NHS Wales Joint Commissioning Committee
& Royal College of Psychiatrists Wales

Dyfodol Programme

# Weight Management & Mental Health

## A framework for action in Wales

March 2025

RC PSYCH ROYAL COLLEGE OF PSYCHIATRISTS
CB SEIC COLEG BRENHINOL SEICIATRYDDION

GIG CYMRU NHS WALES
Cyd-bwyllgor Comisiynu
Joint Commissioning Committee

in collaboration with

RC PSYCH ROYAL COLLEGE OF PSYCHIATRISTS
Public Mental Health Implementation Centre

## About this report

This report was commissioned by the Welsh Government as part of the Dyfodol Programme.

The Joint, NHS Wales Joint Commissioning Committee & Royal College of Psychiatrists Wales Dyfodol Programme supports the enhancement of secondary care mental health services and delivery of optimal care for those people in Wales with serious and enduring mental illness.

The Dyfodol Programme enables the Welsh Government and national partners to acquire valuable insights in order to plan and commission effectively.

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## List of abbreviations

| | |
|---|---|
| **ACE** | adverse childhood experience |
| **AWWMP** | All Wales Weight Management Pathway |
| **BMI** | body mass index |
| **CVD** | cardiovascular disease |
| **NCCMH** | National Collaborating Centre for Mental Health |
| **SES** | socioeconomic status |
| **SMI** | severe mental illness |
| **SSB** | sugar-sweetened beverage |

# Definitions

**Body mass index (BMI):** Measure of body weight relative to height. It is calculated by dividing a person's weight in kilograms by the square of their height in metres (162).

**Mental health condition:** A wide range of conditions that affect an individual's emotional, psychological, and social wellbeing but do not necessarily meet the criteria for SMI. These conditions include common mental disorders such as anxiety and depression, which do not involve the level of impairment associated with a diagnosis of SMI.

**Obesity:** The World Health Organisation defines obesity as having a BMI greater than or equal to 30 kg/m2 (5).

**Overweight:** A condition characterised by excessive fat deposits. There are several ways to measure obesity. One of the most used, especially at population level, is according to BMI. The World Health Organisation defines overweight as having a BMI greater than or equal to 25 kg/m2 but lower than 30 kg/m2 (5).

**Polypharmacy:** taking five or more prescribed medicines.

**Severe mental illness (SMI):** Mental disorder that substantially interferes with one's life activities and ability to function (160). It is associated with the diagnosis of psychosis, schizophrenia and bipolar affective disorder (161).

# Executive Summary

## Key Messages

### Why weight gain is a concern for people with mental health conditions

Preventable physical health problems are the greatest threat to life for people with mental health conditions.

In Wales, obesity is one of the top three contributors to the loss of healthy years (1). Weight gain and obesity are major causes for lower life expectancy of 7–25 years for people with severe mental illnesses (SMI). This is because obesity is linked to many chronic illnesses including heart disease, diabetes and cancer, which cost upwards of £700 million to the NHS in Wales each year (2).

For people with mental health conditions, some medications can cause weight gain, which can affect their physical health and wellbeing. Also, having a mental health condition can make it difficult to maintain healthy behaviours like exercising and cooking balanced meals. Having a mental health condition can also make it difficult to keep consistent employment, leading to a vicious cycle in which poverty contributes to further weight gain because people are not able to afford nutritious food.

The broader environment impacts weight gain and the ability to lose weight, including food deserts (no available fresh food), the cost of living crisis, unhealthy food advertising and marketing, a takeaway culture that disguises health harms, and a lack of green and blue spaces in deprived areas, limiting access to opportunities for physical activity.
The consequence of these factors is that it is common for people with mental health conditions to gain weight.

### Medication review and behavioural support are important for healthy weight management

Health services and our communities can support people with mental health conditions to avoid weight gain and to keep a healthy weight. For people taking medications that may cause weight gain, this means paying special attention to any side effects and intervening early. Expert review by a mental health care provider will support changing a prescription where needed, or reducing the amount of a medication where weight gain is a concern.Monitoring for the return of symptoms (relapse) is part of this process.

People with mental health conditions should also receive physical health checks to identify problems early. Weight management programmes, when needed, can help build healthy behaviours.

Physical health checks will help to identify people experiencing weight gain – but what happens next is just as important. The NHS has reviewed many of its programmes and concluded: **“don’t just screen, intervene”.**

**Tailored support and improved provision are critical**

The greatest challenge to meeting the needs of people with mental health conditions relates to fragmented health services. A clear approach to delivery of care will improve the provision of physical health checks and medication reviews, which are critical to identifying problems early. This also requires a clearer picture of who is delivering which interventions, including input from dietitians.

Currently, there is no guidance that addresses the needs of this group. The current national weight management strategy in Wales could be amended to provide tailored guidance for people with mental health conditions.

**Data are needed**

There is a lack of data in Wales on the rates of overweight and obesity among people with mental health conditions. Collecting these data will help inform whether interventions and strategies are effective. An additional benefit of better data is better planning. We will be able to monitor if policy changes and service redesign are delivering the outcomes we all want.

**A framework for action at local and national levels**

This report identifies several actions that can be taken in Wales to address current gaps in obesity prevention and management. We have developed a framework for action focusing on steps that can be taken at the local and national level.

# Recommendations

We propose the following eight recommendations to help address the issue of weight gain among people with mental health conditions in Wales:

**1** Provide leadership and direction to deliver healthy weight management support for people with mental health conditions.

**2** Develop and implement targeted policies, strategies, pathways and support for healthy weight management for people with mental health conditions.

**3** Identify people with mental health conditions who are at high risk of weight gain through screening and physical health checks and intervene early.

**4** At a local level, be clear where weight management support is provided and increase understanding of roles that different professional groups can take in supporting healthy weight management.

**5** Support delivery of a suite of evidence-based healthy weight management programmes.

**6** Improve the provision of medication reviews for people using psychotropic medications that can cause weight gain.

**7** Consider the broader context of healthy weight management, including the food environment, access to green space, and opportunity for safe physical activity.

**8** Optimise the collection and use of data to evaluate the effectiveness of weight management approaches and measure outcomes.

# Contents

# 1.

# Background and purpose of this report

## 1.1 The importance of weight management for people with mental health problems

Effective weight management is crucial for the health and quality of life of those with mental health conditions, including severe mental illnesses (SMI). People with mental health conditions have a high risk of gaining weight. This directly worsens both mental and physical health, creating a cycle of deteriorating health and escalating healthcare demands.

The link between obesity and mental health is clear and reciprocal. Mental health conditions increase vulnerability to weight gain and, at the same time, overweight and obesity increase the likelihood of developing mental health conditions. This cycle results in higher rates of multimorbidity, making treatment more complex and leading to significant health inequalities.

People with mental health conditions are at greater risk of developing a number of physical illnesses, including cardiovascular disease (CVD), diabetes, and liver disease. Having overweight or obesity are also significant risk factors for these conditions. In addition, the double stigma associated with having both mental health problems and obesity can lead to social isolation and poorer health outcomes.

Despite the clear need, in Wales there is a significant gap in the availability of healthy weight management support for people with mental health conditions. Providing effective weight management support is essential for improving both the physical and mental health of people with mental health conditions. It can also lead to:

- improved management of psychiatric symptoms
- reduction in side effects of medication, including weight gain
- reduced premature mortality
- reduced physical illness and improvements in physical health conditions
- improvements in quality of life

## 1.2 Integrated care for people with physical and mental health problems

Integrating weight management support within mental health services in Wales is vital to delivering support alongside regular physical health checks. However, current healthcare systems often don't integrate weight management or medication review into the treatment plans for those with mental health conditions, leading to under-addressed physical health issues. Monitoring medication-related weight gain, and appointing a dietitian and/or physiotherapist to work with patients and staff in mental health services, can prevent progressive obesity and the need to refer to external weight management services in the first place.

There is an urgent need to develop and implement targeted and evidence-based weight management programmes that consider the unique challenges faced by people with mental health conditions, ensuring an integrated approach to their health. By taking steps now and providing integrated care for people with both mental and physical health care needs, healthcare leaders in Wales can make a real difference in the lives of people with mental health conditions who have overweight or obesity.

## 1.3 Purpose of this report

This report, which was commissioned by RCPsych Wales through its partnership with NHS Wales' Joint Commissioning Committee and the Dyfodol Programme, examines the link between weight gain and mental health.

The report makes a case for the importance of addressing weight gain among people with mental health conditions, describes the current provision of weight management support in Wales, highlights best practice, and provides practical recommendations and a framework for action at local and national levels.

# 2.

# Understanding the link between weight gain and mental health

## 2.1 Importance of addressing overweight and obesity in people with mental health conditions

In Wales, over 60% of adults have overweight or obesity (3). International research has shown that people with mental health conditions are consistently more likely to have obesity compared with the general population (4). Globally, among people with SMI (data from 2016-2020) there is an estimated prevalence of obesity of 22.4% (4), compared with 16% in the general population (5). In the case of other mental health conditions, there are estimates of obesity rates as high as 43% among people with depression.

