NHS

Tackling Obesity

A framework for action in Dudley

Obesity Task Group

July 2005

DUDLEY COMMUNITY PARTNERSHIP *achieving together*

Dudley Metropolitan Borough Council

Dudley Public Health

Contents

1. Introduction

"Obesity is a complex, multifactorial disease that develops from the interaction between the individual and the environment. It involves the integration of social, behavioural, cultural, physiological, metabolic and genetic factors." (WHO 1998)

The key causes are increased consumption of energy-dense foods high in saturated fats and sugars, a reduction in physical activity and the development of what is termed the "obeseogenic environment", where opportunities to be physically active and choose healthy food options are limited or prohibited.

Around two thirds of the population of England are overweight or obese. Obesity has grown by almost 400% in the last 25 years and on present trends will soon surpass smoking as the greatest cause of premature death. It will entail levels of sickness that will put enormous strains on Health and Local Authority services and will impact on society as a whole. On some predictions, today's generation of children will be the first for over a century for whom life expectancy falls. (Select Committee for Health 2004)

Obesity is associated and linked to many physical and psychological health problems including coronary heart disease (CHD), diabetes, kidney failure, osteoarthritis, back pain and hypertension. Recent evidence also highlights a strong association between obesity and cancer. Psychologically, people who are over-weight or obese have lower self esteem, higher levels of depression and increased rates of isolation. Evidence has also shown that being overweight is the biggest reason for being bullied at school.

This Framework has been developed to respond to this national epidemic at a local level, but also as a response to key national and local policy documents, where addressing overweight and obesity is a recognised beneficial outcome both directly and indirectly. It is also designed to highlight recommendations and local activity relating to the main causal factors of obesity - physical activity and nutrition.

Figure 1

NATIONAL POLICY DRIVERS	LOCAL POLICY DRIVERS
Tackling Obesity in England. National Audit Office, 2001	**Dudley's Community Plan – The Borough Challenge**
Wanless Report Interim Report Securing our Future Health (2002) HM Treasury **Wanless Report Final Report Securing Good Health for the Whole Population (2004)** HM Treasury	**PE and School Sport Strategy**
Review of Treatment Options. Health Development Agency, 2003	**Leisure and Recreation Strategy**
Health Select Committee Third Report, 2004	**Dudley's Physical Activity Strategy**
Choosing Health: Making Healthier Choices Easier Department of Health, Easter 2004	**Dudley's Food For Health Action Plan**

This Framework has been led by Dudley's Public Health Department and developed through the work of a multi-agency working group which was set up to ensure representation and input on the multi-factorial aspects relevant to obesity. The membership and terms of reference for the group are detailed in Appendix 1. The group is fixed life for 2 years commencing in January 2004. It was tasked to produce the Framework by the Health and Wellbeing Partnership, in response to the government's Public Sector Agreement (PSA) target: '*to halt the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole'.*

The framework is supported by:
FfHSG (Food for Health Steering Team)
PATG (Physical Activity Task Group)

2. Epidemiology

A report was commissioned by the Obesity Task Group to ascertain the epidemiology of obesity and the implications for Dudley. A summary of the key findings and recommendations are included here in Section 2. The full report is available from the Public Health Department (see Appendix 2 for contact details).

2.1 Definition of Obesity

Obesity is defined as an excessive amount of body fat in relation to lean body mass. The term '**overweight**' refers to an increase in body weight in relation to height when compared to some acceptable standard.

There are a number of measures of obesity. The proxy measures of fat include: weight, the body mass index (BMI), waist circumference and the waist-to-hip ratio.

The **BMI** has become the most widely used measure and is considered the universal gold standard. It remains the best correlate of body fat, and is likely to have the lowest operator variation.

The BMI is calculated using the following formula and reference tables exist for both metric or imperial units.

$$BMI = \frac{\text{weight kg}}{(\text{height})^2 \text{ m}}$$

BMI Does Have Limitations:-

The BMI does not distinguish between fat and lean body mass. Hence those who have lower than average body fat with a higher than average lean body tissue e.g. athletes may often be defined as overweight when using their BMI.

BMI readings can be misleading for African-Caribbean men who, it has been found, have a greater than average bone density.

The loss of height which occurs with age may account for an increase in BMI of 0.7 kg/m² in men and 1.6 kg/m² in women making fat assessment more difficult in the elderly.

BMI does not take body shape into account, which varies between individuals, the sexes and ethnic groups. The 1999 Health Survey of England found that although Indian, Pakistani and Bangladeshi men had a relatively low prevalence of obesity, they conversely had a high prevalence of raised waist to hip ratio. BMI alone would not identify the increased cardiovascular risk in this ethnic group unless the individual was grossly overweight.

In summary it is recommended that for the clinical measurement of obesity, that BMI be used for adults, using the classifications in Table 1.

BMI for age using UK90 country specific reference charts and cut offs in Table 2 is the best measure for children as body fat in children is not a static measure, but changes during childhood, and is different between the sexes.

These cut-offs have high specificity and moderate sensitivity for identifying the fattest children. They are also clinically meaningful in identifying an individual who will have persistent obesity and act as predictors for the presence and clustering of cardiovascular risk factors.

Table 1:
Classification of obesity based on BMI and risks of comorbidities: Adults

Category	BMI (kg/m²)	Risk of co-morbidities
Underweight	<18.5	Low—but risk of other clinical problems increased
Healthy weight	18.5-24.9	-
Overweight	25.0-29.9	Mildly increased
Obese class 1	30.0-34.9	High
Obese class 2	35.0-39.9	Very high
Obese class 3	>40.0	Extremely high

Table 2:
Classification of obesity based on BMI-for-age curves (UK90): Children

	Clinical measure
Overweight	> 91st centile
Obese	> 98th centile

2.2 Why is Obesity a Problem?

The impact of obesity on the health of the individual and that of the community is significant.

2.2.1 Impact On The Individual

Mortality:

There is a direct relationship between obesity and premature death.

Obesity increases risks of mortality from a number of related diseases (see Table 3)

Table 3: Estimated mortality ratios for selected obesity related diseases by sex, disease and BMI (NB: the higher the ratio, the higher the risk of mortality)

	Mortality Ratios by BMI			
	Men		Women	
	30-39	40+	30-39	40+
All causes	1.46	1.87	1.46	1.89
Diabetes	3.51	5.19	3.78	7.90
Coronary heart disease (CHD)	1.55	1.95	1.54	2.07
Cerebral vascular disease	1.54	2.27	1.40	1.52
Cancer	1.14	1.33	1.23	1.53

Obesity also has its risks on the road. Studies have shown people with higher BMIs are more likely to suffer serious consequences following a car crash – to be injured more seriously or more likely to die.

Morbidity:

Obesity is associated with a number of serious health problems:- hypertension, diabetes, CHD, stroke and cancer.

The pain of osteoarthritis is exacerbated. Back pain is common as is recurrent infection in skin folds, shortness of breath and poor exercise tolerance.
In the severely obese the activities of daily living can become difficult; sometimes to the extent that it is disabling.

Obesity reduces fertility and increases risks associated with pregnancy such as death of a baby or mother, and birth defects, especially neural tube defects and spina bifida.

Being obese increases the likelihood of surgical intervention and increases the risk of intra and post operative complications, including death, for any operation.

Obesity is related to poor self-image and self-esteem. The prevalence of anxiety and depression is 3-4 times greater in the obese than in the non-obese.

Socio-economic consequences:

Obesity is linked with social stigma. Obese people are subjected regularly to prejudice and discrimination.

Obese children (especially girls) are more likely to leave school early. Obese school leavers are less likely to get into their university of choice than their lean counterparts with the same grade.

The obese have fewer employment opportunities. Obesity may result in downward social drift through poorer educational attainment and reduced employment opportunity.

2.2.2 Cost To Society

Premature death:

The Audit Commission estimated that in 1998:

- There were 30,000 deaths attributed to obesity in England, representing 6% of all deaths.
- 275,000 life years were lost (LYL). Each person who died lost, on average 9 years of their expected life-span.
- Of the 275,000 LYL, 40,000 of these were pre-retirement years.

Loss of productivity:

Premature death and absenteeism from work has an impact on the economy.

A strong association has been shown between obesity and absenteeism. In the UK the Audit Commission estimated that over 18 million days of medically certified sickness absences were attributable to obesity and its consequences in 1998.

Healthcare costs:

The Health Select Committee estimate the economic costs of obesity conservatively at £3.3-3.7 billion per year and of obesity plus overweight at £6.6-7.4 billion.

2.2.3 The Effects On Children

The effects of obesity on children reflects that of adults. A key trend is the emergence of type 2 diabetes in the young. Childhood obesity is associated with increased risk factors for CHD and it impacts on adult health even when body weight has returned to normal or near normal. Obese children also experience psychosocial problems.

Obese children:

- Are more likely to be labelled immature and disruptive
- Have more negative self-perceptions
- Have more depression
- Are more likely to be bullied

2.3 The Benefits of Reducing Weight

Figure 2

Mortality **Fall of >20% in total mortality** **Fall of >30% diabetes related deaths** **Fall of >40% obesity-related cancer deaths**	***Blood pressure*** **Fall of 10mmHg systolic pressure** **Fall of 20mmHg diastolic pressure**
Diabetes **Fall of 50% in fasting glucose**	***Lipids*** **Fall of 10% total cholesterol** **Fall of 15% LDL** **Fall of 30% triglycerides** **Rise of 8% HDL**

The Scottish Intercollegiate Guidelines Network reported that a 10kg weight loss has the benefits detailed above.
Weight loss is a goal worth pursuing as even relatively modest reductions in weight in the individual result in significant reductions in the risk of death and the complications of obesity.

Overweight and obesity are regarded as amongst the main modifiable risks associated with CHD and cardio-vascular disease generally.

2.4 Why Do People Get Overweight?

Essentially, obesity is an imbalance between energy intake and energy output over a sustained period of time.
The increase in the availability of food, especially that high in energy, and an increasingly sedentary lifestyle are broadly responsible for this epidemic.
Summing up the energy equation, the Royal College of General Practitioners suggest that food intake has fallen on average by 750 kcal per day; but activity levels by 800 kcal. Out of this small imbalance has come the wave of obesity.

