Healthy **Weight**:
Healthy Wales

Llywodraeth Cymru
Welsh Government

All Wales Weight Management Pathway 2021

(Adults): Core Components

Purpose and Summary of Document:

This document details the revised All Wales Weight Management Pathway core components for adult weight management services. It provides guidance to those looking to commission weight management services, as well as to providers, detailing the minimum service requirements and expectations at each level for adult weight management services across Wales. This document also provides a summary of the interface between the levels and the minimum data set to be recorded by providers.

This document is one in a suite of planned documents to support the delivery of effective weight management services across Wales.

Acknowledgements

This document and the work that has been needed to reshape and develop a new approach to weight management services in Wales, in support of our Healthy Weight Healthy Wales Strategy, has drawn on the expertise and knowledge of a number of professionals across Wales. Their help has been invaluable.

We would particularly like to thank those who have participated in the pathway development groups and provided constructive feedback and advice throughout the process; in no particular order:

Jeffrey Stephens
Jon Barry
Karen James
Patrick Wainwright
Dr Sue Kenneally
Zoe Paul-Gough
Claire Lanes
Ann Vincent
Helen Nicholls
Jon Bradley
Fiona Kinghorn
Stuart Bourne
Ros Jervis
Keith Reid
Jennifer Devin
Julie Lewis
Meryl James
Rachael Smart
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1. Introduction

This document is one in a series of documents setting out the components, standards and guidance to support the development and delivery of weight management services in Wales. This document sets out the key elements and principles underpinning the planning, commissioning and delivery of weight management services for the adult population of Wales.

The 2021 All Wales Weight Management Pathway, replaces the previous pathway published in 2010 by Welsh Government (Welsh Government, 2010), focuses on the weight management journey, i.e., from early intervention to specialist support and has been developed in partnership with professionals working in this field across Wales, drawing on the best available international evidence (Appendix A).

The essential but complex work of prevention, through developing healthy weight environments, healthy weight settings, and broader preventative approaches will be steered through the delivery of the Welsh Government's Healthy Weight: Healthy Wales strategy (Welsh Government, 2019).

This revised weight management pathway (2021) seeks to improve outcomes for individuals by ensuring that all levels of service are built on a shared understanding of the complexity of factors which lead to overweight and obesity. The importance of psychological factors including trauma in addressing overweight and obesity means that a psychologically informed approach should be central to all weight management services.

This new weight management pathway (2021) is underpinned by the 10 national design principles outlined in *A Healthier Wales: our plan for health and social care* (Welsh Government , 2018) and frame a transformative approach over the next decade.

The core components outlined in this document should be used in conjunction with the others including All Wales Weight Management Pathway (AWWMP) Service Standards, which will be used to measure service quality and stimulate continuous improvement.

2. Fundamentals for service design and delivery

All services with the All Wales Weight Management pathway should integrate the following fundamentals into their design and delivery:

Person-centred

A person-centred, empathetic, non-judgemental approach based on mutual respect and honesty should be adopted by all staff at every level of the Pathway. The person should be considered the *expert* in their own life and circumstances.

Psychologically and behaviourally informed

There should be a strong focus on building self-esteem, self-efficacy and resilience to enable people to feel more confident in embracing their weight management journey, since for most people, a life-long approach will be required. Services should be designed and delivered with an understanding of how adverse experiences and trauma may play a role in the background for many people. Staff need to understand weight stigma, its impact and to consider how to communicate sensitively and effectively with those living with overweight and obesity.

Focussed on the long term

Services should focus on facilitating life-long sustainable change, reduction in clinical risk and the prevention of future weight gain or regain. Sustained improvements in health and wellbeing is the goal rather than weight cycling.

Integrated and co-ordinated supporting the patient journey

Every person's weight management support should be coordinated by an appropriately trained member of staff or a team who be responsible for ensuring overarching progress is reviewed in a timely manner. This is particularly relevant if programmes consist of separate components delivered by different providers.

Provide support for on-going weight management journey

Staff in all services should provide planning support and information to help participants continue their weight management journey once the active phase of the programme is complete.

Table 1 below summarises the revised pathway approach to the management of overweight and obesity based on individual complexity and need for specialist intervention and support. All services within the AWWMP will need to ensure that the fundamentals described are integral to the design and delivery of the services.

3. Adult Weight Management Pathway Levels

Table 1 below summarises the different levels of the pathway for adults, their access criteria and referral routes

Table 1: Adults Weight Management Pathway 2021 for people 18 years and above

Level	Description	Criteria	Referral
1	**Brief Advice and Self-Directed support** Self-directed support for achieving or maintaining a healthy weight. Primary healthcare teams should ensure that the weight of all patients in monitored and discussed in a sensitive and non-stigmatising manner. Patients at level 1 should be advised to access evidence-based support. Health Boards should provide guidance to primary and community services on the range of options available locally. This may include local weight loss groups; commercial weight loss services delivering 1:1, group or online services; online or other self-help materials in digital or other form. Opportunities at level 1 should be available close to people's homes, in the neighbourhood, local community and online.	BMI 25-30 kg/m^2 without co-morbidities[+] Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Signpost from a professional in a helping role
2	**Multi-component weight management support** Multi-component weight management interventions; addressing diet, physical activity and behaviour change skills, underpinned by behavioural science. The different components may be delivered together or separately, they would normally include referral to evidence based commercial provision, dedicated primary or community services delivered by dietitians or other professionals or digital services. The physical activity component may be provided by the National Exercise Referral Programme or similar provision. Sessions should be offered over a minimum period of 12 weeks and should include a review by the referring professional at the end of the period.	BMI ≥30 kg/m^2 without co-morbidities BMI ≥25 kg/m^2 with co-morbidities[+] Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Self-referral Referral by a health or social care professional

