2014

Commissioning guide:

Weight assessment and management clinics (tier 3)

Sponsoring Organisation: British Obesity and Metabolic Surgery Society
Date of evidence search: July 2013
Date of publication: March 2014
Date of Review: March 2017

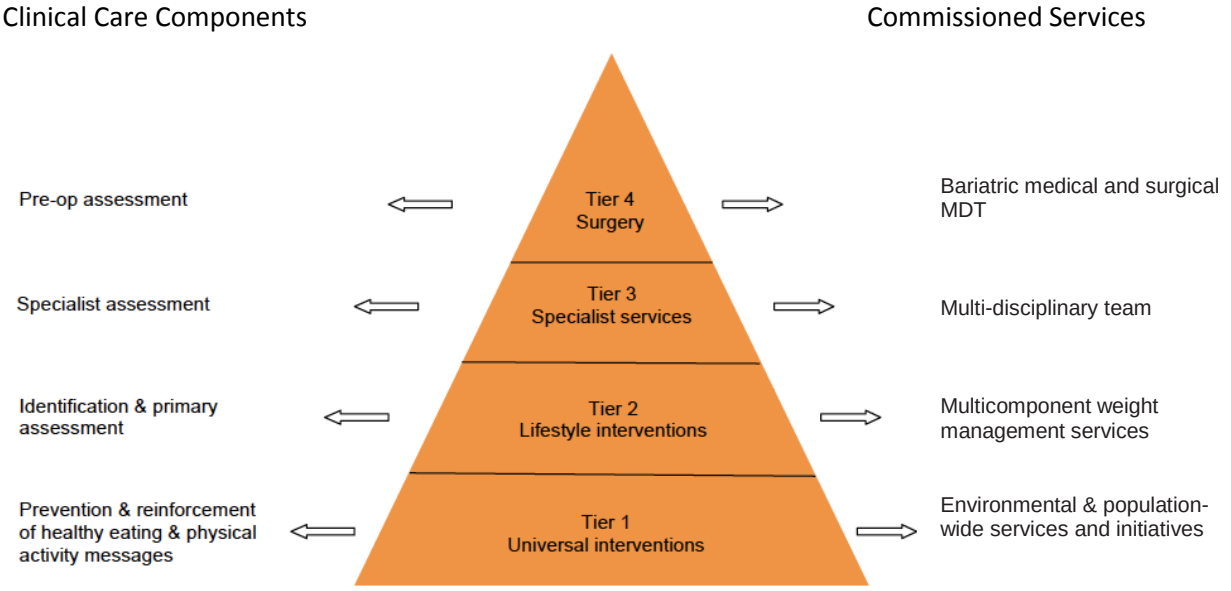
NICE has accredited the process used by Surgical Speciality Associations and Royal College of Surgeons to produce its Commissioning guidance. Accreditation is valid for 5 years from September 2012. More information on accreditation can be viewed at www.nice.org.uk/accreditation

CONTENTS

Introduction

This guidance and recommendations are to be read in conjunction with the Commissioning Policy A05 Complex and Specialised Obesity Surgery Services of the NHS Commissioning Board April 2013 [1]. The A05 policy describes the pathway of patients within the multidisciplinary bariatric surgical service and states that patients referred for bariatric surgery will come from a primary or secondary care specialist obesity service. Postoperative follow up within the bariatric surgical service is commissioned for 2 years, and dovetails with the ongoing care provided peri- and post-operatively by the specialist obesity service.

The process of care overall is intended to fit with a chronic disease model overseen by specialist weight management clinics, according to the plans described in 'Action on Obesity: comprehensive care for all', a report of the Royal College of Physicians (Jan 2013) and 'Measuring up. The medical profession's prescription for the nation's obesity crisis', a report of the Academy of Medical Royal Colleges (Feb 2013) [2, 3]. Currently there is not universal geographical coverage of Tier 3 weight management services in the NHS. Therefore this Guidance is intended for Tier 3 Specialist Services which provide the link between Tier 1/2 Environmental and population-wide services / Lifestyle interventions, and Tier 4 Multidisciplinary Specialist Bariatric Surgical Services, which is covered by NICE Guidance and BOMSS standards for clinical services & guidance on commissioning [4-6]. The tiers are defined below according to the terminology from the 2013 DoH Tier 2 guidance [7].



It is recognised that the label 'Tier 3' in this context could apply to a clinic ('Weight Assessment and Management Clinic') based either in primary or secondary care, but if in primary care it would be distinct from Tier 2 services [a]. Also, the Guideline Development Group recognises the changing nature of the definitions and that Tier 4 services ('bariatric surgery') may also include specialist non-surgical bariatric services, including medical, dietetic and psychological support. For NHS England Tier 3 services will be commissioned by Clinical Commissioning Groups and will liaise closely with Tier 4 services, which are commissioned centrally [2].

[a] Tier 2 refers to lifestyle weight management services plus prescribing in appropriate clinical circumstances.

This Tier 3 guidance describes the role of the referring GP, what should be achieved in the clinics and who should be referred for bariatric surgery. Given the lack of consistency in the provision of medical obesity services, this guidance should provide an organised structure and evidence-base for treatment, guidance for referral into and out of the Tier 3 service: either back to primary care (Tier 2) or onto specialist or surgical assessment (Tier 4). The advice on type 2 diabetes is also intended to guide GPs in the management of severely obese patients in whom prevention strategies have failed [8].

The potential uptake to the clinics is unknown although the population in the UK with a body mass index (BMI) of ≥40 alone is around 1.3m and there is an annual incidence of this level of obesity of about 60,000. The scale of the problem underlines the need for guidance on how patients with severe and complex obesity should be assessed and managed. Although it is not known how many would wish to be referred to the clinics, or how many would subsequently opt for bariatric surgery, there need to be enough bariatric physicians and allied health professionals in these teams to provide this care.

A literature search was carried out to identify research articles that evaluated the effectiveness and cost-effectiveness of Tier 3 weight management services. Although much high-grade evidence exists with respect to the clinical management of patients with obesity there was little evidence at a system level on how services should be organized to achieve the best patient outcomes in the most cost-effective manner. The search also did not identify the peer-reviewed publications of existing community-based weight management programmes relevant to the management of obesity in the UK [9, 10]. Therefore the recommendations in this guidance specify the scope of care that patients should receive in a Tier 3 weight management service, but how this care is organized will be a locally based decision. Wherever possible meta-analyses, systematic reviews or Randomised Controlled Trial evidence is presented. Observational trial data have also been included where the panel felt that the findings from several studies were consistent and effect sizes large [11, 12].

