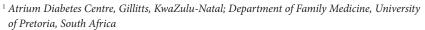
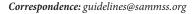
# Primary care and primary healthcare in obesity management

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Cite this chapter: Diab PN, Dire Z, Hellig J, Conradie-Smit M, May W. Primary care and primary healthcare in obesity management. S Afr Med J 2025;115(8b):e3731. https://doi.org/10.7196/SAMJ.2025.v115i8b.3731



- · Obesity is a complex chronic disease driven by a complex interplay of genetic, biological, behavioural, psychosocial and environmental factors - not simply a result of poor choices. Effective care requires acknowledging this complexity and shifting from weight-focused to health-focused goals.
- · Primary healthcare providers (PHPs) play a critical role in initiating respectful, patient-centred conversations with people living with obesity (PLWO), ideally using tools such as the '5As' of obesity management (Ask, Assess, Advise, Agree, Assist) approach, while being mindful of weight stigma and bias.
- · Multi-component, personalised interventions that include behaviour change strategies (nutrition, exercise, improved sleep, and mental health support), often delivered by interdisciplinary teams, are more effective than single-component strategies. Small sustainable changes
- · Health literacy and cultural context matter deeply. Care should be culturally tailored and sensitive to socioeconomic and community factors to improve engagement and outcomes, especially in diverse populations such as those in South Africa.
- · System-level change is essential. This includes training providers, reducing stigma, creating accessible referral pathways, and supporting scalable models (such as tech-enabled or group-based programmes) that can be maintained over the long term in real-world settings.

## KEY MESSAGES FOR PEOPLE LIVING WITH OBESITY

- · Focus on prevention. Prevention of weight gain is a crucial and realistic goal. Significant weight loss may be difficult, depending on personal health factors.
- · Set value-based goals. Instead of focusing on a target weight, aim for improved health and quality of life such as improved mobility or
- · Seek individualised support. Nutrition counselling and access to a multidisciplinary team will greatly improve the ability to manage weight and ensure long-term maintenance.
- Address underlying medical issues. Conditions such as disrupted sleep, pain, mechanical problems, metabolic conditions and mental health issues may contribute significantly to challenges in managing individuals living with obesity.
- · Ask about medications. When prescribed new medications to treat a medical condition, particularly if the medication is intended for long-term use, always enquire about its effect on weight and potential associated weight effects, exploring other options if available.

#### RECOMMENDATIONS

- 1. We recommend that PHPs identify PLWO, and initiate patient-centred, health-focused conversations with them (Level 3, Grade C).[1]
- 2. We recommend that PHPs ensure that they ask PLWO for their permission prior to discussing weight or taking anthropometric measurements (Level 3, Grade C).[2]





- 3. Primary care interventions should be used to increase health literacy in individuals' knowledge about and skills in weight management as an effective intervention to manage weight (Level 1a, Grade A).[3]
- 4. PHPs should refer PLWO to primary care multi-component programmes with personalised obesity management strategies as an effective way to support obesity management (Level 1b, Grade B).[4-8]
- 5. PHPs can use collaborative deliberation with motivational interviewing to tailor action plans to individuals' life context in a way that is manageable and sustainable to support improved physical and emotional health, and weight management (Level 2b, Grade C). [9]

Features of primary care and primary healthcare community-based interventions for PHPs and developers:

- 6. Interventions that target a specific ethnic group should consider the diversity of psychological and social practices with regard to excess weight, food and physical activity as well as socioeconomic circumstances, as they may differ [4-8] across and within different ethnic groups (Level 1b, Grade B).[10]
- 7. Longitudinal primary care interventions should focus on incremental, personalised, small behaviour changes (the 'Small Changes' approach) to be effective in supporting people to manage their weight (Level 1b, Grade B).[11]
- 8. Primary care multi-component programmes should consider personalised obesity management strategies as an effective way to support PLWO (Level 1b, Grade B).[7,8,12]
- 9. Primary care interventions that are behaviour based (nutrition, exercise, lifestyle), alone or in combination with pharmacotherapy, should be utilised to manage PLWO (Level 1a, Grade A).[13-15]
- 10. Group-based nutrition and physical activity sessions informed by the Diabetes Prevention Program and the Look AHEAD (Action for Health in Diabetes) programme should be used as an effective management option for PLWO (Level 1b, Grade A).[16-18]
- 11. Interventions that use technology to increase reach to larger numbers of people asynchronously should be a potentially viable lower-cost method in a community-based setting (Level 1b, Grade B).[19]