Figure 3: A Health Promoting Park in Dudley

2.4.1 Factors Influencing Weight Gain

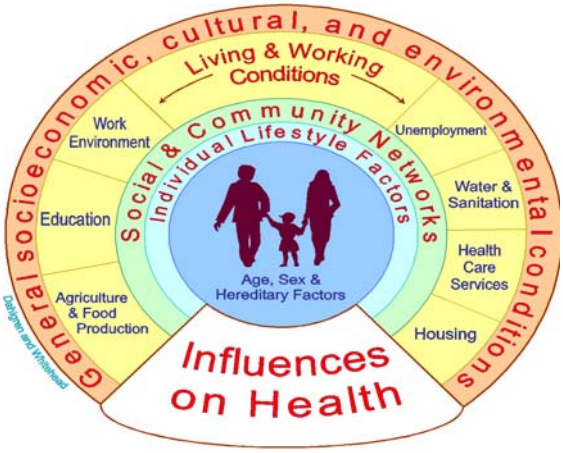


Figure 4

2.4.2 Genetic Factors

Studies have indicated that susceptibility to becoming overweight is genetic, but while possibly contributing up to 25-75% of weight gain, genes per se are not responsible for the obesity epidemic. Put another way, even if some individuals are prone to gain weight as a result of differences in physiology—lack of this predisposition is not protective for the most part, given the right environmental circumstances.

2.4.3 Behavioural Changes: Physical Activity, Nutrition and the Obeseogenic Environment

Industrialisation; changes in society, culture and increased affluence have led to a more sedentary lifestyle and changes in what we eat:

- There has been a reduction in occupational exercise. The extra physical activity involved in daily living 50 years ago, compared with today, has been estimated to be the equivalent of running a marathon a week (c.3500 calories)
- England now reflects the result of two generations of planning centred on the use of cars with wide car use and ownership. Car parks are readily available, but bike racks are not. Employees who want to walk or cycle to work frequently have no place to get showered and changed when they arrive at the workplace.
- Pedestrians and cyclists are the 'second class citizens' of Britain's roads.
- For the first time ever less than half of our young children are walking to school.
- Once at school, children struggle to meet the Government's target of two hours of physical exercise per week.
- The decline in walking has been exacerbated by heightened fears about personal safety, which affect some groups of the population more than others. For example, children, women and older people, especially those living in inner cities, are likely to feel particularly vulnerable.
- There has been an increase in energy-saving devices in public places, such as escalators, lifts and automatic doors.
- There are less opportunities for young people to take physical exercise. Factors influencing this include increasing fears among parents about their children's safety when unsupervised, and a reduction in the amount of physical education and sport undertaken in schools.
- There has been a substitution of physically active leisure with sedentary pastimes such as television, computer games and the internet.
- Fear of racial harassment and cultural beliefs prevent people from certain black and minority ethnic communities from taking exercise. Different avenues may therefore be required to promote physical exercise for these groups.

Cited in Physical Activity and Health. The Evidence Explained—A.E. Harman and D. J Stensel 2003

At the same time as energy expenditure has dropped, environmental factors have combined to make it increasingly easy for people to consume more calories than they need. Energy-dense foods, which are highly calorific without being correspondingly filling, are becoming increasingly available.

Figure 5: Active Children in Dudley

The Health Select Committee Report 2004 notes that according to Tim Lobstein of the Food Commission, healthy eating messages are well known, but external pressures prevent people from adhering to them. This includes cultural and economic reasons, commercial food production and promotion and food pricing:

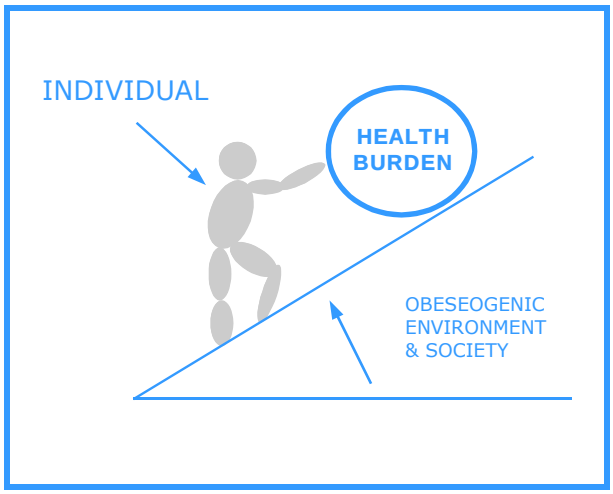
- Evidence suggests that a growing number of people lack the basic skills and confidence to cook.
- Health information about nutrition that consumers currently receive is heavily counterbalanced by advertising and promotional campaigns undertaken by the food industry.
- The food industry also deploys a full range of less visible, but no less effective, promotional techniques, such as the inclusion of free gifts to encourage repeat purchase.
- Access to unhealthy foods through vending, take aways, restaurants, cafes and shops is much easier than access to healthy food.

Figure 6

- Healthier food options are often more expensive and naturally healthy foods such as fresh fruit and vegetables are also considerably more expensive than non-healthy alternatives.
- Nutritional labelling in England is voluntary. As a result on some foods, nutritional labelling can be entirely absent, but even when food is labelled, there is little consistency about the format or size of labelling, making it difficult to interpret or even to see, and with some giving misleading health claims.
- There has also been a reduction in breastfeeding which is thought to protect children against obesity (as well as the mother).

In summary, in society it is currently much easier to make less healthy than healthy lifestyle choices, and this needs to change—healthy choices should be easier to make.

Figure 7



Action is needed at three levels: -

- **Major social and structural change to alter the obeseogenic environment.**
- **Prevention programmes with adults and children to develop positive knowledge, attitudes and skills to eat healthily and keep active.**
- **Weight management and treatment programmes for obese and overweight children and adults.**

Figure 8: Exercising in the Park

2.5 Population Trends

2.5.1 World Trends

It is estimated that 7% of the World's adult population is obese.

Projections based on current trends indicate that the prevalence of obesity will double between 1998 and 2025. Three quarters of this growth will be in the developing world where obesity is now becoming an indicator of poverty.

In England, the mean BMIs for the male and female adult populations have increased only slightly but by a statistically significant amount. The main area of concern is in the percentage rise in the obese and morbidly obese (see Table 4 & 5 : Source: Health Surveys for England).

Table 4 Time trends in the prevalence of overweight and obese adult men in England—1993 –2001

Year	% of male population (16 years+)			Mean BMI
	25-30	>30	>40	
1993	44.4	13.2	0.2	25.9
1994	44.3	13.8	0.4	26.0
1995	44.0	15.3	0.3	26.1
1995	44.6	16.4	0.4	26.3
1997	45.2	17.0	0.8	26.5
1998	45.5	17.3	0.6	26.5
1999	43.9	18.7	0.8	26.5
2000	44.5	21.0	0.6	26.8
2001	46.6	21.0	0.6	27.0

Table 5 Time trends in the prevalence of overweight and obese adult women in England—1993—2001

Year	% of female population (16 years+)			Mean BMI
	25-30	>30	>40	
1993	32.2	16.4	1.4	25.7
1994	31.4	17.3	1.6	25.8
1995	32.9	17.5	1.4	25.9
1995	33.6	18.4	1.4	26.0
1997	32.8	19.7	2.3	26.2
1998	32.1	21.2	1.9	26.4
1999	32.8	21.1	1.9	26.4
2000	33.8	21.4	2.3	26.6
2001	32.9	23.5	2.5	26.7

British studies measuring BMI show an increase in prevalence of obesity in children and young people. Studies measuring other body fat indices namely waist circumference which monitors shifts in body shape more accurately, in particular the move from muscle to fat, suggest the obesity epidemic in this age group is more severe than currently thought.

The 1996 Health Survey for England focused on children and found that 11% of 6 year olds and 17% of 15 year olds had BMIs >95th centile relative to the 1990 reference group.

2.5.2 Socioeconomic Trends

In common with most public health problems the impact of obesity mirrors deprivation levels.

Obesity prevalence increases from the highest income groups to the lowest income groups, especially for women.

2.5.3 Ethnicity

The distribution of fat deposition differs between races. The BMI in most minority ethnic groups is less than that of the general population with the exception of African-Caribbean and Pakistani women. However the waist circumference figures for all but African-Caribbean and Chinese men fall below the general population mean.

2.5.4 The Relationship Between Childhood and Adult Weight

The research indicates three key findings:

- Adults who are either overweight or of normal weight but who were obese as a child continue to carry an increased health risk, especially that of cardiovascular disease.
- Childhood obesity predisposes obesity in adults. The main predictor is obesity at 13 years of age.
- Not all obese adults were obese as children—indeed the majority were not. Thinness during childhood and adolescence does not protect against obesity in later life.

2.5.5 Known Predictors Of Weight Gain

Adults:

- Overweight or obese parents
- Lower socio-economic status
- Giving up smoking
- Low levels of physical activity
- Low metabolic rate
- Childhood overweight
- Giving birth to heavy babies or having multiple births
- Recent marriage

Children:

Predictors of obesity before the age of 10 years are:

- Diabetic mother
- Small-for-dates or small head circumference (these children have a higher risk of abdominal fatness)
- Never breast-fed

It is well recognised that obesity has reached epidemic proportions and there is little to suggest that the upward trend in incidence and prevalence is going to tail off in the foreseeable future.

Obesity must now be considered the number one health problem in Western countries. This is because despite the fact that the number of deaths attributable to obesity is currently less than from smoking, the obesity epidemic is in its ascendancy in the West.

2.6 Prevalence and Trends in Dudley

Prevalence information for children in Dudley is not readily available and has been identified as a key action to be taken forward.

Prevalence information for adults will be measured from the adult lifestyle survey currently being analysed.

3. What Works: Interventions

The Health Select Committee Report (2004) identifies that solutions to the problem of obesity need to be multifaceted, recognising the true complexity of the issue. They must address environmental as well as individual factors and should be designed to bring about long-term, sustainable change, rather than promising overnight results.

A report was commissioned by the Obesity Task Group to ascertain the evidence base for interventions to prevent and control obesity for Dudley. The key findings and recommendations from this are included here in Section 3, and form the basis on which Dudley's framework for action is based. The full report is available from the Public Health Department. (See Appendix 2 for contact details).

3.1 Action on the Environment

The Health Select Committee Report (2004) states that a generation is growing up in an obesogenic environment in which the forces behind sedentary behaviour are growing, not declining. Most overweight or obese children become overweight or obese adults; overweight and obese adults are more likely to bring up overweight children. There is little encouraging evidence to suggest that overweight people generally lose weight.

This is because the effectiveness of behaviour change interventions are contextual. For advice to have full impact it needs to be carried out in a culture and environment which supports the intervention. Evidence exists that where this support does not exist—the intervention is **not** effective.

Figure 9: A Health Promoting Park in Dudley

Figure 10: Nine Locks in Brierley Hill

'Most individuals relapse repeatedly when they try to make complex, sustained behavioural changes without positive social support in environments that conspire against them'. Moore et al BMJ 2003

An illustration of the importance of changing the environment is provided from a review of obesity prevention in the USA.