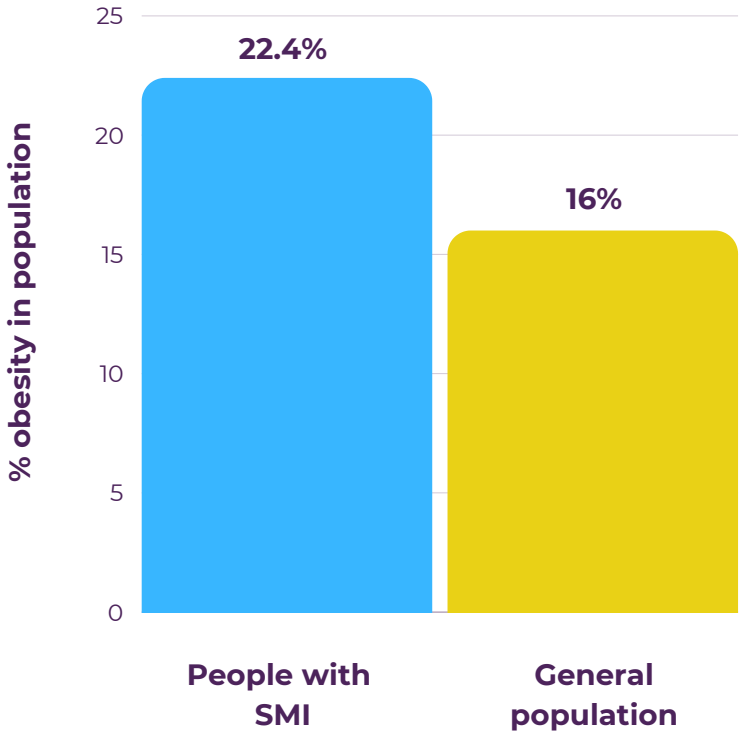



***Figure 1**. Global proportion of people with obesity, defined as BMI >=30, among those with and without SMI. Data from 2016-2020 on SMI from Afzal et al 2021 (4), and data on the general global prevalence estimate is from the WHO 2022 (5).*

The relationship between mental health conditions and overweight and obesity is complex. People with mental health conditions are more likely to have overweight or obesity, and people with overweight or obesity are more likely to have mental health conditions. An analysis of longitudinal studies showed that those who had overweight or obesity had 27% and 55% increased odds of developing depression; while those with depression at baseline had 20% and 58% increased odds of developing overweight and obesity, respectively (6).

Similarly, people with mental health conditions have a higher prevalence of physical comorbidities compared with the general population (7–9). People with SMI have a 160% increased risk of having comorbidities compared with the general population (10), and people with depression are twice as likely to have two or more physical health conditions compared with those without depression (11) . Moreover, physical health conditions among people with mental health conditions are often diagnosed late and treated insufficiently (12,13). The presence of multiple long term conditions affects people's quality of life, can delay their entry to training and the workforce, can lead to polypharmacy and adverse drug events, and can increase treatment burden and health service use (14).

### 2.1.1 Mortality

A key driver of the reduced life expectancy in people with mental ill health is poor physical health. People with SMI have a reduced life expectancy of 7-25 years, on average, compared with the general population (15,16). People with any mental health condition have a life expectancy that is shorter, on average, by 10.2 years for men and 7.3 years for women (12). Unfortunately, the premature mortality gap for people with SMI has been worsening over time. The Office of Health Improvement and Disparities (OHID) report on premature mortality among adults with SMI showed an increasing trend 2016-2020 in excess mortality among people with SMI in England:

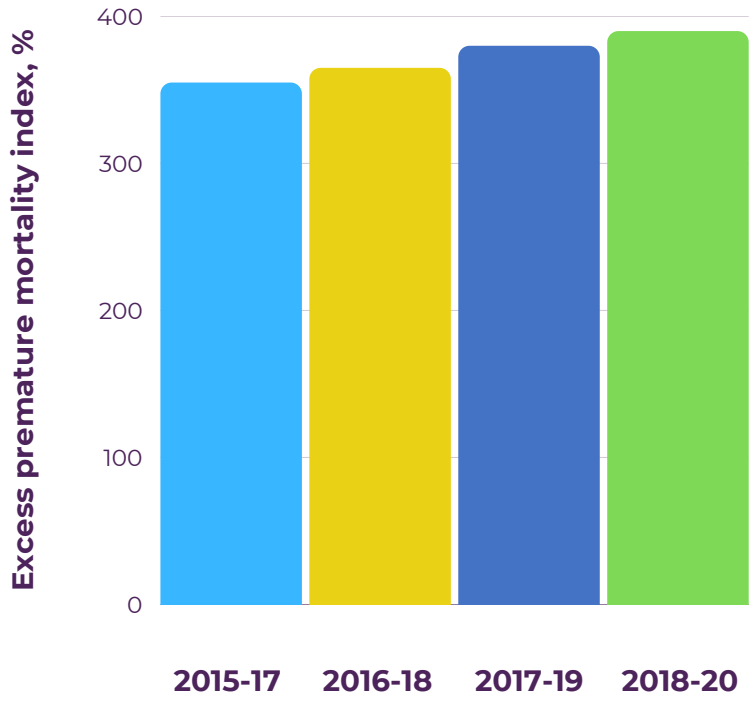



***Figure 2**. Excess premature mortality index among people with SMI, 2015-2020. Data from OHID Premature Mortality in Adults with Severe Mental Illness 2023 report (17).*

Research from the United States shows that people with SMI are 3.6 times as likely to die from CVD, 1.8 times as likely from cancer, 4.2 times as likely from diabetes mellitus, and 3.6 times as likely from renal failure compared with people without SMI (17,18).Overweight and obesity are well-known risk factors for these health conditions and many more (13,19–21), and people with mental health conditions are at higher risk of overweight or obesity compared with those without mental health conditions.

While death rates from CVD and cancer are falling in the general population (though less so for people with SMI in the context of greater inequalities), deaths from liver disease are rising (22), even more so in SMI populations [1] (26). Most of these deaths are avoidable, with research estimating that two-thirds can be prevented (27).

## 2.1.2 Impact of overweight and obesity on multiple long-term conditions

### Pathways to multiple long-term conditions

When someone has overweight or obesity, their body goes through several changes that affect their metabolism, body mechanics, inflammation and hormones. Excess body fat can cause insulin resistance, dyslipidaemia and inflammation around the organs (28–30). These factors create a triad of organ damage and increase the risk of diabetes, liver disease and CVD (23,28–30). Hormonal imbalances affecting appetite and metabolism further complicate these risks (31,32).

Additionally, obesity can increase blood pressure and cause fat build-up in the arteries, increasing the risk of heart disease and stroke (33). All these pathways make people with overweight or obesity more prone to multiple health conditions.

People with multiple long-term conditions are more likely to experience reduced mobility (34), which can result in further health decline (35). This decline in function can lead to a reduced quality of life and increased dependence on caregivers (36). Cognitive decline is more prevalent among people with multimorbidity, impairing decision-making and self-care abilities (37). Compromised immune function is another critical factor, as multiple chronic conditions weaken the body's defence mechanisms (38), increasing susceptibility to infections and prolonging recovery times. Cardiovascular events are more likely, with the cumulative strain of multiple conditions on the heart and blood vessels (33). Chronic inflammation, a common result of having multiple long-term conditions, can lead to organ damage (39) and increase the risk of severe complications and mortality.

[1] Metabolic dysfunction-associated steatotic liver disease (formerly known as non-alcoholic fatty liver disease) is more common in people with SMI due to several factors: they are likely to be on obesogenic psychiatric medications that place a parallel strain on the liver, more likely to take alcohol to excess (with its liver toxic effects made worse by smoking), and have higher rates of treatable blood-borne hepatitis virus (23). Many centres are adapting screening methods for treatable liver disease in specific populations (24), while others have applied these life-changing interventions to people who have become homeless (25).

### Prevalence of multiple long-term conditions

The prevalence of physical comorbidities is high among people with SMI compared with the general population. Up to 75% of people with SMI report the presence of physical comorbidities (40,41), including diabetes, neurological disorders, CVD, liver disease and metabolic and respiratory conditions (7,8), among others. People with SMI have a high prevalence (42%) of metabolic syndrome (42), and they also have a two to three-fold risk of having diabetes and CVD compared with the general population (43). Coronary heart disease is 1.2 times higher and diabetes is 1.9 times higher in people with SMI compared with the general population (27). In tertiary mental health settings, there is evidence that liver disease affects the majority of people with SMI (44).

The increased risk of physical comorbidities is not exclusive to those with SMI, but also can be seen in people with other mental health conditions. For example, people with depression have a 50% increased risk of CVD compared with the general population (9). Depression is reported in about 15% of people with CVD, two to three times higher than in general population (45). In the case of diabetes, the prevalence of depression is even higher, estimated at 28% (46). The prevalence of depression among individuals with liver disease has been estimated to be as high as 45%, varying by type of disease (47).

This also works the other way around: people with chronic physical health conditions are two to three times more likely to develop mental health conditions (48). Depression and anxiety are common among people with multimorbidity, partly due to the burden of managing multiple chronic diseases. The stress of dealing with complex medication regimens, frequent medical appointments, and persistent symptoms can contribute to psychological distress (48).

### Impact of multiple long-term conditions on health management

Treating and managing multiple long-term conditions is challenging for both individuals receiving care and health systems. The interaction between multiple diseases can exacerbate symptoms, predict poorer physical health outcomes and complicate treatment and health management (14). This synergistic effect can result in increased hospitalisations, higher healthcare costs and greater risk of premature mortality.

