

Guidelines for ABO Weight Management in Primary Care

Introduction

The enormity of the problem of obesity-related disease risk (metabolic syndrome), such as Type 2 diabetes (T2DM) and cardiovascular disease (CVD), is well known. There is also a relationship of metabolic syndrome with risk for cancer and brain degenerative disease[1].

Obesity afflicts large numbers of people in westernised countries, especially the socially disadvantaged[2], and is a major cause of morbidity in all ethnic groups in New Zealand[3]. The 2012/13 New Zealand Health Survey found that approximately 1/3rd of adults were reported as obese, with nearly 1/2 of Māori and over 2/3rds of Pasifika[2]. Of great concern is the 20% of children who were found to be overweight, with over 10%, of children classified as obese. Children in the most deprived areas were three times more likely to be obese than those in the least deprived[2]. Becoming overweight should be preventable.

This primary care weight management pilot programme is a well-reviewed, evidence based approach to effective weight management. The programme acknowledges an individual's cultural context with an understanding that culture has an impact on health. The aim is to provide a positive approach by asking patients to eat more vegetables and fruit and move more. An empathetic, positive and non-blaming approach can be taken with people who are overweight with eating control issues. At the same time they can be supported and enabled to find and eat much more **whole food** – particularly vegetables and fruit – without having to 'calorie count'. This programme aims to bring this understanding to clinicians but, most importantly, aims to translate it into easily understandable messages and practices for primary clinicians and people in their care.

Introduction to 'ABO'

The project resulted in the development of assessment tools for weight management based on the smoking cessation approach of 'ABC'. This utilises the structure of an already known process encouraging health professionals to 'Ask' about weight, provide 'Brief' interventions in a positive approach with eat MORE vegetables and fruit and provide 'Ongoing' management via the Comprehensive Assessment Tool (CAT) which will identify/clarify areas of concern. Anthropometric measurements are taken each visit to track changes. Blood tests for inflammatory markers are taken at the first and last weight management appointments. Any abnormal results could be repeated during the programme at the discretion of the GP. The health professional can then encourage the person to identify SMARTA (Specific, Measureable, Action Orientated, Realistic, Timely, Agreed) goals and utilise available services such as self-management groups/counselling/referral to specialist etc. to support change for a healthier lifestyle.

Who and How to run the programme

Refer to flow diagram on the following page.

A team approach can be taken to complete the weight management tools. Maori health workers, lead maternity carers etc. are encouraged to use the following weight management tools (green boxes in the following diagram):

- **Ask**
- **Brief intervention**
- Readiness to change questions (to determine suitability)
- **Ongoing management and Onward Referral: Comprehensive Assessment Tool (CAT)**