It must be considered that many patients eligible for bariatric surgery may choose not to have it, but still require and want assessment to treat issues beyond simply weight, and talk about treatment options so as to provide feedback to the GP about a long term plan; this would require a review at a specialised clinic [13]. It is assumed that patients will only be referred on by GPs to Tier 3 if they have tried and failed a supervised lifestyle weight management programme or self-directed dieting. Patients need not spend a prolonged time in Tier 3 in preparation for referral to a Tier 4 bariatric surgery clinic, but the Tier 3 clinic should not only be for assessing patients to refer on for surgery. A large proportion of patients who the GPs have struggled with (hence the referral to Tier 3) would be referred back after assessment with a management plan.

Although there is no evidence base for how long a patient being assessed for surgery should be in the Weight Assessment and Management clinic, typically the process of evaluation and assessment may take a period of months for complex patients. During this time clinically meaningful benefit may be achieved without the need or wish for referral for surgery. Equally, it is important to avoid undue delays in referral for surgery such as repeating failed prior interventions inappropriately due to the high likelihood of recidivism with weight regain and yo-yo dieting. This is particularly relevant to patients with BMI > 50 kg/m^2 for whom surgery is considered the next option instead of repeating failed lifestyle interventions [4 b]. Patients fulfilling the BMI thresholds for surgery

[b] Other groups of patients needing expeditious decision-making include severely obese patients needing renal transplants or presenting to gynaecologists with pelvic cancer.

'should be eligible' (evidence level 1, grade A recommendation) for a procedure and part of the clinic's role should be to facilitate this appropriately [14].

Thus overall the pathway is for primary care services that include community based interventions referring into a specialist multi-disciplinary bariatric service which includes a bariatric physician (the Weight Assessment and Management Service). A proportion of patients would then be considered for bariatric surgery, with the whole team also being involved in the peri-operative care, usually as part of the same team if the surgery service is located in the same hospital. After discharge from the surgical service patients would be managed in a chronic disease model of care. As the available literature did not distinguish between assessment clinics that contained surgeons (in addition to the rest of the multidisciplinary team) and clinics that did not contain surgeons, the guidance describes overall best practice and does not subdivide what should be done in each clinic if the services are run separately.

The guidance also provides the tools for measuring equity of access into the clinics and referral onwards for surgery, and it is expected that set-up costs of Tier 3 clinics would be offset by potential savings from reduced medication costs, consultation costs and hospital visits in those having bariatric surgery. There would also be considerable overlap and sharing of staff between diabetes clinics (with diabetologists/endocrinologists usually the predominant group of bariatric physicians), sleep medicine, dietetics/nutrition, psychology, psychiatry, and physical therapy for instance which would mitigate against new set-up costs.

email: *info@bomss.org.uk* www.bomss.org.uk

1 High Value Care Pathway for weight assessment and management clinics [c]

Guidance for General Practitioners:

- Use every opportunity to identify overweight and obese patients including opportunistic case finding and routine health checks [15]
- Discuss with an overweight or obese patient his/her understanding of the likely resulting health problems, assess the individual health risks and engage with the patient in a partnership to modify the risks as part of a holistic approach that includes his/her emotional wellbeing [15]
- Encourage training for doctors and practice nurses so that they can provide support for overweight and obese patients such as motivational interviewing [16]
- Provide a set of scales capable of weighing up to 200kg in every surgery, and offer to refer a patient over this weight to a service capable of weighing and monitoring him/her
- Record the patient's current weight and height to calculate body mass index (BMI) and measure waist circumference if BMI < 35 kg/m^2
- Discuss with the patient his/her previous attempts at weight loss and encourage those who have never successfully dieted to participate in a community or commercial Tier 2 weight management plan
- Assess carefully how engaged a patient is with the process before any decision is made about referral to the weight assessment and management clinic [17]
- Recognise the patient with a long history of cyclical weight loss and regain (yo-yo dieting) and consider direct referral to a weight assessment and management clinic without making him/her participate in a further Tier 2 programme as a qualifying threshold [17]
- Discuss the benefits of weight maintenance if the patient is not yet ready to engage with a programme, and encourage him/her to return at any point if they decide they need help

In discussing with a patient whether to refer him/her to the Weight Assessment and Management Clinic GPs should: [d e]

- Consider that it is an accepted option to refer a patient with BMI of ≥ 35 kg/m^2 and type 2 diabetes [18]
    - This recommendation may be reduced by 2.5 kg/m^2 of BMI in Asians [5, 18]
    - In exceptional circumstances a patient with BMI < 35 kg/m^2 may be referred to the Tier 3 clinic [18]
- Consider referring adults with a BMI of 40 or ≥ 35 kg/m^2 + obesity-related comorbidity e.g. metabolic syndrome, hypertension, obstructive sleep apnoea (OSA), functional disability, infertility and depression if specialist advice is needed regarding overall patient management
    - Occasionally a patient may be referred whose BMI is below these thresholds, if he/she has exceeded the thresholds in the past; this may include a patient who has already had bariatric

[c] In the common Commissioning Guidance specification high value care pathway implies a benefit/cost ratio to providing the service i.e. high Quality Adjusted Life Year (QALY) value.
[d] The current BMI thresholds for surgery were chosen arbitrarily as the criteria for referral into the clinic since the quoted literature predominantly refers to patients in these groups.
[e] If a patient is already being treated in secondary care it should be accepted practice to refer to the Weight Assessment and Management Clinic directly if the patient fulfils the criteria.

surgery presenting with a problem such as weight regain or nutritional deficiency or where revisional surgery might be considered

- Consider referring children and adolescents with obesity to age-appropriate specialist services especially if their weight interferes with secondary school education [19]

In the Weight Assessment and Management Clinic:

- The multidisciplinary team (MDT) should contain at least a bariatric physician, a dietitian, a specialist nurse, a clinical psychologist and a liaison psychiatry professional; there should be access to a physical therapist [20-23 f]
- The patient should have his/her weight and height measured and the trend in BMI assessed
- A dietary history should be taken to ascertain the patient's feelings and expectations about potential outcomes and willingness to consider treatment options, and information and education should be provided so that he/she has appropriate understanding of the relationship between eating habits and weight, aiming to: [20-22, 24]
    - Help him/her understand the necessary changes in eating habits to improve health, and identify risk factors and vulnerabilities so that interventions can be planned to address and improve them
- Encouragement should be provided for weight loss or maintenance, and structured eating plans, meal replacements and Very Low Energy Diets may be considered
- The bariatric physician should consider screening for rare hormonal or genetic causes for weight gain if there is clinical suspicion
- The bariatric physician should investigate for obesity-related comorbidities that may be previously undiagnosed, in particular type 2 diabetes, hypertension, OSA, heart failure, atrial fibrillation, chronic kidney disease, non-alcoholic fatty liver disease and depression, to optimise and modify all identified risks, and so that those referred for surgery are as fit as possible; cardiologists and respiratory physicians could also be involved by separate referral if patients need super-specialist care [14, 22]
- The Edmonton Obesity Staging System or similar should be considered as a means of assessing the risk from obesity-related disease in individual patients [25]
- Lifestyle advice should include access to a physical activity programme so as to promote health gains and general fitness individually tailored for each patient [22, 26]
- Given the high prevalence of psychiatric comorbidity the patient should be screened for psychological and lifestyle issues which may interfere with engagement, including anxiety and depression, self-harm and