Moreover, the presence of health conditions that are not similar in their management, such as physical and mental health conditions, creates additional challenges. Treatment regimens can easily become burdensome on patients and increase the chances of uncoordinated, fragmented care (14), which is a consequence of a siloed approach to health care.

Polypharmacy is a common consequence of multiple long-term conditions. While the various conditions need to be managed, it can, however, increase the risk of adverse drug reactions, drug interactions and medication non-adherence (49).

### 2.1.3 Loss of healthy years of life due to overweight and obesity

In Wales, overweight and obesity are responsible for 9% of the known risk factors for three highly burdensome types of conditions: CVD, chronic respiratory conditions and cancer (1). This is most relevant for CVD as most of the other known risk factors are strongly associated with overweight and obesity.

The impact of overweight and obesity also affects how healthy life can be for people affected by them.

Obesity leads to a significant loss of healthy years. In Wales, it has been estimated that 72,128 accumulative years of full health are lost due to overweight and obesity (1). For the general population, this is more than other factors like alcohol consumption, high cholesterol and low physical activity. This burden affects all age groups, making it one of the top three contributors to the loss of healthy years in the Welsh population (1).

### 2.1.4 Economic Impact

The effect of overweight and obesity in people with mental health conditions goes beyond health and impacts the economy. The economic costs are both direct [2] and indirect [3] (50). The global economic impact of obesity in 2014 was estimated at 2.8% of gross domestic product (GDP) (51) and 8.4% of health expenditure (52,53). It has also been estimated that obesity will directly lead to the loss of 6 million full-time workers in the next 25 years (54). Moreover, the presence of comorbid physical and mental health conditions increases healthcare costs by at least 45%. Between 12% and 18% of all NHS spending on long-term conditions is associated with poor mental health (48).

In Wales, the economic impact of obesity has been estimated at £73 million in 2011. This means that roughly 1.5% of the country's health expenditure was related to obesity (55). These estimates are highly conservative due to difficulty in ascertain the full range of conditions affected by obesity, assigning codes to all conditions and limited evidence on how much obesity contributes to certain conditions and the associated risks. The economic impact of obesity is projected to increase over time. It has been estimated that by 2050, the cost to the NHS in Wales will be £465 million, and the total societal cost will be £2.5 billion by that year (56). Although there are no estimates of the economic impact of mental health conditions in Wales, it has been estimated that mental health conditions cost the overall UK economy roughly £118 billion each year (57).

[2] The costs of treating the health condition and its related health outcomes.
[3] The costs of reduced productivity due to premature mortality, loss of healthy years and productivity.

### 2.1.5 Effects on social networks and carers

Physical limitations and the burden of disease management resulting from overweight and obesity can restrict someone's ability to engage in social activities, leading to loneliness and diminished social networks (58). Social support is crucial for managing chronic conditions, and its absence can negatively impact health outcomes (59). For example, someone with depression and obesity may find it difficult to engage in social events, leading to a sense of loneliness and a shrinking social network. This isolation can further exacerbate symptoms of mental ill health, creating a vicious cycle where poor mental health and obesity reinforce each other. Conversely, strong social support networks have been shown to improve outcomes for individuals with chronic conditions (60).

The impact of having a mental health condition and overweight or obesity extends beyond the individual, affecting family members and carers. The physical and emotional demands of caring for someone with these conditions can be overwhelming. Family members may experience stress, anxiety and depression themselves, as they navigate the challenges of providing support (61). Carers may also struggle with feelings of helplessness and frustration, particularly if they feel ill-equipped to manage the complex needs of their loved one, and this can increase their risk of developing a physical or mental health condition and burnout (62,63). Additionally, carers might face direct financial burdens related to healthcare costs and indirect financial burden due to less availability to engage in paid work (64).

The stigma surrounding obesity can perpetuate feelings of shame and inadequacy, making it even harder for individuals to seek help or engage in social activities (65). Moreover, cultural biases can influence the quality of care received by people with obesity and mental health conditions (66,67), as healthcare providers may prioritise weight loss over the management of mental health issues, potentially leading to suboptimal treatment outcomes.

## 2.2 Prevalence of overweight and obesity in people with mental health conditions

More than three out of five people aged 16 and over in Wales have overweight or obesity (estimated at 35% and 26%, respectively). This prevalence is not evenly distributed across the population and there are important demographic and socioeconomic differences. Although women have a lower prevalence of overweight compared with men, they have slightly higher rates of obesity. ***Table 1*** provides the prevalence of overweight, obesity, mental health conditions and multimorbidity among the Welsh population, by demographic and socioeconomic characteristics for the period 2022-2023.

***Table 1: Prevalence in the Welsh population***

| 2022-23 Welsh National Survey | Total | Men | Woman | 16-44 Years | 45-64 Years | 65+ Years | Least Deprived | Most Deprived |
|---|---|---|---|---|---|---|---|---|
| Over-weight | 35 | 40 | 30 | 32 | 37 | 38 | 36 | 34 |
| Obesity | 26 | 25 | 27 | 25 | 31 | 21 | 22 | 32 |
| Over-weight/ obesity | 61 | 65 | 57 | 57 | 68 | 59 | 58 | 66 |
| Mental health condition | 12 | 10 | 14 | 18 | 11 | 4 | 7 | 20 |
| Multi-morbidity | 20 | 17 | 23 | 11 | 21 | 33 | 14 | 27 |

*Source: National Survey for Wales: Adult Lifestyles (2022-2023), National Survey for Wales: General Health and Illness (2022-2023)*

[4] Limited by data availability.

The prevalence of mental health conditions is also unevenly distributed in Wales. About 12% of the Welsh population aged 16 and over reported having a mental health condition. Women reported higher levels of mental health conditions compared with men. Moreover, the youngest age group, 16-44 years old, has a higher prevalence of mental health conditions compared with the 45-64 and over 65 years age groups.

The distribution of mental health conditions and obesity by age and gender becomes even more pronounced when focusing on individuals with SMI. In England, people with SMI aged 15–34 years are three times more likely to be classified as having obesity compared with people in the same age group without SMI (27). The obesity gap for people with SMI is even more pronounced among women compared with men, and among those aged 15–34 years relative to other age groups (27).

Socioeconomic inequalities drive higher obesity rates. Individuals from the most deprived areas have a significantly higher prevalence of obesity compared with those from the least deprived areas. Mental health conditions are also unevenly distributed, with people living in the most deprived areas reporting higher levels of mental health conditions than those living in the least deprived areas.

There are groups that are more severely affected, for example, those in secure mental health services. In 2017, a review by Public Health England showed that overweight and obesity are more prevalent among people detained in secure mental health units, with rates reaching up to 80%, compared with approximately 60% in the general population (68). Moreover, these patients face an increased risk of weight gain during their detention. This increased risk is attributed to factors such as medications causing weight gain, the restrictive nature of the environment, easy access to high-calorie foods, and limited opportunities for physical activity (69). These conditions create a challenging scenario for weight management in secure mental health settings.

# 3.

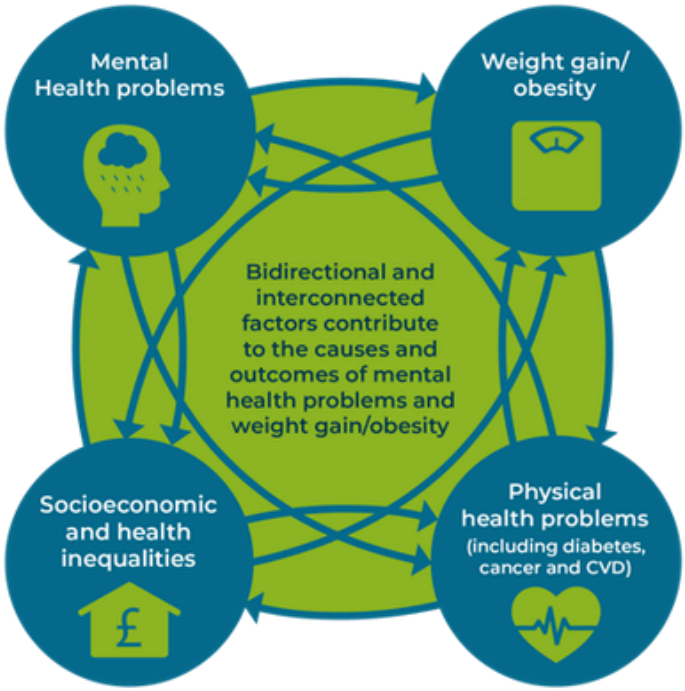
# Factors contributing to overweight and obesity in people with mental health conditions

## 3.1 Overview

Overweight and obesity in people with mental health conditions can be influenced by various factors, including medication side effects and sociodemographic and environmental impacts. Understanding these factors is crucial for developing effective interventions that address both mental and physical health in this population.

### Weight gain and mental health problems: why we need to act now

Medication side effects and behavioural factors such as changes to diet and physical activity often lead to weight gain among people with mental health conditions. This contributes to higher rates of premature death among people with mental illness. Many of the below causes of weight gain can be addressed and prevented by careful policy action




**Summary of key factors affecting the relationship between mental health and weight gain**

**Medication:** Antipsychotic and other medications can lead to metabolic and appetite changes associated with weight gain. Communication of side effects and regular medication review by a mental health professional are essential to monitor and address weight gain early on – but medication review is rarely provided. Regular physical health checks should include medication review for anyone at risk of medication-related weight gain.

