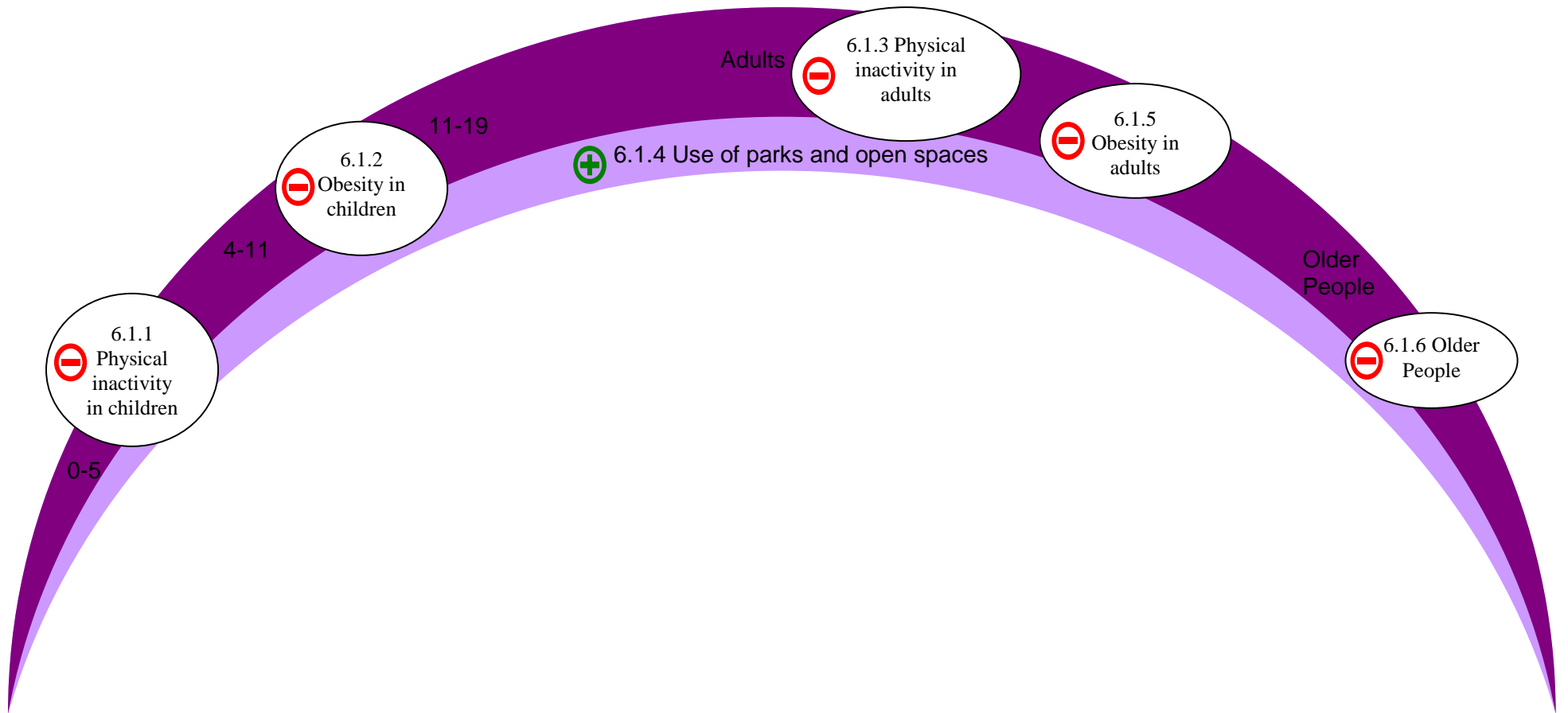


Chapter 6: Get Active



Document control		
Document title	Get Active Chapter	
Purpose		
Author	Gemma Bathurst – Whittle & Julie Hotchkiss	
Date of publication		
Valid until		
Owner/responsibility		
Distribution		
Version	Date	Comments
Final before numbering	17.03.2010	
Updated with more recent data	08.07.11	Emma McNamara
Final editing	23.08.11	Julie Hotchkiss

Please note that these recommendations come from the assessment and are not (necessarily) the policy of any of the contributing agencies.