Educational recommendations to support development of obesity management skills in the primary healthcare clinical workforce:

12. Educators in undergraduate, graduate and continuing education programmes for PHPs should provide courses and clinical experiences to address the gaps in skills, knowledge of the evidence, and attitudes necessary to confidently and effectively support PLWO (Level 1a, Grade A).[20]

## Introduction

Obesity is now recognised as a complex chronic disease in which abnormal or excess body fat (adiposity) impairs health, increases the risk of long-term medical complications, and reduces lifespan - not merely the result of individual choices, but the product of a complex interplay of genetic, biological, behavioural, psychosocial and environmental factors. In South Africa (SA), obesity has reached epidemic proportions, with significant implications for public health, healthcare resources and systems, and socioeconomic development.

Despite advances in our understanding, widespread misconceptions persist about the causes of obesity and the effective management of people living with obesity (PLWO). These narratives, often reinforced within healthcare settings, contribute to weight stigma and bias, which in turn undermines both treatment efforts and patient trust. There is an urgent need to shift towards a person-centred, respectful and evidence-based approach to care.

While other chapters in this guideline review the evidence regarding the efficacy of various treatments, this chapter focuses on how primary care and broader healthcare systems can play a transformative role in managing PLWO. For primary healthcare providers (PHPs), the goal is not just weight loss but improved overall health and quality of life. For PLWO, the emphasis is on realistic and personalised goals - often starting with preventing further weight gain, improving function, and managing associated health conditions.

- Primary care refers to care provided within offices and medical practices.
- Primary healthcare encompasses interventions delivered within the broader community, addressing public health needs holistically.

PHPs in SA are often the first - and sometimes the only - point of contact for PLWO. This places them in a pivotal position to initiate supportive, respectful and holistic care. To do this effectively, they need access to practical tools, training, and clear pathways to appropriate interventions.

This chapter seeks to equip primary care teams with a deeper understanding of the real-world strategies available for managing PLWO, as well as the organisational changes needed to support patient-centred care. It focuses on interventions within both primary care and broader community-based settings, recognising that managing PLWO requires co-ordinated, sustained action across multiple levels of care. SA's high burden of disease and strained healthcare resources create additional challenges, but also underscore the urgency of strengthening management of PLWO in primary care. Most interventions in this space are complex and context sensitive, shaped by:

- · the ability of both PHPs and PLWO to engage
- the presence of personal and systemic barriers
- alignment with the needs of stakeholders
- the intervention's ability to produce meaningful outcomes.

To be successful and scalable, obesity care interventions must be viewed as both valuable and feasible within existing systems - even after external research funding has ended. Mixed-methods studies and implementation research are needed to uncover the principles that drive success across different settings and populations.

While no single 'best practice' fits all scenarios, this chapter offers clinically relevant insights that PHPs can apply in real-world contexts. With obesity contributing to the rising tide of chronic disease, there is a pressing need for targeted research and resourcing to support a system-wide shift. By empowering PHPs, we take a vital step toward more equitable, effective and sustainable care for all PLWO in SA.

## The nature of the care gap

In a recent series in the Lancet, Dietz et al.[21] highlighted that the management of PLWO is not ideal in current health systems. They cited concerns in several areas: training of the healthcare workforce, unfounded assumptions of PLWO, lack of experience working in interdisciplinary teams, and lack of training in behaviour change strategies. There is a tremendous gap between evidence-based recommendations and current clinical practice. International data have demonstrated this gap, identifying issues such as both PHPs and PLWO being reluctant to initiate a conversation about weight

loss, PLWO not being able to seek appropriate care, and those who do seek care not receiving adequate advice. [22,23] Additionally, access to metabolic and bariatric surgery remains very poor both internationally<sup>[24]</sup> and in SA.<sup>[25]</sup>

In trying to ascertain how to close this gap and explore PLWOs' expectations of the role of their PHPs and the care they receive, Torti et al.[1] found that:

