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Service for Wales**

**Gwasanaeth Iechyd Cyhoeddus  
Cenedlaethol Cymru**

## **Enhanced pharmacy service assessment: weight management**

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### **Intended Audience:**

Directors of pharmacy (or equivalent), health boards in Wales.

### **Purpose and summary of document:**

This report is intended as a resource to assist health boards (HBs) in Wales to undertake an enhanced pharmacy service assessment (EPSA) in relation to weight management services.

Information is brought together from a range of sources to support the HBs in Wales in considering community pharmacy-based services as part of their overall approach to tackling overweight and obesity.

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\*Refers to the former local health board in Wales prior to October 1, 2009.

## Contents

1	Introduction .....	4
2	Purpose .....	4
3	Epidemiology .....	5
3.1	Measurement of overweight and obesity .....	5
3.2	The health benefits of losing excess weight .....	7
3.3	Prevalence of overweight and obesity .....	7
3.4	Trend over time .....	8
3.5	Geographical variation .....	8
3.6	Variation by age and gender .....	10
3.7	Obesity and deprivation.....	11
3.8	Overweight/obesity in children.....	11
3.9	Prescribing data .....	12
4	Strategic context in Wales .....	14
5	Literature review .....	15
5.1	Overview of the evidence .....	15
5.2	Community pharmacy setting and role appropriateness .....	16
5.3	Components of a community pharmacy weight management service.....	17
5.4	Key factors for successful implementation .....	18
6	Current service provision .....	18
6.1	NHS services.....	18
6.2	Self-help, commercial and community programmes.....	19
6.3	Over-the-counter orlistat.....	19
7	Stakeholder views .....	20
8	Financial implications.....	20
8.1	Coventry Primary Care Trust project .....	21
8.2	Pharmacological treatment costs .....	21
9	Service planning options.....	22
10	Key considerations .....	23
11	References .....	24
12	Appendix I Overview of main overweight/obesity prevalence data sources.....	29

## List of abbreviations

CASPA	Comparative analysis system for prescribing audit
EPSA	Enhanced pharmacy service assessment
GP	General medical practitioner
HB	Health board
HOPMM	Head of pharmacy and medicines management
LA	Local authority
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NPHS	National Public Health Service for Wales
OTC	Over-the-counter
PCT	Primary care trust
POM	Prescription only medicine
QOF	Quality and outcomes framework
SLA	Service level agreement
WCPPE	Welsh Centre for Postgraduate Pharmacy Education
WIMD	Welsh Index of Multiple Deprivation

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# 1 Introduction

The prevalence of obesity in the UK has more than doubled since the early 1980's.<sup>1</sup> Currently, more than half of the adult population of Wales (aged  $\geq 16$  years) is either overweight or obese.<sup>2</sup> Around one third of children (aged 2 to 15 years) are either overweight or obese.<sup>2</sup> The number of overweight and obese individuals in the UK is forecast to continue rising.<sup>1</sup> Without effective action to tackle overweight and obesity, almost 90% of adults in the UK could be either overweight or obese by 2050.<sup>1</sup> Additionally, overweight and obesity are linked to health inequalities, with people from the lowest socioeconomic groups most at risk.<sup>3</sup>

Overweight and obesity have significant public health implications and are an important societal issue.<sup>1</sup> The health risks of overweight and obesity are considerable.<sup>1</sup> Well-being, quality of life and ability to earn can also be impaired.<sup>1</sup> Apart from substantial personal and social costs, there are also serious financial consequences for the NHS and the wider economy.<sup>1</sup> The costs are predicted to escalate as the prevalence of overweight and obesity is forecast to rise.<sup>1</sup>

Effective action includes increased support to those individuals who are already overweight or obese in moving towards a healthy weight as well as effective preventative measures.<sup>3</sup> Not all people who are overweight or obese need help from an NHS specialist obesity clinic. Many people currently choose self-help or assistance from commercial or community weight management programmes. However, NHS healthcare professionals in a range of settings play an important role in identifying overweight and obesity, providing advice on healthy lifestyles and referring individuals to weight management services, both NHS and non-NHS based.<sup>3</sup>

Local strategies and action plans for tackling overweight and obesity may seek to encourage and increase participation from the NHS as part of their approach.<sup>3</sup> NHS health professionals in primary care setting are well placed to provide effective weight management services to support overweight and obese individuals.<sup>3</sup> Evidence indicates that community pharmacists can successfully deliver weight management services.<sup>4</sup>

## 2 Purpose

This report is intended as a resource to assist health boards (HBs) in Wales to undertake an enhanced pharmacy service assessment (EPSA) in relation to weight management services.

Information is brought together from a range of sources to support the HBs in Wales in considering community pharmacy-based services as part of their overall approach to tackling overweight and obesity.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 4 of 29	Publication: NPHS internet & intranet

### 3 Epidemiology

Overweight and obesity are terms to describe increasing degrees of excess body fatness. The World Health Organisation describes overweight and obesity as conditions in which excess body fat has accumulated to such an extent that health may be impaired.<sup>5</sup> In simple terms, excess body fat accumulates over time through a persistent imbalance between energy intake and energy expenditure in individuals.<sup>1</sup> However, diet and physical activity are also influenced by the wider social context.<sup>1</sup>

The rapid increase in prevalence of obesity in the population of Wales has occurred over a relatively short period. Behavioural and environmental changes are more likely to have resulted in this sharp increase than genetic changes.<sup>1</sup> The UK Foresight project *Tackling obesities – future choices*<sup>1</sup> showed that exposure to a modern lifestyle makes it increasingly difficult for people to maintain a healthy weight.<sup>1,6</sup> This has been described as the obesogenic environment<sup>7</sup> and it will take major changes in lifestyle and environment to slow or reverse the current trend of increasing levels of overweight and obesity.<sup>1</sup>

Overweight and obesity can lead to increasingly adverse effects on health, well-being, quality of life and ability to earn.<sup>1</sup> The risk of developing a wide range of chronic conditions, particularly type-2 diabetes, hypertension, cardiovascular disease including stroke, osteoarthritis as well as certain cancers is increased.<sup>8</sup> Life expectancy can be reduced; with greater excess mortality related to more severe obesity and when obesity persists over many years, having developed in children and young adults.<sup>9</sup> Evidence suggests that excess weight in childhood continues into adulthood and that childhood obesity substantially increases the risk of adult obesity.<sup>10</sup>

At an individual level the specific causes of overweight and obesity are many and varied.<sup>1</sup> They differ between population groups and across a person's life course.<sup>1</sup> This variability indicates that there needs to be a range of different solutions rather than a 'one size fits all' approach.<sup>1</sup> Evidence-based guidance has been developed by the National Institute for Health and Clinical Excellence (NICE) for the prevention, identification, assessment and management of overweight and obesity in children and adults.<sup>11</sup> The guidance is broad and covers both clinical and non-clinical management.<sup>11</sup>

#### 3.1 Measurement of overweight and obesity

**Adults - body mass index (BMI)** is routinely used to measure for overweight and obesity. BMI is defined as weight in kilograms divided by the square of the height in metres (kg/m<sup>2</sup>). Categories of BMI represent arbitrary points on a continuum of risk for morbidity and mortality (see table 1). BMI is useful on a population scale as a measure of overweight and obesity, but has limitations on an individual level as it does not take account of the distribution of body fat.<sup>11</sup> BMI is not a direct measure of adiposity and needs to be interpreted with caution in some population groups such as adults who are highly muscular, Asians and older people.<sup>11</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 5 of 29	Publication: NPHS internet & intranet