**Reduced physical activity:** Behavioural and lifestyle changes associated with mental health problems such as reduced physical activity can lead to increased risk of weight gain. Reduced physical activity can contribute to symptoms of mental health problems. Weight management support following the physical health checks, and community programmes, can support people to find healthy activities that will work for them.

**Changes to diet and disordered eating:** Binge eating, emotional eating and food cravings are more common in people with mental health conditions and can be a side effect of antipsychotic medications. Medication review can help identify these side effects early on, so they can be addressed with a dietitian or relevant health professional.

**Stigma, prejudice, and discrimination:** Stigma and attitudes around mental health and weight can result in biased treatment, lack of empathy and hesitancy to seek help, lower self-esteem, challenges finding employment and increased isolation.

**Lack of integrated physical and mental health care**: fragmented physical and mental health care can lead to inadequately and unaddressed needs. Time pressure and low confidence in discussing weight gain/obesity or mental health may mean staff prioritise managing psychiatric symptoms or physical health needs only.

**Physical health problems:** Obesity can lead to physical illness due to changes to metabolism, inflammation, hormones and reduced mobility. There is a higher prevalence of physical comorbidities in people with mental health problems compared with the general population. People with chronic physical health conditions are also more likely to develop mental health conditions.

**Socioeconomic & health inequalities:** Low SES is associated with higher rates of obesity and mental health problems. Higher obesity prevalence may be linked to limited access to healthy food, elevated stress and less opportunities for physical activity. People with low SES also experience inequalities such as reduced access to health care.

## 3.2 Medications that cause weight gain

Antipsychotic medication is important for managing symptoms of SMI and is also used for other mental health conditions. However, this medication can cause significant weight gain, because of metabolic changes, increased appetite and alterations in lipid and glucose metabolism. There is also evidence of unfavourable changes to the gut microbiome caused by antipsychotic medication (70). Most patients with first-episode psychosis gain over 7% of their body weight in the first year of treatment (71,72). The extent of weight gain varies by drug, with olanzapine and clozapine causing the most (73). While second-generation antipsychotics are considered to cause more weight gain, first-generation antipsychotics like chlorpromazine can also lead to notable weight gain (74). Such weight gain poses additional health risks to individuals already dealing with mental health conditions. However, in some cases it may be challenging to find effective alternative options that do not cause weight gain. For example, the antipsychotic that causes the greatest weight gain, clozapine, is recommended for treatment-resistant schizophrenia, and is helpful for managing symptoms where other medications may not work, and can improve life expectancy (75).

Numerous antidepressant and anti-anxiolytic medications, used for other mental health conditions, are also associated with weight gain (76–78).

People with mental health conditions may be unaware that their treatment can lead to weight gain, which could result in unaddressed weight management issues (79). Weight gain may also lead to poor adherence to the treatment regimen. Informing people about the side effects of their medication can help them to feel prepared to cope with the side effects, and can help to build a supportive and trusting relationship between the patient and care provider(80).

Medication reviews are critical to identifying and addressing medication-related weight gain. Medication review and adjustment, along with behavioural support to achieve healthy behaviour change, should be the first step. The appropriate provision of options to supply adjunctive treatment to address weight gain, or alternative medication, can be a second step where medication adjustment and behaviour change are not enough to curb weight gain. This is highlighted in the recommendations and framework for action.

## 3.3 The relationship between weight gain and poor mental health

The relationship between weight gain and mental health is bidirectional and complex. Weight gain can exacerbate mental health issues, leading to a cycle where poor mental health contributes to behaviours that promote weight gain, and vice versa. For example, people with depression may experience increased appetite and reduced physical activity, leading to weight gain, which can further increase their depressive symptoms. This can partially explain why there is both an increased risk of mental health conditions among people with obesity and an increased risk of obesity among people with mental health conditions.

Moreover, it's also important to note that people with mental health conditions who have overweight or obesity face a phenomenon known as double stigma. While some people can conceal a mental health condition, it is much harder to hide overweight or obesity from the gaze of others. The combination of prejudice and discrimination is evident in multiple ways, including biased treatment, hesitancy to seek assistance, challenges in finding employment, isolation from social circles, and decreased empathy from others (79,81). This stigma can create a vicious cycle of self-stigma, where emotional eating as a coping mechanism results in more weight gain, greater distress and delayed recovery (82). Addressing this double stigma is essential for creating a supportive environment, including in health services, which encourages individuals to seek help and manage both their mental and physical health effectively.

## 3.4 Sociodemographic factors

Sociodemographic factors, including age, ethnicity, gender, and SES, influence weight gain among individuals with mental health conditions. Weight gain patterns can vary by age and gender, with middle-aged people being more prone to having overweight or obesity. Although women consistently show lower rates of overweight compared with males in Wales, the opposite is true for obesity. As seen in Table 1, obesity in women is more prevalent. This pattern holds for SMI (27).

Low SES is associated with higher rates of obesity due to factors such as limited access to healthy foods, elevated stress levels, and fewer opportunities for physical activity. As shown in Section 2.2, individuals living in more deprived areas exhibit higher rates of obesity and mental health conditions. The increased prevalence of obesity among low SES populations is largely influenced by their living environments and the affordability of food. People living in food insecurity do not have consistent access to nutritious and safe food, leading to reliance on inexpensive, calorie-dense, and nutrient-poor foods (83,84).

People with low SES often experience inequalities, including reduced access to healthcare services and treatment (13,85) and disparities exacerbated by socioeconomic barriers like social deprivation, poverty and stigma, which can also lead to harmful lifestyle behaviours and high rates of food insecurity (86). Nearly 40% of people with SMI live with food insecurity (87). Social exclusion and isolation, often experienced by people with mental health conditions (88), can further influence the adoption of health-harming behaviours (86).

## 3.5 Behavioural factors

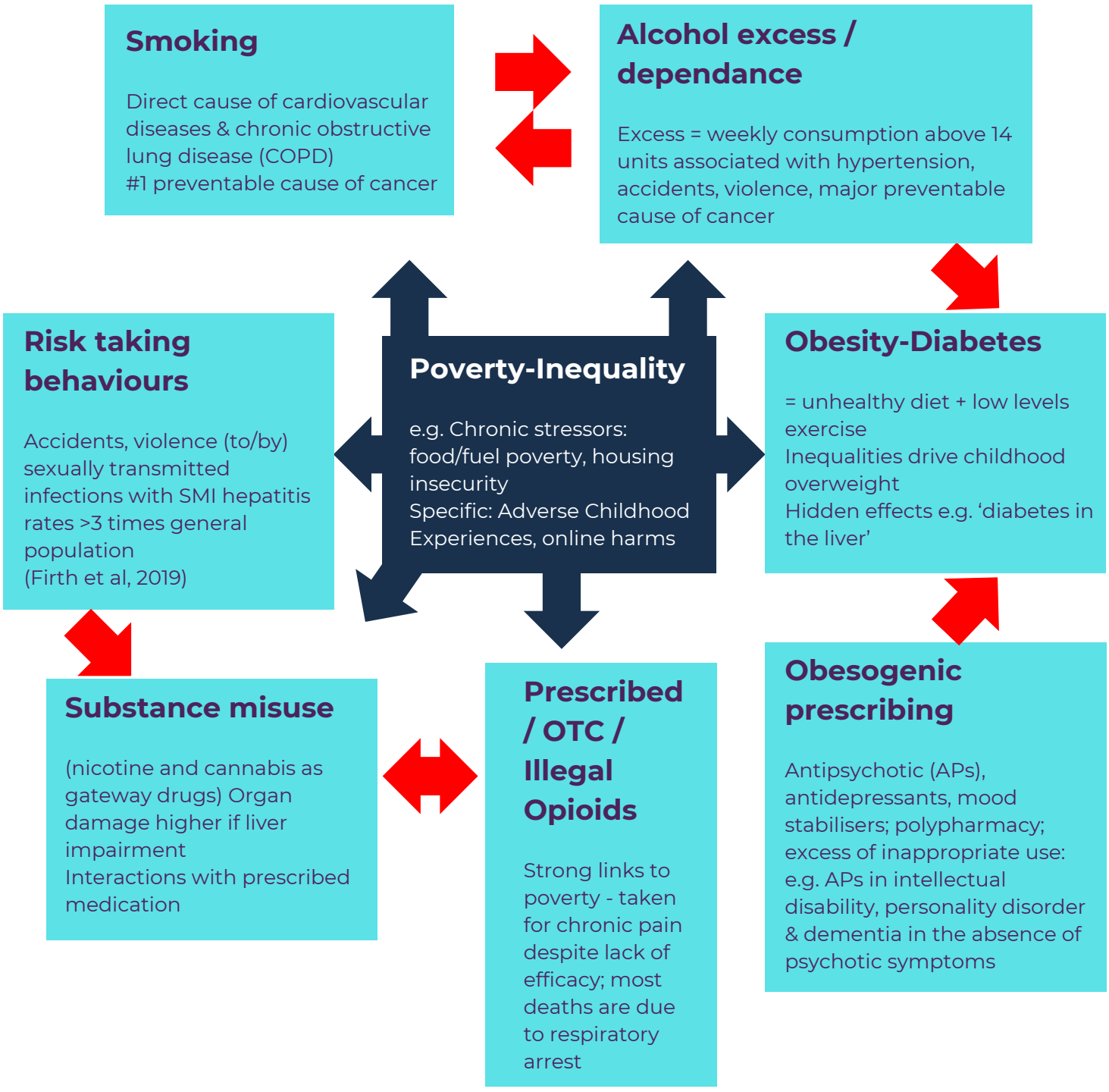
Behavioural factors play a crucial role in weight gain among people with mental health conditions. Sedentary behaviour is a significant contributor, and sedentary behaviour is more common among people using psychotropic medications (89). Sedentary time is greater among people with mental health conditions and physical activity is lower compared with general population (89). Drowsiness and sedentary behaviour can be side effects of many antipsychotic medications. Sedentary behaviour negatively impacts people's physical and mental health and, combined with reduced motivation and energy levels, increases the risk of weight gain.