- · PLWO had clear expectations that their PHP would initiate discussion around weight concerns.
- · PLWO expected these discussions to take place in the context of a co-ordinated and person-centred approach to care.
- · Multiple conditions and drivers related to their weight and health would be discussed.[1]

It was therefore identified that:

- · There is a need for primary care delivery to be redesigned to facilitate PHPs addressing obesity with their patients, including improving skills in initiating the conversation.[26]
- The referral process and coverage for obesity management specialists and community-based programmes should be simplified and encouraged.[26,27]
- · Healthcare provider counselling alone has limited ability to achieve clinically meaningful weight loss and should be combined with a multidisciplinary team approach.[27]
- · Identification of practical strategies to support implementation of evidence-based treatment services in primary care should receive high priority in healthcare reform. [27]

Changing the management of PLWO in primary care represents an adaptive challenge requiring a change in PHPs' beliefs and practices. It involves addressing weight bias and stigma in clinical consultations and care settings. Additionally, there is a need for structuring clinical encounters to address PLWOs' self-directed bias (internalised stigma), creating efficient approaches to personalised consultations that result in sustained shifts in behaviours and actions, which are scalable to the magnitude of the problem.

## The critical role of the primary healthcare provider

## Addressing weight stigma and bias

As highlighted elsewhere in this guideline (see the chapter 'Reducing weight bias in obesity management, practice and policy'), there is evidence indicating that both PHPs and PLWO endorse weight bias attitudes and beliefs about obesity. Studies also show that PLWO perceive biased treatment in healthcare, and that this affects how they access healthcare services for themselves and for their other health problems. PHPs should be mindful that most PLWO will have experienced weight bias and stigma in healthcare settings and that this may affect their behaviours and responses to healthcare interventions. PHPs should avoid making assumptions or judgements about PLWOs' health and behaviours based on their weight.

Kirk et al.[2] conducted a qualitative study on the management of PLWO in which they highlighted 'blame as a devastating relation of power, tensions in managing PLWO and prevention and the prevailing medical management discourse. They highlighted the clinical messages of 'eat less and move more' promoted by PHPs, the health system and society as blaming and contributing to internalised stigma. This collision between the lived realities of the complex biological and social drivers for PLWO and this simplistic, ineffective messaging leads to profound frustration for patients, in part because PHPs seemingly ignore all that they have done to manage their weight.[2] They also highlighted PHPs' struggles with knowing how to help, and feelings of ineffectiveness when care focuses solely on body weight. The sensitivity of the topic also hinders PHPs' confidence in raising it with people. [2] Thille [28] conducted a robust qualitative study using interactional stigma theory to analyse audio-recorded primary care dialogues about weight. In addition to stressing the importance of asking permission to discuss weight, she proposed several actions to mitigate anti-obesity stigma in primary care consultations:

- Explicitly acknowledge multiple determinants of weight as is done with other biomeasures, disrupting the stigmatising personal failure/success stereotypes attached to body composition.
- Prior to talking about outcomes, assess healthy behaviour routines that affect health separately, to identify the extent to which behavioural interventions may help improve overall health.
- Redefine success as sustained healthy behaviour change (e.g. increased consumption of fruit and vegetables), regardless of body size or weight.[28]

The following is a list of a few practical weight bias reduction strategies that PHPs can use in their practice:

- Assess your own weight bias attitudes and beliefs.
- Consider the patient's previous weight bias experiences and assess for internalised weight bias.
- Recognise that developing obesity is a product of many factors.
- Uncouple weight from health explore all causes of presenting problems, not just weight.
- Emphasise the importance of behaviour goals rather than weight loss goals.
- Remove all materials from the waiting area that stereotype PLWO.
- Have gowns, blood pressure cuffs and other diagnostic equipment designed to fit larger bodies.
- Install grab bars in washrooms and provide seating that will accommodate/support larger body sizes and shapes.

#### **Obesity conversations**

PHPs identify many challenges with supporting PLWO in managing their weight. One of these is that obesity is often present alongside other health conditions, making it difficult to address directly. Asselin and colleagues<sup>[4-6]</sup> conducted a robust qualitative study as part of the 5As Team programme that sought to understand PHPs' challenges with supporting PLWO. Providers in the 5As Team study reported discomfort initiating conversations about weight, citing its sensitivity, limited consultation time, and uncertainty about how to help.<sup>[6]</sup> Many resorted to addressing weight obliquely through other medical concerns.