**Table 1: BMI classification and risk of co-morbidities**

Classification	BMI (kg/m <sup>2</sup> )	Risk of co-morbidities
Underweight	Less than 18.5	Low - but different clinical problems
Desirable weight	18.5-24.9	Average
Overweight	25.9-29.9	Mildly increased
Obesity I	30.0-34.9	Moderate
Obesity II	35.0-39.9	High
Obesity III	40 or more	Very high

Source: adapted from WHO (2000)<sup>12</sup>, NICE (2006)<sup>11</sup>

**Adults - waist circumference** is an indicator of abdominal (central) fat distribution. It may be used in addition to BMI to assess overweight and obesity in people with a BMI of less than 35kg/m<sup>2</sup>, and to identify the risk of co-morbidities.<sup>11,12</sup> NICE guidance recommends that assessment of the health risks associated with overweight and obesity in adults should be based on BMI and waist circumference as follows (see table 2).<sup>11</sup>

**Table 2: Assessment of health risks associated with overweight and obesity based on combined BMI and waist circumference**

BMI classification	Waist circumference		
	Low	High	Very high
Overweight	No increased risk	High risk	High risk
Obesity 1	Increased risk	Increased risk	Very high risk
For men, waist circumference of less than 94 cm is low, 94–102 cm is high and more than 102 cm is very high.			
For women, waist circumference of less than 80 cm is low, 80–88 cm is high and more than 88 cm is very high.			

Source: NICE (2006)<sup>11</sup>

**Children** - development of a specific classification system for children and young people has proved difficult because of constant changes in body composition during growth.<sup>2</sup> BMI, adjusted for age and gender, provides a practical estimate of overweight and obesity in children, but needs to be interpreted with caution as it is not a direct measure of adiposity.<sup>11</sup>

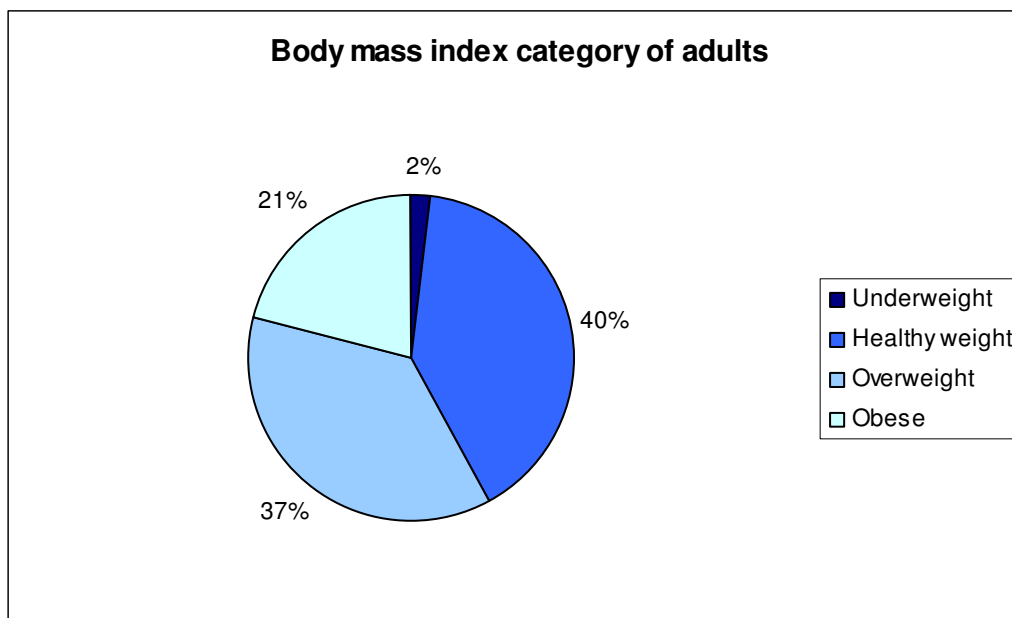
### 3.2 The health benefits of losing excess weight

There is good evidence that even a modest weight loss of 5 to 10% of body weight in overweight and obese individuals is associated with important health and well-being benefits, particularly in improving lipid profiles, reducing blood pressure, reducing the risk of developing type-2 diabetes and coronary heart disease.<sup>13,14</sup>

### 3.3 Prevalence of overweight and obesity

The Welsh health survey (2008) classified 57% of adults aged 16 years and over as being either overweight (BMI  $\geq 25\text{kg/m}^2$ ) or obese (defined as BMI  $\geq 30\text{kg/m}^2$ ).<sup>2</sup> Of these, 36% were classified as overweight and 21% obese. The proportion of adults falling into each of the BMI categories in 2008 is shown in figure 1.<sup>2</sup>

**Figure 1: BMI category of adults (age  $\geq 16$  years) in Wales, 2008**



**Source data: Welsh health survey (2008)<sup>2</sup>**

The Quality and outcomes framework (QOF) data obtained from GP practices' obesity registers in Wales are available for 2007 and 2008.<sup>15</sup> The QOF indicator description for obesity requires GP practices to produce a register of patients aged  $\geq 16$  years with a BMI  $\geq 30\text{ kg/m}^2$  recorded in the last 15 months.<sup>16</sup>

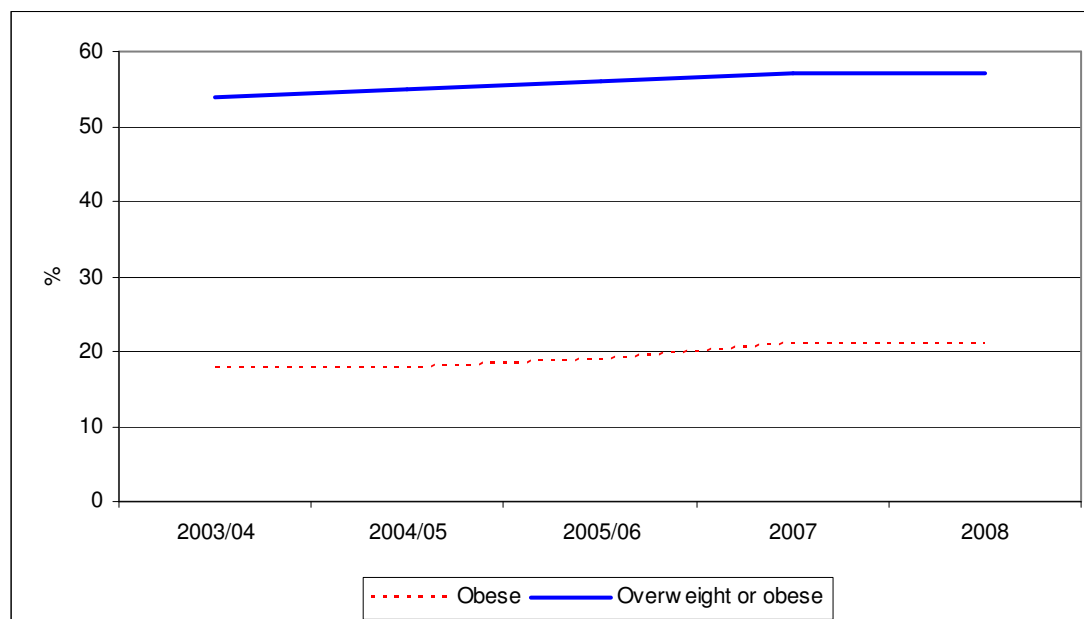
Prevalence data based on QOF registers may differ from prevalence figures from other sources due to significant methodological issues<sup>17</sup> and should therefore be interpreted cautiously.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 7 of 29	Publication: NPHS internet & intranet