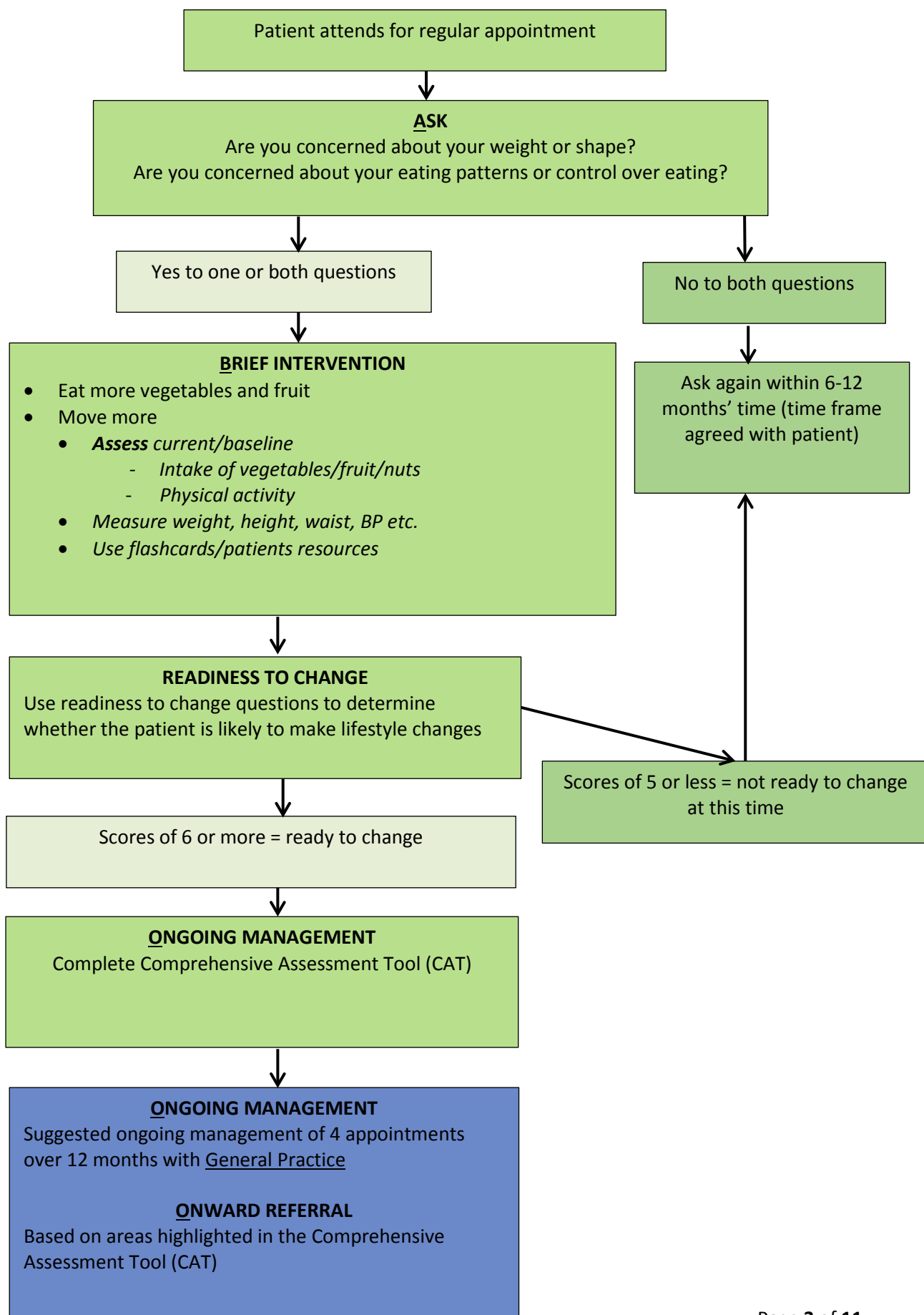
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There is an expectation that if the above have been completed by any person external to General Practice, collaboration should occur to hand over or work in partnership with general practice for ongoing management. Healthcare professionals can complete the full weight management programme (ABO).

General Practice is the person's health care home although it is acknowledged that some individuals may identify with other health care providers. Nevertheless, only the patient's general practice is in the unique position to provide an overview of all medically related health care. The general practices' role in regards to weight management is to assess, manage and support medical concerns. Specifically, blood tests are required (as well as interpretation), prescriptions may be needed as well as onward referrals to other services. General Practice may choose to do every aspect of the programme. However the potential for additional people to benefit is greater if broader access to the weight management tools is enabled, hence a team approach is encouraged. The Weight Management pathway and all associated resources are available on the Bay of Plenty DHB clinical pathway tool 'Bay Navigator' <http://baynav.bopdhb.govt.nz/pathways/>

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Overview of the programme



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Barriers to Implementing the ABO pathway

Staff Attitude barriers – This is a serious consideration. Each clinician must look at attitudes to obesity in society, people & **most of all in themselves**. If this is done then providing a non-judgemental welcome to all people who are overweight or have some sort of eating disorder (binge) makes for trust and best results. Having an empathetic clinician helps those with eating problems better, irrespective of the method or programme used[4]. Some people may be addicted to carbohydrates such as simple sugar or starchy foods. People with addictions are often angry and defensive, but often they are most angry and blaming of themselves, and feel misplaced guilt [5]. Helping remove their feelings of self-blame (blame the obesogenic environment), then allows them to get on and deal with their tasks of managing their weight in their own space, at their own pace.

Physical Barriers – Lack of adequate equipment (large scales, tapes, stadiometers). All clinics need to have scales which weigh people up to a minimum of 200Kg (best if >250kg) and annual routine weighing of all people attending clinic should be standard. However, it should be noted that many people are ‘frightened’ of their weight and may prefer to close their eyes when on the scales and may not want to know the results.

Communication skills – Staff may need to upskill in motivational interviewing and change management utilising open questions, reflective listening, raising ambivalence, summarising and rolling with resistance/recognising sustain talk [6, 7]. People often have insight into what needs changing but require a non-judgemental supportive environment where they can acknowledge their concerns and be guided towards developing an effective action plan (for themselves) to support positive behavioural changes. Avoid providing solutions unless change talk has been heard as suggestions provided at any other time can build resistance.