Another barrier was inconsistent messaging between PHPs, which undermined patient trust and care continuity. These issues were often resolved in settings with strong interdisciplinary teams that fostered effective communication, clearly defined roles, and a shared understanding of care priorities.[4]

To address these challenges, the '5As' of obesity management (Ask, Assess, Advise, Agree, Assist) was developed. [29] These tools were developed to summarise the evidence on obesity management in consultation with PLWO, PHPs and obesity experts through the Canadian Obesity Network (now Obesity Canada). They are supported by the Canadian Institutes of Health Research and the Public Health Agency of Canada, and provide a structured, evidence-based framework for engaging PLWO in a respectful, collaborative manner. In a non-randomised pre-post design study by Rueda-Clausen et al., [30] it was shown that implementing the 5As of obesity management resulted in a twofold increase in the initiation of obesity management (19% v. 39%; p=0.03).

Utilisation of the 5As approach in conjunction with interdisciplinary care was shown to improve PHPs' confidence, increase the use of people-first language, and promote a chronic disease mindset over weight-centric approaches.<sup>[5]</sup> Crucially, it aligned with what patients wanted: holistic, patient-centred care that took into account their personal contexts and comorbidities.[1]

Further enhancing this approach, collaborative deliberation - a model of care based on deep, reflective listening and shared decisionmaking - was shown to improve both physical and psychological health outcomes. Luig et al.[31] identified eight key processes that build trust and support behaviour change to improve overall health:

- 1. Compassionate and real listening
- 2. Making sense of the person's story
- 3. Recognising individual strengths
- 4. Shifting beliefs about PLWO
- 5. Focusing on whole-person health
- 6. Collaborative action planning
- 7. Encouraging reflection
- 8. Supporting experimentation with change.

Integrated into primary care, this approach helps disrupt weight stigmas, supports empathy and empowerment, and enables PHPs to work meaningfully with patients, rather than simply directing them.

Motivational interviewing, grounded in similar principles, enhances autonomous motivation, self-efficacy, and long-term behaviour change. By tailoring discussions to individual goals and avoiding prescriptive regimens, it encourages PLWO to become active participants in their care - supporting better adherence and outcomes, especially in weight management and physical activity.

Together, these approaches - 5As, collaborative deliberation, and motivational interviewing - equip PHPs with the tools to initiate respectful, effective and person-led obesity care, helping to close the care gap and reduce stigma in clinical encounters.

#### Multi-component, personalised interventions

In a systematic review of effective obesity management practice interventions and of behavioural interventions, Kirk et al.[7] highlighted the importance of multi-component interventions that incorporate physical activity, nutrition and behavioural strategies. Based upon several systematic reviews, they concluded that multi-component interventions lead to greater weight loss, whereas single-component interventions are more effective in improving the targeted behaviour, for example, nutrition or physical activity. The clinical heterogeneity in studies does not permit meta-analysis. Additional evidence also highlights the role of sleep as a crucial behavioural factor that can influence weight regulation. Disrupted or inadequate sleep has been associated with hormonal dysregulation, increased appetite, reduced impulse control, and poorer adherence to nutrition and activity plans. Including sleep hygiene as part of behavioural strategies may further enhance the effectiveness of multi-component obesity interventions. [32]

Interviews with the participants after the intervention highlighted that the monthly telephone calls and personalised goal setting were most helpful. Key conclusions from a home-based weight loss and physical activity intervention programme (Choose to Lose)<sup>[8]</sup> were:

- That the PHP plays a critical role in identifying PLWO who could benefit from and who are ready for obesity support/intervention, and in referring to programmes
- · That home-based individually tailored interventions with minimal face-to-face contact are effective in achieving clinically meaningful weight loss
- That people value individualised support.

Another intervention delivered outside of a clinic setting compared three groups of interventions (weight loss v. weight loss and resistance

training v. weight loss and aerobic training) at a YMCA community facility.[12] All groups lost weight from baseline, with an average baseline adjusted change of -6.1% (95% confidence interval [CI] -7.5 - -4.7).

