National Assembly for Wales
Health and Social Care Committee

Inquiry into the availability of bariatric service

Evidence from the Body Contouring after Massive Weight Loss Commissioning Guidance Committee, the British Association of Plastic Surgeons (BAPRAS), and the Welsh Centre for Burns and Plastic Surgery – ABS 08

2013

Commissioning guide:

Body contouring surgery

Sponsoring Organisation: British Association of Plastic, Reconstructive and Aesthetic Surgeons
Date of evidence search: March 2013
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The Royal College of Surgeons of England, 35-43 Lincoln's Inn Fields, London WC2A 3PE

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 (eg 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.[16]

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.[17,18] 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. 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 27.0kg/m^2 AND weight stability of 12 months AND significant functional disturbance (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 – should be eligible for apronectomy only. BMI of up to 40kg/m^2 can be considered here.

Weight stability of 12 months

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]

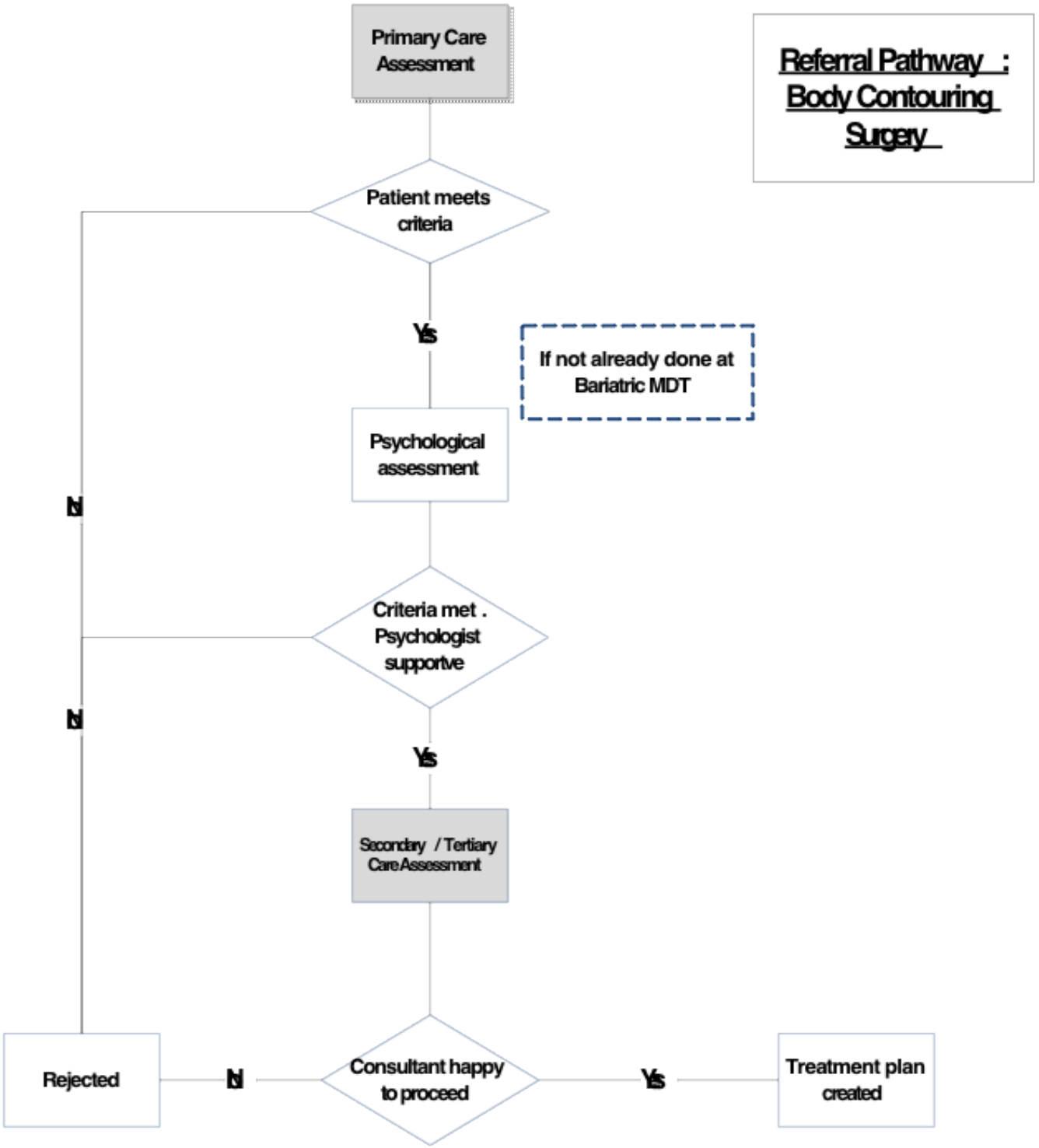
patients who have had an episode of self-harm within the last two years;
patients with a previous diagnosis of body dysmorphic disorder;
patients with a disproportionate view of the problem following your examination;
patients who currently have on going alcohol or drug misuse problems.

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 for surgery. If a patient is very deserving for 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 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 <X%	Data available from Hospital Episode Statistics
Average of length of stay		
Psychological evaluation in patient pathway	Provider demonstrates access for patients to psychological evaluation	
Aspirational: patient reported outcomes measures	Provider can demonstrate collection of patient satisfaction and patient reported outcomes measures, for example by completing pages 2–4 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/

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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 of outcomes.	Resource required to establish MDT

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. Quality of life cannot be calculated without this information.