Contents Page

Section Number	Section Name	Page Number
	Summary of recommendations	5
6.0	Introduction	8
6.1	Analysis	9
6.1.1	Physical inactivity in children	9
6.1.2	Obesity in children	10
6.1.3	Physical inactivity in adults	11
6.1.4	Use of parks and open spaces	12
6.1.5	Obesity in adults	13
6.1.6	Older people	14
6.2	Interventions and evidence	15
	Before birth	15
	Children and Families, and Adults	16
	Exercise Referral Schemes	18
	Older people	21

Linked Documents

Fundamental movement skill competence among 10-11 year old children: Year 2 PEPASS Physical Activity Project: A report produced by Liverpool John Moores University for Wigan Council, August 2010



2010 PEPASS
Project FMS result...

LEAP IPAQ Analysis: Preliminary Results January 2011



IPAQ REPORT
summary 2011.doc.d

Health Needs Assessment – Physical Activity



Recovered HNA -
Physical Activityv4.dc

This document represents a snap-shot – a picture at a single point in time. Assessing needs is an on-going process, and updates and new sections will be added over the year, and posted on the [Wigan Life pages](#).

Summary of recommendations

Please note that these recommendations come from the assessment and are not (necessarily) the policy of any of the contributing agencies.

These selected recommendations are from the whole JSNA, not just this chapter, but have relevance to the theme of Get Active. In order to understand the background to the recommendations the reader is to refer to the relevant chapters for the analyses and review of evidence which has informed the recommendations.

Recommendation 1

Leaders at all levels and across all agencies (statutory, voluntary and private sector) need to use existing power and resources to develop and maintain mental capital and to promote wellbeing by considering how they can increase the 5 ways to wellbeing:

Get Active
Connect
Take Notice
Keep Learning
Give

Ageing Population

The borough population is ageing. In 2001 there were 43,000 people aged over 65, currently there are 49,000. By 2033 there will be an extra 31,000, making a total of 80,000. In 2033, if current trends continue, 19,000 of the over 65s will be obese.

Recommendation 2

In order to help reduce the demand for services which will result from the ageing of the population, investment needs to be redirected into prevention (of ill health) for older people. We need to support local community organisations and the voluntary sector to keep people actively engaged as they get older, to prevent deterioration and dependence. We need to ensure that commissioned services for leisure and culture target middle-aged to older people to keep them active and engaged for as long as possible. This may mean the services changing their offer to clients.

Historically NHS investment in Physical Activity services has tended to be concentrated in the top two tiers of the 'at risk' pyramid with an emphasis on treatment - rather than prevention across all relevant population groups. Future investment should be balanced across this investment pyramid.

Interventions to increase physical activity should focus on activities that fit easily into people's everyday life (such as walking), should be tailored to people's individual preferences and circumstances and should aim to improve people's belief in their ability to change (for example, by verbal persuasion, modelling exercise behaviour and discussing positive effects). Ongoing support (including appropriate written materials) should be given in person or by phone, mail or internet.

The prevalence of dementia is projected to rise. One in 8 people aged over 80 years has dementia. Currently there are predicted to be about 3,100 people with dementia in the borough. GP registers record less than half this amount, about 1200. The NHS Continuing Care team have 203 clients "on their books": and the local authority pays for approximately 260 people with dementia, the costs for these 463 patients alone is estimated to be in excess of £12M per year.

Evidence = Many interventions slow the development of dementia – the 5 ways to wellbeing encompass most of them, i.e keeping people physically and mentally active, connected with their communities and “giving something back” and continually learning.

Get Active

The population of the developed world has been getting steadily less active over the last few decades. The increasing number of cars, labour-saving devices and inactive leisure pastimes such as watching TV and playing computer games have all contributed to the decline.

Many children in Wigan do not achieve the recommended 60 minutes of physical activity per day. Local research found that children were more active on weekdays, which suggests that when they had the day free to play, they were not engaging in physical play, nor walking or cycling to various places where they may be going. Nearly 10% of children in Reception (4 or 5 years old) are obese, and by the time they leave primary school (Year 6) when they are 10 or 11, nearly 20% are obese.

Recommendation 15

It is vitally important to maintain, and increase the proportion of the school week devoted to physical activity. Particular attention should be paid to modifications to school policies and use of school environments by the wider community when school closed.

Recommendation 16

Encourage active play/make streets more child-friendly by ensuring the external environment is safe and attractive. Introducing a 20 mph speed limit, and using Road Safety Officers to teach children how to play safely on pavements would help create confidence in parents to let their children “play out”. Encourage families to be more active in their daily lives, e.g. walking and cycling to school and shops, using parks and informal play space. This means the local authority should direct its resources to making and keeping the walking environment appealing, e.g. well-paved, well-lit and clear of undergrowth and litter.