Getting started utilising the A&B assessment form

A - ASK

The following questions have been validated and should be used by any health/non-healthcare professional to initiate a discussion about weight management.

- **Are you concerned about your weight or shape?**
- **Are you concerned about your eating patterns or control over eating?**

If the person answers yes to one or more questions, continue onto the brief intervention.

B - Brief intervention

The brief intervention involves using positive messaging that encourages

- Eating more coloured high nutrient food particularly vegetables and fruit (utilise “more colour” & “real food” posters)
- Moving more (*keeping in mind that one cannot “outrun a bad diet”*)
 - Start low for those who are significantly overweight/sedentary
- Drink more water (utilise “more water less sweet” poster)

Resources to support these message are available under “patient resources” on the Bay Navigator Weight Management Pathway.

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Consider assessing baseline vegetable, fruit and nut consumption as well as basic anthropometric measurements.

Assessing Readiness to Change

In order for people to change they need to be **willing, able** and **ready** to make some changes to their lifestyle. The following questions will enable you to assess a person's readiness to change

Compared to previous attempts to change your eating, how motivated are you to improve your eating at this time?

Considering all outside factors at this time in your life (stress you are feeling at work, your family obligations, etc?) How confident are you that you will stay committed to an improved eating pattern program?

These questions are important as people are more likely to attend their appointments and make lifestyle changes if they have a score of 6 and above (see A&B assessment document on Bay Navigator).

Increase your skills in motivational interviewing

Access online learning to increase your knowledge and skills of motivational interviewing. One good online learning course is Motivational Interviewing in Brief Consultations. This is available via BMJ online, is free of charge and takes less than one hour to complete.

<http://learning.bmj.com/learning/module-intro/.html?moduleId=10051582>. The example used is for stopping smoking (where there is also an addiction component) but is adaptable to weight management. <https://www.kognito.com/changetalk/web> is an online interactive animation applying motivational interviewing techniques in a consultation between health professional, mother and an overweight child (use Internet Explorer, Safari or Firefox).

Once it has been established that your patient is ready to change utilise the comprehensive assessment tool to commence ongoing management and assist in the determination of why this person is overweight.

Comprehensive assessment tool (CAT)

Before undertaking the assessment ensure you have identified that the person is willing able and ready to change (see previous section). The comprehensive assessment tool can be printed out and handed to the patients for self-completion or you may prefer to undertake this in partnership with your patient.

The measurements recommended aim to give a starting point and enable charting of progress e.g. the patient may reduce waist size, but not lose weight. Blood tests are recommended which will assess the effect of excess fat on the body. The tests will enable tracking of the impact of dietary changes even without changes in body weight (see Bay Navigator pathway for details). For example, a reduction in inflammatory blood test markers, this may also encourage progress.

The initial aspect of the on-going management strongly depends on utilising the on-going Comprehensive Assessment Tool (CAT). The form is structured utilising Te Whare Tapa Whā and provides a holistic overview giving insight into the reasons why people may overeat. This includes spiritual, family, emotional and physical reasons. Completion of the assessment form can be spaced

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over time or ***given to people to take away and review for themselves and return at their next appointment***. The Comprehensive Assessment is also available online; an email address is required for the results to be sent back to the GP. The assessment form may identify other related conditions such as binge eating, depression or sleep apnoea that require further assessment using other validated tools such as Kessler 10, SCOFF and Epworth Sleep Apnoea scale.

A scoring system is employed for the various sections to assist you and your patient in the development of a plan for ongoing management. Ideally your plan will employ SMARTA goals

S	Specific
M	Measureable
A	Action-Orientated
R	Realistic
T	Timely
A	Agreed (create the goal <u>with</u> your person, not for them)

SMARTA goals focus on realistic actions/steps that can be achieved. Final goals/outcomes such as a weight loss cannot be predicted and can set people up to fail, leaving them feeling guilty.

Example: I will eat 3 handfuls of coloured vegetables with my main meal 5 nights a week.

Ongoing management

Ongoing management appointments are set up in general practice to support patients while making lifestyle changes. Many people simply feel better (improved mood and energy) by modifying their diet and exercise patterns, regardless of their weight. Additionally, improved blood results can motivate patients to stick to an improved eating and exercise pattern. Ongoing management is directed by issues highlighted and prioritised in the CAT. Anthropometric measurements are recorded at each visit as well as going over what steps the patient was working on.