[f] No literature was identified that distinguished between care provided by the bariatric physician or by the bariatric surgeon, or regarding the order in which they were seen by the different specialists. The panel recognised that the physician would often or usually be shared between the Weight Assessment and Management Clinic and the bariatric surgery team, which in practice would together provide the care and would in effect be the same clinic if located in the same hospital. The panel considered the guidance presented as best practice according to the identified literature and recognised that existing services may have examples of good practice that might not fit into different interpretations of the tier structure. Also the panel recognised there is no literature to identify which professionals are best placed to provide mental health interventions in weight management, and further research is required (section 7.1, page 16). For the purpose of the guidance 'liaison psychiatry professional' may include a psychiatrist and a mental health-trained nurse with specialist expertise in weight management. The panel recommends that the ideal service has both a clinical psychologist and a liaison psychiatry professional; however it recognises that this is aspirational and there needs to be local flexibility in commissioning as services develop. Liaison psychiatry refers to a sub-specialty multidisciplinary team that provides an interface between physical and mental health for patients in secondary care. The panel recognised that close working relationships need to be established between the groups described and community mental health teams where available.

suicidal behaviours, eating disorders such as binge eating and bulimia nervosa, borderline personality disorders, alcohol / substance misuse, childhood adversity and blocks for voluntary weight which are not clearly understood, so as to identify the patient who may need additional long term support or who may be at risk of self-harm after surgery; examples of screening tools are the IWQOL-Lite, SF-12 V2, EQ5D, GIQLI, HADS, EDE-Q and EHQ [17, 27-34]

- When screening for bariatric surgery the clinical psychologist and liaison psychiatry professional should [17, 27, 35]
    - Identify the patient for whom surgery may be inappropriate (severe learning disability, active uncontrolled psychosis, severe personality disorder)
    - Identify individuals not presently suitable for surgery (e.g. untreated or unstable mental health presentation, active alcohol or substance misuse, active eating disorder, self-harm in past 12 months, dementia, current non-adherence to treatment and recent significant life event e.g. bereavement or relationship breakdown) and provide an intervention or access to treatment before reassessing for surgery
    - Identify and manage weight gain associated with psychotropic medications
    - Identify the patient who may need specific attention and support following surgery
- After a mental health assessment a traffic light system may be useful to identify a patient who is not currently suitable for surgery or who may be suitable although deemed at higher risk and requires psychological treatment before being considered for surgery [36]
- Recognising that most will have multiple previous episodes of cyclical weight loss/regain, and that absolute weight loss per cycle may be modest, patients should not be made to achieve a set weight loss target before referral to the bariatric surgery service as a means of 'qualifying' for surgery; instead they should expect to lose weight during a short, supervised diet in order to make surgery technically feasible, and demonstrate engagement with the process [9, 18, 37-43]
- For a patient with type 2 diabetes: [18, 44]
    - The team should strive for satisfactory glycaemic control before surgery (HbA1c < 68 mmol/mol) but inability to achieve this within a reasonable period of time should not be a bar to or delay referral for bariatric surgery
    - Macro- and micro-vascular risk should be assessed and the information made available before a referral for surgery
- Smoking cessation advice should be given and appropriate referral made for a long term solution [14, 22, 45]
- Vitamin and micronutrient status should be assessed and deficiencies corrected, to include recognition of diets deficient in protein, in those being referred for bariatric surgery [14, 22]
- The patients should be encouraged to attend education sessions usually arranged by the bariatric surgery team if referral for surgery is being considered [24]
- The team, led by the bariatric physician, should meet physically or audiovisually, to discuss all patients at least once before deciding on referral back to the GP or for bariatric surgery
- Patient information leaflets written in plain English and other languages as appropriate should be provided for all proposed interventions

The patient should be referred for bariatric surgery if the Weight Assessment and Management Clinic is satisfied that: [g]

- The patient is adequately engaged with the team, fully understands the surgery, is well-informed and motivated to have surgery and has realistic expectations [17, 20, 21]
- All management options have been put to the patient including the characteristics of the various surgical procedures available and the risks and side effects
- He/she is medically optimised
- There is no medical, surgical, nutritional, psychological, psychiatric or social contraindication
- He/she understands the importance of complying with nutritional requirements before and after surgery and recognises the need for life-long follow up [14]

The patient should be referred back to the GP when:

- He/she does not engage with the team, for instance if resistant to recommended health and lifestyle changes
- Obesity-related diseases have been addressed and the team agrees with the patient that ongoing treatment and management plans can now appropriately be provided by the GP and –
- The patient does not want to be considered or does not appear to be appropriate for referral for bariatric surgery assessment or does not appear to be suitable for the Weight Assessment and Management clinic

The patient may remain within the Weight Assessment and Management Clinic if:

- He/she has complex weight-related comorbidity and the MDT agrees to keep him/her under review on a shared care arrangement with the GP, for instance for early supervision of a Very Low Energy Diet or specific more intensive programme

Peri-operatively and in the period of surgical aftercare bariatric physicians and surgeons should liaise closely with GPs to: [h]

- Ensure that diabetes management remains optimized [14]
- Ensure that medications for other obesity-related and non-obesity-related conditions are assessed regularly and adjusted e.g. blood pressure and epilepsy; GPs may be best placed to supervise these with the support of the medical and surgical MDTs [14]
- Supervise long term assessment of nutritional and trace mineral status and dietary replacement according to published recommendations, with the help of the dietitian [14]
- Identify issues that may require referral back to the surgical team and establish local protocols / 'red flags' for urgent re-referral if a patient has a suspected surgical or nutritional complication
- Support the patient's mental health and psychosocial needs and ensure that he/she has continued, adequate access to a clinical psychologist and a liaison psychiatry professional when appropriate, especially for those who may be made more vulnerable after surgery by developing depressive illness, risk

[g] The clinic should also be able to refer patients to the bariatric surgery team for ongoing treatment if they have had previous bariatric surgery elsewhere, or where a surgical complication or revisional surgery is being considered; those patients already known to the bariatric team should also be able to be referred back to the medical clinic in a two-way process
[h] Note - the surgical aftercare period in the Commissioning Policy A05 is 2 years [1].