### 3.4 Trend over time

The Welsh health survey results shows that the prevalence of overweight in adults (aged  $\geq 16$  years) has changed little between 2003/04 and 2008.<sup>2</sup> Over the same time period the prevalence of obesity in adults from 18% to 21% (see figure 2).<sup>2</sup>

**Figure 2: Percentage of adults (aged  $\geq 16$  years) in Wales overweight or obese (combined) compared obese (alone), 2003/04-2008**



**Source data: Welsh health survey (2008)<sup>2</sup>**

The rising prevalence of obesity over time is more apparent when the data for England is analysed as results are available for a longer time period. The prevalence of obesity (defined as BMI  $\geq 30\text{kg/m}^2$ ) in adults (aged  $\geq 16$  years) in England has increased from 14.9% in 1993 to 24.0% in 2007.<sup>18</sup>

The prevalence of obesity throughout the UK has risen steadily over the second half of the twentieth century, appearing to accelerate in the late 1980's and early 1990's.<sup>1</sup>

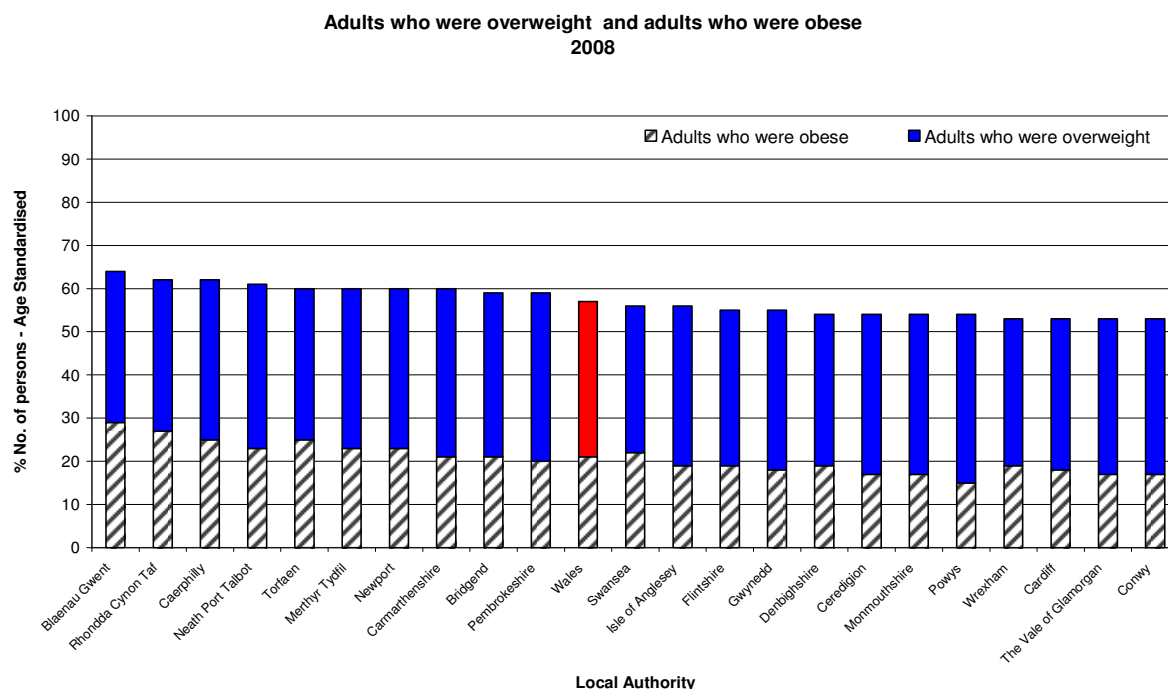
### 3.5 Geographical variation

The Welsh health survey provides data on the prevalence of overweight and obesity by local authority (LA) areas in Wales. The combined prevalence of overweight and obesity in adults (aged  $\geq 16$  years) varied from 50% to 64% (mean 57%) in LA areas in Wales in 2008.<sup>2</sup> Prevalence of obesity varied from 15% to 29% (mean 21%) (see figure 3).<sup>2</sup> The data is also presented by HB areas for 2008 (see figure 4)<sup>2</sup>.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 8 of 29	Publication: NPHS internet & intranet

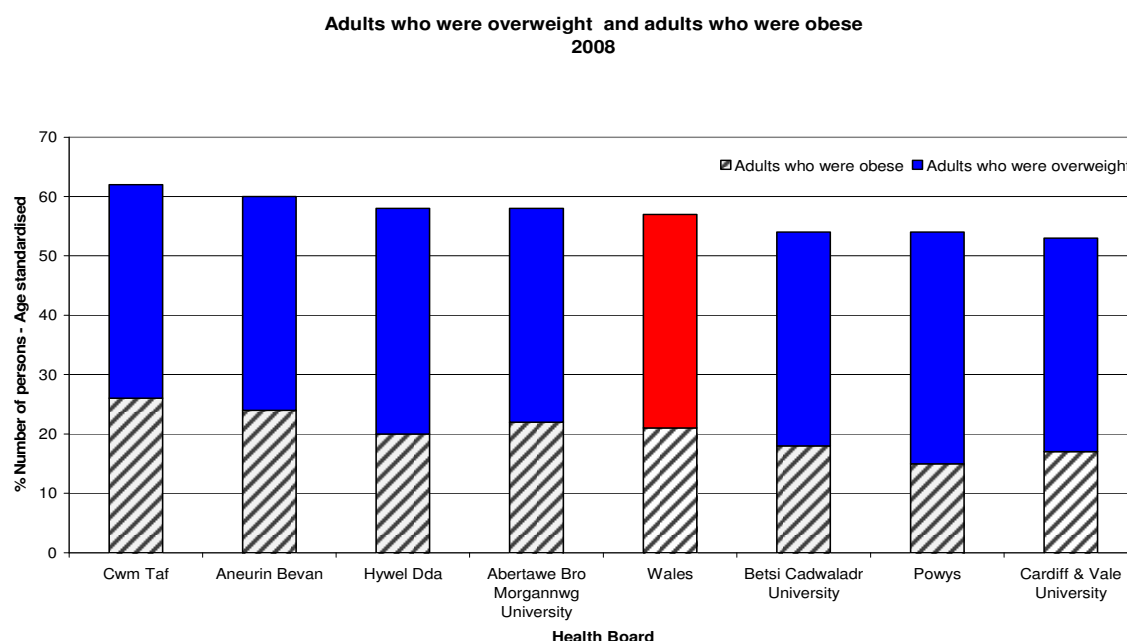


**Figure 3: Percentage adults (aged  $\geq 16$  years) in Wales overweight and adults obese by LA area in Wales, 2008**



Source data from: Welsh health survey, 2008<sup>2</sup>

**Figure 4: Percentage adults (aged  $\geq 16$  years) in Wales overweight and adults obese by HB area in Wales, 2008**



Source data from: Welsh health survey, 2008<sup>2</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 9 of 29	Publication: NPHS internet & intranet