Behavioural change will take around 12 weeks before a habit is formed. This is important as short term changes will ultimately result in disappointment. For this reason appointments should be spread over at least a three month period and continued as appropriate considering finances and time availability. In addition, the recommendation with using these weight management assessment tools is to utilise support services already funded and available in your area.

Support Services

Examples include:-

- Self-management groups for increased cardiovascular risk, diabetes, smoking cessation, exercise, and dietitian.
- Green prescription.
- Counselling.
- Hauora funded programmes.
- Pacific Island Trust funded programmes.
- Church groups as appropriate.
- Funding streams through your DHB such as CarePlus or Diabetes Care Improvement Package (DCIP).

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Nutrition

To improve health and manage weight (to achieve a healthy body weight), we need to eat a diet which is based on **wholefoods** (real food) as opposed to heavily processed foods and encourage people to eat in a way that is manageable long term. Humans have a surprisingly high requirement for micronutrients and phytochemicals. Vegetables and fruit are nutrient dense as these foods are high in both micronutrients and phytochemicals while being lower in energy value (i.e. lower in calories) than most highly processed food. One of the key messages of the Weight Management Programme is to eat more vegetables and fruit as most people do not consume adequate quantities for good health. It was estimated, 10 years ago in 2005, that the total worldwide mortality attributable to inadequate fruit and vegetable consumption could be up to 2.6 million deaths per year[8]. The minimum requirement is 5+ per day but ideally this should be 9 per day [9-15] and therefore this is the recommendation in this guideline. It is hoped that this increase in vegetables and fruit will displace (at least some of) the high energy nutrient depleted processed foods.

Calorie restricted diets have proven benefits in the short term it is not realistic to rely on calorie counting in the long term. One of the key issues with poor nutrition is too much highly processed and refined food, so confining these foods to a few special occasions is ideal.

Benefits of eating high nutrient vegetables and fruit are:

- Large volumes can be eaten daily – no need to restrict portion size (positive message)
- The quality of the food eaten is more important than the timing/number of meals.
- High micronutrient density and beneficial plant chemicals are essential for health.
- Increasing the quality of someone's diet even if no other changes are made.
- Potential for displacement of unhealthy foods.
- A wholefood diet high in vegetable and fruits can result in sustainable weight loss.

Definition: "Whole food/ real food" – foods that have had no or little processing. Whole foods have a low human intervention factor from growing to consumption. They are micronutrient dense and generally don't contain additives like salt, fat sugar and preservatives. Examples of whole foods include vegetables, fruits, legumes, nuts, seeds, meat, seafood, eggs (see the 'eat real food not labels' poster). Often whole foods are found around the outside of the supermarket, while the highly refined processed foods are in the middle aisles.

Physical activity

The key concept is the basic message of "move more/be more active". Ask the person about their history of physical activity or exercise.

Start into exercise slowly, especially when the person has been sedentary for a number of years and/or is very overweight

- Short bouts of activity may be better than one long session [16] e.g. 3 x 10min walks instead of 30min.

Consider how to increase incidental activity on a daily basis e.g. Park the car a block from work and walk the extra distance.

Consider how uncomfortable activity can be for larger persons and advise people how to minimise discomfort:

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- Sweating / chafing – use of barrier creams
- Aching muscles after exercise – rest, ice, compress to reduce inflammatory effects. It is best not to do so much exercise that inflammatory effects are produced – these reduce with gradual practice and increase in fitness.

Resistance exercise is an important consideration for a balanced activity programme.

- Body weight exercises are best initially.
- Resistance exercise should be part of an initial programme for anyone with pre-diabetes, diabetes, metabolic syndrome.
- Avoid breath holding especially with hypertension.

Frequency: ≥ 5day/week (wk)

Intensity: Initial exercise intensity should be appropriate to suit the individual but should be progressed to ensure physiological adaptation. Moderate to vigorous aerobic activity should be encouraged in those who can safely manage this. At least 25% of all exercise should be huffing and puffing.

Time: minimum of 30min/day (150min/wk) progressing to 60min/day (300m/wk) of moderate intensity aerobic activity. Accumulation of intermittent exercise of at least 10min is an option.

Type: the primary mode of activity should be aerobic that involves the largest muscle groups. Resistance training and flexibility is highly recommended as part of a balanced regimen.