of self-harm, significant eating disturbance, post-operative alcohol / substance misuse, and significant body image disturbance

After discharge from the bariatric surgery service bariatric physicians and GPs [i] should:

- Put in place a shared care model of chronic disease management led by the physician that clarifies what is expected of each role and what should be achieved at each review [46, 47]
- Provide the patient with clear written information on the importance of and reasons for long term follow up, to include advice about what to do if a patient becomes pregnant; contact details should be provided for the Tier 3 clinic
- Arrange for each patient to be reviewed at least annually, indefinitely
- Liaise closely together so that diabetes control is optimized in the medium and long term by at least an Annual Review
- Consider continuing medications indefinitely for those previously at high cardiovascular risk due to diabetes, dyslipidaemia and hypertension [14, 48]
- Ensure that a patient on treatment for OSA is reviewed appropriately by a sleep clinic
- Continue to supervise long term assessment of nutritional and trace mineral status and dietary replacement with the help of the dietitian [14]
- Refer patients back to the surgeons if red flags are identified, as above
- Ensure that the patient continues to have adequate access to a clinical psychologist and a liaison psychiatry professional
- Establish local protocols for appropriate investigation of post-bariatric surgery abnormalities such as anaemia or symptoms such as pain or vomiting, or for weight regain
- Arrange to undertake, or refer back for, band adjustments as required in conjunction with the surgical team
- Arrange and supervise physical activity individually tailored to each patient [26, 49]
- Consider referring patients for removal of excess tissue that interferes with function if clinically appropriate [50]
- Arrange for ongoing annual submission of data to the National Bariatric Surgery Registry according to the current dataset requirements

2 Procedures explorer for weight assessment and management clinics

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.

[i] In the context of the tier terminology 'bariatric physicians and GPs' implies Tier 3 and primary care services. The panel also recognised that there are existing examples of best practice where in the absence of a bariatric physician or Weight Assessment and Management Clinic surgical teams and GPs have already developed what is in effect a shared model of care.

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

3 Quality dashboard for weight assessment and management clinics

In the guidance development process the quality dashboard potentially provides an overview of activity commissioned by CCGs from the relevant pathways, and indicators of the quality of care provided by surgical units. However, the quality dashboard is severely constrained by the lack of national data on provision of non-surgical services and does not demonstrate all the data required to assess a medical weight management service. It is suggested that a recognised tool such as the National Obesity Observatory Standard Evaluation Framework is used to evaluate these services, and that in future consideration is given to collecting these data nationally [51]. Existing definitions of bariatric surgery according to HES are an estimate and open to interpretation but standard metrics could be presented against these, populated from HES and ONS data. Although the following mostly relate to bariatric surgery and not Weight Assessment and Management clinics, the metrics could include:

- Rates of referral to Weight Assessment and Management clinics, as presented in a quality dashboard, according to:
    - Gender and ethnicity
    - Reported population prevalence of obesity (Standardised / 100,000) (QOF / ONS)
    - Reported population prevalence of diabetes (Standardised / 100,000) (QOF / ONS)
    - Reported population prevalence of cardiovascular disease (Standardised / 100,000) (QOF / ONS)
- Rates of referral for surgery
    - For each of the above metrics
- The standardised rate of bariatric surgery per 100,000 population (National Bariatric Surgery Registry) (NBSR)
    - Average length of stay (days)
    - 7 day readmission rate (%)
    - 30 day readmission rate (%)
    - 30 day reoperation rate (%)
    - Day case rate (%)
    - In hospital mortality rate (per 1,000 discharges)
- The proportion of surgery that is publicly funded (NBSR)
- Mean weight and body mass index on referral to the clinic and before surgery (the latter would be available from the NBSR)
- The rate of relevant comorbidities on referral to the clinic and before surgery (the latter would be available from the NBSR) described as either proportion with each comorbidity referred for surgery or total number of comorbidities per patient referred for surgery
- Proportion of patients following bariatric surgery undergoing body contouring procedures within 5 years (HES)

- Surgical complication rate (NBSR)

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
Referral rates	Referral rates to surgery from the weight assessment and management clinic should be recorded appropriately; this could be done for each obesity stage according to the Edmonton Obesity Staging System
Progress through Weight Assessment and Management Clinic	Number of Out Patient Appointments (OPAs) for each of physician, dietitian, nurse, clinical psychologist and liaison psychiatry professional, other team members; FU to new ratio e.g. 1 new and 1 FU for physician, 6-7 OPAs in all with dietetics / clinical psychologist and liaison psychiatry professional / other team members
National Obesity Standard Evaluation Framework	The provider should arrange for on-going population and submission of this comprehensive national specified data collection tool
Documentation of MDT process	Record each patient discussed, frequency of meetings, who attends, quoracy
National Bariatric Surgery Registry	Provider should arrange for on-going annual submission of data to the NSBR for operated patients according to the current dataset requirements

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

Measure	Description	Data specification (if required)
Patient satisfaction rates with the complex obesity service	The provider demonstrates service user experience satisfaction with its service	Local patient survey data
Patient quality of life following	Use of a validated tool such as	Local data collection

service use	SF36 or EQ5D to demonstrate impact on quality of life	
Mean weight loss (kg or % or both) and/or excess BMI loss and/or % excess weight loss post engagement with the service at 12 months	Would capture effect on weight at one year of any intervention provided in the clinic	Partial data are available in the NBSR (for surgical patients) but additional follow up data are required from non-surgical and non-specialist services which could come from a registry set up for the purpose
Measures of patient engagement	Measure 'opt-in' rates; Did Not Attend (DNA) rates including DNA even once; stratified by gender and ethnic origin, to assess equality of access	E.g. discharge is >2 DNAs
Length of stay, improvement in HbA1c for surgical patients (more likely a component of a surgical CQUIN)	Provider demonstrates a mean length of stay of number more than x days	Data available from NBSR/HES

The following are examples of substantive existing Weight Assessment and Management Clinics which were identified in the literature search and could be used as a basis for a model of care.
Isle of Wight NHS. Community Specialist Weight Management Service Tier 3 (Adults aged 18+). Newport: Isle of Wight NHS; 2012. Isle of Wight Weight Management Service Tier 3
NHS West Sussex. "Why Weight" Service - a breakdown of services. NHS West Sussex; 2013. http://www.westsussexgp.com/documents.php?id=581
NHS Wiltshire. Community specialist weight management and bariatric surgery assessment service; and post bariatric surgery support service (Tier 3 and Tier 5). Devizes: NHS Wiltshire; 2013. NHS Wiltshire. Community specialist weight management