Level	Description	Criteria	Referral
3	**Specialist multi-disciplinary weight management services** Specialist multi-disciplinary assessment and specialist interventions delivered by the multi-disciplinary team (MDT), including: medical, dietary, psychological, pharmacological and physical activity/mobility interventions. Progress is monitored and reviewed by the MDT. Those eligible for a bariatric surgery assessment are identified and referred to level 4.	BMI ≥40 kg/m^2 BMI ≥35 kg/m^2 with co-morbidities[+]/ significant additional considerations[++]/both Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Referral by a health care professional
4	**Specialist surgical services** Specialist pre-surgical assessment is conducted by the level 4 bariatric multi-disciplinary team (MDT) to identify person suitability and treatment needs. If suitability is confirmed, a range of surgical options will be considered and an appropriate procedure performed. Pre and post-operative education and support is provided. Long-term follow-up, post-surgery, is provided by the bariatric MDT for a minimum of 2 years.	BMI≥ 35 kg/m^2 and recently diagnosed diabetes (in last 10 years) BMI of >40 kg/m^2 Lower criteria by 2.5 kg/m2 for people from black African, African-Caribbean and Asian groups.	Referred and considered "suitable for surgery" by the level 3 MDT

Comorbidities and Additional Considerations
[+]***Comorbidities*** Type 2 diabetes; Hypertension *(uncontrolled);* Cardiovascular disease ; Osteoarthritis related disability; Dyslipidaemia; Obstructive sleep apnoea; Some cancers; Asthma; Metabolic syndrome, defined by The International Diabetes Federation (1) as "*a cluster of the most dangerous heart attack risk factors: diabetes and prediabetes, abdominal obesity, high cholesterol and high blood pressure*."
[++]***Additional Considerations for Referral to Level 3*** • The person has previously made several unsuccessful attempts at weight loss through attending a structured multicomponent programme (e.g. level 2 or commercial programmes) and requires additional support. • The person has complex disease states (e.g. CVD risk, multiple co-morbidities) or needs that cannot be managed adequately in level 2 (e.g. the additional support needs of people with learning disabilities). • Uncontrolled eating behaviours that are causing clinically significant distress and require further assessment. • Where specialist interventions may be needed – such as a programme including a low-calorie liquid diet. • Bariatric surgery is being considered by a referring clinician.
Other Health Related Considerations *(consider prioritising at appropriate level)* • Pre-diabetes / those at high risk of type 2 diabetes • Infertility • Psychological co-morbidities

4. Level 1 Brief advice and self-directed support

Level 1 involves the provision of brief advice and signposting to self-directed support for achieving or maintaining a healthy weight (step-down). Level 1 is typically provided by primary healthcare teams or other health and social care professionals providing long term continuing care.

Primary healthcare teams should ensure that the weight of all patients is monitored and discussed in a sensitive and non-stigmatising manner with the goal of preventing significant weight gain in addition to supporting weight loss. Patients at level 1 should be signposted to evidence-based support.

Health Boards should provide guidance to primary and community services on the range of options available locally. This may include local weight loss groups; commercial weight loss services delivering 1:1, group or online services; online or other self-help materials in digital or other form.

Opportunities at level 1 should be available close to people's homes, in the neighbourhood, local community and online. Level 1 should apply universally for prevention. Practitioners should discuss action at a body mass index (BMI) as set out below.

Level	Description	Criteria	Referral
1	**Brief Advice and Self-Directed support**	BMI 25-30 kg/m^2 without co-morbidities$^+$ Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Signpost from a professional in a helping role

Community and Primary care practitioners are often the first point of contact for people with health and wellbeing concerns. Many medical issues such as disrupted sleep, pain, mechanical problems, metabolic, respiratory and psychiatric conditions are associated with excess weight. A person seeking help may or may not see weight as the most salient issue for them.

In these situations, primary and community care clinicians can play a central role in guiding people to address weight management issues in a non-stigmatising manner [4]. Supporting people to make changes to benefit overall health as well as addressing weight is a priority. Small yet significant changes should be encouraged and affirmed.

If the person feels supported long term they are more likely to engage with clinicians, optimising the chance of making real changes that will impact the person's health.

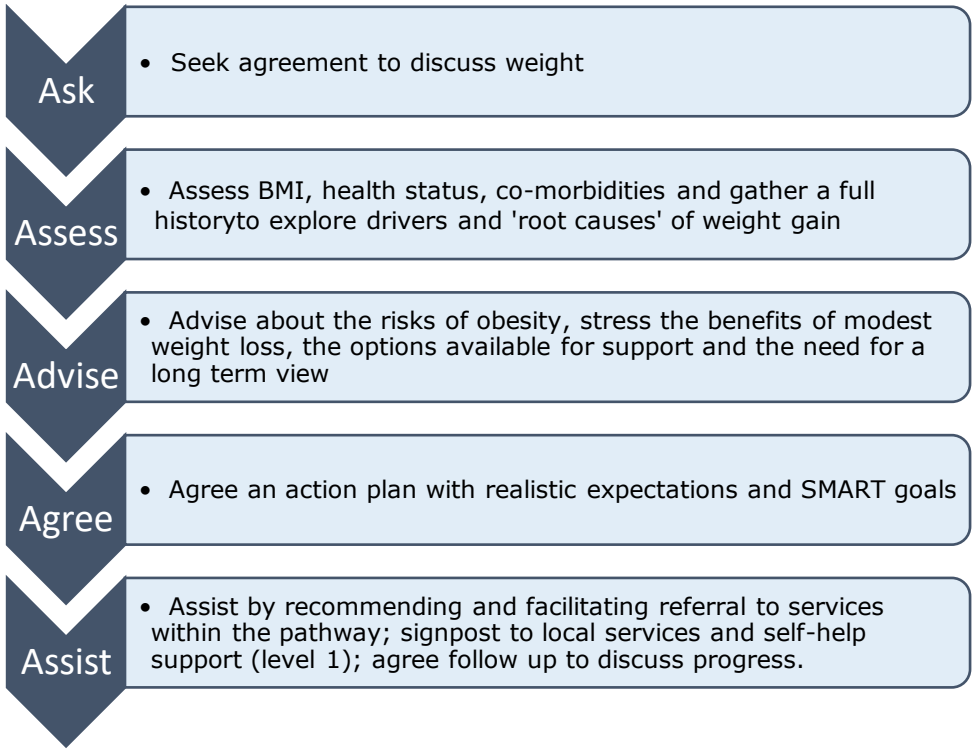
There are a number of frameworks that can be used to structure the initial stages of helping those living with overweight and obesity within primary and community care (Royal College of General Practitioners, 2013), (European Association for the Study of Obesity, 2018).