One constructive strategy in the primary care setting that can be used to promote PLWOs' ability to actively engage in their care is to realise the value in working with PLWO to make small changes in health behaviours over time. One such example is the 'Small Changes' approach to managing PLWO that focuses on an energy deficit of 200 - 300 kcal per day.[11]

After 12 months US veterans who had focused on the Small Changes approach (ASPIRE-Group) had lost significantly more weight than those in the Veterans Health Administration's usual MOVE! programme for weight loss (ASPIRE-Group -2.8 kg, 95% CI -3.8 - -1.9; ASPIRE-Phone group -1.4 kg, 95% CI -2.4 - -0.5; MOVE! group -1.4 kg, 95% CI -2.3 - -0.4). The primary outcome was weight change from baseline at 12 months, and secondary outcomes included physiological, behavioural and psychosocial outcomes as well as levels of participation and adherence.[11] In addition, the percentages of people who had lost at least 5% of their baseline body weight at 12 months were 23.8% in the ASPIRE-Group, 21.7% in the ASPIRE-Phone group and 20.2% in the MOVE! group (p=0.79). The authors concluded that this type of personalised goal-setting approach can effectively promote weight loss, and that delivery in a group setting was the most effective in producing clinically meaningful weight loss at 12 months.[11]

#### Health literacy and cultural context

Health literacy is a crucial factor in people's ability to engage in selfcare for the management of obesity. Weight reduction requires both an understanding of what is required to manage weight, and insight into the factors that prevent weight loss and those that promote weight regain.

As a general principle, obesity management interventions should be culturally tailored to maximise support for individuals engaging in self-care. By this we mean that interventions that target a specific ethnic group should consider the diversity of psychological and social practices with regard to excess weight, food, physical activity and socioeconomic circumstances, as these may differ across and within different ethnic groups.

A leader in the area of cultural competency or cultural safety is Kirmayer, who reviewed key concepts in this area in his article 'Rethinking cultural competence'. [33] Foundationally, there is a need to adopt 'cultural humility'. This implies an openness to understanding the individual within their community, with respect and reflection on how healthcare interventions are situated in a specific socioeconomic and cultural context.

In a multicultural society such as SA, attention to these issues is all the more important in achieving therapeutic success. [34] The contextual environment in which a healthcare consultation takes place, as well as the relationship between PHPs and PLWO, have been shown to be vitally important in chronic disease management. [35] Obesity, like diabetes, relies heavily on lifestyle and behavioural interventions as part of its management, and an understanding of cultural perceptions and the broader context of the interaction is therefore highly relevant.

Conversations need to be broader than tailoring interventions in a cosmetic way without understanding the sociocultural hierarchies in which interventions and healthcare delivery are designed. [33] We must seek to understand how different groups perceive problems, be it in terms of body size, illnesses, meaning of health or meanings of social determinants of health, and include these perceptions into care decisions.[36-39]

#### System-level change

System-level changes play a critical role in improving outcomes in managing PLWO. The DiRECT (Diabetes Remission Clinical Trial) study, although primarily designed to investigate diabetes remission, demonstrated that weight management could lead to the remission of type 2 diabetes mellitus in nearly 50% of participants at 12 months with intensive weight loss, and that this remission was closely linked to the amount of weight loss achieved. [40,41] These findings highlight the importance of implementing broader systemic strategies that prioritise long-term weight management as a means to improve primary health outcomes, with even moderate weight loss (5 - 10%) significantly enhancing insulin sensitivity and reducing overall disease risk.

Primary care interventions must be structured to support system-level change by embedding evidence-based programmes within routine clinical practice. The Diabetes Prevention Program demonstrated significant weight and diabetes risk reductions using intensive nutrition and exercise interventions. Adaptations by Ma et al.[17] to primary care settings demonstrated that both coach-led and self-directed interventions led to greater body mass index (BMI) reductions than usual care. Over 15 months, the coach-led and self-directed groups achieved clinically significant weight loss (-2.2 kg/m<sup>2</sup> and -1.6 kg/m<sup>2</sup> BMI, respectively) compared with usual care (-0.9 kg/m2). A limitation was the high-income demographic, which should encourage future research to explore more socioeconomic diversity.