Recommendation 17

Primary care practitioners (GP, practice nurse, healthcare assistant) should take the opportunity, whenever possible, to identify inactive adults and advise, encourage and negotiate with them to aim for 30 minutes of moderate activity on 5 days of the week (or more).

Recommendation 18

Continue to support the [Lose Weight, Feel Great](#) [weight management programme](#).

Recommendation 19

Monitor weight at the population level: Monitoring of weight status should continue, in both children and adults, children at school and adults at their GP surgery. Data from these measurements should be collated and used to inform and evaluate population strategies.

Environment and Sustainability

Recommendation 24

Promote healthy activity by retaining and improving parks and open spaces, sports pitches and facilities for community including use of school sports facilities, providing adequate and accessible play space for children.

Recommendation 27

Promote behavioural change through “Active Travel”, to encourage more drivers to leave the car at home and use active modes of travel to increase levels of physical activity and reduce carbon emissions.

Recommendation 28

Promote a refreshed approach to road safety education, training and publicity, to support communities to use active travel modes for local journeys.

Recommendation 29

Adopt a new road user hierarchy within Transport Planning:

- disabled people as pedestrians, or wheelchair users
- able-bodied pedestrians
- cyclists
- public transport users
- motorists

Assess all works to ensure this hierarchy is being used.

Recommendation 36

Commissioners should specify data to be collected in contracts with providers. Record level data should be made available to analysts (in compliance with Information Governance regulations). This data needs to include demographic details (age, sex, ethnicity, post code) to enable Equality Impact Assessments and Health Impact Assessments to be undertaken.

Recommendation 37

Commissioners must continue to buy-in accessible, locally appropriate interpreting services (including British Sign Language) for use in all commissioned health and social care services, making Cultural Competence training mandatory for all service providers.

6.0 Introduction

The population of the developed world has been getting steadily less active over the last few decades. The increasing number of cars, labour-saving devices and inactive leisure pastimes such as watching TV and playing computer games have all contributed to the decline.

Physical activity can build mental capital in the following ways :

- It is required for healthy growth, development of muscles and bones, increased cardiovascular fitness necessary for a healthy start in life
- It improves mental well-being in various ways, for instance
 - 1) being outdoors in green spaces has benefits beyond that of physical activity in itself
 - 2) much physical activity involves social interaction
- It keeps adults healthier by preventing or delaying over 20 conditions, including the “vascular diseases”: heart disease, stroke and Type 2 diabetes – the biggest contributors to lower life expectancy in Wigan, 2 years less than the England average
- It promotes health in those with long-term conditions, people with all types of disease can benefit from physical activity

Physical inactivity produces negative effects on mental capital in the following ways:

- Inactivity is the major contributor to the increase in excess weight in the population, the “obesity epidemic”
- Parental inactivity is linked to inactivity in their children, and subsequent lack of play and stimulation for children – so necessary for the child to reach its full potential
- People using cars rather than walking or cycling, particularly for short journeys increases local congestion
- More cars on the road increases fear of accidents, which makes people less likely to cycle and walk creating a vicious circle
- There are parallels in increases in physical inactivity and obesity to climate change

In the most recent Chief Medical Officer’s Annual Report Sir Liam Donaldson states that the harm caused by inactivity is very substantial,

*“Inactivity pervades the country. It affects more people in England than the combined total of those who smoke, misuse alcohol or are obese. Being physically active is crucial to good health. If a medication existed that had a similar effect on preventing disease, it would be hailed as **a miracle cure.**”*

Up to 70% of adults in England do not do the recommended minimum amount of physical activity and child fitness is falling by up to 9 percent every decade.

The cost of inactivity

Inactivity costs the NHS between £1 billion and £1.8 billion per year and this is before the costs of overweight and obesity are included (DH, 2009.) Adding the indirect cost to the wider economy such as working days lost to sickness absence and premature mortality, results in a total bill of up to £8.3 billion each year (DH, 2009).

Economic and clinical evidence demonstrates the case for investment in the promotion of physical activity in primary care through brief interventions. The National Institute for Clinical Excellence (NICE) endorses the use of brief interventions for physical activity as being clinically effective and costs effective in the long term (NICE, 2006). NICE established that in comparison with no intervention, a brief physical activity intervention in primary care costs between £20 - £440 per quality adjusted life year (QALY), with net costs saved per QALY gained of £750 - £3150. See the attached 'Physical activity in the Wigan Borough Health needs assessment, 2009 for further detail.