5 Directory

5.1 Patient Information for weight assessment and management clinics

Name	Publisher	Link
NHS Choices – Information on all aspects of weight	NHS	http://www.nhs.uk/Pages/HomePage.aspx

management including surgery		
Patient.co.uk website funded by Egton medical information systems. BMA patient information resource highly recommended. Includes leaflets on diet, medication, and health advice	Patient.co.uk	http://www.patient.co.uk/
British Obesity Surgery Patient Association (BOSPA): Information and support for bariatric surgery patients	BOSPA	http://www.bospa.org.uk/
Weight Loss Surgery Info (WLS Info): Information and support for bariatric surgery patients	WLS Info	http://www.wlsinfo.org.uk/
British Heart Foundation (charity): Useful leaflets and resources	British Heart Foundation	http://www.bhf.org.uk
Diabetes UK (charity): Useful leaflets and resources	Diabetes UK	http://www.diabetes.org.uk/
British Dietetic Association (charity): Useful leaflets and resources	British Dietetic Association	http://bdaweightwise.com/

5.2 Clinician information for weight assessment and management clinics

Name	Publisher	Link
National obesity observatory (NOO) The Public Health England (PHE) Obesity Knowledge and Intelligence team provides a single point of contact for wide-ranging authoritative information on data, evaluation, evidence and research related to weight status and its determinants.	National obesity observatory [j]	http://www.noo.org.uk/

[j] The National Obesity Observatory is now part of Public Health England (PHE) Obesity Knowledge and Intelligence team

National Obesity Observatory. Standard evaluation framework for weight management interventions. The NOO website offers examples of weight management services, and encourages services to upload data evaluated via SEF.	National Obesity Observatory; 2009. The PHE Obesity Knowledge and Intelligence team are currently consulting on improving the NOO SEF.	http://www.noo.org.uk/core/frameworks/SEF
Obesity learning centre The Obesity Learning Centre (OLC) is the nationwide centre for quality assured information for everyone working in obesity. The OLC sets out to strengthen and support local capacity and capabilities to treat overweight in children and adults.	UK Health Forum (Department of Health)	http://www.obesitylearningcentre.org.uk/
NICE Guidelines CG43, PH 35, PH 38, PH 42, PH 44 **Clinical and public health guidelines.**	National Institute for Health and Care Excellence	http://www.nice.org.uk/
British Obesity and Metabolic Surgery Society BOMSS aims to promote the development of high quality centres for obesity surgery, to educate and train future obesity surgeons and practitioners	British Obesity and Metabolic Surgery Society	http://www.bomss.org.uk/
Glasgow and Clyde Weight Management Service Range of service evaluations for weight management	NHS Greater Glasgow and Clyde	http://www.nhsggc.org.uk/content/default.asp?page=s1807_3
The Association for the Study of Obesity is the UK's foremost charitable organisation dedicated to the understanding, prevention and treatment of obesity. The International Association for the Study of Obesity (IASO) is a not-for-profit organisation linking	Association for the Study of Obesity and International Association for the Study of Obesity	http://www.aso.org.uk/ http://www.iaso.org/

over 50 regional and national associations with over 30,000 professional members in scientific, medical and research organisations. It is an umbrella organisation for 53 national obesity associations, representing 55 countries.		
Cancer Research UK (charity) **Information on the links between obesity and cancer and benefits of weight loss.**	Cancer Research UK (charity)	http://www.cancerresearchuk.org/cancer-info/healthyliving/obesityandweight/whatcausesobesity/

5.3 NHS Evidence Case Studies for Weight Assessment and Management Clinics

As noted previously, a published example of an NHS Weight Assessment and Management Clinic that utilises dietitians, psychologists and physiotherapists is referenced, although it is accepted by the panel that this does not fulfil the function of Tier 3 as described since no bariatric physician is included [9].

6 Benefits and risks of implementing this guide

Consideration	Benefit	Risk
Patient outcome and safety	Ensure access to effective therapy for severe and complex obesity, improve quality of life and comorbidity	Poor population health in patients with BMI 40 or ≥ 35 kg/m^2 + obesity-related comorbidity due to lack of engagement; reticence to refer to surgery possibly due to perceived risk
Patient experience	Improve access to patient information, support groups	Patients may not get referred appropriately into the clinic due to lack of engagement with primary care
Equity of Access	Improve access to effective procedures and appropriate increased use of valuable resource – bariatric surgery	Patients most likely to benefit from surgery may not get access due to either lack of referral into the Weight Assessment and Management Clinic or onward

		referral for surgery
Resource impact	Prevention and early treatment of diabetes and other obesity-related disease with reduced medication costs in the medium / long-term after bariatric surgery	Resource required to establish the Weight Assessment and Management Clinic

7 Further information

7.1 Research recommendations

The guidance group identified a severe lack of evidence on the outcomes from Weight Assessment and Management services. An increasing number of services are being commissioned, but as yet few have published outcome data. More research is required to define the most effective composition of the team, and what are realistic clinical outcomes. Improvement in both physical and psychological health rather than weight loss alone needs to be studied and reported on. Some suggested research ideas are:

- Studies to test the hypothesis that: nurse specialists with prescribing rights can be just as effective as bariatric physicians as members of multidisciplinary teams in Tier 3
- Studies considering the impact of appropriately trained dietitians and specialist nurses providing psychosocial screening assessments in Tier 3 services
- Studies considering what issues raised in psychological/psychosocial screening need further intervention from within the MDT and which issues are referred to other services
- Studies looking at outcomes for patients who have accessed a clinical psychologist and a liaison psychiatry professional in Tier 3 vs those who have not
- A study on cost-effectiveness of a community Tier 3 service could be either a randomised clinical trial vs Tier 3 in secondary care, or usual care (still possible in areas where Weight Assessment and Management Clinics are not yet available). It might be difficult to recruit patients to usual care option study, so other designs might be required. It might also be unethical to restrict bariatric surgery candidates to usual care group as this would effectively delay their surgical referral as attendance at Weight Assessment and Management Clinics is becoming a pre-requisite
- Evidence is lacking on what stops patients 'opting in' to weight management programmes. A multi-component qualitative study including telephone interviews, focus groups etc. including MDT experience might discover barriers to engagement and generate hypotheses on how to engage hard to reach groups
- More evidence on weight maintenance after discharge from weight management programmes is required. A long term patient led support group is one inexpensive model. A randomised control study of those offered long term group support after discharge from Weight Assessment and Management Clinics

compared to simple discharge looking at both weight and quality of life outcomes would be useful