Thirty six major documents, which address food intake and physical exercise, have been published over the years, all of which apart from one address intervention at the individual level only. This one document included 23 pages of recommendations for action at all levels to change the social and environmental causes of obesity, but has largely been ignored.

The net result is that food consumption per capita in the USA continues to increase, while the proportion of schools offering physical education, overweight people who report dieting and exercising to lose weight, and primary-care physicians who counsel patients about behavioural risk factors for obesity and other conditions have declined. Some obese people have accepted their weight (e.g. the 'fat and happy with it' movement).

The Health Select Committee Report (2004) highlights that the effect of any intervention aimed at the individual will either be diluted or neutralised by an obesity inducing environment. Changing the environment is therefore key to obesity prevention and control and should focus on the food we eat, how we eat, how much we eat and increasing energy expenditure.

3.2 Action for Clinical Weight Reduction

Successful interventions for smoking cessation behaviour change can be applied to obesity behaviour change and have been based on a two level system. This involves GP basic intervention with referral to more specialised primary health care intervention, and counselling. The GP (or clinicians) uses a clear and simple algorithm to:

- Provide cessation advice and encouragement.
- Assess readiness to quit (using the cycle of behaviour change model).
- Offer only brief assistance through counselling and drug prescription. If more is needed then referral to specialist teams is necessary.

Research evidence from weight loss trials identifies the following:

3.2.1 Approach

- A combination approach of diet, physical activity and behaviour therapy is most effective.
- Group therapy is more effective than individual therapy.
- Drug use should be targeted to the very specialist, morbidly obese cases.
- A range of options should be available to meet diverse needs i.e. different diets, activity programmes.

3.2.2 Weight – Loss Diet Types

- Low calorie diets, low fat diets, high carbohydrate low fat diets, and mediterranean diets are all effective at producing weight loss.
- Very low calorie diets and meal replacements are effective, but require supervision and support to maintain weight loss. These are more suited to specialist service provision.
- The Atkins diet is effective but is contrary to national healthy eating principles, and cannot therefore be recommended.
- Meal plans, grocery lists, internet diets all provide helpful support for different target groups.

3.2.3 Models

- Slimming-by-referral to commercial ventures such as Weight Watchers is a promising and cost effective model. There is potential for collaboration as they offer the combination approach and group therapy.
- A dietitian led model is not as effective if the combination approach is not used.
- The effectiveness of brief interventions is unclear.
- The counterweight model (capacity building within primary care) is an effective model but is expensive and needs commitment from primary care.

3.2.4 Physical Activity Levels

Physical Activity is defined as any bodily movement that results in energy expenditure and is expressed in kilo calories. Activities can include lifestyle activities such as walking and gardening through to structured play and sports. Activities can be performed at three effort levels of intensity which are mild, moderate or vigorous (Table 6).

Table 6: Physical Activity Intensity Levels

Vigorous Activity	Heart beats rapidly, breathing hard. Activities such as running, jogging, squash, hard swimming, cycling, basketball, aerobics.
Moderate Activity	Breathing harder than normal and feeling warmer. Activities such as brisk walking, tennis, badminton, swimming, line dancing, heavy gardening-digging, mowing, heavy house work—washing floors/windows
Mild Activity	Minimal effort, very easy. Activities such as yoga, easy walking, light housework/gardening, bowls

For people looking to lose weight the moderate activity measure is most appropriate, due to the rate of energy expenditure and the fact that it is achievable and has fewer health risks.

The general measure for the population looking at maintaining a healthy weight is five occasions of 30 minutes of moderate activity, but for people trying to lose weight (body fat) or sustain weight loss from a previously obese state, 60—90 minutes per day of moderate activity is recommended. It is helpful to build exercise back into everyday life such as using the stairs etc (see appendix 5).

3.2.5 Skills and Attitudes

A major problem in the fight against obesity is the prevailing social and professional attitudes to obesity which has '*been widely viewed as a disease that results from a lack of self-control. Overweight individuals rather than their environment are held responsible for their disease.*' This view is reminiscent of how smokers were viewed some decades ago.

Changing attitudes, especially amongst policy makers and health workers is critical to success.

The messages GPs and other health care professionals are giving are not clear, simple or consistent. Mixed attitudes and views prevail. There is still much work to be done educating health professionals on obesity control.

The training of all health professionals should include nutrition and physical activity. The inclusion of social, economic, cultural and psychological determinants of diet and physical activity would also strengthen existing training programmes.

3.3 Educational Strategies

It is vital to ensure that the public are fully aware of the dangers of obesity and the importance of healthy eating, and that they also have the practical skills and information they need to implement these messages in their daily lives.

School and community based programmes are fundamental to any strategy. Educational programmes have been most successful when used in combination with community programmes that include parent involvement, mass media campaigns, access restrictions and enforcement of school policies.

3.4 Advertising, Mass Media and Counter Marketing

Food advertising has a key role. Counter marketing therefore is equally important and involves: paid advertising, media advocacy, press releases, health promotion activity and sponsorship.

3.5 Regulatory Efforts

Although successful for controlling tobacco use, there are at present no regulatory mechanisms for food and physical

Figure 11: A Health Promoting Park in Dudley

exercise. A number of options are available for compulsory PE at school, food labelling, limiting school sponsorship to only healthy foods and banning advertising of unhealthy foods to younger children.

3.6 Economic Approaches

As food (and physical activity) is essential to life, the role taxation might play has to be carefully thought through. Economic forces, nevertheless, clearly affect food choices. The US Department of Agriculture concluded that most of the historical trends in food consumption per capita of specific food items could be explained by price. Interventions could include discounts off insurance programmes for health behaviour, and tax breaks for fitness related expenses etc.

3.7 A Combination Approach

One type of intervention alone will not have any impact on either the obesity epidemic or weight control in the individual.

The only viable framework is to implement a range of interventions simultaneously and:

- Ensure that the different elements of the programme work together.
- Have long term commitment—20 to 30 years.
- Have sound management and administration.
- Have ongoing surveillance and evaluation.
- Have accountability of those running the programmes.

- Have a good understanding of the community and the diversity within it, close collaboration with various community organisations, and full participation of the community.

Figure 12: Sledmere Community Café

- Combine well-planned media and communication messages with broad ranged community activities involving primary health care, voluntary organisations, the food industry, supermarkets, work-sites, schools, local media and so on.
- Make efforts to ensure equity of physical and economic access to facilities and interventions.
- Have strategies that explicitly address health inequalities. These should focus on the needs of the poorest communities and population groups.

3.8 Childhood Obesity

As with adult obesity, tackling childhood obesity requires changes at multiple levels of society and a blend of individual and environmental strategies.

Unless there is an enabling context the potential for change will be minimal. This encompasses a wide frame of reference, from the environment at school and in the community, to transport policies, urban design policies, and the availability of a healthy diet.

It also requires supportive legislative, regulatory and fiscal policies to be in place. The ideal is an environment that not only promotes but also supports and protects healthy living, making it easier and more attractive, for example, to cycle or walk to school, and to buy fresh fruit and vegetables.

A life-course perspective on obesity prevention and control is critical. This starts with maternal and child health, nutrition and care practices, and carries through to school environments, access to preventive health and primary care, as well as community based care for looked after children.

3.8.1 Recommended Prevention Interventions for Children

Infants and young children:

- The promotion of exclusive breast-feeding.
- Avoiding the use of added sugars and starches when feeding formula milk to infants.
- Instructing mothers to accept their child's ability to regulate energy intake rather than feeding until the plate is empty.
- Limitation of television viewing.
- Policies which improve the health and nutrition of women of child-bearing age and their children with priorities to eliminate food poverty and prevent obesity.

Nutrition:

- Promoting the intake of fruit and vegetables.
- Restricting the intake of energy-dense, micronutrient-poor foods e.g. packaged snacks and sugar sweetened soft drinks.
- Creating more opportunities for family interaction e.g. eating family meals together.
- Limiting the exposure of young children to heavy marketing practices of energy dense, micronutrient-poor foods.
- Providing the necessary information and skills to make healthy food choices.

Figure 13: Sledmere Community Café

- Policies to ensure the availability and accessibility of foodstuffs to supply an adequate and affordable diet.
- Policies to ensure adequate retail provision of food to those who are disadvantaged.

Physical activity:

- Modifying the environment to enhance physical activity in schools and communities.
- Promotion of an active lifestyle.
- Measures to promote walking and cycling as attractive forms of transport and to ensure the safe separation of pedestrians and cyclists from motor vehicles.

School based interventions:

Well designed and fully implemented school-based programmes have been shown to be effective in changing knowledge, attitudes, skills and behaviour of children.

CASE STUDY

Padiham St Leonards C of E Primary School combined initiatives including:

- Improvement of the physical environment
- Introduction of a breakfast club offering healthy breakfasts
- Healthy snack clubs
- Making water freely available with encouragement to drink
- Introduction of physical activity into the lessons with every class beginning with a 5 minutes aerobic session
- Introduction of brain breaks during lessons
- Yoga type exercises after lunch
- Multi-sport playground markings with peer buddies to encourage participation in playtime and lunch time physical activity
- Improvements included better behaviour, higher levels of self esteem and improved SATS test results.

The most successful approach to promoting healthy eating and physical activity in school is to take a 'whole school approach' e.g. Health Promoting Schools using multifaceted school based interventions with an integrated curriculum involving nutrition and physical activity. This could include:- the promotion of school food policies; the development of budgeting and cooking skills; the preservation of free school meal entitlement; the provision of free school fruit; the restriction of less healthy food and the promotion of walking and cycling routes to school.

CASE STUDY

Wales offers free pre-school breakfasts to all primary school children. Wales also opened its leisure centres to children for free swimming during the summer holidays, and experienced dramatic increases in children taking up these physical activity opportunities.

Children who do not have breakfast are more likely to suffer from impaired memory and attention span, and are less likely to process information. Participation in school breakfast programmes can improve students' standardized test scores and reduce their rates of absence and tiredness.

Drinking water in schools has been successful in promoting the consumption of healthy drinks as opposed to high-sugar and artificial drinks.

CASE STUDY

Powys Local Procurement Initiative found that locally sourced nutritious food:

- Helped to deliver important health benefits, especially for the young and the sick, as an integral part of public sector catering in school and hospitals
- Helped the local economy retain a larger share of the retail price within the community compared with global food systems, delivering potential economic benefits to the locality
- Lowered food delivery miles and reduced carbon dioxide emissions producing significant environmental benefits
- Promoted a better dialogue between producers and customers.