Another important behavioural factor is disordered eating[1], including binge eating, emotional eating, food cravings and ingesting snacks throughout the day and night. There is robust evidence of elevated rates of disordered eating behaviours among people with mental health conditions compared with the general population (91). Psychiatric medication has been associated with disordered eating due to its influence on the brain's satiety centre or on insulin and gastrointestinal hormones (90); however, even after controlling for age, sex and medication elevated rates of disordered eating behaviours can still be seen (92). The increased prevalence of disordered eating has also been attributed to deficits in executive function, which impair the ability to inhibit behaviour (93), and a greater propensity to experience negative emotions, leading to the consumption of energy-dense foods for comfort (94).
The quality of ingested food is another critical factor influencing obesity in people with mental health conditions. Diets are often low in fruit and vegetables but high in energy density and sodium, contributing to poor nutritional quality (95,96). Obstacles to keeping healthy eating behaviours include food cravings associated with antipsychotic use, negative perceptions of healthy eating, decreased feelings of fullness, challenges in changing eating habits, and the use of food for comfort. Additionally, the prioritisation of addressing mental illness over diet, limited access to healthy foods, social pressures, and the side effects of psychiatric medications further complicate the ability to sustain a healthy diet (97).

Factors like smoking, alcohol use, obesity, medication, and self-harm are deeply interconnected, contributing to poor physical health and increased premature mortality among individuals with mental health conditions. These factors not only exacerbate psychiatric conditions but also lead to chronic physical illnesses, creating a cycle of poor health outcomes. ***Figure 1*** illustrates the interconnection between these factors.

[5] Unhealthy eating patterns that, while not severe enough to be classified as an eating disorder, still negatively affect people's functioning (90).

***Figure 3. Drivers of premature mortality in people with SMI***




*Source: Byrne P. 'Premature mortality of people with severe mental illness: a renewed focus for a new era'. Irish Journal of Psychological Medicine, 2023.40:1: 74–83. https://doi.org/10.1017/ipm.2022.3. (98)*

## 3.6 Childhood Obesity

Childhood obesity is a significant predictor of adult obesity, and its persistence into adulthood is well-documented. Children and young people with obesity are more than five times more likely to have obesity in adulthood compared with children and young people without obesity (99). The trajectories of obesity show that about 55% of children with obesity continue to have obesity as teenagers. Around 80% of teenagers with overweight stay overweight as adults and about 70% remain overweight past the age of 30 (100). This persistent trajectory highlights the importance of early intervention to prevent poor health later in life.

The trajectory from childhood obesity to adult obesity is influenced by various factors, including genetic predisposition (101), and environmental (102) and behavioural influences (103). Children who grow up in environments with limited access to healthy foods and opportunities for physical activity are more likely to continue to have obesity as adults (103,104). Additionally, childhood obesity can lead to psychological issues such as low self-esteem and body dissatisfaction (105), perpetuating unhealthy behaviours and weight gain into adulthood.

Adverse childhood experiences (ACEs) are strongly associated with poor physical health outcomes in adulthood (106), with research indicating a dose-dependent relationship between the number of ACEs and the prevalence of health-harming behaviours, such as poor diet (107). While the exact mechanisms leading to obesity in individuals with ACEs remain unclear, evidence suggests that stress-induced physiological impacts (108) and psychological avoidance behaviours (109) play significant roles. Moreover, there is robust evidence linking ACEs with mental health conditions, with the odds of developing such a condition increasing by 52% for each ACEs (110).

## 3.7 Factors related to unintegrated physical and mental health care

Integrated care involves delivering health and care services in a coordinated way to meet an individual's various needs, ensuring that medical, social and psychological aspects are addressed together (111). Integrated care is crucial given the poor physical health of people with mental health conditions, a key driver of the reduced life expectancy in this group.

Fragmented, unintegrated healthcare services can lead to gaps in care, in which physical health conditions in people with mental health conditions are inadequately addressed, and vice versa. This fragmentation, particularly between primary and secondary care, can result in insufficient follow-up and monitoring. Low staff numbers, staff not feeling confident to discuss overweight and obesity are factors, and healthcare providers prioritising managing psychiatric symptoms over addressing weight gain, can result in less support for lifestyle changes that could mitigate overweight and obesity.

In addition, people with mental health conditions may think their mental health professionals are too busy or do not understand weight gain and there is sometimes a lack of trust and engagement between people with mental health conditions and healthcare services due to past negative experiences or perceived stigmatisation (112). Building trust through respectful and empathetic care can enhance engagement and improve health outcomes (79,113).

Coordinated care models that integrate services across different health domains can improve outcomes (111). People with mental health conditions often have limited access to information and support regarding healthy eating and physical activity (114), hindering their ability to make informed decisions about their health. As explored in the next subsection, providing accessible educational resources and supportive interventions can empower individuals to manage their weight effectively (115).

## 3.8 Factors related to patient readiness to engage with weight management interventions

Patient readiness to engage with weight management interventions is critical for success. Factors affecting readiness include motivation, support systems, perceived benefits, and barriers to participation. To increase patient readiness, early behaviour change support, such as motivational interviewing, can improve self-efficacy and willingness to participate in weight management (79,116). Interventions are more successful when they influence individuals' existing strengths and aspirations (116). Additionally, ongoing social support, especially from family and peers, is crucial for sustaining positive behaviour changes and improving outcomes (117,118).

Building a supportive environment that encourages patients to take an active role in their health is essential. This includes providing education about the benefits of weight management, addressing potential barriers such as lack of access to healthy foods or exercise facilities, and offering ongoing support through regular follow-ups and adjustments to the care plan. Engaging patients in the decision-making process and respecting their preferences can also enhance their readiness to participate in weight management interventions.

## 3.9 Wider contextual factors

The broader **environmental context** also plays a significant role in weight gain among people with mental health conditions. Food deserts, common in deprived areas with higher concentrations of people with mental health conditions and obesity, limit access to affordable, nutritious food (119). This leads residents to rely on cheaper food including fast food and other unhealthy options, contributing to weight gain.

In deprived areas, limited access to exercise facilities further restricts opportunities for physical activity, contributing to sedentary lifestyles and weight gain (120). Developing community-based exercise programmes and providing support to improve access to recreational facilities can help mitigate this issue. An obesogenic environment, characterised by easy access to unhealthy foods and limited opportunities for physical activity, significantly impacts the weight gain of vulnerable populations, including those with mental health conditions (120,121).

**Commercial determinants of ill health**, such as industry practices, marketing strategies, and economic policies, play a crucial role in shaping unhealthy consumption patterns (122). The sugar-sweetened beverage (SSB) industry employs aggressive marketing strategies, lobbying and tactics to influence public perception and policy. The SSB industry actively lobbies against regulations, such as SSB taxes and front-of-package labelling, and employs strategies to shift the blame for health issues, like obesity, onto individuals (123). Practices, such as SSB taxation, could help to reduce obesity, by a projected 0.99% to 2.7% (124). In Mexico, it has been estimated that nearly 240,000 cases of obesity would be prevented, 39% of them among children (125), if SSB taxation were introduced. These, however, are projections. A more concrete effect can be seen in the purchased volume of SSB. After increasing taxation of SSB in Chile, the monthly purchased volume of SSB was reduced by nearly 22% (126). In the UK, a year after introducing an SSB tax, sugar consumption in children and adults was reduced (127) and there is also evidence of a reduction in obesity among children in their last primary school year, especially among girls living in the most deprived areas (128).

The food environment in hospitals and inpatient units is also important factor. Effective facilities focus on providing nutritious, high-quality meals that patients and staff value (129). Integrating catering, dietetics, and nursing teams is essential to improve nutritional outcomes for patients (129). However, concerns persist about the presence of fast-food outlets on hospital premises, which can undermine health efforts (130). Many secure units have recognised the problem of access to unhealthy food (for example, takeaways) and have adopted policies to reduce access to unhealthy foods, make healthier options more accessible, and manage portion sizes (68,131).

# 4.

# Approaches to providing weight management support

## 4.1 Current weight management approaches in Wales

At a national level, the Welsh Government have published the All-Wales Weight Management Pathway (AWWMP), and the Healthy Weight: Healthy Wales obesity strategy (132,133). Public Health Wales has produced a document outlining the primary care needs of people with overweight and obesity, which is aligned to the objectives of the Healthy Weight: Healthy Wales strategy and is intended to support the implementation of the AWWMP.