- A randomised controlled trial could look at long term support groups provided by commercial organisations vs patient led support groups supported by the NHS in terms of weight management, quality of life, self-esteem, body image and cost-effectiveness
- There is a need to increase the knowledge and confidence of primary care staff in raising the issue of obesity; a trial using a training package and then testing whether they raised the issue of weight, performed baseline assessments and made more referrals after this would be useful
- A qualitative study looking at the way primary care staff raise the issue of weight and the patient experience of this
- Long term studies on quality of life, mental health and psychological interventions required after bariatric surgery would provide evidence for commissioning mental health and psychosocial interventions after surgery
- There is a need to understand patient experience including QALYs post-bariatric surgery in the first 2 post-operative years, 2-5 years, and 5 years + in terms of weight, body image, mood, weight management strategies used, functional change, impact on close relationships and change within the family; then to consider what interventions are most appropriate at the different stages including post-surgery specific Tier 3 interventions vs general weight management intervention vs primary care management and who is best placed to provide interventions
- There is a need to find out the requirement for revision surgery during the 2 year surgical follow up period
- There is a need to quantify patient compliance with clinic attendance during the 2 year surgical follow up period

A multidisciplinary group should be set up to look at relevant research questions, perhaps involving the Society for Endocrinology Obesity bariatric physician group.

7.2 Other recommendations

- There would be value in developing a national registry with an agreed set of core outcomes for Weight Assessment and Management Clinics. It is important for clear outcomes to be identified to evaluate the work up for surgery and for surgery itself, and key stakeholders (patients, surgeons, endocrinologists, dietitians, clinical psychologists and liaison psychiatry professionals) should select these outcomes. A core set of outcomes could then be measured and reported in all studies of medical work-up for severe and complex obesity
- It is also necessary for well-designed and conducted randomised trials to be performed to compare surgical procedures to examine the clinical and cost effectiveness of different types of surgery
- A core outcomes set would enable audit to compare services, interventions and centres
- It would be important to add in a measure of co-morbidities such as the EOSS score to the baseline data, and to recognise that valid comparison between services should reflect the population recruited
- A multidisciplinary group could look at these ideas and the possibility of working with the PHE Obesity Knowledge and Intelligence Team should be explored.

7.3 Evidence base

1. Clinical Commissioning Policy: Complex and Specialised Obesity Surgery. April 2013. Reference NHSCB/A05/P/a. http://www.england.nhs.uk/wp-content/uploads/2013/04/a05-p-a.pdf
2. Royal College of Physicians. Action on obesity: comprehensive care for all. Report of a working party. London: RCP, 2013. http://www.rcplondon.ac.uk/sites/default/files/action-on-obesity.pdf
3. Academy of Medical Royal Colleges. Measuring up. The medical profession's prescription for the nation's obesity crisis. London 2013. http://www.aomrc.org.uk/about-us/news/item/doctors-unite-to-deliver-prescription-for-uk-obesity-epidemic.html
4. NICE. Obesity. London: National Institute for Health and Clinical Excellence; 2006. http://www.nice.org.uk/nicemedia/pdf/CG43NICEGuideline.pdf
5. SIGN. Management of obesity. 115. Edinburgh: Scottish Intercollegiate Guidelines Network; 2010. Available from: www.sign.ac.uk/pdf/sign115.pdf
6. BOMSS. Providing bariatric surgery: BOMSS standards for clinical services & guidance on commissioning. London: British Obesity & Metabolic Surgery Society; 2012. Available from: http://www.bomss.org.uk/pdf/clinical_services_standards/Service_std-2012.pdf
7. Developing a specification for lifestyle weight management services. Best practice guidance for tier 2 services. Department of Health, Obesity and Food Policy Branch, PHD. March 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/142723/Weight_Management_Service_Spec_FINAL_with_IRB.pdf
8. NICE. Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. PH38. London: National Institute for Health and Clinical Excellence; 2012. Available from: http://guidance.nice.org.uk/PH38
9. Morrison DS, Boyle S, Morrison S, Allardice G, Greenlaw N, Forde L. Evaluation of the first phase of a specialist weight management programme in the UK National Health Service: prospective cohort study. Public Health Nutr 2012; 15: 22-38. http://library.nhsggc.org.uk/mediaAssets/WMS/PHN%20GCWMS%20Phase%201%20Evaluation.pdf
10. Lean M, Brosnahan N, McLoone P, McCombie L, Higgs AB, Ross H et al. Feasibility and indicative results from a 12-month low-energy liquid diet treatment and maintenance programme for severe obesity. Br J Gen Pract 2013; 63: e115-e124. Pdf available from www.counterweight.org
11. Concato J, Shah N, Horwitz RI. Randomized, controlled trials, observational studies, and the hierarchy of research designs. N Engl J Med 2000; 342(25): 1887-1892. http://www.nejm.org/doi/full/10.1056/NEJM200006223422507
12. Benson K, Hartz AJ. A comparison of observational studies and randomized, controlled trials. N Engl J Med 2000; 342(25): 1878-1886. http://www.nejm.org/doi/full/10.1056/NEJM200006223422506
13. Hainer V. How should the obese patient be managed? Possible approaches to a national obesity management network. In J obesity 1999; 23: S14-S19. http://www.nature.com/ijo/journal/v23/n4s/pdf/0800915a.pdf
14. Mechanick JI, Youdim A, Jones DB, Garvey WT, Hurley DL, McMahon MM et al. Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient—2013 update: Co-sponsored by American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery. Obesity 2013; 21: S1-S27.

http://www.ncbi.nlm.nih.gov/pubmed/23529939 or http://www.seen.es/docs/apartados/485/ASPEN%20BARIATRIC%20SURGERY.pdf (2008 Clinical practice guidelines)