3.8.2 Recommended Weight Loss Interventions for Children

- Early intervention for the promotion of good nutrition and exercise interventions combining diet, activity and behaviour/psychological therapies achieve more success than diet, physical activity or behaviour therapy alone.
- Family support is needed for treatment to succeed and family based multi-faceted behaviour modification programmes may be effective.
- There is no evidence that drug treatment is effective in treating obesity in children.

4. Dudley: The Current Situation

To start the process of planning a way forward, members of the Obesity Task Group were asked to map existing practice and services against differing target groups and settings.
The target groups were based on age:

- Infants and children
- Young people
- Adults
- Older people
- General, or services that can affect all or a combination of the age ranges

The settings were chosen to reflect best current and planned delivery:

- The wider physical and cultural environment
- Community (in terms of prevention)
- Community (interventions for weight loss)
- Primary Care (prevention)
- Primary Care (intervention for weight loss)
- Hospital (treatment)

The above target groups and settings were not only used to map existing provision but also to plot what would ideally be required from future delivery.

4.1 Summary of Service Mapping

The mapping exercise showed a very diverse delivery within Dudley but highlighted some generic issues, particularly a lack of capacity within existing staffing and resources to cope with increasing demand. It was clear that interventions aimed at individual behaviour change were in place but there was limited intervention at an environmental and policy level to support the behavioural changes, and enable a healthy choice to be an easy choice.

The mapping process also highlighted a need for links and synergy between the services and programmes and for the whole process to have a higher profile with all stakeholders, including the public, across Dudley.

In summary, current provision includes:

4.1.1 Culture/Environment

- Dudley has begun to develop a cycle route network, to improve links between the major centres, but needs further coordination and is under used due to a number of environmental barriers.
- There are six Local Authority Leisure Centres, that are under used and do not cater for a high percentage of the population (the current leisure provision is under review, see recommendations).
- There is potential within Dudley's parks and open spaces for physical activity through 'Transforming Your Space', a lottery funded project aimed at making physical improvements to parks; 'Liveability', funded through The Office of the Deputy Prime Minister (ODPM) and aimed at empowering local 'Friends of Parks' groups; and 'Steps To Health' (see community prevention).
- Work is underway to look at developing allotments with a view to combining a physical activity opportunity with the production of fresh vegetables.

4.1.2 Community Based Primary Prevention

There are many interventions and services that are being delivered in the community setting aimed at primary prevention i.e projects which provide an opportunity to be physically active or which promote healthy eating.

Figure 14: Vegetable Kebabs: Get Cooking

- **Get Cooking**: A cascade programme which is aimed at training communities and people who work with communities to deliver cooking sessions. The sessions provide members of the public with the skills and awareness to be able to buy, prepare and cook healthy nutritious food on a budget. It also enables participants to explore food issues in their localities and is used as a needs assessment opportunity.

- **Steps To Health:** A programme which aims to get people to be more active. The programme links GP practices to Dudley's Leisure Centres and primarily aims to encourage and promote the use of parks as places to be physically active.

- **Dudley Cycle Forum**: A multi agency group facilitated by Dudley MBC which aims to improve and increase cycling opportunities within the borough.
- **Dudley Walking Strategy Group**: As above but facilitated by Public Health and Action Heart.
- **Fit Kid, Phyz Kids and Busy Kids,** 3 initiatives delivered by School Health Advisors and Dudley MBC that provide physical activity opportunities for primary school age children both in and outside curriculum time.
- **Health Promoting Schools (HPS):** A nationally accredited scheme which promotes health in its widest sense but includes physical activity and diet within the core delivery.
- **Take 5**: Healthy Eating initiatives which are lottery funded, these include Healthy Takeaways, Community Cafés, and Family Food and Fun Clubs.

Figure 15: Get Cooking Class

4.1.3 Community Based Weight Loss Interventions

At the time of the mapping exercise there was limited activity in this setting other than some specific delivery within private sector gyms and through organisations such as Weight Watchers and Slimming World.

Phyz Kids delivers appropriate activities and dietary advice to primary aged children who have been referred with weight problems. The programme is delivered by School Health Advisors, but is under resourced (see recommendations/ future delivery).

4.1.4 Primary Care Prevention and Treatment

- **Physical Activity Toolkit Training**: A training package delivered to practice staff to raise awareness on the current recommendations and messages relating to physical activity, to highlight current and planned local activity, and to help develop practice based activity action plans.
- **Steps to Health Exercise Referral** (as above)
- **Referral to Get Cooking** (as above)
- **Pharmacotherapy**: Weight management drugs prescribed as appropriate
- Anecdotal advice given opportunistically via practice staff
- A small number of practice based obesity clinics

4.1.5 Hospital Treatment

- Clinics are delivered within Russells Hall Hospital through the Biochemistry Department where weight reduction is an issue for some of the patients. Advice and targets may be set in conjunction with dietitians and psychologists. Capacity within this service is stretched. Provision for obesity surgery is commissioned regionally by the Strategic Health Authority with Dudley's capacity being 28 cases for bariatric surgery per year.

4.2 Recommendations

The recommendations are based on the original mapping exercise and the evidence base from the reports commissioned by the Obesity Task Group.

4.2.1 Culture/Environment

- Streets, neighbourhoods, communities and town centres need to be designed and redesigned to enable walking and cycling to be a safe and viable alternative to the car.

Figure 16: Steps to Health

- Each school and as many workplaces as possible need to have active travel plans and provide would-be walkers and cyclists with adequate cycle storage and showering facilities.
- Local neighbourhood shops need to be supported and encouraged to stock fresh fruit and vegetables
- Town centre food outlets need to be audited to map where people can buy a healthy snack or meal.

Figure 17: Steps to Health

- All schools should meet the national recommendation of physical activity provision and provide healthy school meals.
- There is a need to create more pedestrian zones in town centres and neighbourhoods. Research has shown that the major venue for people to be active is "the street".
- Planners and engineers need to be aware of the influence of their work on people's opportunities to be physically active and to seek the advice of health professionals.
- More traffic management is needed to promote walking, cycling and public transport in preference to the car.
- Community environments need to be cleaner, safer, greener with good lighting and no litter or waste.

4.2.2 Community Based Primary Prevention

Capacity issues are consistent throughout this section.

- A need for more trained deliverers and advocates of activity and diet related projects and initiatives.
- Roll out of "Active Dudley", which is funded by Sport England and the lottery and includes 4 programmes that are aimed at raising activity levels in Dudley. They include two school based programmes one focussing on after school activity and parental involvement, and the other looking at increasing cycling to school. The other two are aimed at increasing walking both in recreation and work time.
- Nursery and primary schools to have food policies that reflect healthy eating principles.
- Schools to be encouraged to adopt funding strategies that do not rely on sponsorship from food manufacturers.
- Local Authority leisure provision to be reviewed to enable sedentary people to access activities appropriate for them.

4.2.3 Community Based Interventions For Weight Loss

- A need for statutory organisations to engage with private sector providers to increase capacity and delivery for overweight and obese people.
- A need to utilise community volunteers to support existing programmes and signpost to others.

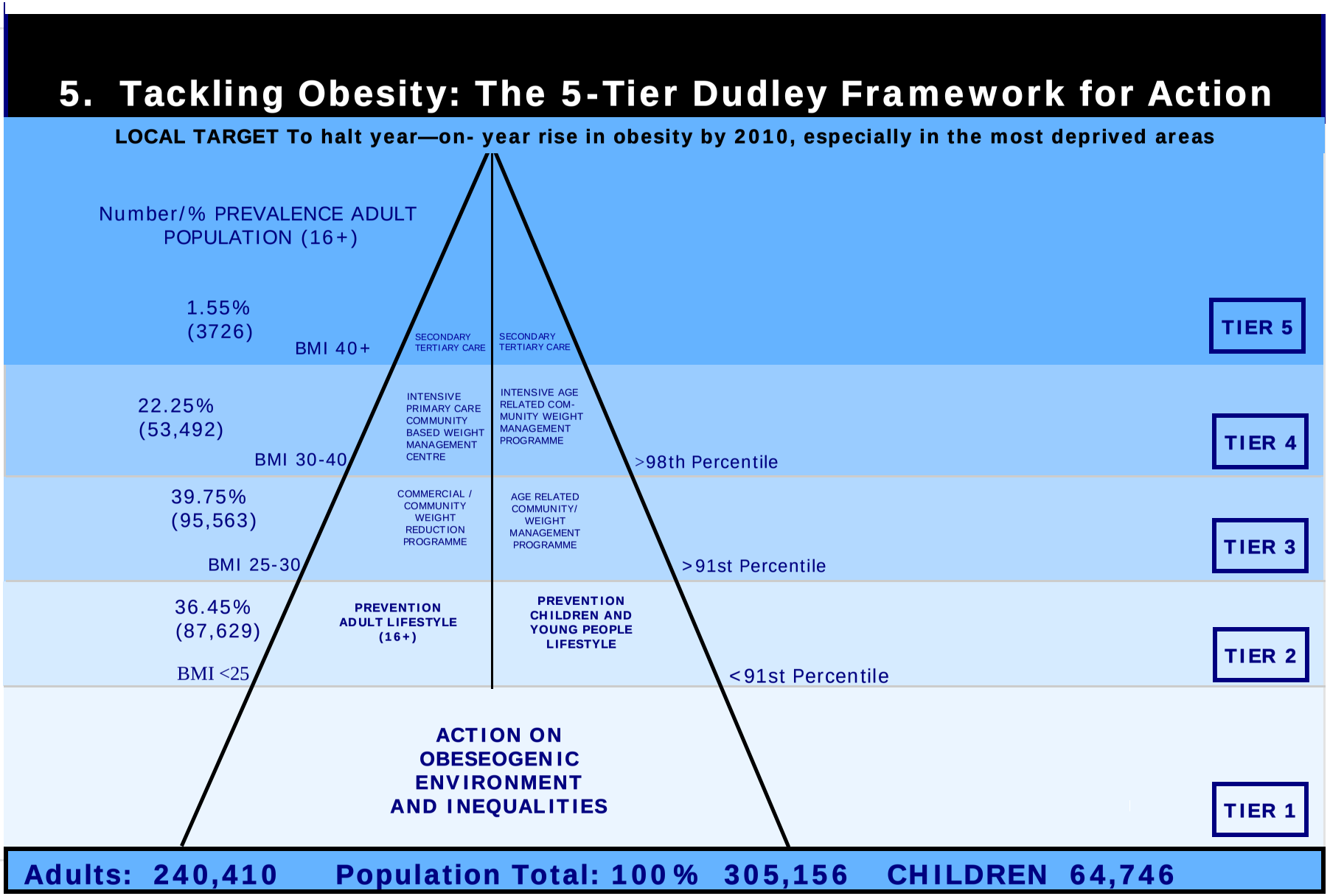
4.2.4 Primary Care Prevention and Treatment

- All primary care settings should receive training on physical activity and healthy eating.
- Primary care to be made aware and to be encouraged to view prevention and treatment of overweight and obesity as time saving rather than additional work, due to its impact and influence on other comorbidities such as diabetes, CHD and hypertension.
- Primary care staff that are trained should be supported with dedicated time for delivery on overweight and obesity related issues.
- Primary care to systematically measure and record patients' BMI to aid data sets and to guide planning and intervention need.
- Volunteers to be placed within practices to aid capacity and to support projects and patients.