### 3.6 Variation by age and gender

The Welsh health survey (2008) classified 62% of men and 52% of women (aged  $\geq 16$  years) as either overweight or obese.<sup>2</sup> The prevalence of overweight in either men or women has changed little since 2003/04.<sup>2</sup> A greater proportion of men than women were overweight (47% compared to 31% respectively).<sup>2</sup>

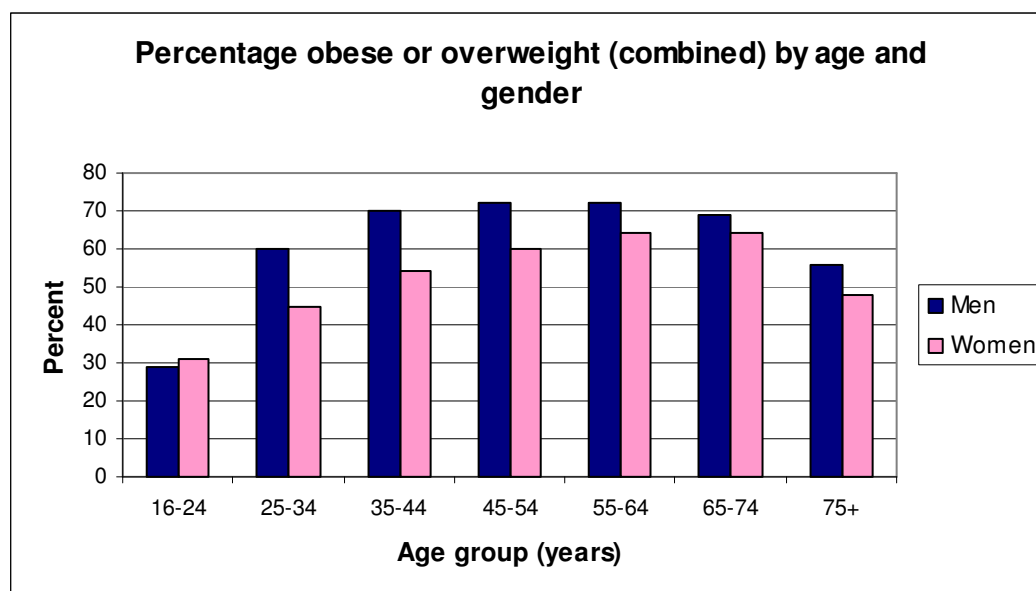
The prevalence of obesity in both men and women increased in Wales over the last 5 years.<sup>2</sup> The prevalence of obesity was very similar for men and women over this time period and was 20% and 21% respectively in 2008.<sup>2</sup>

The Welsh health survey (2008)<sup>2</sup> also provided data at an all-Wales level on the proportion of adults (aged  $\geq 16$  years) by age and gender, classified as either overweight or obese combined, or as obese (see figures 5 and 6).

It has been suggested that lower prevalence of obesity in older age groups may be partly a selection effect due to higher mortality among obese people at younger ages.<sup>19</sup>

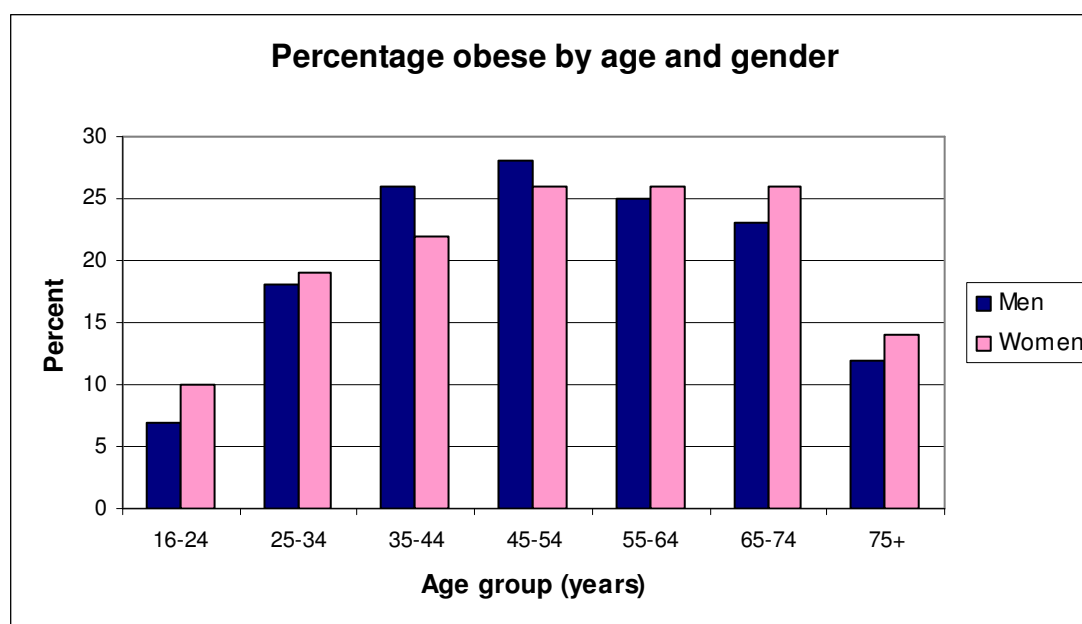
HBs may wish to target particular groups in relation to age and gender for the promotion of approaches to the management of overweight and obesity.

**Figure 5: Percentage adults (aged  $\geq 16$  years) in Wales overweight or obese, by age and gender, 2008**



Source data from: Welsh health survey, 2008<sup>2</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 10 of 29	Publication: NPHS internet & intranet

**Figure 6: Percentage adults (aged ≥ 16 years) in Wales obese by age and gender, 2008**

Source data from: Welsh health survey, 2008<sup>2</sup>

### 3.7 Obesity and deprivation

The Welsh health survey (2008) presents data on the prevalence of overweight and obesity by socio-economic group. The prevalence of obesity shows a gradient in relation to socio-economic group.<sup>2</sup> In age-standardised comparisons (absolute) for 2008, prevalence was 2% lower for the overweight and obese groups taken together and 3% lower for obesity alone, in managerial and professional households compared to those in never worked and long-term unemployed households.<sup>2</sup>

The Welsh health survey also presents data on the prevalence of obesity based on area deprivation using the Welsh index of multiple deprivation (WIMD).<sup>20</sup> In age-standardised comparisons for 2008, prevalence was 8% higher for overweight and obese groups taken together and 11% higher for obesity alone in the most deprived compared to the least deprived fifth.<sup>2</sup>

### 3.8 Overweight/obesity in children

The **Welsh health survey** 2008 estimated that 33% of children (aged 2-15 years) were either overweight or obese.<sup>2</sup> Of these, 17% were classified as overweight and 16% obese.<sup>2</sup> Only two years of data is so far available for children, making it too soon to comment on trends.<sup>2</sup> The percentage of children estimated as obese was lower in 2008 than 2007, although the difference was not statistically significant.<sup>2</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 11 of 29	Publication: NPHS internet & intranet