4.1 The 5As Framework for obesity management

The 5As approach to obesity management is a widely used theory-driven, evidence-based behavioural change framework extensively utilised in addiction management. Developed and adapted by the Canadian Obesity Network, the 5 As of obesity management (Obesity Canada , 2016) is designed to facilitate obesity counselling and management by primary care practitioners (Figure 2).

The 5 As approach utilises Motivational Interviewing techniques which have been widely applied and shown to elicit and strengthen personal motivation for change (Miller & Rollnick, 2009) have also been adapted for use in the UK (Tahrani, et al., managing Obesity in Primary Care Guidelines in Practice, 2020).

Figure 2: The 5 As of Obesity Management, (Obesity Canada , 2016)



Depending upon the pathway configuration in each Health Board, or how care is organised in each primary care organisation or cluster, these steps may be conducted by one health professional who raises the issue, works with an individual through the 5As until a plan of action is agreed. Alternatively, the process may be started by one health professional, for example a GP, who may raise the issue and take some basic health details (Ask" and part of "Assess" stage) and then additional appointment takes place to complete the process, either with the same or a different health professional, for example a practice nurse. Making Every Contact Count (MECC) training and skills can support having these conversations and promoting brief interventions.

4.1.1 ASK

It is important that professionals seek the permission and agreement of the patient to discuss their weight and to take measurements. It is important that professionals are alert to the stigma associated with excess weight and engage with the patient in a sensitive and supportive way. The monitoring of weight should be presented as a routine part of preventative healthcare and should be offered to all patients not based on a perception of a problem.
Taking a preventative approach also involves early identification of significant weight gain or loss, understanding how weight has changed or is changing over time is an important part of the assessment.

4.1.2 ASSESS

Body Mass Index (BMI) is key measure of healthy weight (weight in kilograms (kg) divided by his or her height in metres squared). Overweight and obesity in adults aged 18 years or more should be defined using the following BMI thresholds (National Institute of Clinical Excellence, 2014):

Table 2: BMI Classifications

Classification	**BMI (kg/m^2)**
Underweight	<18.5
Healthy weight	18.5–24.9
Overweight	25.0–29.9
Obesity I	30.0–34.9
Obesity II	35.0–39.9
Obesity III	≥40.0

There are a range of factors which can impact on the assessment of body mass index:

- **Ethnicity:** Lower BMI thresholds should be used to define overweight and obesity for black African, African-Caribbean and Asian groups. Individuals from black African, African-Caribbean and Asian groups are at an increased risk of conditions such as type 2 diabetes at a lower BMI and therefore needs to be interpreted differently. BMI ≥23 kg/m^2 indicates increased risk and BMI ≥27.5 kg/m^2 indicates high risk in these groups.
- **Highly muscular adults:** Interpret BMI with caution in highly muscular adults, as it is a less accurate measure of adiposity in this group. The assessment of waist circumference can be a useful additional measure in individuals who appear to have high muscularity (Rosenberg I. , 1997).
- **Low muscle mass (Sarcopenia):** Interpret BMI with caution if there is suspected Sarcopenia. Sarcopenia has been defined as an age related, involuntary loss of skeletal muscle mass and function (Rosenberg I. , 1997). BMI can underestimate body fat in people who have lost muscle mass as it does not differentiate between body fat, lean body mass and body fluid content. The assessment of waist circumference can be a useful additional measure in individuals who appear to have low lean mass.

Measure waist circumference if indicated
Consider using waist circumference, in addition to BMI, in people with a BMI less than 35 kg/m (Rosenberg I. , 1997) to further assess clinical risk and also those who are considered to be highly muscular or to have low muscle/lean mass (Sarcopenia). Please see Appendix B for guidance on measuring waist circumference.
Table 3 below provides guidance on risk assessment and interpretation of waist circumference and BMI where the term *risk* refers to risk of cardio-metabolic disease.

Table 3: BMI and waist circumference risk for cardio-metabolic disease
(NICE 2014 (National Institute of Clinical Excellence, 2014))

BMI classification	**Waist circumference**		
	Low Men<94cm Women<80cm	**High** Men 94-102cm Women 80-88cm	**Very high** Men>102cm Women >88cm
Overweight 25–29.9 kg/m^2	No increased risk	Increased risk	High risk
Obesity 30–34.9 kg/m^2	Increased risk	High risk	Very high risk

Psychological Awareness

While practitioners in primary and community care settings are not expected to be able to make a psychological assessment it is essential that they are alert to the potential for psychological factors underpinning overweight and obesity. This may be in the form of an eating disorder such as binge eating, disordered eating more generally or previous psychological trauma including ACEs.
It is important that training is available to primary care practitioners to support them in identifying psychological factors relating to weight management and for there to be clear pathways to access more specialist assessment and advice.
Where there are concerns about possible psychological factors referral to level 3 services is indicated to enable a full multi-disciplinary assessment including from a psychologist.

Assess co-morbidities

The following group of co-morbidities have been identified and prioritised by national and professional bodies (National Institute of Clinical Excellence, 2014), (Scottish Intercollegiate Guidelines Network , 2010), (British Obesity and Metabolic Surgery Society and Royal College of Surgeons Professional Standards and Commissioning Guidance 2012 (updated May 2019), 2019) due to the health consequences associated with obesity and the potential health benefit derived from moderate weight loss.

- type 2 diabetes
- hypertension *(uncontrolled)*
- cardiovascular disease
- osteoarthritis related disability
- dyslipidaemia
- obstructive sleep apnoea
- some cancers
- asthma
- Metabolic syndrome (International Diabetes Federation , 2006)

Assess additional health related considerations:

There are other health related factors that need to be considered as they are either exacerbated by obesity or may impact on the likelihood of the individual benefiting from weight loss interventions, including:

- Infertility
- Pre-diabetes/ those at high risk of type 2 diabetes
- Psychological co-morbidities

4.1.3 ADVISE

BMI should never serve as the only indicator for weight management interventions. Obesity is a complex disorder with multiple causes. Drivers and complications of obesity will vary among individuals. For example, there are patients with overweight or with lower levels of obesity who are profoundly affected by their excess weight with, for example, type 2 diabetes, obstructive sleep apnoea and depression. Alternatively, some people have a higher BMI but minimal physical, psychological or functional consequences. It is important to base decisions on an overall view of a person's physical, psychological and social wellbeing.