### 4.1.1 Healthy Weight: Healthy Wales

Healthy Weight: Healthy Wales outlines a national long-term strategy to reduce obesity by creating healthier environments including at schools and in healthcare settings by focussing on prevention and early intervention, including via targeted and specialist services, and by building leadership to deliver the programme nationally and via local systems.

Currently, there is no specific weight management strategy aimed at people with mental health conditions. Healthy Weight: Healthy Wales should therefore be supplemented with the more specialised approach set out in the NHS England guidance (134) to better inform weight management strategies for people with mental health conditions.

### Healthy Weight: Healthy Wales Strategy Key Areas

1. Healthy environments:
   Promoting healthier food and active environments across Wales.
2. Healthy settings:
   Promoting health within education, work and community settings.
3. Healthy people:
   Focusing on prevention and early intervention and promoting provision of targeted and specialist services to reduce conditions linked to obesity.
4. Leadership and enabling change:
   Promoting national delivery and a systems-based approach.

### 4.1.2 All Wales Weight Management and Obesity Pathways

The All Wales Weight Management Pathway (AWWMP) provides a four-level weight management pathway system (132), as set out in the Figure below.

**Level 1** aims to ensure availability and promotion to the public of a range of opportunities to support people to achieve and maintain a healthy body weight in a supportive environment, without the need to access specific health services.

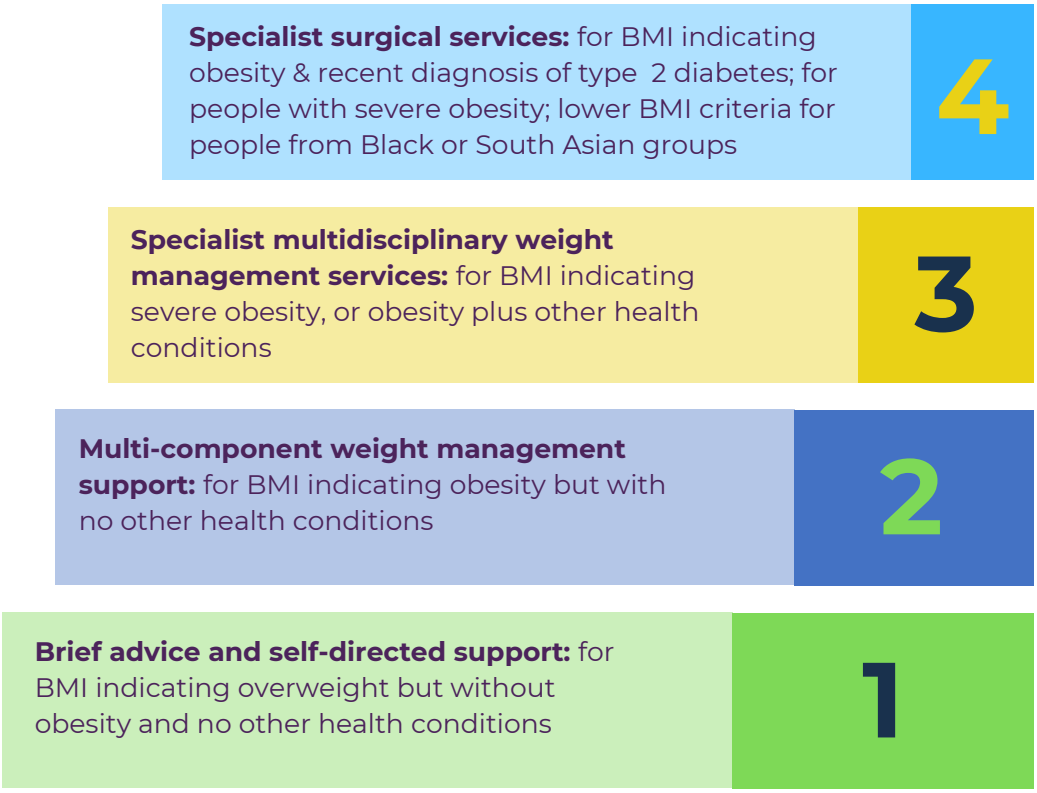
**Level 2** aims to ensure availability of a range of services for people who wish to lose weight and have been identified as being at increased risk of obesity by a member of the primary care team. This would include behaviour-based weight management support.

At **level 3**, the aim is to ensure availability of services for people with obesity who have one or more comorbidities and several unsuccessful intervention attempts, or those with complex emotional relationships with food. These services provide more specialist interventions and can be delivered in both primary and secondary care. They act as a gateway to secondary care ensuring that secondary care services are used appropriately. Drug therapy can be considered at level 3, combined with other approaches, if these have been unsuccessful when used alone. **Level 4** aims to provide a specialist medical and surgical (bariatric surgery) service to those individuals who have failed to achieve or maintain adequate weight loss through other interventions in the pathway.

The AWWMP proposes that service design and delivery should be person-centred, psychologically, and behaviourally informed, should focus on long-term health change, should provide integrated, co-ordinated, and ongoing weight management support for the patient (132). However, tailored weight management support for people with mental health conditions has not been outlined.

The AWWMP Obesity Pathway, which was established in 2010 but is currently under review, also sets out a four-level approach to manage and treat obesity. Severalguidelines have been produced to guide the effective implementation of the pathway, such as the Primary Care Obesity Prevention Plan (135), a report on the primary care needs of people with overweight and obesity (Hannah et al., 2021), and a report of behavioural insights of people supporting weight management that work in primary care (Pringle et al., 2021). However, none of these provides weight management guidance specific to people with mental health conditions. There is advice about how to implement the recommendations for people with mental health condition in Section 5.

***Figure 4. The four levels of the All Wales Weight Management Pathway***




## 4.1.3 Public Health Wales guidance on healthy weight management in primary care

The Public Health Wales publication on the primary care needs of people with overweight and obesity states that primary care, including GPs and clinical pharmacists, can play an important role in weight management for people with mental health conditions by providing medication reviews. Primary care and community pharmacists would be able to review and adjust antidepressant medications, however, specialist mental health pharmacists would be best placed to review and adjust antipsychotic medications.

Medication reviews are essential, but the current system has gaps in their delivery and in the provision of physical health checks for people with mental health conditions.

Community pharmacists, who have central roles within health provision of a local area, could help with signposting to screening and identifying people in need of specialist support for medication reviews.

Without pathways in place connecting community care, primary care and specialist mental health services, weight management support and medication reviews will not reach the people who need it.

A **weight management care pathway for local areas** should set out how physical health checks and medication management are provided, and how the referrals process can be implemented and improved.

Currently, there isn't clear guidance on the coordination and delivery of medication reviews or weight management support. Coordination between primary care and mental health teams can help support delivery and reduce gaps in provision. Clearer specification of these roles and integration of weight management support in health care is necessary to ensure people can access the right help.

## 4.2 NICE and NHS England guidance on healthy weight management

The NICE guidance on obesity management recommends supported behavioural weight management interventions for people with overweight or obesity who meet certain criteria. While there is no specific healthy weight management guidance for people with mental health conditions, the NHS England guidance on improving the physical health of people living with severe mental illness outlines the importance of healthy weight management for this group. NHS England and NICE guidance on bipolar disorder and psychosis and schizophrenia recommend regular physical health checks, beginning at initial diagnosis (136).

Healthy weight management support provided to eligible patients via physical health checks should follow the NICE guidance for obesity prevention (137), and physical activity brief advice (138).

Below, we highlight key features of the physical health checks and considerations for delivery.

### SMI physical health checks: what you need to know

- All adults on the SMI register should be offered all 6 recommended physical health assessments, **at least annually**. This requires that the SMI register is up to date.
- **Medication management** is part of the physical health checks.
- People with SMI may have a history of **trauma**. Trauma-informed delivery of health checks is vital.
- Ensure **care doesn't stop at screening**. Follow up is essential.

People with other mental health conditions may also benefit from physical health checks – especially if they are prescribed psychotropic medications where weight gain as a side effect. Medication review and physical health monitoring are important for these groups, too.

### 4.2.1 Follow-on care after the physical health check

The health checks can identify areas where more support is needed and facilitate early intervention. However, physical health care does not end with the health check – this is the starting point.

Where patients are prescribed medications that lead to weight gain, or if issues of weight gain are identified, early intervention is essential. Medication-related weight gain can be addressed by modifying the prescription, where appropriate, and by supplementing this with weight management support.

The current guidance on physical health checks suggests that follow-on care should include **tailored support** to meet the health needs of people with SMI. To improve access, this support should be embedded through health services. Local areas should provide clear guidance on how follow-on care should be delivered wherever need is identified during the physical health check.

Community mental health teams can play a role in delivering physical health checks and ensuring proper follow-up, as described in case studies from NHS England Central and North West London NHS Foundation Trust, and Bradford.

### 4.2.2 Medication-related weight gain

Current guidance on physical health checks for people with SMI specify that medication monitoring should be part of routine physical health care.

The Equally Well UK briefing, Healthy Weight Management in People with Severe Mental Illness, sets out that antipsychotic medications play a major role in weight gain, along with behavioural and other factors. To mitigate and address medication-related weight gain, the Equally Well briefing states that:

- The clinician should consider selecting an antipsychotic that is less likely to cause weight gain
- The adverse effects of medication should be communicated with the patient
- A plan should be put in place to manage adverse effects, including weight gain
- Interventions to address weight gain should include behaviour change support. Such interventions are essential for improving physical health via healthy lifestyle changes, and are more likely to be effective among people who have newly started taking antipsychotic medication
- Adjunctive medications can also support weight management, as can bariatric surgery.