Figure 18: Get Cooking

5.1 Framework for Action

National Target: To halt the year-on-year rise in obesity among children under 11 by 2010



Source: Figures based on the 'Health Survey for England' 2001 and Dudley Census 2001

5.2 Dudley Charter for Action

Dudley's aim is to halt the year-on-year rise in obesity by 2010 especially in the most deprived areas.
In order to achieve this, a fundamental cultural shift is required.

This involves action on the 'obeseogenic' environment to 'make healthy choices easier to make' and action to 'promote positive attitudes and skills' so that people want to and can make healthy choices. These choices need to reflect the cultural diversity of the Dudley population.

OBJECTIVES	TARGETS
TIER 1: OBESEOGENIC ENVIRONMENT: 'TO MAKE HEALTHY CHOICES EASIER TO MAKE'	
Establish 'active transport' alternatives	• Encourage a modal shift in mind-set away from car use to public transport by 2010 • All NHS sites to have active travel plans by 2008 • All DMBC sites to have active travel plans by 2008 • All schools to have active travel plans by 2006 • Apply walkability checklist to 10 areas and develop 'homezone' proposals by 2006
Increase physical activity facilities and opportunities	• Develop and implement a joined up network of walking routes in Dudley by 2008 • Develop and implement a joined up network of cycle routes in Dudley by 2010 • Local Authority to provide affordable leisure facilities by 2006 • All parks/key open spaces to be outdoor activity centres by 2010 • Develop family- orientated activity options by 2006 • All GPs and medical professionals to participate in Exercise On Prescription by 2008 • All children to have the opportunity to take 4 hours physical activity per week within and beyond the curriculum by 2008
Increase access to affordable healthy food options	• All local communities to have access to affordable healthy food by 2010 • All public sector catering establishments, workplaces to provide healthy affordable food choices by 2008 • All NHS sites to have the Dudley Food for Health Award (DFHA) by 2006 • Expand the DFHA programme to promote the provision of healthy affordable food choices within the commercial sector - cafes, pubs, take-aways, etc by 2006 • Key local supermarkets will promote their healthier food options by 2008 • All schools, nurseries and colleges to provide healthy meal and snack options and have a DFHA by 2008
Increase healthy public policy	• Develop a sustainable approach to 'land use planning for health' in the borough by 2006 • Develop a healthy workplace programme to implement in the public sector by 2007 & business sector by 2009 • Implement actions in the 'Healthy Living Blue Print for Schools' by 2010 • Develop & implement a 'health promoting youth club' model by 2008 • Achieve 100% coverage of the borough through school sports partnerships by 2006 • All schools, nurseries, and colleges to have food policies by 2008

5.2 Dudley Charter for Action

OBJECTIVES	TARGETS
TIER 2: LIFESTYLES: ATTITUDES, KNOWLEDGE AND SKILLS	
Raise awareness of healthy living messages	• Develop a rolling public and professional awareness campaign by 2006 • Establish training programmes for key professionals in nutrition and physical activity by 2006
Increase knowledge and skills for healthy living	• All GPs to participate in Get Cooking on Prescription by 2008 • Expand school opportunities to learn about growing food, healthy eating, cooking food and the importance of being active by 2008 • Expand community programmes to provide training, resources and support to local people to enable them to improve their healthy living skills and knowledge by 2007 • Implement national standard for cycle training in Dudley by 2006
Promote a healthy start to life	• Increase initiation of breast-feeding by 2% year-on-year
TIER 3, 4 AND 5: WEIGHT MANAGEMENT, REDUCTION AND TREATMENT	
Increase weight loss opportunities by developing a clear and coherent clinical pathway for obesity sufficiently re-sourced within the community and pri-mary care	• Establish a co-ordinated weight management service for overweight and obese adults (>16) by 2006 • Establish a co-ordinated weight management care pathway for overweight and obese children by 2008 (up to 16 years of age or 19 years where appropriate) • Ensure appropriate referrals to secondary and tertiary care by 2007
Increase physical activity options	• Physical activity sessions for the overweight established in the Local Authority by 2008
Appropriate drug use	• Appropriate use of anti-obesity drugs by 2007 • Reporting mechanism for expenditure on anti-obesity drugs established for each PCT by 2006

6.1 ACTION PLAN: Obeseogenic Environment & Lifestyle Action Tier One and Two

TARGET	ACTION	LEAD/GROUP	FUNDING NEEDED	EVALUATION
Encourage a modal shift in mind-set away from car use to public transport by 2010	• Develop and implement a transport plan for Dudley that makes public transport reliable, comfortable, frequent, affordable, and co-ordinated with car-parking and walking and cycling routes • Build the promotion of walking and cycling as alternatives into the Local Authority's walking and cycling strategies • Review car parking charges for parking in all areas of the borough • Investigate restriction of car use in urban areas • Investigate subsidised free bus passes	Dudley Metropolitan Borough Council (DMBC) Department of Urban Environment (DUE) Physical Activity Task Group (PATG) (Links: Local Transport Plan)	Yes	• Audit of access and use of public transport
All NHS sites to have active travel plans by 2008	• PCTs and Dudley Group of Hospitals (DGOH) to develop plans using free consultancy from Department of Transport • Identify a designated person to develop this process	Management teams of DGOH & PCTs Links: (Physical Activity Action Plan (PAAP))	Yes	• Audit of sites
All DMBC sites to have active travel plans by 2008	• DMBC to develop plans using free consultancy from Department of Transport • Develop a joined up approach across the council departments who can contribute • Implement travelwise and link to walking and cycling strategies • Promote and market benefits to private sector organisations	DMBC Executive (PATG) (PAAP)	No	• Audit of sites
All schools to have active travel plans by 2006	• DMBC to continue to draw down government funding to support schools (5K for primary and 10K for secondary schools) • 'Health Promoting Schools' to continue to encourage schools to develop plans • Consider legal enforcement of prohibition of car-parking outside schools to reduce car use • Implement walking bus and safe routes to school schemes	DMBC-DUE Head Teachers School Governors PATG (PAAP)	No	• Audit of schools
Apply the walkability checklist to 10 areas and develop 'home zone' proposals by 2006	• Implement walkability checklist recommendations • Develop a vision of the 'health promoting, living street' and home zone proposals • Improve all streets for walking & shopping in Dudley, Halesowen and Stourbridge including food shopping • Develop links with community safety, street lighting • Build into LA's walking strategy	Public Health PATG (LA walking strategy)	Yes	• Results from checklist
Develop and implement a joined up network of walking routes in Dudley by 2008	• Build into LA's walking strategy • Implement walking routes • Implement walk zone website • Implement walk leaders programme and link to volunteer programme • Implement pedometers programme • Develop rigorous local response to the National Walking Action Plan	DMBC-DUE PATG (PAAP) (LA Walking Strategy)	Yes	• Audit of use

6.1 ACTION PLAN: Obeseogenic Environment & Lifestyle Action Tier One and Two

TARGET	ACTION	LEAD/GROUP	FUNDING NEEDED	EVALUATION
Develop and implement a joined up network of cycle routes in Dudley by 2010	• Build into LA's cycling strategy to develop a network of safe routes that join up key community facilities (lifestyle pathways) • LA to implement traffic calming and other supportive infrastructure measures to support the above • Make full use of planning opportunities to influence design layout of new developments as well as Section 106 Agreements • Develop rigorous local response to the National Cycling Plan	DMBC—DUE PATG (PAAP) (LA Cycling Strategy)	Yes	• Audit of network & use
LA to provide affordable leisure facilities by 2006	• LA to look at alternative venues such as parks and community centres and to target areas of deprivation • Continue Steps to Health programme linked to LA's Smartcard • Continue to develop parks as activity centres • Ensure LA's Leisure and Cultural strategy is health-related • Continue to implement 'Active Dudley' bid • Ensure measures are taken to ensure that facilities are accessible to all groups	DMBC—Department of Leisure & Culture (DLC) PATG (PAAP)	No	• Audit of facilities
All parks/key open spaces to be outdoor activity centres by 2010	• Continue Steps to Health with parks as an outdoor activity centre • Expand Green Gym option • Develop active.mag website • Continue links to walk leaders, Leap Over 60 and other key programmes • Implement 'Liveability' Scheme	DMBC—DLC PATG (PAAP)	From April 2005 Yes	• Audit of availability and use
Develop family—orientated activity options by 2006	• Develop choices in the home e.g. active play stations, garden games • Encourage physical activity through cultural interventions e.g. dance • Continue family activity events through Steps To Health • Implement 'Active Dudley' programme • Schools to provide access to facilities for after school activities	PATG (PAAP) ('Active Dudley' Plan)	No	• Audit of activity levels
All GPs and medical professionals to participate in Exercise On Prescription by 2008	• Continue Steps To Health primary care referral routes • Continue Physical Activity Tool-kit training in primary care • Develop 'single assessment' protocol and referral	PATG (PAAP)	No	• Audit of practices
All children to have the opportunity to take 4 hours physical activity per week within and beyond the curriculum by 2008	• Deliver environmental audits of all schools re physical activity opportunities • Encourage schools to expand curricular activity time through school partner-ships • Expand extra-curricular activities through busy kids/Phyz Kids, Active Dudley bid, and Playtime Pals • Implement pedometers in schools • Expand the use of lunch time activities with supervisors • Develop walking to school opportunities • School governors to be empowered to lobby for changes within schools	PATG (PAAP)	No	• Audit of activity levels