15. National Obesity Observatory. Brief interventions for weight management. National Obesity Observatory; 2011. http://www.noo.org.uk/uploads/doc/vid_10702_BIV2.pdf
16. Rollnick S, Heather N, Bell A. Negotiating behaviour change in medical settings: The development of brief motivational interviewing. J Mental Health 1992: 1: 25-37. http://phe512.files.wordpress.com/2011/03/04-rollnick.pdf
17. Wadden TA, Sarwer DB. Behavioral Assessment of Candidates for Bariatric Surgery: A Patient-Oriented Approach. Obesity 2006; 14: 53S-62S. http://onlinelibrary.wiley.com/doi/10.1038/oby.2006.283/full
18. Dixon JB, Zimmet P, Alberti KG. Rubino F, on behalf of the International Diabetes Federation Taskforce on Epidemiology and Prevention. Bariatric surgery: an IDF statement for obese Type 2 diabetes. Diabet Med 2011; 28: 628-642. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3123702/
19. Pratt JSA, Lenders CM, Dionne EA, Hoppin AG, Hsu GLK, Inge TH. Best Practice Updates for Pediatric/Adolescent Weight Loss Surgery. Obesity 2009; 17: 901-910. doi:10.1038/oby.2008.577. http://onlinelibrary.wiley.com/store/10.1038/oby.2008.577/asset/oby.2008.577.pdf?v=1&t=hkciveoc&s=a8ba96082c9fcc1f6d6d74e60e6a88bec6e2a93d
20. Collazo-Clavell ML, Clark MM, McAlpine DE, Jensen MD. Assessment and preparation of patients for bariatric surgery. Mayo Clin Proc 2006; 81: S11-S17. http://www.asmbspa.org/ckfinder/userfiles/files/article%206%20Mayo%20Clinic%20Supplement.pdf#page=11
21. Kelly JJ, Shikora S, Jones DB et al. Best Practice Updates for Surgical Care in Weight Loss Surgery. Obesity 2009; 17: 863-870. doi:10.1038/oby.2008.570. http://onlinelibrary.wiley.com/doi/10.1038/oby.2008.570/full
22. Apovian CM, Cummings S, Anderson W, Borud L, Boyer K, Day K et al. Best Practice Updates for Multidisciplinary Care in Weight Loss Surgery. Obesity 2009; 17: 871-89. doi:10.1038/oby.2008.580. http://onlinelibrary.wiley.com/store/10.1038/oby.2008.580/asset/oby.2008.580.pdf?v=1&t=hkcj74du&s=ec124201a65701c9436948e1323b4c95f10f76e3
23. Too Lean a Service? A review of the care of patients who underwent bariatric surgery. http://www.ncepod.org.uk/2012report2/downloads/BS_fullreport.pdf
24. Wee CC, Pratt JS, Fanelli R, Samour PQ, Trainor LS, Paasche-Orlow MK. Best Practice Updates for Informed Consent and Patient Education in Weight Loss Surgery. Obesity 2009; 17: 885-888. doi:10.1038/oby.2008.567. http://onlinelibrary.wiley.com/store/10.1038/oby.2008.567/asset/oby.2008.567.pdf?v=1&t=hkcjikxt&s=f6eb2cead109ff74692d54fe2ae7d6157b4a65c3
25. Padwal RJ, Pajewski NM, Allison DB, Sharma AM. Using the Edmonton obesity staging system to predict mortality in a population-representative cohort of people. CMAJ 2011; 83: 1-8. http://www.cmaj.ca/content/183/14/E1059.full.pdf+html or http://www.slideshare.net/DrAMSharma/edmonton-obesity-staging-system
26. Johnson JL, Slentz CA, Houmard JA, Samsa GP, Cuscha BD, Aiken LB et al. Exercise Training Amount and Intensity Effects on Metabolic Syndrome (From Studies of a Targeted Risk Reduction Intervention

through Defined Exercise). Am J Cardiol 2007; 100(12): 1759–1766. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2190779/

27. Greenburg I, Sogg S, Perna FM. Behavioral and Psychological Care in Weight Loss Surgery: Best Practice Update. Obesity 2009; 17: 880-884. doi:10.1038/oby.2008.571. http://onlinelibrary.wiley.com/store/10.1038/oby.2008.571/asset/oby.2008.571.pdf?v=1&t=hkci7wgt&s=913b025d5bc70bf69ab2558a28b88383c2250d53
28. Impact of Weight on Quality of Life Questionnaire http://www.med.umich.edu/intmed/endocrinology/weightmanagement/IWQOL-LiteEnglish-US.pdf
29. SF-12 V2 http://www.sf-36.org/demos/SF-12v2.html
30. EQ5D http://www.euroqol.org/about-eq-5d.html
31. Eypasch E, Williams JI, Wood-Dauphinee S, Ure BM, Schmülling C, Neugebauer E, Troidl H. Gastrointestinal Quality of Life Index: development, validation and application of a new instrument. Br J Surg 1995; 82: 216-222. http://www.ncbi.nlm.nih.gov/pubmed/7749697?dopt=Abstract
32. Hospital Anxiety And Depression Scale http://www.hqlo.com/content/pdf/1477-7525-1-29.pdf
33. Fairburn CG, Beglin SJ. Assessment of eating disorders: Interview or self-report questionnaire? Int J Eating Disord 1994; 16: 363–370. https://www.rcpsych.ac.uk/pdf/EDE-Q.pdf
34. Eating Habits Questionnaire http://www.nhrmc.org/workfiles/Good%20For%20You/Nutrition.pdf
35. Obesity in the UK: a psychological perspective. The British Psychological Society Professional Practice Board 2011. http://www.bps.org.uk/system/files/documents/obesity_report_2011.pdf
36. Stevens T, Spavin S, Scholtz S, McClelland L. Your patient and weight-loss surgery. Advances Psychiatric Treatment 2012; 18: 418-425. http://apt.rcpsych.org/content/18/6/418.short
37. Casazza K, Fontaine KR, Astrup A, Birch LL, Brown AW, Bohan Brown MM et al. Myths, Presumptions, and Facts about Obesity. N Eng J Med 2013; 368: 446-454. http://www.nejm.org/doi/full/10.1056/NEJMsa1208051#t=articleBackground
38. Zijlstra H, Larsen JK, de Ridder DTD, van Ramshorst B, Geen R. Initiation and Maintenance of Weight Loss after Laparoscopic Adjustable Gastric Banding. The role of Outcome Expectation and Satisfaction with the Psychosocial Outcome. Obesity Surgery 2009; 19: 725-721. http://link.springer.com/article/10.1007/s11695-008-9572-1
39. Gibbons LM, Sarwer DB, Crerand CE, Fabricatore AN, Kuehnel RH, Lipshcutz PE et al. Previous Weight Loss Experiences of Bariatric Surgery Candidates: How Much Have Patients Dieted prior to Surgery? Obesity 2006; 14: 70S-76S. http://onlinelibrary.wiley.com/doi/10.1038/oby.2006.285/full
40. Ochner CN, Dambkowski CL, Yeomans BL, Teixeira J, Pi-Sunyer FZ. Pre-bariatric surgery weight loss requirements and the effect of preoperative weight loss on postoperative outcome. Int J Obesity 2012; 36: 1380–1387. http://www.nature.com/ijo/journal/v36/n11/full/ijo201260a.html
41. ASMBS Position Statement on Preoperative Supervised Weight Loss Requirements. 2011. http://asmbs.org/2012/01/preoperative-supervised-weight-loss-requirements/
42. Cassie S, Menezes C, Birch DW, Shi X, Karmali S. Effect of preoperative weight loss in bariatric surgical patients: a systematic review. Surg Obes Rel Dis 2011; 7: 760-767. http://www.ncbi.nlm.nih.gov/pubmed/21978748
43. Livhits M, Mercado C, Yermilov I, Parikh JA, Dutson E, Mehran A et al. Does weight loss immediately before bariatric surgery improve outcomes: a systematic review. Surg Obe Rel Dis 2009; 5: 713-721.