Similarly, a meta-analysis by Borek et al.[18] underscored the effectiveness of combined nutrition and exercise programmes, such as the NEW (Nutrition and Exercise in Woman) study (-10.8% fat loss) compared with diet-only (8.5% fat loss) and exercise-only (2.4% fat loss) interventions. It also identified challenges with long-term sustainability as seen in the WOMAN (Women On the Move through Activity and Nutrition) study, where initial behaviour changes were noted to achieve weight loss but long-term sustainability beyond 48 months fell short.

Technology offers new opportunities for system-wide scalability. Web-based interventions, evaluated by Bennet et al. [42] and Hageman et al., [43] achieved modest but meaningful weight loss among minority adults, with >5% weight loss in 42 - 51% of participants using asynchronous delivery methods (web only, web plus peer, or web plus professional support).

The POWeR (Positive Online Weight Reduction) study reinforced the feasibility of web-based platforms with optional professional support, showing clinically significant weight loss maintained at 12 months for 20 - 32% of participants. [19] These models highlight how leveraging digital solutions can support broader, sustainable changes in the delivery of care of PLWO. (See the chapter 'Emerging technologies and virtual medicine in obesity management.)

To effectively drive system-level transformation, PHPs must deliver individualised, health-focused management incorporating nutrition, physical activity, behavioural strategies and, when necessary, pharmacotherapy or surgical interventions. Emphasising a patient-centred, team-based approach, combating weight stigma, and addressing the broader social determinants of health are vital components. In addition, these conversations need to be addressed throughout the healthcare system, at all levels of care, and reinforced across all sectors of society, including media and education, so that healthy choices become easy and affordable choices for people to make. (See the chapter 'Prevention and harm reduction of obesity [clinical prevention]'.) Even when specialist referrals are unavailable, offering structured, empathetic and evidence-informed care can foster meaningful improvements in the health of PLWO. Investment in ongoing professional development in obesity medicine is essential to build clinical confidence and capacity, ultimately embedding sustainable, system-level solutions into everyday practice.

### Conclusion

Obesity is a chronic complex disease driven by an interplay of genetic, biological, behavioural, psychosocial and environmental factors. Effective management requires more than individual behavioural change; it demands systemic reform across healthcare settings. PHPs occupy a pivotal position to initiate respectful, patient-centred conversations, deliver evidence-based interventions, and combat weight stigma that undermines care.

Sustainable care of PLWO in SA must be anchored in system-level changes that prioritise health-focused, multi-component approaches over simplistic weight-centric models. Embedding interventions such as the 5As of obesity management, collaborative deliberation, motivational interviewing and culturally tailored programmes into routine primary care practice is critical. In parallel, scalable innovations - such as technology-enabled models - offer promising solutions for extending reach and supporting long-term behaviour

Improving PHP training, creating accessible referral pathways, addressing social determinants of health, and challenging weight bias are essential to building trust and improving outcomes. Implementation of these strategies requires investment in primary healthcare systems, workforce development, and research that bridges the gap between evidence and practice.

By equipping PHPs with the necessary skills, tools and systemic support, we can empower PLWO to achieve meaningful improvements in health and quality of life. Real progress depends on recognising obesity as a chronic disease requiring sustained, compassionate and co-ordinated action at every level of care.

Acknowledgement. 'Primary care and primary healthcare in obesity management' is adapted from the Canadian Adult Obesity Clinical Practice Guideline (the 'Guideline'), which Obesity Canada owns and from whom we have a licence. SAMMSS adapted the Guideline having regard for relevant context affecting South Africa using the ADAPTE Tool.

SAMMSS acknowledges that Obesity Canada and the authors of the Guideline have not formally reviewed 'Primary care and primary healthcare in obesity management' and bear no responsibility for changes made to such chapter, or how the adapted Guideline is presented or disseminated. Therefore, such parties, according to their policy, disclaim any association with such adapted materials. The original Guideline may be viewed in English at: www.obesitycanada.ca/guidelines

Author contributions. PND adapted the Canadian guideline and extensively updated the discussion for local context. ZD and JH edited and contributed. All authors edited and approved the final version of the chapter.

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