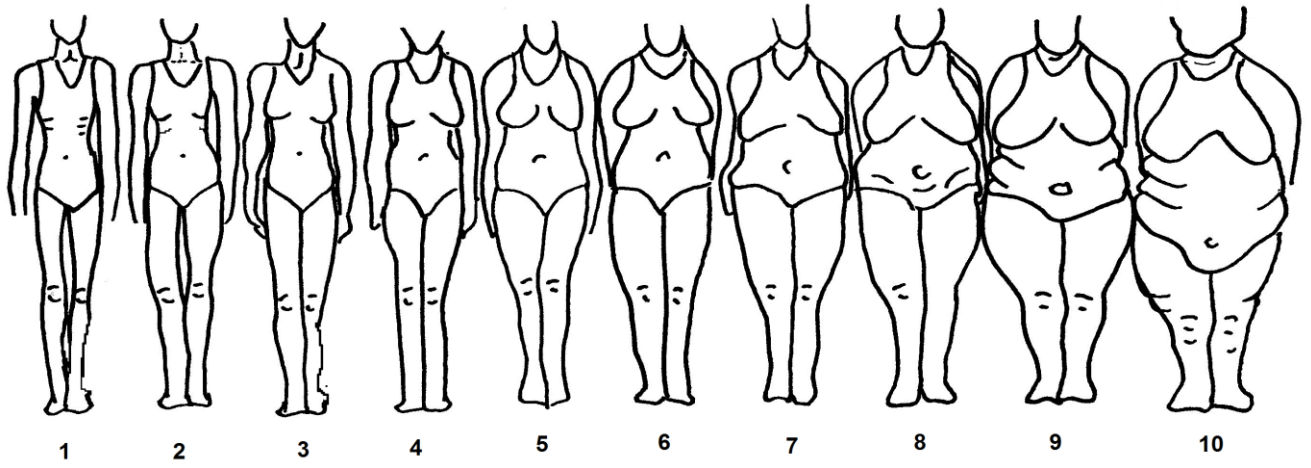
Body Contouring

Because of this body area: Please tick the box which applies:	Not at all 1	2	Neutral 3	4	Extremely 5
I find it difficult to move around					
I avoid going out of the house					
I get distressed when I see myself in the mirror					
I have problems finding clothes that fit					
I am unable to exercise as much as I would like					
I feel uncomfortable getting undressed in front of my partner					
There is an adverse outcome on my sex life					
I have physical pain					
I am limited in what I can do during the course of a typical day					
I am unable to interact with my family as I would like					
I find it difficult to socialise					
There is an adverse outcome on my professional life					
I am unhappy with my physical appearance					
I do not undress in front of other people (changing rooms)					
I am unable to independently perform some activities of personal hygiene (e.g. bathing, brushing my hair or wiping myself after the toilet)					

Please select from the following, the item that applies best to you:	
I can climb 3 flights of stairs without resting	☐
I can climb 1 flight of stairs without resting	☐
I can climb half a flight of stairs without resting	☐
I require a wheelchair	☐
I am housebound	☐

Activities of daily living	Please circle the choice that best suits you now			
In general my health is	Excellent	Good	Fair	Poor
I am able to work	Not at all	A little	Often	Very much
I am able to do the things I want to do	Not at all	A little	Often	Very much
I have satisfactory social contacts	Very many	Satisfactory	A few	None
I get pleasure out of sexual intimacy	Very much	Often	A little	Not at all

Please select from the following scale, which image you think best represents your body size and shape.



Please write down any additional information you think is important:

Thank you for completing this form.
Please ensure it gets sent to the massive weight loss body contouring team at:

Referral Tool Mark Scheme

1. (Weight Lost/ (original weight-ideal weight)) x 100= percentage excess weight lost. (Where ideal weight = 25 x height $(m)^2$)	Mark	Tick which applies
≤49%	0	
50-100%	1	
>100%	2	

2. Current BMI = mass in kg/(height in m)2	Mark	Tick which applies
>30	-1	
>27-30	0	
26-27	1	
≤25	2	

3. Length of time maintained at current weight.	Mark	Tick which applies
<12 months	0	
>12 – 18 months	1	
>18 months	2	

4. Weight fluctuation ≥5kg in the last 12 months	Mark	Tick which applies
Yes	-2	
No	0	

5. Skin conditions	Points
Allocate one point for each condition (maximum 6)	

6. Evidence of functional impairment	Mark	Tick which applies
Yes	1	
No	0	

7. Evidence of psychological impairment	Mark	Tick which applies
Yes	1	
No	0	

8. Psychiatric History:	Mark	Tick which applies
Active delusional or schizophrenic illness	-1	
Body dysmorphic disorder	-1	
Eating disorder	-1	