http://bariatricsurgerymd.com/wp-content/uploads/2013/01/Does-weight-loss-immediately-before-bariatric-surgery-improve-outcomes.pdf

44. NHS Diabetes. Joint British Diabetes Societies Inpatient Care Group. Management of adults with diabetes undergoing surgery and elective procedures: improving standards. April 2011. http://www.diabetes.nhs.uk/document.php?o=224
45. Myers K, Hajek P, Hinds C, McRobbie H. Stopping Smoking Shortly Before Surgery and Postoperative Complications. A Systematic Review and Meta-analysis. Ann Int Med 2011; 171: 983-989. http://archinte.jamanetwork.com/article.aspx?articleid=227487
46. Richman RM, Webster P, Salgo AR, Mira M, Stenbeck KS, Caterson ID. A shared care approach in obesity management: the general practitioner and a hospital based service. Int J Obes Relat Metab Disord 1996; 20: 413-9. http://www.ncbi.nlm.nih.gov/pubmed/8696419
47. Jensen MD, Ryan DH, Apovian CM, Loria CM, Ard JD, Millen BE et al. 2013 AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults. J Am Coll Cardiol 2013 doi: 10.1016/j.jacc.2013.11.004. http://content.onlinejacc.org/data/Journals/JAC/0/11004.pdf or http://onlinelibrary.wiley.com/store/10.1002/oby.20660/asset/oby20660.pdf?v=1&t=hpzycxqr&s=6f1753adac6bee382689270b1b28f8ce07950515
48. Sjöström L, Lindroos A-K, Peltonen M, Torgerson J, Bouchard C, Carlsson B et al. Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery. NEJM 2004; 351: 2683-2693. http://www.nejm.org/doi/full/10.1056/NEJMoa035622
49. Livhits M, Mercado C, Yermilov I, Parikh JA, Dutson E, Mehran A et al. Obes Surg 2010; 20: 657–665. Exercise Following Bariatric Surgery: Systematic Review. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2850994/
50. BAPRAS/RCS NICE-Approved Commissioning Guidance on Body Contouring Surgery (2014 In Press) http://www.rcseng.ac.uk/healthcare-bodies/docs/published-guides/body-contouring-surgery
51. National Obesity Observatory. Standard evaluation framework for weight management interventions. National Obesity Observatory; 2009. http://www.noo.org.uk/core/frameworks/SEF

7.4 Guide development group for weight assessment and management clinics

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

Name	Job Title/Role	Affiliation
Mr Richard Welbourn	Consultant Surgeon (Co-Chair)	President, British Obesity and Metabolic Surgery Society
Prof John Wass	Professor of Endocrinology (Co-Chair)	Academic Vice-President, Royal College of Physicians
Dr Julian Barth	Consultant Chemical Pathologist	Chair, Severe and Complex Obesity Clinical Reference Group, NHS England

Mr Ken Clare	Patient representative	British Obesity and Metabolic Surgery Society Council member, WLSInfo patient support group
Prof John Dixon	Professor of Metabolic Medicine	Baker IDI Heart and Diabetes Institute, Melbourne, Australia, invited international expert member
Prof Nick Finer	Hon Professor Consultant Endocrinologist and Bariatric Physician	Royal College of Physicians, Association of Physicians Specialising in Obesity
Dr Carly Hughes	General Practitioner, Bariatric Physician, Hon Lecturer Health Policy and Practice UEA	Royal College of General Practitioners GPING, GPs with an Interest in Nutrition Group, Fakenham weight management service (Tier 3)
Dr Anita Jolly	Public Health Consultant	Faculty of Public Health
Ms Sue Sawyer	Specialist Commissioner	NHS England
Dr Lisa McClelland	Consultant Psychiatrist	Royal College of Psychiatrists
Ms Iris McMillan	Patient representative	Royal College of Surgeons Patient Liaison Group
Ms Mary O'Kane	Consultant Dietitian	British Obesity and Metabolic Surgery Society Council member, British Dietetic Association
Ms Gail Pinnock	Dietitian	British Obesity and Metabolic Surgery Society Council member, British Dietetic Association
Prof Carel le Roux	Professor of Metabolic Medicine	Royal College of Pathologists
Mr Peter Sedman	Consultant Surgeon	British Obesity and Metabolic Surgery Society
Dr Vanessa Snowdon-Carr	Lead Clinical Psychologist	British Obesity and Metabolic Surgery Society, British Psychological Society

7.5 Funding statement

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

- Department of Health 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 Obesity and Metabolic Surgery Society 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	Position	Declared Interest
Dr Julian Barth	Consultant Chemical Pathologist	• Received fees for consultancy from Slimming World and Lighterlife • Received fees for research from Roch Counterweight Project
Prof Nick Finer	Hon Professor Consultant Endocrinologist and Bariatric Physician	• Fees for consultancy multiple pharmaceutical companies – in past 2 years Novo Nordisk, Janssen, Vivus, Arena, Servier • Funds for research – clinical trials of anti-obesity drugs – income to employing Trust • Fees for speaking at meeting / symposium – Novo Nordisk, Janssen, Vivus, Arena • Sponsorship for attending a meeting – as speaker/presenter of research findings/faculty member Novo Nordisk, Vivus • Weight Concern (Reg Charity) – unpaid medical advisor • International Association for the Study of Obesity – unpaid chair of education and management task force • Experts in Severe and Complex Obesity (Reg Charity) - unpaid chair Stocks or shares, patents or royalties – yes, Counterweight plc – provider of Tier 2 obesity services
Dr Carly Hughes	General Practitioner, Bariatric Physician, Hon Senior Lecturer Health Policy and Practice UEA	• Runs a Tier 3 weight management service in Norfolk
Dr Anita Jolly	Public Health Consultant	• Employee of British Medical Health Journal

		Group from September 2011 – April 2013
Dr Vanessa Snowdon-Carr	Lead Clinical Psychologist	• Received consultancy fee from Allergan for providing sessions at 'Gastric Band Master Class' (May, July, October 2012) • Received consultancy fee from Astrazenca for providing workshops focusing on Motivational Interviewing (2012 – present)
Mr Richard Welbourn	Consultant Surgeon	• Received sponsorship for attending conference/educational workshops from Allergan, Ethicon Endo-surgery and fees for writing from Covidien • President of British Obesity and Metabolic Surgery Society • Chair of the National Bariatric Surgery Registry