The estimates in the Welsh health survey were produced using the 85th and 95th percentiles of the age and sex-specific 1990 UK BMI reference curves as cut-offs for overweight and obesity respectively.<sup>2</sup> The estimates should not be compared with those produced on a different basis (for instance, estimates from international cut-offs are likely to be lower as the cut-off points tend to be higher) or with adult estimates.<sup>2</sup> Initial estimates using international cut-off points suggest that around 26% of children would be classified as overweight or obese, including 7% obese.<sup>2</sup>

The **Health behaviour in school-age children survey** (HBSC)<sup>21</sup> is cross-national and examines children aged 11, 13 and 15 years. Questions on height and weight were introduced for the first time in the 2001-02 survey. Results for 2001-02 indicated that for 13-year-olds in Wales, 18% of boys and 15% of girls were overweight and that 4% of boys and 2% of girls were obese.<sup>21</sup> The results at 15 years old were similar.<sup>21</sup> Wales appeared to have a greater obesity problem at 13 and 15 years than most European countries including England or Scotland.<sup>21</sup> The report indicated that the survey findings may underestimate the scale of overweight and obesity.<sup>21</sup>

A **Childhood heights and weights pilot programme** is being undertaken in Wales. The National Public Health Service for Wales (NPHS) is co-ordinating a study in seven LA areas on the feasibility of obtaining standardised information on child heights and weights.<sup>22</sup> Measurements taken in a consistent manner through a national childhood height and weights programme would enable the monitoring of population trends in childhood growth, including overweight and obesity in Wales.<sup>22</sup>

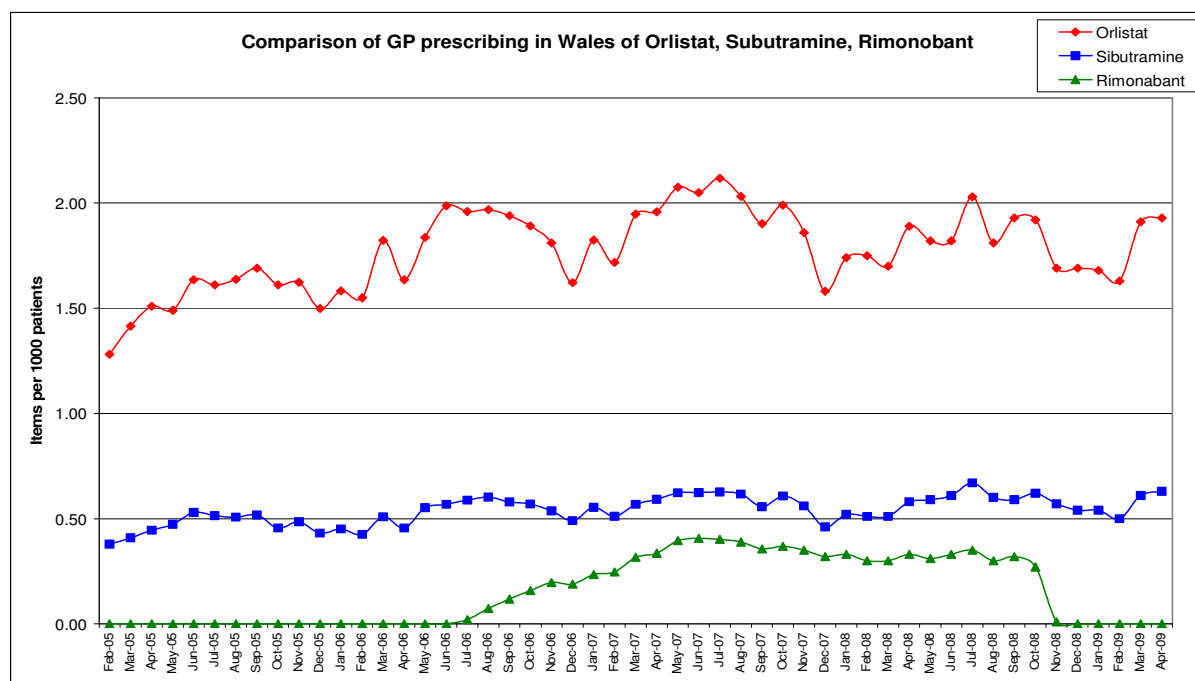
### 3.9 Prescribing data

All-Wales GP prescribing data for all medicines used in the treatment of obesity (orlistat, rimonabant and sibutramine) was obtained from the Comparative Analysis System for Prescribing Audit (CASPA) between February 2005 and April 2009. The data is presented as the number of prescription items for each anti-obesity medicine per 1,000 of population (GP registered population by LHB area) in figure 7. In July 2006 rimonabant, a new anti-obesity medicine was first marketed in the UK. However, the marketing authorisation for rimonabant was suspended in October 2008 and then withdrawn in January 2009 by the European Commission.<sup>23</sup>

GP prescribing data at LHB level for all medicines used in the treatment of obesity for the financial year 2008/09 is presented alongside QOF prevalence data for obesity in 2008 (see figure 8).

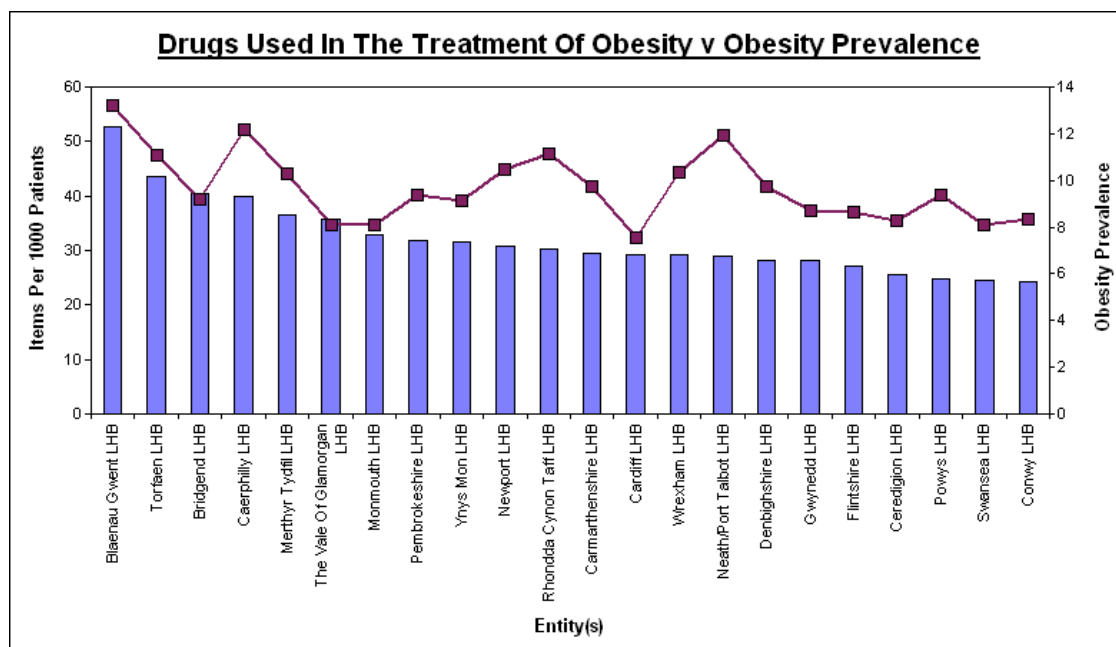
Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 12 of 29	Publication: NPHS internet & intranet

**Figure 7: Wales GP prescribing of orlistat, sibutramine and rimonabant February 2005 to April 2009**



Source data from: CASPA, February 2005 to April 2009 inclusive.