7.2 Other recommendations

Request for central funding for body contouring surgery
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 groups
professional organisations (BAPRAS media company)
GP surgeries?

7.3 Evidence base

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2. Hurwitz DJ, Rubin JP, Risin M *et al*. Correcting the saddlebag deformity in the massive weight loss patient. *Plast Reconstr Surg* 2004; **114**: 1,313–1,325.
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3. Klassen AF, Cano SJ, Scott A *et al*. Satisfaction and quality-of-life issues in body contouring

surgery patients: a qualitative study. *Obes Surg* 2012; **22**: 1,527–1,534.

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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	
Jo Gilmartin	Lecturer in Health and Psychology	
Kiranmayi Penumaka	GP	

Nick Wilson-Jones	Consultant Plastic Surgeon	BAPRAS
Richard Welbourn	Consultant Bariatric Surgeon	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 Urological 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.

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 Rainey Foundation to undertake Doctor of Medicine (MD) study

Appendix 1

<table>
<tr><th colspan="6">Page 1: For the Referrer to complete:</th></tr>
<tr><td rowspan="10">Patient Name:

Date of birth:

Height:

Referral Source:
Address:

Phone Number:
Email:</td><td colspan="3">Original weight:

Original BMI:</td><td colspan="2">Current weight:

Current BMI:</td></tr>
<tr><td colspan="5">Weight lost:</td></tr>
<tr><td colspan="5">Percentage excess weight loss:</td></tr>
<tr><td colspan="5">Length of time maintained current weight:</td></tr>
<tr><td colspan="5">Method of weight loss: please select from below:</td></tr>
<tr><td rowspan="2">Diet</td><td colspan="4">Bariatric Surgery</td></tr>
<tr><td>Gastric band
☐</td><td>Gastric sleeve
☐</td><td>Roux en Y
☐</td><td>Duodenal Switch
☐</td></tr>
<tr><td>Operation:</td><td>Open
☐</td><td>Closed
☐</td><td>Date of surgery</td><td></td></tr>
<tr><td>Complications:</td><td colspan="4"></td></tr>
<tr><td>Additional information:</td><td colspan="4"></td></tr>
<tr><td colspan="2">Funding Secured?

Yes ☐ No ☐</td><td colspan="4">Plastic surgery procedure desired:
1.
2.</td></tr>
</table>

Past Medical History: Please write:	As a result of the excess skin:

	Skin condition	Intertrigo ☐	Hidradenitis ☐
		Infection ☐	Dermatitis ☐
		Lymphoedema ☐	Ulceration ☐
	Functional morbidity	Yes ☐	No ☐
	Psychological morbidity	Yes ☐	No ☐

Psychiatric History: Please write:	Please tick if there is any history of the following:	
	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	☐
	If any of the others are ticked, please give dates of diagnosis and last acute episode.	

Drug History:	Any history of recreational drug use? Please give information
Allergies:	

Page 2-4: For the patient to complete		
Date of Completion:	Patient Name	Date of Birth

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)	Only occasionally	☐	Only occasionally	☐
	Less than one pack per day	☐	Less than one pack per day	☐
	About one pack per day	☐	About one pack per day	☐
	One to two packs per day	☐	One to two packs per day	☐
	About two packs per day	☐	About two packs per day	☐
	More than two packs per day	☐	More than two packs per day	☐
If you have quit, when did you quit:				

Marital status (please check one):	Please tick	Occupation:	
Single	☐	Full time employment	☐
Married	☐	Self employed	☐
Divorced	☐	Part time employment	☐
Separated	☐	Student	☐
Widowed	☐	Unemployed	☐
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

Please describe what you eat on a daily basis:		
On the average, how many main meals do you eat each day?		Indicate your preferred ways of dieting (select all that apply)

		Skip meals	☐
On the average, how many snacks do you eat each day?		Completely fast for 24 hours +	☐
		Restrict carbohydrates	☐
		Restrict sweets/sugar	☐
How many of the following meals do you eat a week?		Reduce fats	☐
Breakfast	Days	Reduce portion size	☐
Lunch	Days	Exercise more	☐
Dinner	Days	Reduce calories	☐
		Take diet supplements	☐

How frequently do you exercise?		If you exercise, how long do you exercise each time?	
Not at all	☐	Less than 15 minutes	☐
Once per month or less	☐	15 - 30 minutes	☐
Several times per month	☐	31 - 60 minutes	☐
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	☐
Running	☐	Walking	☐
Swimming	☐	In-line skating	☐
Weight training	☐	Stairmaster	☐
Aerobics	☐	Treadmill	☐
Dancing		Other: _____	

Is there a part of your appearance that you are concerned with? Use the diagram to record where and why you are concerned:					
Please tick the box which best applies to you	Not at all		Neutral		Extremely
Because of this body area:	1	2	3	4	5
I get distressed when I see myself in the mirror					
I find it difficult to mobilise					
I have problems finding clothes that fit					
I am able to exercise as much as I would like to.					
I avoid going out of the house					
I feel uncomfortable getting undressed in front of my partner					
I have physical pain					
I am limited in what I can do					
I get distressed when going to social events					

Activities of daily living	Please circle the choice that best suits you			
In general my health is	Excellent	Good	Fair	Poor
I am able to work	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. If you feel you are in between 2 images, mark in between.

Consent for clinical photography for MDT