Once the initial assessment is complete the health practitioner will then advise about the risks of obesity. It is important that patients understand that excess weight is associated with several weight-related complications. These include diabetes, high blood pressure, and other cardiovascular, joint and psychological problems, and that that a sustained weight loss of as little as 5-10 % can have a beneficial effect on co-morbidities.

4.1.4 AGREE

The success of the actions that a person takes, should be measured in improvements in the agreed and prioritised wider health and wellbeing benefits rather than focussing just on weight lost.

The primary care professional should focus on agreeing a reasonable goal and understand the key barriers or enablers of change. This may include understanding the drivers of weight gain e.g. poor sleep, lack of time, depression, stress, medication. Subsequent steps should focus on actions to stabilise weight and prevent further weight gain before addressing weight loss.

4.1.5 ASSIST

Depending on the level of overweight or obesity, history and co-morbidities identified during the assessment, the primary and community care practitioner will, with agreement from the individual, either signpost the individual to Level 1 support and resources available; refer to Level 2 services; or refer to Level 3 services, and document this in the person's notes.

Those who are not yet ready to engage in weight management at this point should be offered the chance to access further consultations when or if they are ready. For those not ready to engage, acknowledge this, and provide information on maintaining weight in the interim and sign-post to community or web-based support and information.

Given the chronic and relapsing nature of overweight and obesity; ongoing follow up is essential. Primary and community care professionals should continue to monitor, support and care for people with overweight or obesity over the long term (NICE, 2012). For people who have initiated changes through this process with a BMI of >30, follow-up appointments should take place annually, in a similar way to other chronic conditions, such as Asthma, Diabetes and COPD, to review progress, provide support, boost motivation and facilitate problem

solving. These can be done remotely or by non-clinicians if appropriate and acceptable to the person.
The role of the referring practitioner is to follow-up with the patient to establish whether the individual attended the service to which they were referred or took the planned actions and the outcomes.

- *For those who have engaged and have met their initial goals but still have more weight to lose;* provide positive reinforcement, acknowledge how difficult it is to lose weight and their achievement and discuss the benefits of continued weight management/maintenance. Consider continued support options in the community or a re-referral into the pathway if appropriate and beneficial.

- *For those who have engaged but have not met their initial goals;* provide positive reinforcement for their engagement, discuss their experience, any barriers encountered, discuss the benefit of continued weight management and the benefit of social support. Do not frame lack of weight loss or regain as "failure" but help them to understand why they feel they may not have achieved their goals and what further support they may need. This may include referral to the next level in the pathway where more intensive support may be provided, consider whether referral to level 3 is indicated to facilitate psychological support.

- *For those who have not engaged, or disengaged;* review the reasons for this, discuss the barriers they encountered and consider alternative options if appropriate, such as a different service at the same level or different level (if clinically appropriate).

It is important that the person's progress towards meeting their specified behavioural goals, agreed in earlier appointments, is documented and the person is supported to set new SMART behavioural goals based on their experiences so far.

5. Level 2 Multi-component weight management services

Level 2 involves specifically commissioned or funded services; addressing diet, physical activity and behaviour change skills, underpinned by behavioural science. The different components may be delivered together or separately, they would normally include referral to evidence based commercial provision, dedicated primary or community services delivered by dietitians or other professionals or digital services. The physical activity component may be provided by the National Exercise Referral Programme of similar provision. The different components may be delivered together or separately or through a blended approach. The components may be delivered either online, in primary care or in a range of community locations. Sessions should be offered over a minimum period of 12 weeks and should include a review by the referring professional at the end of the period.

Level	Description	Criteria	Referral
2	**Multi-component weight management support**	BMI ≥30 kg/m^2 without co-morbidities BMI ≥25 kg/m^2 with co-morbidities+ Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Self-referral Referral by a health or social care professional[1]

There should be a diversity of offers at Level 2, to meet the wide range of need in the population (Sutcliffe, et al., What are the critical features of successful Tier 2 weight management programmes for children, young people, & families? A systematic review to identify the programme characteristics, & combinations of characteristics, that are associated with successful, 2016). The offers should include funded access to evidence-based commercially delivered weight management programmes; programmes designed to appeal to specific segments of the population and more targeted programmes delivered or overseen by health professionals e.g. very low-calorie diets; pregnancy weight management services. All services included in the pathway should meet the requirements set out in this guidance.

Programmes should be designed and developed with input from a multidisciplinary team (National Institute of Clinical Excellence, 2014) and adults with overweight and obesity. Practice based evidence suggests that the team involved in service design should include the following registered professionals (Health Scotland, Standards for the delivery of tier 2 and tier 3 weight management services for adults in Scotland 2019 http://www.healthscotland.scot/publications/standards-for-the-delivery-of-tier-2-and-tier-3-weight-management-services-in-scotland, 2019) all of whom have a specialist interest/training in weight management:

- dietitian
- physiotherapist or physical activity specialist
- clinical psychologist / applied psychologist/ counsellor

Level 2 services can be delivered by public, private or third sector organisations. Those delivering the services do not necessarily need to be clinically trained or specialists, however all staff will need to demonstrate competency in delivering the overarching approach and competency for the component they are delivering.

[1] Health and social care professionals, including nutrition and dietetic teams, general practitioners, community nurses, social workers, dental professionals etc.

5.1 Level 2 Core Components

Programmes should comprise an active intervention phase of at least 12 weeks, followed by a managed exit route and maintenance plan. The duration of each phase will be dependent on individual needs. Evidence shows that those who engage more within the programme tend to have better outcomes and that supportive relationships with providers and peers are equally important (Sutcliffe, et al., What are the critical features of successful Tier 2 weight management programmes for children, young people, & families? A systematic review to identify the programme characteristics, & combinations of characteristics, that are associated with successful, 2016). Consider programme flexibility to meet the needs of different attendees, for example, timeframes, local venues, transport and equipment needed.

Health Boards will determine an overall maximum duration for participants to be supported in Level 2 services and any associated criteria and review points for local services.

5.2 Active Intervention phase

All interventions (individual or group) should comprise of a minimum of eight sessions per 12-week period and include an option to record weight at each session. Local areas are encouraged to trial and evaluate the effectiveness of longer/higher intensity interventions, as there is some evidence to suggest that there is a dose–response relationship between volume of intervention and outcome, particularly in a group setting (Health Scotland, Standards for the delivery of tier 2 and tier 3 weight management services for adults in Scotland 2019 http://www.healthscotland.scot/publications/standards-for-the-delivery-of-tier-2-and-tier-3-weight-management-services-in-scotland, 2019).