**Figure 8: Prescribing of anti-obesity medicines and QOF obesity prevalence by LHB area in Wales.**



■ Prescribed anti-obesity medicines (items/1,000 patients) ■ QOF obesity prevalence (%)

Source data from: CASPA, 2008/09

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 13 of 29	Publication: NPHS internet & intranet

## 4 Strategic context in Wales

Overweight and obesity have major public health implications and the Welsh Assembly Government has taken action to promote greater access to physical activity and healthier food choices. Intervention strategies to tackle overweight and obesity are fundamental to achieving a number of Welsh Assembly Government strategies for health and social care. There is no overall cross-cutting strategy for the prevention and management of overweight and obesity in Wales at present. However, there are a number of key national and local strategies and other resources relevant to the prevention and management of overweight and obesity in Wales including the following:

### National strategies

- The cardiac disease national service framework for Wales (2009)<sup>24</sup>
- Designed to improve health and the management of chronic conditions in Wales (2007)<sup>25</sup>
- Health, social care and well-being strategies guidance (2006)<sup>26</sup>
- Designed for life: creating world class health and social care for Wales in the 21st century (2005)<sup>27</sup>
- National service framework for children, young people and maternity services (2004)<sup>28</sup>
- National service framework for diabetes in Wales – delivery strategy (2003)<sup>29</sup>
- National nutrition and physical activity strategies<sup>30</sup>

### Local strategies

- Local health, social care and well-being strategies 2008-2011<sup>31</sup>
- Local nutrition and physical activity strategies<sup>32</sup>

### Other resources

- Health Challenge Wales<sup>33</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 14 of 29	Publication: NPHS internet & intranet

## 5 Literature review

A summary of an NPHS literature review<sup>4</sup> of weight management interventions by community pharmacists is provided in this section. The methodology used in reviewing the literature was not a systematic review of primary studies but a rapid review of the evidence.

### 5.1 Overview of the evidence

There is little published evidence on the effectiveness of weight management interventions delivered in community pharmacy settings.

A number of studies were identified through the literature search although none of them were UK-based. One small randomised controlled trial in the USA with a 12-week weight loss phase followed by a 10-week maintenance phase demonstrated statistically significant weight loss for clients.<sup>34</sup> No large randomised controlled trials were identified.

Three observational studies indicated that the community pharmacy weight management programmes were effective.<sup>35-37</sup> Follow-up of weight maintenance in these studies did not exceed twelve months. One further small observational study did not demonstrate any significant change in weight for clients.<sup>38</sup>

An Australian study<sup>39</sup> developed a model for a community pharmacy-based weight management project provided some evidence for the:

- Types of interventions to include.
- Key factors for successful implementation.

Whilst the number of studies was small and all undertaken outside of the UK, they provide some evidence to support the provision of weight management services by community pharmacists.

A number of community pharmacy-based weight management initiatives have already been undertaken in the UK. Whilst comprehensive evaluations of the services provided to determine clinical and cost-effectiveness are lacking in the published literature, some evidence appears in the grey literature.

An evaluation of the first year of the Coventry Primary Care Trust (PCT) community pharmacy weight management project was undertaken in 2008 (L Tressler, personal communication February 17, 2009). A total of 160 patients were recruited and follow-up was for one year. At the time of the evaluation some patients were still taking part but had not yet reached the one year follow-up. Their progress could not be included in the one-year outcomes. Of those patients who had completed the full programme 26.5% (9/34) achieved a weight loss of  $\geq 5\%$ . The mean weight loss was 3.7 kg ( $n = 34/160$ ) ( $p < 0.001$ ).

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 15 of 29	Publication: NPHS internet & intranet

*Healthy weight, healthy lives: a toolkit for developing local strategies*<sup>3</sup> developed on behalf of the Department of Health to assist local areas in the prevention and management overweight and obesity stated:

*'Local areas should not feel constrained to implement only interventions with evidence of effectiveness. The evidence base to tackle this serious issue will only improve if areas try new interventions and then evaluate them properly'.*

New and existing weight management interventions delivered by community pharmacists need to be evaluated comprehensively in the light of current and emerging evidence.

## 5.2 Community pharmacy setting and role appropriateness

A number of clinical/best practice guidance documents identified roles for appropriately trained community pharmacists and their support staff in the management of overweight and obesity.

*Public health: a practical guide for community pharmacists*<sup>40</sup> acknowledged the potential for community pharmacists to advise clients on weight management and offer weight reduction programmes.

*Choosing health through pharmacy - a programme for pharmaceutical public health 2005-2015*<sup>41</sup> recognises that community pharmacists and their support staff have an important part to play in weight management in the context of a broader strategy to tackle obesity. Actions suggested for community pharmacies included regular weight checks, healthy lifestyle advice and weight reduction programmes, including the supply of anti-obesity medicines.<sup>41</sup>

NICE<sup>11</sup> identified that healthcare professionals in a wide range of settings play an important role in the management of overweight and obesity. Pharmacists were included in its recommendations for NHS healthcare professions. Additionally it recognised that with specific training, pharmacy support staff may also be able to give advice and support.<sup>11</sup>

The White Paper *Pharmacy in England*<sup>42</sup> sets out the UK government's vision for pharmacy service development for the future. The White Paper provides support for the provision of weight management services by community pharmacists.<sup>42</sup> It also provides support for community pharmacists to be able to refer people directly on to 'exercise on referral' schemes as well as signpost to other services.<sup>42</sup>

*Healthy weight, healthy lives: a toolkit for developing local strategies*<sup>3</sup> stated:

*'Overweight and obesity are issues related to inequalities, and community pharmacies are particularly well located to assist with weight management, as many of them are based close to residential areas and have few physical and psychological barriers related to access'.*

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 16 of 29	Publication: NPHS internet & intranet



### 5.3 Components of a community pharmacy weight management service

Evidence-based guidance on the management of overweight and obesity in adults and children has been developed by NICE.<sup>11</sup> The guidance recommends multicomponent interventions as the treatment of choice in providing personalised support for overweight or obese individuals.<sup>11</sup> All weight management programmes should include behaviour change strategies to increase people's physical activity levels or decrease inactivity, improve eating behaviour and the quality of the person's diet and reduce energy intake.<sup>11</sup> A variety of approaches should be offered to address diet and activity.<sup>11</sup> Additional recommendations were made for specific population groups and settings.<sup>11</sup> Guidance is also provided on the use of anti-obesity medicines.<sup>11</sup>