History of self-harm in last 2 years	-1	
Major depressive illness	-1	
Obsessive compulsive disorder	-1	
Substance abuse problem	-1	

9. Any history of recreational drug use	Mark	Tick which applies
No	0	
Yes	-1	
10. Smoking History:	Mark	Tick which applies
Never smoked	1	
Quit smoking	0	
Smokes rarely	-1	
Smokes socially	-1	
Smokes <5 cigarettes per day	-2	
5-10 cigarettes per day	-3	
11-20 cigarettes per day	-4	
21-40 cigarettes per day	-5	
>40 cigarettes per day	-10	

Question	Mark	Tick which applies
11. Have you had a pregnancy in the last 12 months?		
No	0	
Yes	-1	
12. Have you experienced the death of a close family member in last 12 months?		
No	0	
Yes	-1	
13. Have you experienced a relationship breakdown in the last 12 months?		
No	0	
Yes	-1	

14 Patient's clinical photograph matches patient's self-selection of body image on scale	Mark	Tick which applies
Yes	1	
No	-2	
More than 2 points difference between patient assessment and objective assessment score by MDT panel should prompt a referral to psychologist		

Referral Tool total score _____

PROM Mark Scheme

In order to score, please circle the answers the patients used in their questionnaire.

At the end add up the total score.

1. Have you had any weight fluctuation in the last 12 months?	None	0-5kg	>5-10kg	>10-20kg	>20kg
	1	-1	-2	-3	-4
Please tick the box which applies to you	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2. I am satisfied with the medical care I received	5	4	3	2	1
3. I am satisfied with the outcome of my most recent surgery	5	4	3	2	1
4. I am satisfied with my scar	5	4	3	2	1
5. I am satisfied with my contour	5	4	3	2	1

6. How frequently do you exercise?		If you exercise, how long do you exercise each time?	
Not at all	0	Less than 15 minutes	0.25
Once per month or less	1	15 - 30 minutes	0.50
Several times per month	2	31 - 60 minutes	1
Once per week	3	61 - 120 minutes	1.5
Several times per week	4	More than 120 minutes	2
Once per day	5		
Several times a day	6		

Score = frequency x exercise time =

Because of this body area: Please tick the box which applies:	Not at all 1	2	Neutral 3	4	Extremely 5
7. I find it difficult to move around	5	4	3	2	1
8. I avoid going out of the house	5	4	3	2	1
9. I get distressed when I see myself in the mirror	5	4	3	2	1
10. I have problems finding clothes that fit	5	4	3	2	1
11. I am unable to exercise as much as I would like	5	4	3	2	1
12. I feel uncomfortable getting undressed in front of my partner	5	4	3	2	1
13. There is an adverse outcome on my sex life	5	4	3	2	1
14. I have physical pain	5	4	3	2	1
15. I am limited in what I can do during the course of a typical day	5	4	3	2	1

16. I am unable to interact with my family as I would like	5	4	3	2	1
17. I find it difficult to socialise	5	4	3	2	1
18. There is an adverse outcome on my professional life	5	4	3	2	1
19. I am unhappy with my physical appearance	5	4	3	2	1
20. I do not undress in front of other people (changing rooms)	5	4	3	2	1
21. I am unable to independently perform some activities of personal hygiene (e.g. bathing, brushing my hair or wiping myself after the toilet)	5	4	3	2	1

22. Please select from the following, the item that applies best to you:	
I can climb 3 flights of stairs without resting	4
I can climb 1 flight of stairs without resting	3
I can climb half a flight of stairs without resting	2
I require a wheelchair	1
I am housebound	0

Activities of daily living	Please circle the choice that best suits you now			
23. In general my health is	Excellent	Good	Fair	Poor
	4	3	2	1
24. I am able to work	Not at all	A little	Often	Very much
	1	2	3	4
25. I am able to do the things I want to do	Not at all	A little	Often	Very much
	1	2	3	4
26. I have satisfactory social contacts	Very many	Satisfactory	A few	None
	4	3	2	1
27. I get pleasure out of sexual intimacy	Very much	Often	A little	Not at all
	4	3	2	1

PROM total score_____