6.1 ACTION PLAN: Obeseogenic Environment & Lifestyle Action Tier One and Two

TARGET	ACTION	LEAD/GROUP	FUNDING NEEDED	EVALUATION
All local communities to have access to affordable healthy food by 2010	• Map and identify food 'deserts' • Develop fruit and vegetable delivery and mobile schemes for areas of 'food deserts' • Develop cooking and food storage facility standards for social housing	FfHSG (Food for Health Steering Group) (FfHAP) Food for Health Action Plan	Yes	• Audit of places with Food for Health Award • Use of mobile schemes
All public sector catering establishments, workplaces to provide healthy affordable food choices by 2008	• Expand the Dudley Food For Health Award (DFHA) to increase capacity to deliver to all sites • Public sector sites to develop food for health policies	FfHSG (FfHAP)	Yes	• Numbers with DFHA
All NHS sites to have the DFHA by 2006	• Implement DFHA in all sites • PCTs and DGOH to develop food for health policies	FfHSG (FfHAP)	No	• Audit of sites
Expand the DFHA programme to promote the provision of healthy affordable food choices within the commercial sector - cafes, pubs, take-aways, etc by 2006	• Expand DFHA to increase capacity to deliver to all sites- especially capacity of LA environmental health	FfHSG (FfHAP)	Yes	• Numbers with DFHA
Key local supermarkets will promote their healthier food options by 2008	• Targeted work with supermarkets and retailers in relation to promotion, labelling and pricing especially in deprived areas • Develop a retailers award • Lobby and support Food Standards Agency in implementing improved food labelling • Train retailers to promote healthier food options	FfHSG (FfHAP)	Yes	• Audit of supermarkets
All schools, nurseries and colleges to provide healthy meal and snack options and have a DFHA by 2008	• Investigate funding of the schools meals service as a welfare service, removing the need to generate income. • Investigate provision of free school meals in all primary schools • Review catering contracts to introduce nutritional standards for school meals • Implement Food for Health Award • Continue implementation of water in schools • Expand implementation of the national fruit scheme • Expand breakfast clubs • Action on tuck shops and vending in schools	FfHSG (FfHAP)	Yes	• Audit of schools with Dudley Food for Health Award • Audit of programmes

6.1 ACTION PLAN: Obeseogenic Environment & Lifestyle Action Tier One and Two

TARGET	ACTION	LEAD/GROUP	FUNDING	EVALUATION
Develop a sustainable approach to 'land use planning for health' in the borough by 2006	• Develop formal health involvement in town planning and land use • Introduce 'health impact assessment' for development plans, the UDP and within the planning office • Develop a holistic approach to residential and commercial street planning based on active health including walking, and limiting access to unhealthy food facilities by key sites e.g. schools	DMBC— executive	NO Yes	• Before and after audit of borough
Develop a healthy workplace programme to implement in the public sector by 2007 & business sector by 2009	• Identify funding to establish a model and designated worker • Investigate expansion of workwell	PCT Manage-ment Teams, DMBC – Executive DMBC-DUE	Yes	• Number of work places involved & changes made
Implement actions in 'Healthy Living Blue Print for Schools' by 2010	• Promote and support schools to develop action plans especially in physical activity & nutrition through Health Promoting Schools • Provide training, inset and network meetings to support development • Implement full service extended schools programme	Health Promoting School (HPS) Steering Group DMBC— Department of Education & Life-long Learning (DELL)	No	• Audit of actions in schools
Develop & implement a 'health promoting youth club' model by 2008	• Promote model and support youth clubs to develop • Provide training and network support • Include physical activity and nutrition options	DMBC-DELL HPS steering group (& action plan)	Yes	• Audit of youth club involvement & action
To achieve 100% coverage of borough through school sports partnerships by 2006	• Encourage and support schools to develop partnerships • Work with schools to develop their action plans	DMBC—DELL PATG (PAAP)	No	• Mapping of schools
All schools, nurseries, and colleges to have food policies by 2008	• Work with schools, colleges, nurseries to support development and implementation of a whole-school approach to food for health policies that include recommended practise on sponsorship • Incorporate school councils which include food action	FfHSG (FfHAP)	No	• Audit of schools, nurseries, colleges

6.1 ACTION PLAN: Obeseogenic Environment & Lifestyle Action Tier One and Two

TARGET	ACTION	LEAD/GROUP	FUNDING NEEDED	EVALUATION
Develop a rolling public awareness campaign by 2006	• Train programme staff in media skills • Develop a stock of stories and tie in with government campaigns • Support relevant campaigns of local agencies • Map healthy sandwich and snack outlets and takeaways for a directory • Produce materials and guides of where to access healthy food options, and physical activity opportunities • Develop information access points and websites	FfHSG (FfHAP) PATG (PAAP)	Yes Yes No Yes	• Audit of knowledge • Survey of awareness in defined groups
Establish training programmes for key professionals by 2006 in nutrition and physical activity	• Implement training of caterers, health workers, teachers, primary care staff etc to improve consistency of messages • Provide a core set of relevant information • Implement an obesity training scheme for health professionals	Public Health FfHSG (FfHAP) PATG (PAAP)	Yes	• Numbers trained • Audit of knowledge
All GPs to participate in Get Cooking on prescription by 2008	• Further develop and establish the Get Cooking referral process • Raise awareness and train practices to signpost to Get Cooking	FfHSG FfHAP	Yes	• Audit of practices
Expand school opportunities to learn about growing food, healthy eating, cooking food & the importance of being active by 2008	• Implement DfES Growing Schools Programme through allotments • Support the introduction of food skills on the national curriculum • Develop cooking programmes in schools • Introduce food labelling education in schools • Continue PSHE education in schools	FfHSG (FfHAP)	No	• Audit of school activity
Expand community programmes to provide training, resources and support to local people to enable them to improve healthy living skills and knowledge by 2007: cooking skills, nutrition, physical activity knowledge	• Expand volunteers programme: nutrition and physical activity workers • Expand Get Cooking initiative especially in deprived areas and with vulnerable groups • Introduce debt counselling and food budget skills where needed • Implement the 'Choosing Health—Making Healthy Choices Easier' NHS accredited health trainers scheme	Public Health FfHSG (FfHAP)	Yes	• Audit of cooking skills
Implement national standard for cycle training in Dudley by 2006	• Pilot training through Hillcrest School for staff and pupils • Develop a model that can be rolled out to all schools and implemented through Health Promoting Schools (HPS) for children and adults • Incorporate into School Build Programme	DMBC—DUE PATG (PAAP) (LA Cycling Strategy)	No	• Numbers Trained
Increase initiation of breast-feeding by 2% year-on-year	• Develop a borough-wide policy and action plan to promote breastfeeding • Develop a joint agency infant feeding policy and training programme • Expand volunteers programme: breast feeding buddies	Improving Maternity Services Group	Yes	• Breastfeeding routine data set

6.2 ACTION PLAN Weight Management: Tier 3 , 4 & 5

TARGET	ACTION	LEAD/GROUP	FUNDING	EVALUATION
Establish a co-ordinated Weight Management Service for over-weight and obese adults (>16) by 2006 (see appendix 3)	• Develop a costed weight management care pathway across the community, primary care and hospital settings based on best practice • Fund through the Local Development Plan (LDP) • Link the service into the Quality Outcomes Framework (QOF) • Develop referral links to other relevant chronic disease management pathways eg. Diabetes, CHD, hypertension and smoking • Develop referral guidelines and service delivery standards and protocols • Commission service • Pilot a service for learning disability clients	PCTs— Department of Public Health Commissioning Department Obesity Task Group Learning Disabilities Facilitation Team/ Dietetic Service	Yes Yes	• Quality standards of pathway met • Patient satisfaction surveys • Treatment outcomes • Numbers of patients referred • Number of patients • Outcomes reduction BMI
Establish a co-ordinated Weight Management Care Pathway for overweight and obese children (<16) by 2008 (see appendix 4)	• Develop a costed weight management care pathway across the community, primary care and hospital settings based on best practice • Fund through LDP • Link the service into QOF • Develop referral links to other relevant pathways • Develop referral guidelines and service delivery standards and protocols • Commission service	Obesity Task Group Child Weight Management Sub-Group PCTs- Public Health & Commissioning Departments	Yes	• Quality standards of pathway met • Patient satisfaction surveys • Treatment outcomes • Numbers of patients referred
Ensure appropriate referrals to secondary and tertiary care by 2007	• Develop secondary and tertiary input to the adult and children's weight management care pathway • Develop referral protocols for bariatric surgery with follow up and support as part of the pro-posed primary care weight management centre	Obesity Task Group	Possible	• Pathway developed • Quality standards of pathway met • Treatment outcomes
Physical activity sessions for the overweight established in the Local Authority by 2008	• Establish physical activity sessions at key leisure centres, for people managing their weight	DUE	No	• Numbers of users
Appropriate use of anti-obesity drugs by 2007	• Audit use of sibutamine and orlistat in primary care according to NICE guidance	Public Health Prescribing Team	No	• Quality Standards of NICE audit met
Reporting mechanism for expenditure on anti-obesity drugs established for each PCT by 2006	• Expenditure template adjusted for ASTRO-PUS per practice	Public Health Prescribing Team	No	• Benchmarking of comparison of practices

6.3 Performance Management and Monitoring Arrangements

The Obesity Task Group will monitor implementation, meeting quarterly in the first year, 6 monthly in the second year and annually for subsequent years.

Terms of Reference:

- Performance manage action plan
- Incorporate actions into appropriate plans
- Work in partnership to secure funding
- Establish clear and accurate base lines of prevalence for monitoring and evaluation purposes
- Establish a surveillance mechanism for obesity prevalence measures for children and adults
- Identify mechanisms and funding for evaluation
- Ensure partners share best practice and work jointly
- Ensure a coordinated approach to reducing and preventing obesity
- Ensure initiatives are sustainable, evidence based and evaluated
- Advocate nutritional and physical activity policy at a national level
- Advocate national training of key professionals e.g. teachers
- Support Children's Food Bill

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8. GLOSSARY

BME = Black and Minority Ethnic

BMI = Body Mass Index

CHD = Coronary Heart Disease

DfES = Department for Education and Skills

DFHA = Dudley Food for Health Award

DMBC = Dudley Metropolitan Borough Council

HDL = High density lipoprotein

LDL = Low density lipoprotein

LDP = Local Development Plan

LITs = Local Implementation Teams

LYL = Life years lost

MBC = Metropolitan Borough Council

NICE = National Institute of Clinical Excellence

NSFs = National Service Frameworks

PE = Physical Education

PHCT = Primary Health Care Team

PSA = Public Sector Agreement

PSHE = Personal, Social and Health Education

QOF = Quality Outcomes Framework

UDP = Unitary Development Plan

Appendix 1.
Dudley Obesity Task Group

TERMS OF REFERENCE

To develop a strategic framework to achieve Dudley Health and Wellbeing Partnership's objectives of addressing obesity by:

- Promoting a multi-agency approach to tackling obesity in Dudley
- Developing and producing a strategic framework for action to be progressed
- Examining existing initiatives and identifying gaps in services and initiatives
- Considering baseline epidemiology and its impact in Dudley
- Developing a programme of action for 2005-2010 to include targets
- Advising on monitoring, evaluation and future reviews

MEMBERSHIP

Representation from:
Health:
Dudley Beacon & Castle PCT - Director of Public Health
Dudley South PCT - Director of Public Health
Two General Practitioners – one from each Primary Care Trust
Psychology Services
Public Health Manager (Health Improvement) (Obesity Lead)
Nutrition Programme Manager, Public Health
Physical Activity Programme Manager, Public Health
Specialist in Pharmaceutical Public Health
School Health Advisors, Dudley PCTs
Dietetic Service, Dudley Group of Hospitals
Consultant Chemical Pathologist, Dudley Group of Hospitals
Dudley Metropolitan Borough Council:
Directorate of Urban Environment:-
Assistant Director of Cultural and Community Services
Assistant Director of Economic Regeneration
Head of Traffic and Road Safety
Dudley Catering and Client Services
Other members may be co-opted as the strategy develops

ACCOUNTABILITY

This is a fixed term group which has its prime accountability to the Dudley Health and Wellbeing Partnership, through the Health Improvement and Modernisation Management Team (HIMMT). It will also have a working relationship with the Local Implementation Teams (LITs) for Diabetes and CHD. It is proposed that the Physical Activity Task Group and The Food for Health Steering Group will be accountable to HIMMT via the Obesity Task Group.