*Choosing health through pharmacy: a programme for pharmaceutical public health*<sup>41</sup> advocated for the use of brief consultations on health behaviours in community pharmacies, linked to PCTs' public health programmes. Brief consultations were not defined in the guidance. However, there is considerable interest in the effectiveness of brief interventions delivered in primary care settings. Despite this, NICE concluded that no good quality evidence supports a role for brief interventions in weight management.<sup>11</sup> *Choosing health through pharmacy* recognised that community pharmacists and their support staff can play an important role in providing targeted information and advice on diet and physical activity.<sup>41</sup> *Choosing health through pharmacy* concluded that the evidence base supports community pharmacists offering weight reduction programmes with appropriate evaluation.<sup>41</sup>

An Australian study<sup>39</sup> included the development of a model for an enhanced community pharmacy weight management service. The service model proposed that interventions should be delivered through multiple components including the following:

- Nutrition and diet.
- Activity and physical exercise.
- Behavioural therapy/modification.
- Medication review and counselling.
- Possible pharmacological intervention.
- Weight maintenance phase.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 17 of 29	Publication: NPHS internet & intranet

## 5.4 Key factors for successful implementation

The findings of the literature review for an Australian study<sup>39</sup> indicated that a community pharmacy weight management programme can be successful in treating individuals who are overweight and obese where the following key factors are addressed:

- Remuneration must cover the additional workload involved.
- Workload, staffing and time constraints. 'Appointment-only' access to the weight management programme can offset some constraints.
- Facilities and the pharmacy environment being conducive to participating in and sustaining a weight management programme with adequate privacy a priority.
- Training and accreditation of the weight management service to maintain consistency and quality.
- Recruitment of clients through specific inclusion criteria.
- The pharmacist's role needs to be clear.
- A collaborative multi-disciplinary team approach which enables other professionals to contribute to an individual's programme is preferable.

## 6 Current service provision

### 6.1 NHS services

The characteristics and availability of current NHS weight management services along with any gaps in service provision will need to be identified by the HBs. Different models of NHS weight management services may be available locally. Some services may only be available from specialist centres in Wales or in England. Some examples of NHS weight management services by setting are given in table 3.

**Table 3: Examples of NHS weight management services**

<b>NHS primary care settings:</b>
<ul style="list-style-type: none"> <li>• GP practice enhanced service</li> <li>• Community pharmacy enhanced service</li> <li>• Community dietician service</li> </ul>
<b>NHS secondary or tertiary care settings:</b>
<ul style="list-style-type: none"> <li>• Specialist multi-disciplinary clinic</li> <li>• Bariatric surgery</li> </ul>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 18 of 29	Publication: NPHS internet & intranet

A series of **maps**, called '*PNA pharmaceutical needs assessment maps*' have been produced by the NPHS for each LA/former LHB area in Wales. The maps identify the number and location community pharmacies and GP practices (not branch surgeries) in Wales by postcode area number and location. These are available at: <http://www.wales.nhs.uk/sites3/home.cfm?orgid=719> (scroll links on the left of screen for Pharmaceutical public health team publications).

## 6.2 Self-help, commercial and community programmes

Services that aim to help people lose weight are available from many organisations. These often work with LAs and HBs.<sup>11</sup> NICE concluded that the programmes offered are of variable quality.<sup>11</sup> Therefore it is important to ensure that they meet best-practice standards if a HB recommends or considers endorsing them to patients.<sup>11</sup> The costs associated with regular attendance and/or associated products may be a barrier for some individuals to access these services.

Three large commercial slimming organisations all run weight management programmes for groups in various locations in Wales.<sup>43-45</sup> Online versions of the weight management programmes are also offered. The structure of the programmes, entry criteria and fee packages vary. Generally there is a joining fee plus a weekly class fee and related products are available for purchase from these organisations.

## 6.3 Over-the-counter orlistat

In April 2009 orlistat capsules 60mg (Alli®) was first marketed in the UK as an over-the-counter (OTC) anti-obesity medicine following reclassification from prescription-only medicine (POM) status. The OTC medicine is half the strength of the POM version and can be purchased from community pharmacies in the UK.

OTC orlistat is indicated for weight loss in adults aged  $\geq 18$  years with a BMI  $\geq 28$  kg/m<sup>2</sup> in conjunction with a reduced calorie, lower-fat diet. Individuals may continue to take OTC orlistat for up to 6 months provided certain criteria are met.<sup>46</sup> A pack of Alli® typically retails at £32.95 (42 capsules/14 days supply) or £49.95 (84 capsules/28 days supply).<sup>47-49</sup>

Community pharmacists may also offer a package of support together with OTC orlistat. One example of such a programme includes; an initial consultation and assessment with a pharmacist, orlistat capsules 60mg (4-week or 12-week course), follow-up reviews and ongoing support services, in-store discounts on related products (12 week option only).<sup>50</sup> The programme is for adults aged  $\geq 18$  years with a BMI  $\geq 30$  kg/m<sup>2</sup> or adults aged  $\geq 18$  years with a BMI  $\geq 28$  kg/m<sup>2</sup> who have other risk factors.<sup>50</sup> The service costs £62.50 for 4 weeks or £125 for 12 weeks. Provided certain criteria are met, courses can be repeated to a maximum of 6 months duration.<sup>50</sup>

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 19 of 29	Publication: NPHS internet & intranet

## 7 Stakeholder views

The HBs will need to identify the range of local stakeholders to consult and the means by which their views are gathered. Stakeholders are likely to include:

**Patients and public** - the views of patients and the public could be gained in a number of different ways through for example:

- Patient and public involvement processes in NHS Wales through HBs and Community Health Councils.
- Wales Council for Voluntary Action which represents voluntary organisations, volunteers and communities.
- Market research to understand more fully what patients want and are willing to accept from a community pharmacy-based weight management programme.

**Healthcare professionals** - particularly those providing weight management interventions in primary care settings and those providing specialist obesity services in secondary/tertiary settings.

**Senior managers, commissioners of healthcare and directors of public health** – engaging those who manage plan and commission healthcare services.

## 8 Financial implications

The Pharmaceutical Services Negotiating Committee provides an online database of enhanced community pharmacy services.<sup>51</sup> This includes brief descriptions of a number of weight management and obesity projects. Community Pharmacy Wales has produced an NHS community pharmacy local enhanced service framework for an obesity management support service on behalf of pharmacy contractors in Wales.<sup>52</sup>

Definitive information on the cost of implementing and operating a community pharmacy-based weight management service in Wales is not available at present. The financial implications of developing and operating a community pharmacy-based weight management service in a locality will depend on a number of factors including:

**The service specification:** Certain components must be included in all weight management services with additional interventions required for specific population groups and settings (see section 5.3).<sup>11</sup> The number and intensity of interventions chosen to deliver each component will also affect cost.

**Capacity issues:** Key influences on capacity include; characteristics of the target population, inclusion criteria, access to the service, the number of community pharmacies recruited, training and continuing professional development and competing priorities.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 20 of 29	Publication: NPHS internet & intranet

## 8.1 Coventry Primary Care Trust project

Coventry PCT developed and implemented an NHS local enhanced community pharmacy-based weight management service on a project basis in March 2007 (L Tressler, September 15, 2009). The service is for adults aged  $\geq 18$  years with a BMI  $\geq 30 \text{ kg/m}^2$  and  $\leq 38 \text{ kg/m}^2$  and who have at least one diagnosed risk factor. A network of 10 community pharmacies and 160 patients were recruited.