- The emphasis should be on practical, interactive delivery to build confidence and enable skill development
- Programmes should provide opportunities for socialising with others to foster social support and involve positive relatable role models. Services should consider seeking the involvement of people who have experienced the services, in a peer support role, to help newer participants feel at ease through sharing their experiences and stories.
- Programmes should encourage a whole-family approach, given that obesity is often intergenerational.
- Achievable goals for participants' wellbeing, weight loss, and behaviour change should be agreed, monitored and reviewed at regular intervals.
- Participant's progress should be reviewed and service feedback obtained from participants at the end of each agreed period e.g. 12 weeks

At the end of the active intervention phase, a progress review will be conducted and preferred next step(s) agreed with the participant. A report or letter detailing the person's progress and next step(s) should be sent to the person's GP (with consent) and referring professional (if different). A summary of engagement should be sent if the individual is no longer attending at the progress review point. Local arrangements will determine if an appointment/consultation will be required to agree the next steps between the participant and their GP.

5.3 Level 2 Content

- Assessment of current and previous weight, eating habits, physical activity level, sedentary behaviour and personal wellbeing concerns should be conducted and recorded, recognising the complex nature of overweight and obesity.
- Person-centred action plan developed, to address the root cause and drivers for overweight and obesity in their lives, using a framework to structure the conversation.,
- Dietary components to help participants explore how to stabilise and reduce their energy intake, improve the quality of their diet

and address emotional eating, in line with Welsh Government and UK dietary guidelines https://gov.wales/eatwell-guide

- Physical activity and sedentary behaviours should be explored with participants and a plan agreed with them to explore ways to break up long periods of sedentary behaviour in an acceptable and sustainable way.
- Behaviour Change and Self-care tools and techniques should be integrated into the design of all programme components, with the aim of enabling participants to feel confident in their use.

Health Boards should ensure that Level 2 service providers have clear routes of access to specialist Eating Disorder Services to refer people who exhibit signs of eating disorders such as binge eating (Welsh Government , 2018).

5.3.1 Weight Loss Continuation/ Maintenance plan

A weight loss continuation/maintenance plan should be developed with the person, to support continued progress following the active intervention phase since the evidence suggests that many people need considerably longer than the active intervention phase to develop the sustainable behaviour changes needed for weight-loss maintenance (Avenell, et al., Bariatric surgery, lifestyle interventions and orlistat for severe obesity: the REBALANCE mixed-methods systematic review and economic evaluation. Health Technology Assessment, 2018:22(68), 2018). The plan will include SMART objectives which aim to support continued progress towards personal wellbeing and weight loss/weight maintenance goals. It will summarise relapse prevention strategies that have been explored during the active intervention and reinforce the importance of social support. Individuals should be advised of level 1 services that might support weight maintenance or continued weight loss.

Follow-up is the responsibility of the referrer unless specifically commissioned from the provider service and can be via telephone or digital means. A review should be undertaken at the end of the active intervention and should be followed up at 6 and 12 months. Core data should be collected at these follow-up points, which may involve either direct measurements of self-measurement depending on the mode of follow up. Ensure that at least one set of core data is collected 6 months after the completion of the active intervention phase.

6. Level 3 Specialist Multi-Disciplinary Assessment and Weight Management service

At level 3 specialist assessment and specialist interventions are delivered by members of multi-disciplinary team (MDT), including dietary, psychological, pharmacological and physical activity/mobility interventions. A participant's overall progress is monitored and reviewed by the MDT. The level 3 service should have clear pathways and partnerships with the relevant level 4 service so that those who may be eligible for a bariatric surgery referral are identified and supported prior to and post-surgery. To improve access, programme offers should include support provided online or via digital/telehealth.

Programmes should be designed and coordinated by a multidisciplinary team[9] having considered the views of adults with overweight and obesity and should be available at health board level.

Level	Description	Criteria	Referral
3	**Specialist multi-disciplinary weight management services**	BMI ≥40 kg/m^2 BMI ≥35 kg/m^2 with co-morbidities$^+$/ significant additional considerations^{++}/both Lower criteria by 2.5 kg/m^2 for people from black African, African-Caribbean and Asian groups.	Referral by a health care professional

The specialist multidisciplinary team involved in the design and delivery of services should consist of the following registered professionals with a specialist interest/training in weight management (Public Health England, Joined up Clinical Pathways for Obesity: Report of the Working Group (01004)., 2014):

- A dietitian
- A physiotherapist or physical activity specialist (i.e., on the Register of Exercise Professionals, or equivalent, at the appropriate level)
- A clinical or applied psychologist
- A physician
- A nurse specialist

Teams will also need significant support from:

- A coordinator/ administrator
- An occupational therapist
- Support staff, such as dietetic support workers, physiotherapy technicians and assistant psychologists or counsellors to ensure the principles of prudent healthcare are upheld, for example, ensuring effective use of senior clinician time.
- For those with very high BMI there will be a need for services to draw in other agencies, including social services, to support these patients.

6.1 Level 3 Core Components

Programmes will typically be at least 1 year in total duration, however, this should not be too prescriptive and consideration should also be given to recent Level 2 service engagement and be kept under regular review. This should comprise an active intervention phase and a weight loss maintenance phase (Avenell, et al., Bariatric surgery, lifestyle interventions and orlistat for severe obesity: the REBALANCE mixed-methods systematic review and economic evaluation. Health Technology Assessment, 2018:22(68), 2018). The duration of each phase will be dependent on individual needs. Evidence shows that those who engage more within the programme tend to have better outcomes and this should be shared with those taking part.

6.2 Active Intervention Phase

The duration of the active intervention phase should be a minimum of 24 weeks but many people will need considerably longer. The length should be flexible and based on the needs of the person (Health Scotland, Standards for the delivery of tier 2 and tier 3 weight management services for adults in Scotland 2019 http://www.healthscotland.scot/publications/standards-for-the-delivery-of-tier-2-and-tier-3-weight-management-services-in-scotland, 2019).

One hour is a useful guide for face-to-face appointments within level 3, depending on specialism. Group sessions will be longer when physical activity is delivered as part of the session. Due to the likely complexity of these individuals' relationship with food, the development of emotional regulation groups should be supported.