EXPECTED OUTPUTS

- Preliminary position paper
- Strategic framework
- Action Plan
- Statement of ongoing monitoring arrangements

Agreed by Obesity Task Group – January 2004

Available Reports:-

1. The Epidemiology of Obesity, November 2003
   Dr Daphne Austin BSc MBChB FFPHM
2. Overview of the Prevention and Reduction of Obesity
   Dr Daphne Austin BSc MBChB FFPHM January 2004
3. Tackling Childhood Obesity
   Dr Daphne Austin BSc MBChB, FFPHM
4. Effectiveness of Interventions for the Treatment of Obesity in Adults
   Edwina Affie, Specialist Registrar South Birmingham PCT

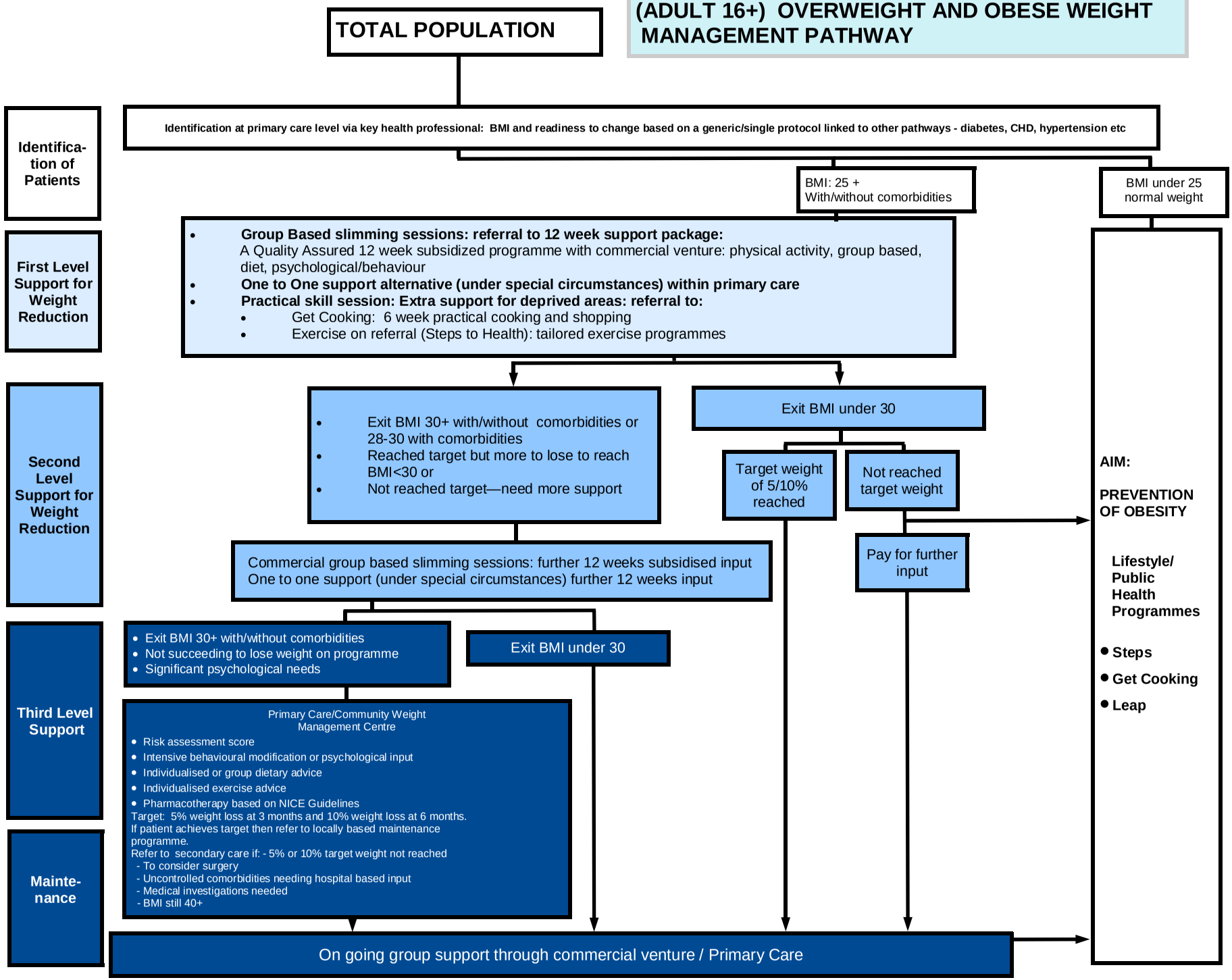
From:

Public Health Department
St John's House
Union Street
Dudley
West Midlands
DY2 8PP

For more information on this strategy, or copies of the above reports contact:

Karen Jackson, Public Health Manager
Tel: 01384 366041
Email: karen.jackson@dudley.nhs.uk

(ADULT 16+) OVERWEIGHT AND OBESE WEIGHT MANAGEMENT PATHWAY



APPENDIX 3: Adult Overweight and Obese Weight Management Pathway Specification

INTRODUCTION:

It is proposed to develop a co-ordinated, systematic care pathway for adults (16+), based on the current evidence base and best practice benchmarks available.

The pathway will provide a single, seamless, pathway incorporating community, primary care, secondary and tertiary care services, and also provide an innovative and cost effective approach through the use of the commercial sector.

The pathway underpins key National Service Frameworks (NSFs) such as CHD, and diabetes since the treatment offered is effective for all overweight/obese patients with or without comorbidities.

It is designed to meet the needs of the Dudley population, in particular to make it easier for them to reach their weight loss goals through the provision of information, and practical, behavioural and social support.

The pathway, although available as a universal service, will be targeted specifically at the most deprived and disadvantaged wards within the borough and will develop specific links with managed neighbourhoods and so contribute to the reduction in health inequalities.

SPECIFICATION DETAILS:

The pathway has 3 key elements:

FIRST LEVEL SUPPORT:

Target Population: BMI 25+ with or without comorbidities
Dudley Prevalence: 152,781 (63.55%)

This first level provision is dependent on the role of primary care health professionals: general practice team-GP, advanced nurse practitioner, practice nurse, health visitor, dietitian, pharmacist, based on a simple algorithm with a single assessment protocol to:

- identify relevant patients for referral
- measure height, weight, BMI and set an initial target weight of 5%/10% as appropriate
- assess readiness for change
- and refer to the group based commercial intervention and additional practical skills interventions as required
- under special circumstances refer to one-to-one based support (this would be an option only for those patients who felt unable to attend a group based programme as the evidence shows this method to be less effective. It would also only be an option for patients with a BMI over 30, or over 28 with comorbidities - current dietetic and primary care cut-offs)

The pathway and assessment protocol would be marketed with these key health professionals and training provided.

Type of Intervention (based on current evidence of effectiveness):

1. Group-Based Commercial venture: ***12 week group–based support sessions, 1 session per week of 1 hour in length run by a trained instructor:***
Content of session **:**

- Diet plan based on national healthy eating principles
- Practical information e.g. recipes and written guidance
- Exercise plan based on national recommendations
- Behaviour modification plan
- Weekly monitoring of weight via scales
- Social support

Monitoring and evaluation:

- BMI and exercise level
- Final weight and BMI and % of initial weight and exercise level at 12 weeks or on exit from the programme
- Week of exit
- Follow-up weight and BMI and exercise level: 6 months, 12 months
- Personal information: postcode, gender, ethnicity, age, GP

Quality standards: Benchmarks and training, quality checks

Maintenance: This is available as long as weight loss or target weight is maintained at target of ± 5lb

Specific programmes may need to be considered e.g: men only, families, BME groups

This intervention is provided most cost-effectively by the commercial sector.

2. Practical Skills Sessions:
Community Get Cooking Intervention: This service will be targeted to deprived wards of the borough to give extra support for these communities. It involves a 6 week practical cooking and shopping and advice sessions to support weight loss, 1.5 hour sessions for 6 weeks
Exercise On Referral (Steps To Health): referral to tailored exercise programmes within the borough including walking.

3. One-to-One Based Support: (Under special circumstances)
Obesity clinic at practice or health centre, patients seen on an individual basis fortnightly, over 12 weeks. First attendance of 30 minutes plus 15 minute follow-ups by trained practice or PHCT staff using a single assessment tool and weight management guidelines.

Content of Clinic:
- One-to-one support
- Single assessment at first attendance, Content to include:
  - Basic medical checks
  - Weight and height to identify BMI
  - Waist circumference for BME groups
  - Weight loss goal established as 5% or 10% of initial weight
  - Diet history, assessment of diet and advice sheet based on healthy eating principles and suggested calorie deficit per day
  - Levels of activity
  - Brief behaviour assessment
- Follow-up support and advice regarding weight loss and maintenance

This intervention would be available for patients where a group based approach is not suitable, or where specialised clinical input, monitoring and follow-up is required. This intervention would best be provided within the primary care/ community setting. Currently obesity clinics are offered by some GPs. Existing provision may need to be reconfigured to cover the suggested specification.

SECOND LEVEL SUPPORT:
A second tier of support will be offered to those patients who
- after 12 week programme, have a BMI > 30 without comorbidities or BMI >28 with comorbidities,
- have not reached their target weight within the first 12 week level 1 provision and require further support or
- have met the target weight but require to lose further weight to reach a BMI of 30 or under.