The Public Health England/NHS England guidance on managing a healthy weight in adult secure services provides more detailed advice for clinicians on considerations around antipsychotic use (139).

Antipsychotic medications can affect weight gain to varying degrees. The Maudsley Prescribing Guidelines advises on safe prescribing of psychotropic medications, including adverse effects, switching medications and de-prescribing (140). NICE guidelines state that antipsychotic medications should be initiated at low doses and monitored for side effects in the first 6 months of use.

A review published by Dayabandara et al in 2017, which is highlighted in the Equally Well briefing, summarises the weight gain risks of several common antipsychotics (141).

In addition to considering the weight gain impacts of medications, the side effects database, Psymatik [6] (142), can inform prescribing practices and facilitate comparing the risks and benefits of each medication. Healthcare staff should discuss these with patients and offer support while monitoring impacts.

**Medication review**

Regular medication review is essential to manage the side effects of antipsychotic prescriptions. Medication review can occur via specialist care, and specialist mental health pharmacists. GPs and community pharmacists may also carry out medication review, however for antipsychotic medications specialist support is often needed (143). Medication review is essential for identifying any issues with current prescriptions and making adjustments where needed.

Management of antipsychotic-related weight gain should include, where appropriate: changing medications or adjusting the dose, de-prescribing antipsychotic medications or adding on adjuvant medications to support weight loss (144). This would likely require **specialist** input. Individuals likely to require medication adjustment should therefore receive review by specialist services. **This can be facilitated by community mental health teams**, where the need for expert review can be flagged by the GP.

Improved implementation of physical health checks within the first year of medication initiation, and provision of appropriate follow-up, can facilitate earlier intervention. This will be more effective than reactive care. NHS trusts and regions should establish best practices for coordinating physical health care and medication reviews, and how this can be delivered across primary, secondary and community care.

[6] A not-for-profit website (free to use with an NHS e-mail) that recommends prescribing based on patients' wishes to avoid ranked unwanted side effects of psychiatric medicines.

### 4.2.3 Behavioural versus pharmacological weight management support

Strategies in Wales on weight management support for people with mental health conditions should consider options for both behavioural and pharmacological support for healthy weight management.

Currently NICE guidelines recommend offering behavioural support before offering weight loss medication due to limited evidence of the latter's effectiveness, especially for antipsychotic-induced weight gain (145). Weight loss medication may not lead to improved physical health among people with mental health conditions (146) and should be coupled with lifestyle support. Healthy behaviour changes are essential for improving long-term health outcomes, and a holistic approach to treating weight gain should include a behavioural component even where pharmacological support is used.

# 5.

# Implementing healthy weight management guidance and interventions for people with mental health conditions

## 5.1 Implementing healthy weight management support guidance for Wales

As set out in Section 4, the Healthy Weight: Healthy Wales strategy and the AWWMP do not provide weight management guidance specific to people with mental health conditions. Here we suggest how the recommendations from the strategy and pathway can be adapted and implemented to better support people with mental health conditions ***(see Table 2)***.

***Table 2: Tailored weight management recommendations and how to implement them***

| Recommendation | Implementing the recommendations for people with mental health conditions |
|---|---|
| Greater responsibility for the long-term management of obesity by the health service | Ensure that physical health checks are provided to people with mental health conditions and that there is proper follow-up care. |
| Implement person-centred care for people with obesity, across their treatment journey | Provide proactive instead of reactive weight management support for patients who are on medications that cause weight gain. |
| Support staff members working with people with obesity, to improve their knowledge, skills, and confidence through education, training, and good communication | Provide mental health staff with appropriate training to give weight management support to patients, and to address bias and stigma within the care setting. Promote the use of gentle open-ended questions, such as asking if the patient is comfortable to discuss weight or be weighed. Incorporate motivational interviewing techniques and engage in regular case discussions with a dietitian and other experts. |
| Increase the understanding of specific roles that different professional groups can best play in supporting weight management | Across mental health services, primary care, and community services, there should be coordination of physical health care for people with mental health conditions. Inconsistent delivery of physical health care means that staff do not know what support will be available to their patients, or who will provide the weight management support. Increasing familiarity with local weight management care pathways is key. |
| Optimise overweight and obesity data usage and digital healthcare technologies | Improve systematic data collection, better access to data and increased use of data to inform development of services and better understand the impact of weight management interventions. |
| Increase the accessibility and availability of weight management interventions | Improve access to physical health checks for people with SMI. Where overweight or obesity is present, or where medications are being used that can cause weight gain, provide weight management support proactively. |

## 5.2 Addressing barriers to the effective implementation of weight management support and interventions

### 5.2.1 Adapting evidence-based interventions to better support people with mental health conditions

There are several weight management interventions, such as behaviour-based interventions, that have been effectively tailored and delivered to adults without mental health conditions (147–150). However, there is a lack of clear evidence on how these interventions can be delivered in a way that addresses the barriers experienced by people with mental health conditions. Moreover, these interventions have not been designed to address the barriers to engaging in weight management interventions that many people with mental health conditions face, such as anxiety in social situations exacerbated by symptoms of their mental illness (i.e., paranoia), low self-esteem, and difficulties with concentration and motivation (151). Specialised support can be particularly beneficial for those on weight-inducing medications or in inpatient care (152).

An effective means of improving engagement in weight management interventions for people with mental health conditions is to make appropriate adaptations (McGinty et al., 2018). For example, an adapted weight management intervention was assessed in the Achieving Healthy Lifestyles in Psychiatric Rehabilitation (ACHIEVE) trial (153,154), which lasted 18 months and led to a significant reduction in weight in women with SMI with overweight or obesity when compared with the control group.

The reasons why adapted interventions are successful have been explored in a recent review by Lee and colleagues (151) of 54 studies on weight management interventions for people with mental health conditions. The authors found several common characteristics that were identified by patients, and through exploring the efficacy of treatment, which appear to promote engagement in weight management interventions:

- Education on specific contributors to weight gain, such as the side effects of medication, helps to improve knowledge and confidence in managing these side effects.
- An emphasis on the achievements of individuals undertaking weight management programmes counteracts low motivation to engage and feelings of low self-efficacy.
- A knowledgeable facilitator who understands the nature of a person's specific mental health needs and who conveys empathy and respect has a positive impact on engagement.
- Peer support opportunities that allow patients to connect with other individuals engaging in the intervention also improves engagement.

- Proactive support provided to patients between sessions, such as phone calls from the facilitator, can counteract factors that impede the ability to engage with the intervention outside of the session. This fosters the therapeutic rapport which has a positive impact on weight management outcomes, as well as reduces feelings of isolation.
- Tools such as an intervention handbook, a pedometer or cookery books can support engagement with the intervention.
- Materials that are tailored to the needs of the patient group, such as content that is in simple and plain English, and structured in a way that suits their needs (such as providing shorter and repeated sessions), makes it easier for patients to engage particularly when experiencing mental health symptoms.
- Practical support such as organising travel to the intervention site, which helps reduce fears and anxieties and maintains attendance.
- Incentives such as free healthy food samples and vouchers, particularly for people who live in areas of higher depravity and where access to healthier food is limited.

### 5.2.2 Barriers to achieving and sustaining healthy behaviour changes

Achieving and sustaining healthy behaviour changes can be challenging for people with mental health conditions who have overweight or obesity. In ***Table 3***, we describe three primary barriers to achieving healthy behaviour changes, as identified in the cited literature, and potential steps to address these.

***Table 3: Barrers to achieving and sustaining healthy behaviour changes***

| Barrier | Steps to address it |
|---|---|
| People with mental health conditions might not be offered weight management support when needed | • More consistent offering of physical health checks<br>• People with mental health conditions are less likely to be registered with a GP, and are more likely to present late with physical health problems. Ensuring better access to primary care is essential<br>• Dietitian support to people taking medications that cause weight gain as a preventative measure<br>• Considering antipsychotic or antidepressant medication use as a criterion for receiving weight management support for people who have a BMI indicating overweight but not obesity<br>• Building in weight management as part of the treatment plan |
| For clinicians, physical health may not be a priority for patients receiving mental health care | • Ensuring that patients and care providers understand the connection between physical and mental health<br>• Understanding how patients will benefit from physical health care, to enable care providers to prioritise medication reviews<br>• Collaboration between secondary and primary care, which is essential to provide appropriate of physical health care, and addressing the current lack of coordinated care (143,155) |
| Lack of staff training in providing evidence-based weight management support | • Upskilling staff to deliver a tailored approach to healthy weight management (standard weight management advice may not always be appropriate for patients taking antipsychotic or other medications that can cause weight gain)<br>• Creating a resource for patients and staff to understand the impacts of medication on eating behaviours and weight, and the most obesogenic medications – for example, a more accessible version of the Maudsley Guidelines<br>• Providing staff training to build understanding, and reduce bias. |

### 5.2.3 Addressing misconceptions among healthcare staff

A further barrier to the effective implementation of weight management interventions for people with mental health conditions includes misconceptions among healthcare staff regarding obesity in this population. Stigmatisation of weight has been reported among healthcare staff (156), some of whom can view people with obesity as lazy and lacking in willpower (157), ignoring the complexity of the condition. In the context of mental health this is significant, given that, as noted previously, people with mental health conditions and obesity experience double stigma (81). Weight stigmatisation within healthcare settings should be addressed, given the deleterious effects stigma has on treatment outcomes (158).