During the active intervention phase, sessions should be delivered either weekly or fortnightly, regardless of method of delivery (whether face-to-face or virtual). Each session should include the offer of recording current weight. This may be through self-reported weight, self-weighing or being weighed by the session practitioners.

Participants should be contacted by telephone or text message (as agreed) for appointment reminders and if an appointment/session is missed, to encourage re-engagement with the service. Use of the NHS principles and standards will help to promote the effectiveness of text messages (PHE, 2020).

During the active intervention phase, level 3 programmes will take the following approach:

- Use specialist multi-disciplinary assessment to develop a personalised formulation
- Use tailored interventions designed to optimise health and wellbeing, including dietary, psychological, pharmacological and physical activity/mobility interventions
- Agree, monitor and review achievable goals for participants' wellbeing, weight loss, and behaviour change
- Identify, support and prepare those who may be eligible for bariatric surgery.
- Offer a palliative approach for those with long duration, ultra-complex or class III obesity, aiming to improve quality of life.
- Provide post-surgical aftercare, in conjunction with the Level 4 team, where appropriate.

At the end of the active intervention phase, a progress review will be conducted and preferred next step(s) agreed with the participant. A report detailing the person's progress and preferred next step(s) should be sent to the person's GP and referring professional (if different).

6.3 Level 3 Content

Assessments will normally require around 1 hour (British Dietetic Association Obesity Specialist Group , 2018). A holistic, multi-disciplinary assessment protocol should be developed by the MDT for use in all level 3 assessments, which considers core components including weight history, psychological factors and clinical history. The key psychological factors that might influence engagement with an individual in a standard level 3 assessment (which includes biopsychosocial and psychological assessment) are their history and current experience of:

- anxiety and depression
- self-harm and suicide ideation
- disordered eating and history of eating disorder, including binge-eating (whether or not diagnosed)
- history of mental ill-health
- substance misuse
- self-esteem, trauma and childhood adversity
- experience of weight stigma

Data from the assessment should be recorded to inform individual progress review and anonymised data will form part of the minimum dataset.
Plans should be delivered and implemented which provide:

- A collaborative person-centred approach, using the information gathered at referral, triage and assessment a collaborative, person-centred approach should be adopted to develop their programme plan. The plan should be reviewed at 6 months and 1 year from baseline assessment.
- Person-centred goal setting. Both weight and non-weight related goals and outcomes need to be co-created to maximise likelihood of achievement.
- Psychologically informed components. Psychologically informed components are vital to help participants develop self-awareness and develop self-care and self-management skills to support progress towards their current and future wellbeing goals.
- Behaviour change. Behaviour change tools and techniques should be integrated into the design of all programme components, with the aim of enabling participants to feel confident in their use independently of the programme.

Nutrition

Nutritional components to help participants to regulate their eating patterns, improve the quality of their diet, stabilise and reduce their energy intake where possible and address emotional eating. A detailed assessment of an individual's current dietary intake should be made, identifying potential barriers and opportunities for that individual. Following this, short and long term dietary goals should be identified, agreed and reviewed on a regular basis.

Physical activity

Physical activity should be offered as part of the Level 3 programme following an assessment of the individual's current health status, risk profile and based on realistic and achievable goals. Programmes may include both structured exercise delivered within an appropriate, instructor-led environment and a home-based plan consisting of physical activities that can easily be integrated into everyday life and maintained in the long term. In certain circumstances, it may be helpful to initiate services at people's homes. Services should offer free (or subsidised) access, at the point of use, to physical activity opportunities in either group or individual format during the active intervention phase e.g. national exercise referral programme. Services may wish to consider (or trial) continuing to offer subsided access to physical activity opportunities for the maintenance period (Health Scotland, Standards for the delivery of tier 2 and tier 3 weight management services for adults in Scotland 2019 http://www.healthscotland.scot/publications/standards-for-the-delivery-of-tier-2-and-tier-3-weight-management-services-in-scotland, 2019).

Sedentary Behaviours

Sedentary behaviours should be explored and a plan agreed with participants to test ways to break up long periods of sedentary behaviour in an acceptable and sustainable way.

Pharmacological Interventions

These should be considered as part of a comprehensive plan for obesity management and follow NICE and Welsh guidance [23]. NICE (National Institute of Clinical Excellence, 2014) recommends that pharmaceutical interventions should be considered in the following cases:

- when multi-disciplinary approaches have been implemented and evaluated
- when patients have plateaued or not reached a weight loss target
- when additional health professional support on diet, physical activity and behaviour change approaches have started
- when the implications of drug treatment have been fully discussed with the person, including potential side effects and monitoring requirements.
- Drugs should be used according to their licensed indications and restrictions. The efficacy of pharmacotherapy should be evaluated after the first 3 months. If weight loss achieved is satisfactory (>5% weight loss in people without diabetes) treatment should be continued. For people with diabetes, weight loss will be slower. NICE suggest that less strict goals should be agreed and reviewed. The EASO Guidelines suggest looking for losses of >3% in people with diabetes in the first 3 months [24].
- Treatment should be discontinued in non-responders and alternative options explored with the person.
- The decision to use drug treatment for longer than 12 months (usually for weight maintenance) should be made after discussing potential benefits and limitations with the person.

Identification of suitability for Level 4 Assessment should occur following a minimum period of 6 months accessing support and preparation within level 3, if deemed appropriate.

Following NICE guidance (NICE, Eating Disorders: recognition and treatment [NG69] 2017, updated 2020, 2020), specialist psychological assessments and services should be available to all, including people with binge-eating disorder.

6.3.1 Weight Loss Continuation/ Maintenance Phase

The duration of the weight loss maintenance phase is flexible and will be agreed with the participant based on their progress and individual needs.

A weight loss continuation/maintenance plan should be developed with all participants, to support continued progress (Avenell, et al., Bariatric surgery, lifestyle interventions and orlistat for severe obesity: the REBALANCE mixed-methods systematic review and economic evaluation. Health Technology Assessment, 2018:22(68), 2018) following the active intervention phase. It will summarise relapse prevention strategies and reinforce the importance of social support.