Type of intervention:
A further 12 week package as above of group-based slimming sessions. Previous one-to-one clients would be encouraged to try group support

THIRD LEVEL SUPPORT:
A third tier of support will be offered to those patients who
- After 12 week programme, have a BMI > 30 with/without comorbidity, where first and second level support has not been successful
- Patients with significant psychological needs.

A further 12 to 24 week package at a primary/community weight management clinic with psychological/behavioural therapy and pharmacotherapy input will be offered. The primary/community weight management clinic will act as gatekeeper to secondary care. Pharmacotherapy involves the use of orlistat and sibutramine based on NICE guidelines. Selection criteria include:
- Patients are offered a choice of drug
- Patients have a BMI > 30 without comorbidity, >28 with comorbidities,
- Patients have made previous serious attempts to lose weight by diet, exercise and /or behavioural modifications
- Orlistat is the preferred option for patients at significant cardiovascular risk and blood pressure over 145/90mm
- Support on diet, physical activity and behavioural strategies should be provided with the drug treatment
- Continuation of treatment should be supported by evidence of 5% weight loss at 3 months and 10% weight loss at 6 months

N.B: the NICE guidance have been aligned for simplification.

Patients would be referred to secondary care for consideration of surgery where:

- 5%/10% target weights have not been reached,
- patients have uncontrolled comorbidities which need hospital treatment
- medical investigations are needed
- BMI >40

This level of support would best be provided within the primary care or community setting by a consultant/ special interest GP/advanced practitioner led clinic. Currently obesity clinics are offered by some GPs and 3 hospital outreach clinics are run with approximately 25% of patients referred for obesity. There may be some flexibility within existing provision to meet parts of the specification with some additional funding.

MAINTENANCE:

Maintenance would be available through the commercial venture and primary care.

COST PROPOSAL:

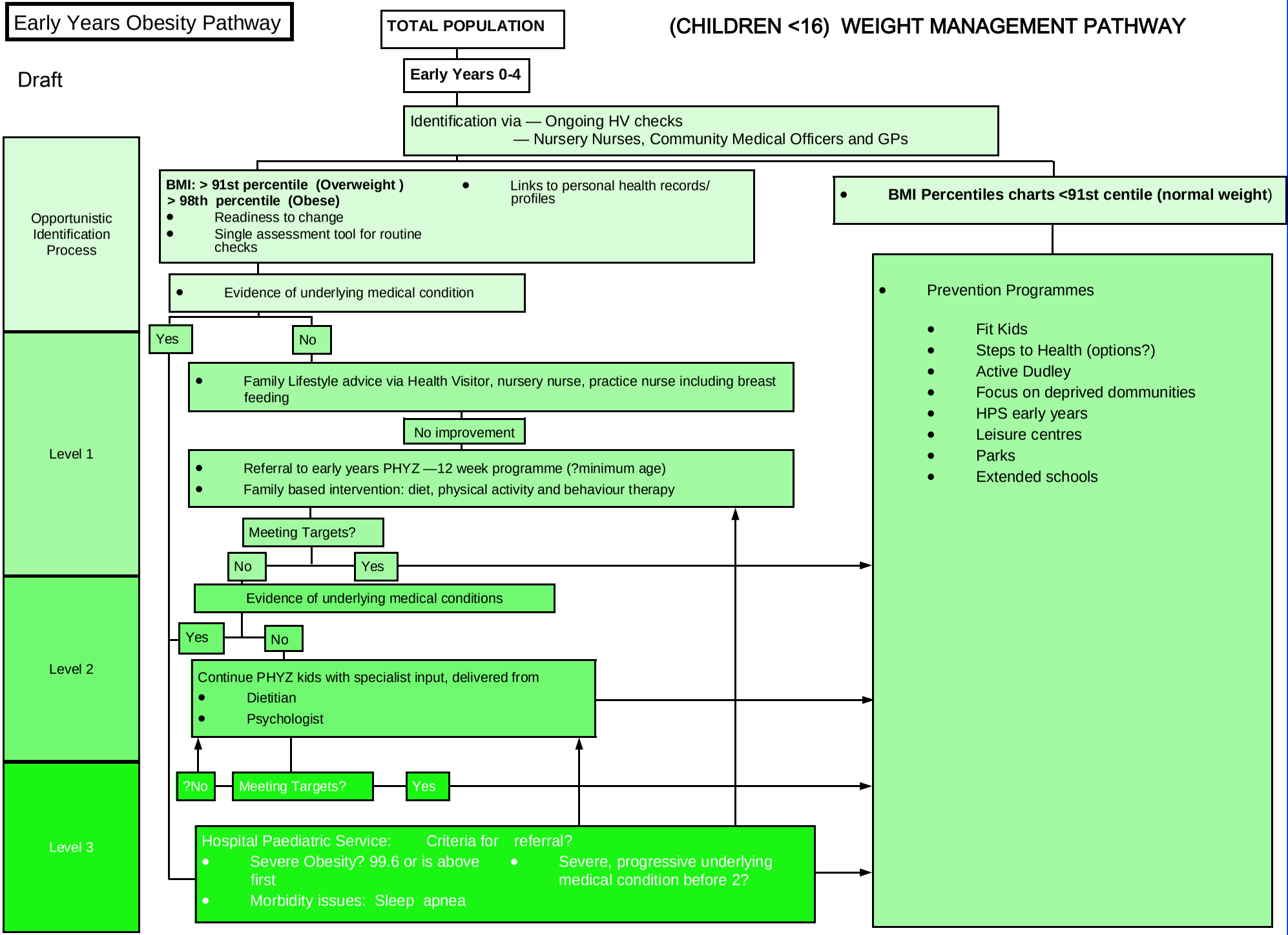
Costing has been attempted based on 5000 patients per year. There are 152,781 potential patients, and this figure represents an arbitrary 3.3% of potential patients. It is recommended that the proposal be run for three years with a reassessment of referral rates and outcomes at this time.

Costings are estimated at £340k for 5000 patients per year based on 2004 prices.

Early Years Obesity Pathway

Draft

(CHILDREN <16) WEIGHT MANAGEMENT PATHWAY



Appendix 4

Primary School Age Obesity Pathway

Draft

(CHILDREN< 16) WEIGHT MANAGEMENT PATHWAY

TOTAL POPULATION

Primary School Age 5—10

Identification via — SHA School Entry Checks year 1, age 5

Systematic Identification Process

BMI Percentile

(obese > 98th and overweight > 91st)

- Readiness to change
- Single assessment tool for routine checks
- Links to personal health records/ profiles

- **BMI Percentiles charts <91st centile (normal weight)**

- Evidence of underlying medical condition

Yes / No

Level 1

- Referral to Primary School Phyz Kids, family based intervention
  - 12 week programme
  - Diet, physical activity and behaviour therapy

Meeting Targets?

No / Yes

Level 2

Evidence of underlying medical conditions

Yes / No

Continue PHYZ kids with input from specialist ,delivered alongside Phyz kids?

- Dietitian?
- Psychologist

?No / Meeting Targets? / Yes

Level 3

Hospital Paediatric Service: Criteria for referral?

- Severe Obesity? 99.6 or is above first
- Morbidity issues: Sleep apnea
- Severe, progressive underlying medical condition before 2?

- Prevention Programmes
- Borough wide co-ordinated package, bringing together existing elements into a recognised package (P.H campaign)
  - Fit Kids
  - Steps to Health (options?)
  - Active Dudley?
  - Focus on deprived communities
  - HPS early years
  - Leisure centres
  - Parks
  - Other?
  - Extended schools
  - HPS
  - Walking buses

Appendix 4

Secondary School Age Obesity Pathway

Draft

TOTAL POPULATION

Secondary School Age 11—16

(CHILDREN< 16) WEIGHT MANAGEMENT PATHWAY

Identification via: Age 11, Method: TBA

Systematic Identification Process

BMI Percentile charts >/91st centile

- Readiness to change
- Single assessment tool for routine checks
- Links to personal health records/ profiles

- **BMI Percentiles charts <91st centile (normal weight)**

- Prevention Programmes
- Borough wide co-ordinated package, bringing together existing elements into a recognised package (P.H campaign)
  - Fit Kids
  - Steps to Health (options?)
  - Active Dudley?
  - Focus on deprived communities
  - HPS early years
  - Leisure centres
  - Parks
  - Other?
  - Extended schools
  - HPS
  - Walking buses

Level 1

- Referral to Phyz Kids Secondary School family based intervention 12 week programme
  - Diet, physical activity and behaviour modification

Yes

- Evidence of underlying medical condition

Meeting Targets

No

Yes

Level 2

Continue PHYZ kids with input from specialist, delivered alongside phyz kids?

- Dietitian
- Psychologist

?No

Meeting Targets?

Yes

Level 3

Hospital Paediatric Service: Criteria for referral?

- Severe Obesity? 99.6 or is above first
- Morbidity issues: Sleep apnea
- Severe, progressive underlying medical condition before 2?

Appendix 4

What is an active lifestyle?

There's an active and an inactive way to do many everyday things. Compare these examples; the energy used in each is expressed in kilocalories (kcals). Aim to do as many of the active options as you can and see if you notice a difference, remember these are indicators but any activity is better than none!

Inactive way	Kcals used	Active Way	Kcals used
Use TV remote	<1	Get up to change channel	3
Phone calls 30 min, reclining	4	Phone calls 30 min, standing	20
Hire home help	0	Iron 30 min, vacuum 30 min	152
Heat up a microwave meal	15	Cook 30 min	25
Buy pre-sliced vegetables	0	Prepare vegetables 15 min	10–13
Use leaf blower 30 min	100	Rake leaves 30 min	150
Hire a gardener	0	Garden or mow lawn 30 min	360
Use car wash	18	Wash and wax car 1 hour	300
Let dog out of back door	2	Walk dog 30 min	125
Drive 40 min, walk 5 min	22	Walk 15 min to bus	60
Email a friend, 4 min	2-3	Walk 1 min, stand and talk 3 min	6
Take lift up three floors	0.3	Climb three flights of stairs	15
Park at door of supermarket	0.3	Park and walk 2 min	1.6
Watch TV for 1 hour	30	Walk and shop 1 hour	145

Doing these kinds of things regularly makes a big difference to the amount of energy you use.

Inactive Way	Active Way
Uses 1700 kcals per month	**Uses 10500 kcals per month**

The difference of 8800 kcal per month is the energy equivalent of losing or gaining 2.5 pounds/1.1 kilos per month or 30 pound/13.6 kilos per year.

Produced by the Physical Activity Team, Public Health Directorate

Dudley Beacon and Castle NHS Primary Care Trust

Dudley South NHS Primary Care Trust