The service included: an initial consultation and assessment with a pharmacist; monitoring of weight, BMI, waist circumference, blood pressure and blood glucose (fasting or random) for all patients; HbA1c, fasting total cholesterol where appropriate, 10 follow-up consultations over 12 months and ongoing support services.

The cost for one patient to complete all 10 follow-ups over 12 months was estimated at £200. Total PCT expenditure on the project during 2007/08 was £20,000. This included a grant of £7,500 from the Department of Health for the first year.

### Expenditure included:

- Professional fees for the initial consultation and each follow-up consultation (£20 and £15 respectively)
- Training to support pharmacists to deliver the service
- Promotion of the service
- Service materials e.g. PCT documentation, food diaries, information leaflets

### Expenditure excluded:

- Equipment for weighing, measuring, blood-testing and associated materials was provided free-of-charge by industry sponsors for the project. Future purchasing costs are to be met by the PCT.
- PCT dedicated support to the service. This was provided within existing resources.
- Provision of anti-obesity medicines. A component for pharmacological treatment was not included in the service specification.
- Back-fill for pharmacists to attend training. Training took place during evenings.

Elements not included in the PCTs expenditure for the project may nonetheless be relevant to HB service planners.

## 8.2 Pharmacological treatment costs

Orlistat capsules 120mg is a prescription-only medicine (POM) which may be prescribed, or supplied to individuals under a patient group direction (PGD). NHS treatment costs are based on the NHS *Drug Tariff*<sup>53</sup> basic price. This is currently £32.27 for 84 orlistat capsules 120mg (28 days supply), plus a dispensing fee of £0.90 or a professional fee for supply through a PGD.

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 21 of 29	Publication: NPHS internet & intranet

## 9 Service planning options

Increased personalised support for individuals who are already overweight or obese forms an important element of local weight management or obesity strategies. The following examples for HB service planning options are not exhaustive (see table 4). There may be other options which HBs may wish to consider, particularly in view of new and emerging evidence. The strengths and weaknesses of the various options will need to be taken into consideration.

**Table 4: examples of HB service planning options**

<b>Option 1</b>	No change to existing service provision.
<b>Option 2</b>	<p>Increased support to community pharmacists for elements of the essential services requirement of community pharmacy contractual framework.</p> <p>This includes promotion of healthy lifestyle (e.g. targeted information on advice and diet, public health campaigns) and signposting to HB endorsed local services (e.g. exercise referral schemes).</p>
<b>Option 3</b>	Increased support (similar to option 2) to other healthcare and/or non-healthcare personnel.
<b>Option 4</b>	<p>Additional weight management services through community pharmacies.</p> <p>The exact model of service and the level of participation to be determined by the HB.</p>
<b>Option 5</b>	<p>Additional weight management services through other NHS healthcare professionals e.g. GP practices, dieticians.</p> <p>The exact model of service and the level of participation to be determined by the HB.</p>
<b>Option 6</b>	<p>Additional weight management support services through non-clinical practitioners e.g. exercise specialists.</p> <p>The exact model of service and the level of participation to be determined by the HB.</p>
<b>Option 7</b>	A combination of any or all of options 2 to 7.

## 10 Key considerations

In making decisions about whether to develop and implement an enhanced community pharmacy-based weight management service it is important that a number of factors are taken into consideration:

- **Is there evidence of local need?**

What is the local/national demographic profile for overweight and obesity? Does the local joint health and social-care needs assessment provide additional evidence? Is there local information on e.g. health/social inequalities, ethnicity profile, overweight or obesity-related morbidity?

- **Do existing weight management services meet local need?**

What services currently exist? What are their opening times? Where are they located? Are the locations convenient for patients e.g. distance to travel, public transport availability? How do patients access these services e.g. referral system, eligibility criteria? How long do patients wait to access these services? Are individual patient needs and preferences met? Are there sufficient local services for NHS primary care professionals to refer patients to?

- **Is tackling overweight and obesity a local priority?**

How is relevant local/national strategy implemented? What are the local implementation priorities?

- **Could community pharmacy-based services help with any unmet need?**

Where are local community pharmacies located? What are the opening hours (contractual and extended) of local community pharmacies? Are contractual opening hours met? Which service model would be most appropriate? How would the community pharmacy service be integrated with the local network of provision? What training and accreditation would be needed? How would the service be monitored and evaluated?

- **What are the views of stakeholders?**

Do the local stakeholders support a community pharmacy-based weight management service?

- **What are the financial considerations?**

Which funding mechanisms may be available to cover the costs of developing and operating the service? Which service model(s) can be delivered locally within funding limits? How does a community pharmacy-based service compare with other options in terms of cost-effectiveness? How could a community pharmacy service be sustained in the longer term?

Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 23 of 29	Publication: NPHS internet & intranet

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Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
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Author: Rosemary Allgeier (Principal pharmacist in public health)	Date: 05112009	Status: Final
Version: 1a	Page: 26 of 29	Publication: NPHS internet & intranet

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## 12 Appendix I Overview of main overweight/obesity prevalence data sources

This table summarises the main characteristics of key sources of prevalence data on overweight/obesity for people in Wales. Internet links to more information on the methodologies used in each data source are provided in the table.

Data source:	WHS			QOF			HBSC	
Key points:	<ul style="list-style-type: none"> <li>Height and weight measurements self-reported.</li> <li>Age-standardised data.</li> </ul>			<ul style="list-style-type: none"> <li>Height and weight measurements performed by GP practice staff.</li> <li>Data not age-standardised.</li> <li>QOF prevalence data should be used and interpreted with caution</li> </ul>			<ul style="list-style-type: none"> <li>Height and weight measurements self-reported.</li> </ul>	
Links to further information on methodology:	<a href="http://wales.gov.uk/docs/statistics/2009/090929hlthsurvey08en.pdf">http://wales.gov.uk/docs/statistics/2009/090929hlthsurvey08en.pdf</a>			<a href="http://www.ic.nhs.uk/statistics-and-data-collections/supporting-information/audits-and-performance/the-quality-and-outcomes-framework/qof-2007/08/faqs">http://www.ic.nhs.uk/statistics-and-data-collections/supporting-information/audits-and-performance/the-quality-and-outcomes-framework/qof-2007/08/faqs</a>			<a href="http://www.hbsc.org/downloads/IntReport04/Annex1&amp;2.pdf">http://www.hbsc.org/downloads/IntReport04/Annex1&amp;2.pdf</a>	
		HB* (2008)	All-Wales	LHB**	NHS region	All-Wales	All-Wales	International comparisons
Adults:	Aged ≥ 16 years			Aged ≥ 16 years				
Adults-female and male	√	√	√	√	√	√		
Adults-female	√	√	√					
Adults-male	√	√	√					
Children:	Aged 2 to 15 years inclusive						Aged 11,13 and 15 years	
Children-girls and boys			√				√	√
Children-girls			√				√	√
Children-boys			√				√	√

Source data: Welsh health survey (2008)<sup>2</sup>, Quality and outcomes framework FAQs 2007/08<sup>16</sup> and Health behaviour in school-aged children survey 2001/02<sup>20</sup>.

\*Refers to new health boards in Wales from October 1, 2009

\*\* Refers to former local health boards in Wales prior to October 1, 2009

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