Follow up support should be provided by level 3 staff (group or 1:1) during an agreed weight loss maintenance phase. Follow-up should be at a minimum of 3 monthly intervals post active intervention. Follow up procedures aim to maximise weight loss/reduction and support progress towards stated wellbeing goals and should include:

- a discussion around weight loss progress
- behavioural and psychological support
- exploration of further support requirements

A range of options for follow-up should be offered including via telephone and via face to face meetings (virtual or in-person). Core data

should be collected 6 months after the completion of the active intervention phase.

A discharge plan, summarising outcomes achieved and next steps should be agreed with the person at the end of the weight loss continuation/ maintenance phase. The discharge plan also needs to highlight the importance of follow up over next two years in primary care as for other chronic conditions pathway management.

6.3.2 Working in partnership with Level 4 services

Level 3 services have a critical role in identifying individuals who may benefit from Level 4 surgical intervention. Whilst it is important that level 3 support should be given the opportunity to achieve the agreed goals, it is also helpful to identify individuals who have the greatest opportunity to benefit from preventative surgical intervention prior to the development of significant co-morbidity.

Shared care and close partnership working with level 4 providers should enable the pre-surgical preparation to take place at an earlier point in time.

The provision of after-care and weight management support for a person who has received surgery remains a lifetime commitment. Shared care between level 3 and 4 services are encouraged, particularly where there are geographical challenges. Structured, systematic and team based follow up should be planned by the level 4 team for a minimum of 2 years after surgery and delivered by level 3 or 4 team depending on the local arrangements. Lifelong specialist follow up is advocated and should be reflected in Level 3 service liaison with Primary Care. Specialist services (L3 and 4) will need to ensure that there is a process for early identification of complications and re-referral to the bariatric surgeon or physicians if required.

7. Level 4 Specialist Surgical Services

Specialist pre-surgical assessment is conducted by either the L3 multi-disciplinary team working in partnership with the level 4 service or the level 4 bariatric multi-disciplinary team (MDT) to identify patient suitability and treatment needs. Pre and post-operative education and support is provided. Long-term follow up post-surgery is provided by the bariatric MDT or through a formal shared care arrangement with the level 3 team, for a minimum of 2 years. Level 4 services are currently available in Swansea and Salford.

Level	Description	Criteria	Referral
4	**Specialist surgical services**	BMI≥ 35 kg/m^2 and recently diagnosed diabetes (in last 10 years) BMI of >40 kg/m^2 Lower criteria by 2.5 kg/m2 for people from black African, African-Caribbean and Asian groups.	Referred and considered "suitable for surgery" by the level 3 MDT

All programmes should be 'designed and developed with input from a multidisciplinary team' (National Institute of Clinical Excellence, 2014). It is important that the core professions / disciplines within the Level 4 MDT should include, as a minimum, the following registered clinicians with specialist obesity training:

- Bariatric surgeon
- Physician
- Clinical Nurse Specialist/ Bariatric Specialist Nurse
- Practitioner Psychologist
- Anaesthetist
- Specialist Dietitian

Teams will also need significant support from a Coordinator / Administrator.

The core team will also need referral pathways to:

- hepatologists
- endocrinologists
- diabetologists
- cardiothoracic physicians
- plastic surgeons
- eating disorder specialists

Specialist surgical services at level 4 should reflect the latest BOMSS guidance and principles, likewise configuration should reflect and appropriately accommodate the number of procedures planned, taking professional guidance from BOMSS (British Obesity and Metabolic Surgery Society and Royal College of Surgeons Professional Standards and Commissioning Guidance 2012 (updated May 2019), 2019) to deliver the specific requirements at level 4. This updated guidance (British Obesity and Metabolic Surgery Society and Royal College of Surgeons Professional Standards and Commissioning Guidance 2012 (updated May 2019), 2019) emphasises the central requirement of a bariatric psychologist within the MDT.

7.1 Level 4 Content

Assessment, building on those undertaken within Level 3 MDT. Typically, every patient will need to be comprehensively assessed by the bariatric surgeon and by *at least* one other professional. The bariatric MDT should discuss the following with people (and family as appropriate) within the assessment:

- The potential benefits

- The longer-term impacts of the surgery, including the likelihood of excess skin for which surgery may not be easily accessible
- Associated risks and complications
- Perioperative mortality

Preparation of the patient must encompass education, counselling and preparation for obesity surgery and post-operative lifestyle requirements.

Procedures used by the Level 4 Specialist services should encompass the range of routine evidence-based obesity procedures, including laparoscopic, open and revisional procedures.

Support should be offered to the patient throughout the treatment process, including post-surgery from appropriate staff from L3 and L4 services. This includes education, guidance and psychological and social/ peer support. Structured, systematic and team based follow up should be organised by the level 4 team for a minimum of 2 years after surgery but may be undertaken in partnership with a level 3 service. Follow up procedures aim to maximise weight loss/reduction, ensure nutritional replacement and to prevent or minimise complications.

Patients who have undergone surgery will required lifetime follow up, this may include re-referral. Specialist services (L3 and 4) will need to ensure that there is a process for early identification of complications by primary care and re-referral to the bariatric surgeon or physicians if required.

Discharge to Primary Care is appropriate for most post-bariatric patients after 2 years post-surgery. Primary care professionals will support patients in the long term and should be provided with appropriate support and access to specialist advice from L4 and L3 services.
An annual review should be conducted, as with other chronic conditions. This review should encompass nutritional status and appropriate supplementation as per the BOMSS guidance (BOMSS, Guidelines on perioperative and postoperative biochemical monitoring and micronutrient replacement for patients undergoing bariatric surgery (updated 2020), 2020). Those who have undertaken bariatric surgery privately should also be able to access annual reviews through primary care, with referral to specialist services if needed through a shared care approach.

8. Minimum Data set

It is essential that both commissioners and providers of services are able to assess quality and outcomes of the services provided and where appropriate to compare services delivering at each level.

Welsh Government will also seek to monitor quality, access and outcomes in line with the implementation of the Healthy Weight Healthy Wales Strategy. Health Boards will be asked to provide routine reporting on obesity services and the implementation of the pathway.

It is recognised that providers will have established their own assessment and record keeping systems appropriate to the level of service provided and at level 3 and 4 these records should be shared by the multi-disciplinary team. However, information systems will need to be established that enable reporting against the core minimum dataset at agreed intervals in addition to allowing extraction of raw data to enable wider service evaluation and research to take place.