Misconceptions around obesity among mental healthcare staff may be exacerbated by a lack of knowledge surrounding the bi-directional relationship between excess weight and mental illness (see Section 3.2). To overcome this, education and training should be provided for staff members to highlight the complex causes of obesity, while also challenging negative stereotypes surrounding obesity in clinical settings to shift the culture that often shames people with overweight or obesity (159). Addressing misconceptions among healthcare staff about obesity in people with mental health conditions requires targeted strategies to enhance understanding, empathy and evidence-based practices.

## 5.3 Integrating physical and mental health care

This report has underscored the importance of bridging the gap between physical and mental health care for people with mental health conditions, not only to mitigate the impact of physical ill health on mental health and recovery from mental illness, but also to address the under-identification and under-treatment of health risks due to weight gain.

In the framework for action (see Section 6), we set out several **actions to bridge the gap between physical and mental health care** and reduce the inadequate prevention and treatment of weight-related health problems among people with mental health conditions. These actions include [reference: NHSE Taskforce 5 year forward plan, 2014]:

1. Develop a screening programme for people with mental health conditions who are at greatest risk of weight gain (e.g. those taking obesogenic psychotropic medications).
2. Educate staff and patients about the role of physical health in recovering from mental health conditions
3. Ensure that, where needed, healthy weight management support is integrated into the patient's care plan and provided from the start. Review progress at subsequent physical health checks and identify goals shared by the patient and the service.
4. Provide information on nutrition and physical activity proactively, as dietitian support is currently more reactive than proactive
5. Provide oversight of the delivery of physical health checks and weight management support for people with mental health conditions across local areas.

## 5.4 Continuity of Care

Supporting people throughout their weight management journey is key, beginning with early, proactive conversations about potential weight gain. These discussions should be revisited regularly to ensure ongoing awareness and engagement. Continuity of care is essential, particularly during transitions through different stages of the care pathway, to maintain consistent support and effective management (79).

## 5.5 Improving data and monitoring

Monitoring weight and other biometric measures (e.g., waist circumference) should be a routine aspect of preventative healthcare and should be offered to all patients, rather than being based on the perception of a problem (160). Monitoring outcome data at the population level – such as overweight and obesity rates in people with mental health conditions and with different groups of people with mental health conditions (e.g., SMI) – is essential to evaluating whether weight management interventions are working. Up-to-date information on rates of overweight and obesity, and levels of engagement with weight management services in people with mental health conditions, are critical to providing the right resources and care.

## 5.6 Scaling evidence-based weight management programmes

The lack of available weight management provision for people with mental health conditions is due in part to the complexity of interventions, particularly where they include multiple dimensions for treatment. This inhibits their ability to be used by wider groups of individuals who are being treated across a variety of psychiatric services. However, there are a number of strategies that can be implemented in the design of weight management interventions, as identified by McGinty and colleagues (161), so that they can be delivered to a greater number of people with mental health conditions. One strategy is to **increase staff capacity** to deliver weight management interventions, including training in techniques such as motivational interviewing. It is also important to make adaptations appropriate for the specific service in which the intervention is being delivered while retaining the core components of weight management interventions that have been effective in non-psychiatric populations.

Just as mental health staff now acknowledge that smoking is everyone's business, we need to make the case for overweight and obesity. Therefore, **implementing leadership roles** within services is important to facilitate ongoing support for weight management interventions. Promoting a culture of care that enables the **implementation of weight management interventions** and supports good physical health more broadly is crucial. Finally, developing **financial mechanisms for implementation strategies** is necessary to sustain these efforts.

# 6.
# Framework for action

***Table 4: Framework for local and national action to improve healthy weight management among people with mental health conditions in Wales***

| Recommendation | Specific actions |
|---|---|
| 1.Provide leadership and direction to deliver healthy weight management support for people with mental health conditions and to prevent obesity and overweight. | • Set national priorities to deliver healthy weight management support to people with mental health conditions.<br>• Develop local structures for implementing and sustaining provision of physical health checks and follow-on healthy weight management support.<br>• Create NHS leadership to assess and address the environment of mental health services, including the provision of healthy food and opportunities to develop healthy behaviours as part of recovery.<br>• Establish regional and national leadership structures to identify and address societal determinants of weight gain and mental ill health.<br>• Ensure consistent messaging at all levels of policy, public health, local authorities and health service settings, for example via inclusion in Working Together for a Healthier Wales |
| 2. Develop and implement targeted policies, strategies, pathways and support for healthy weight management for people with mental health conditions. | • Develop targeted guidance, incorporating recommendations from NICE and NHS England on healthy weight management for people with mental health conditions.<br>• Revise national weight management strategies, including Healthy Weight: Healthy Wales, with people with lived experience of mental health conditions.<br>• Develop national implementation pathways and targets for healthy weight management for people with mental health conditions, and adapt them for local systems.<br>• Develop community-based exercise programmes and improve access to recreational facilities. |

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| 3. Identify people with mental health conditions who are at high risk of weight gain through screening and physical health checks and intervene early. | • Develop a screening programme for people with mental health conditions who are at greatest risk of weight gain (e.g. those taking obesogenic psychotropic medications).<br>• Educate staff and patients about the role of physical health in recovering from mental health conditions.<br>• Ensure that, where needed, healthy weight management support is integrated into the patient's care plan and provided from the start. Review progress at subsequent physical health checks and identify goals shared by the patient and the service.<br>• Provide information on nutrition and physical activity proactively, as dietitian support is currently more reactive than proactive.<br>• Provide oversight of the delivery of physical health checks and weight management support for people with mental health conditions across local areas. |
| 4. At a local level, be clear where weight management support is provided and increase understanding of roles that different professional groups can take in supporting healthy weight management. | • Identify the best settings in which to deliver healthy weight management support.<br>• Where possible, embed healthy weight management support in mental health services at local levels.<br>• Create local strategic delivery plans for healthy weight management support across primary, secondary and community care.<br>• Increase staff familiarity with local weight management care pathways.<br>• Ensure accountability – monitor implementation of weight management support pathways, over time. |
| 5. Support delivery of a suite of evidence-based healthy weight management programmes. | • Develop training materials and guidance at a national level to support delivery of healthy weight management support at a local level, via a new joined-up charter.<br>• Ensure support from medical liaisons in the delivery of weight management support.<br>• Increase the accessibility of weight management interventions by improving access to physical health checks (see recommendation 3) and follow on support.<br>• Ensure that there is a suite of options available for people with overweight or obesity, ranging from evidence-based lifestyle interventions to weight loss medications.<br>• Provide behaviour-based weight management support first, and then consider medication to support weight loss where appropriate |

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| 6. Improve the provision of medication reviews for people using psychotropic medications that can cause weight gain. | • Create and implement medication management strategies through local health boards and NHS trusts.<br>• Ensure expert medication reviews are carried out for the highest risk patients and that practitioners:<br>  ◦ Monitor people with SMI who are taking psychotropic medications that are known to cause weight gain and other side effects, following NICE guidelines[1]<br>  ◦ Are educated about the most obesogenic antidepressants and, for people starting on these drugs, practitioners have put a plan in place to help prevent or manage weight gain.<br>  ◦ Have access to helpful resources e.g. the Lester tool.<br>• Ensure that medication reviews carried out in primary care involve a secondary mental health professional or a specialist pharmacist and that the outcome is shared with everyone involved in the person's care (as per NICE guidance). |
| 7. Consider the broader context of healthy weight management, including the food environment, access to green space, and opportunity for safe physical activity. | • Provide training to healthcare staff to understand the complex impacts of broader socioeconomic factors, policies, and issues such as the high cost of living, food deserts and food insecurity on patients' weight gain.<br>• Co-produce a healthier environment in inpatient settings by:<br>  ◦ Improving the nutrition of hospital food<br>  ◦ Providing green outside spaces<br>  ◦ Organising activities for patients that do not revolve around unhealthy snacking, smoking or vaping.<br>• Swap unhealthy vending machine options for free access to water and fruit.<br>• Develop community-based exercise programmes and improve access to recreational facilities, which will help provide opportunities for healthy activities.<br>• Provide education about healthy eating, where to source healthy food, and how to cook nutritious meals on a budget.<br>• Ensure consistent messaging at all levels of policy, public health, local authorities and health service settings, for example, via inclusion in Working Together for a Healthier Wales. |

[7] Follow the Psychosis and schizophrenia NICE guideline or the Bipolar disorder NICE guideline

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| 8. Optimise the collection and use of data to evaluate the effectiveness of weight management approaches and measure outcomes | • Improve data sharing across primary, community and secondary care to enable better monitoring of physical health in people with mental health conditions.<br>• Monitor use of obesogenic psychotropic medication at a population level.<br>• Determine what data need to be collected to evaluate the implementation and coverage of healthy weight management support.<br>• Evaluate and determine how to disseminate good practice.<br>• Ensure that the following are measured:<br>  ◦ Weight and related metrics, for example waist circumference and waist-to-hip ratio<br>  ◦ Behaviour changes associated with weight loss<br>  ◦ Longer-term outcomes, such as changes in BMI over time, risk factors for cardiometabolic diseases and incidence of cardiometabolic diseases. |

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