Fat distribution, health risks and exercise

Clinicians need to recognise and classify the genetic fat distributions in people or they risk giving the wrong advice and set people up for failure. *Note that there can be a mix of the two types of fat distributions, especially as people age.*

Peripheral/subcutaneous (Pear shaped): In people who are peripherally overweight, i.e. have a lot of weight in the lower limbs, joint mal-alignment and damage is quite common[17-18], including in children[19]. People with this sort of adipose tissue distribution usually have better metabolic health [20] and require lower intensity, lower impact physical activities. Start low and go slow is the message with people afflicted by this type of adipose distribution. This is pivotal in getting very large people to start losing weight. Increase exercise as they are able, physically and mentally.

Peripherally overweight people have many physical problems (fitting seats and joint concerns) and psychological (body shape distress) problems but the body does not 'see' this fat as a metabolic risk. 'Starvation diets' (i.e. Very Low Energy Diets VLED), supervised, sachet based-meal replacement and leafy greens rapid weight loss programmes are required to mobilise this sort of fat, as well as a prudent high nutrient foods. VLED should be medically supervised as severe constipation can occur.

Central/visceral (Apple shaped): In people who are centrally overweight, fat gets forced around the gut (omentum) and into the organs. Unlike subcutaneous cells, the fat in these cells is toxic and associated with oxidative stress, inflammation and protein damage. Fat is forced into upper body skin – dowagers hump, skin around neck, tongue, shoulders, and into the liver, heart, skeletal muscle, pancreas and other organs. Marked abdominal distention can be seen in men and some women with high visceral adipose deposition. This can initiate degenerative diseases such as fatty, stressed liver (the most common liver disease) Type 2 diabetes, Cardiovascular disease and some cancers. Unless there is permanent tissue scarring/necrosis (e.g. myocardial infarction, MI), much of

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this damage is reversible with high micronutrient food and weight loss. VLED (starvation) diets' are often *not* needed in people with central/visceral fat as individuals can do very well on a high micronutrient diet.

Initial breathlessness (abdominal compartment syndrome [21-22] coupled with hypertension and other metabolic abnormalities predisposes people to injury when they start to exercise (especially the Achilles tendon). It is important that high nutrient diets are started and a very gradual increase in physical activity intensity is managed. Once diet is established and fitness regained, this group of people will need to continue higher intensity activity to maintain cardiovascular and general health [23]. Physical activity stimulates metabolic health and cell repair, stiffness following exercise can indicate that this process is occurring, but there is no necessity to exercise to the point of pain [24-26].

Conclusion

This weight management programme has developed tools to enable all persons working in health care to have the resources and knowledge to be able to support their patients with weight management. Weight management is offered in some general practice environments already, these tools enable a comprehensive assessment and guidelines to help more health professionals offer a service to their population or to enhance existing service.

The resources have been tested in a pilot project with WBoP PHO and all patient resources were assessed as appropriate by a cultural committee prior to release.

The format of this primary care weight management programme is similar to the ABC stopping smoking pathway as this is familiar to many health care providers and there are links with addiction and habit, which for some, may be part of their problem with weight management. Positive messaging is psychologically important so people do not feel deprived. Eat more vegetables and fruit and moving more as well as drink more water are the key positive messages. Use of motivational interviewing encourages and guides discussion around what is important for the patient and encourages them to set achievable goals. The aim is to offer support to enable patients to change with positive messages and the utilisation of patient led SMARTA goal setting.

It is recognised that Health care professional (and potentially others) have experienced some difficulty in bringing up the issue of weight management with their patients. This barrier can be overcome through utilisation of two validated questions which are incorporated in the programme. The response to these questions determines the health care practitioner/workers next steps and presents the opportunity for a brief intervention and assessment of the patients' readiness to change. If the response to the two readiness to change questions is positive, it is worthwhile undertaking a comprehensive assessment. As desired, the patients can take this away or complete the comprehensive assessment with their health care professional.

The comprehensive assessment tool is invaluable as this informs the health professional specifically why the patient is overweight and should guide direction for future management. It may also increase self-awareness for the patient. Following completion of the comprehensive assessment, ongoing management is required to support the behavioural changes required and to facilitate any additional referral required based on the result of the comprehensive assessment, for example for anxiety management. Funding for this programme may be available through existing funding streams such as CarePlus or other PHO or DHB funding.

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