The proposed minimum data set is set out below and indicates information that will be reported as part of routine service monitoring and data that should be available in a readily exportable format to facilitate service provision and evaluation.

Whilst participants are within the active intervention it is the role of the weight management service provider to record the information, longer term follow up is the responsibility of the primary / community care professional who referred the individual.

All providers should contribute as required to the national minimum data set for weight management services.

Table 4: National minimum data set for weight management services

Items in italics should be available for extraction, audit and evaluation but would not be routinely reported

Item reported	**Routinely collected data**	**Level 1**	**Level 2**	**Level 3**	**Level 4**
Activity in the reporting period	Number of new referrals Number of re-referrals Number and percentage offered appointments Number and percentage who attended first appointment Number on waiting list	n/a	✔	✔	✔
	Number and percentage of referrals not accepted by service	n/a	n/a	✔	✔

Item reported	Routinely collected data	Level 1	Level 2	Level 3	Level 4
Weight Change	*Height and weight at start* *Weight at end of active intervention* *Weight on discharge* Weight change in kg at end of active intervention Weight change in kg on discharge % of participants achieving ≥ clinically significant weight loss at end of active intervention programme	Initial weight and height Weight at initial review (12 weeks) Weight at 12 months	% participants achieving 5% weight loss at 12 weeks	% participants achieving 5% weight loss as 24 weeks % participants achieving 10% weight loss at 24 weeks	n/a
Engagement	% sessions attended during the reporting period	n/a	✔	✔	✔
	% attended at least 80% of sessions on discharge	n/a	✔	✔	✔
6 month follow up (post active intervention phase)	*Weight* *Weight change in kg from end of active intervention* Percentage of participants maintaining weight loss Percentage of participants gaining weight	n/a	Optional depending on service	✔	✔
12 month follow up weight (after Active intervention has ended)	*Weight* *Weight change in kg from 6 month follow up* Mean change in weight in kg from 6 month follow up Percentage of participants maintaining weight loss Percentage of participants gaining weight	12 month follow up recommended in primary care	12 month follow up recommended in primary care	✔ 12 month follow up recommended in primary care	✔

Item reported	Routinely collected data	Level 1	Level 2	Level 3	Level 4
18 month follow up weight (after surgery)	*Weight* *Weight change in kg from 12 month follow up* Percentage of participants maintaining weight loss Percentage of participants gaining weight	n/a	n/a	n/a	✔
24 month follow up weight (after surgery)	*Weight* *Weight change in kg from 18 month follow up* Percentage of participants maintaining weight loss Percentage of participants gaining weight	n/a	n/a	n/a	✔
Patient Satisfaction: Patient Reported outcome Measures (PROMs) Patient-Reported Outcome and Experience Measures (POEMs)	% PROMs and POEMs completed; % POEMs report positive experience		✔	✔	✔

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Appendix B: Taking Measurements

Where possible, individuals should be measured in private, ideally a private room, but a minimum expectation is the use of a screened off area. Bariatric scales should be available within all weight management services, including portable ones for housebound patients.

Weight and Height

Weight and height can be used to calculate body mass index (BMI).

Individuals should be weighed and measured wearing light indoor clothing so shoes and outdoor garments should be removed prior to being weighed. Encourage the individual to urinate prior to being weighed.

Weight and height should be recorded in metric, along with time of day, date, and which scales used (to minimise the influence of other variables such as different weight scales). Use a conversion chart to inform the individual of their measurements.

When measuring weight:

- Ensure the scales are placed on a flat, non-carpeted surface
- Ensure outdoor garments and shoes are removed
- Ask the individual to step onto the scales, facing forward with feet evenly apart, arms loosely at their sides.
- Record their weight in kilograms and then ask the individual to step off the scales.

When measuring height:

- Ensure outdoor garments and shoes are removed
- Ask the individual to stand straight and tall on the stadiometer, knees straight, facing forward, with arms loosely at their sides, and bottom lightly touching the stadiometer.
- Ensure feet are positioned slightly apart, in line with their hips, with heels touching or nearly touching the back plate.
- Place the individual's head into the 'Frankfort plane' midpoint, so that there is a line from the lower border of the eye to the centre of the ear hole. This ensures that their head is not tilted at an angle.
- Adjust hair accessories or styles if they interfere with head position
- Once in the correct position, ask the individual to take a deep breath and hold briefly.
- The head plate can now be gently lowered down to rest on the crown of the head and the measurement taken.
- Once the measurement has been recorded the individual should be asked to step off the stadiometer.
- Repeat this process two more times to obtain three measurements. These should all fall within 2mm of one another. If they don't, repeat until three in a row do.
- Calculate the mean height by adding the 3 measurements together and dividing by 3

Equipment and calibration

Equipment must be in good working order and meet the required standards as below.

Weighing scales should be medical class 3 or above and must comply with EU Directive 2014/31/EU or UK equivalent. Scales should be calibrated annually. If at any time there is reason to believe that the weighing equipment may be inaccurate, it should be recalibrated.

Ensure that the weighing scales record zero before the individual is in position for weighing.

Stadiometer Height should be measured with an approved portable stand-on height measure (stadiometer) that shows height in centimetres and millimetres. Height measurement can be affected by posture, head positioning and footwear.

Approved stadiometers include the Leicester Height Measure and the SECA 213. Wall-mounted, sonic or digital height measures should not be used. Stadiometers should be set up correctly according to the manufacturer's instructions. Stabilisers that enable the upright to rest against a wall are required for accurate measurements. The SECA stadiometer has a single stabiliser, whilst the Leicester has two. These should be clipped into the end of the upright sections to keep them safe when stored. The correct number of stabilisers should always be used. NOTE: When ordering replacement arms for Leicester height measures ensure that the correct part is selected as significant errors may occur if new model arms (blue box) are used with older models (black box).

Measuring waist circumference

To measure a person's waist:

- find the bottom of their ribs and the top of their hips
- wrap a tape measure around the waist, midway between these points
- Make sure the tape is pulled tight, but isn't digging into their skin
- ask the person to breathe out naturally before taking the measurement

A video guide for people who would like instruction on how to measure their own waist circumference has been published by Diabetes UK https://www.youtube.com/watch?v=e4cUSNq_OY8