Detailed local area costs of physical activity were commissioned by the Department of Health (DH) (DH 2009). The cost data for the analysis were taken from the National Programme Budget Project (NPBP) and were related to the five diseases defined by the WHO as having some relation to physical inactivity. The population attributable fractions for physical inactivity in developed countries were applied to the costs per disease from the NPBP 2006/7 for these diseases. It should be highlighted however, that the figures should be interpreted with caution and used in conjunction with local knowledge.

For NHS Ashton Leigh and Wigan, the whole cost to the PCT of physical inactivity is estimated to be £5,907,880 and the total cost per 100,000 of the population £1,955,772. This ranks as 5th of the 10 Greater Manchester NHS PCTs.

6.1 Analysis

6.1.1 Physical inactivity in children

Current UK physical activity guidelines encourage children to undertake health-enhancing moderate-to-vigorous physical activity (MVPA) for at least 60 minutes over the course of the day. However, approximately 30% of boys and 40% of girls in the UK fail to meet these guidelines (The Information Centre, 2006). Riddoch et al¹ found that that only 5.1% of boys, and 0.4% girls meet current internationally recognised recommendations, where higher cut-off points are used). Levels of participation in sport and exercise also vary according to ethnicity. Further, a decline in walking, specifically continuous walks of at least 5 minutes on five or more days a week, and the mean number of days spent walking in the preceding week is evident as income increases.

On a local level, Wigan Physical Education, Physical Activity and School Sport (PEPASS) Research Project 2009 revealed the following issues:

¹ . Riddoch C et al (2007) Objective measurement of levels and patterns of physical activity, Archives of Disease in Childhood, 92:963-969 <http://adc.bmj.com/content/92/11/963.full>

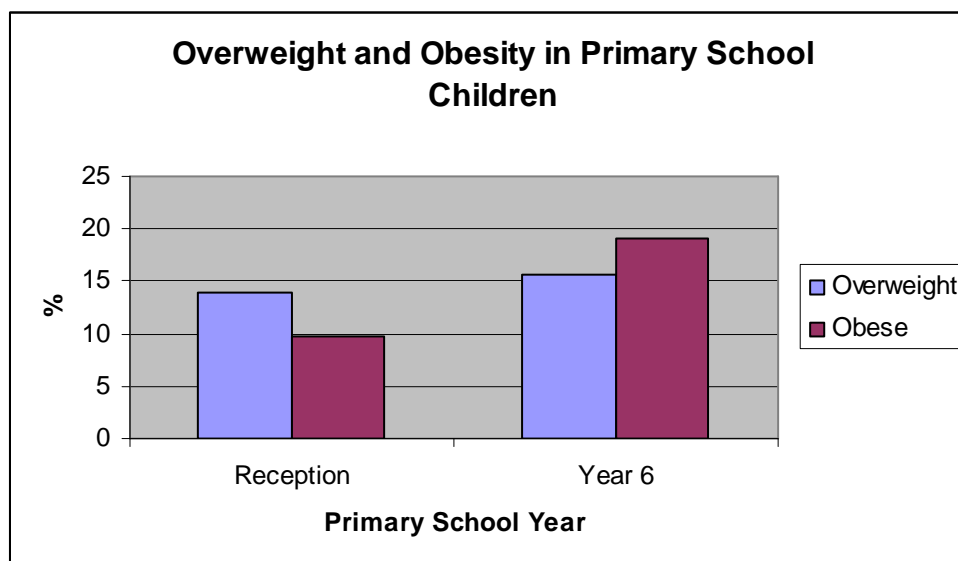
- Children engaged in most moderate or vigorous physical activity during week days, rather than at weekends.
- Most of this activity was accumulated during the school day which reinforces the importance of the school setting for physical activity promotion.
- Less than half of the children achieved the recommended minimum of 60 minutes daily.
- The children reported participating in a wide variety of physical activities. The boys tended to prefer sports whilst girls may be more likely to engage in individual, unstructured activities, as found in many similar studies.
- The lowest levels of physical activity, and physical self-perceptions (self-image) were achieved by girls and earlier maturing children

6.1.2 Obesity in children

There was a two- to five-fold increase in the prevalence of overweight and obesity in English children over the three decades up to the early 2000s, with the most rapid rise occurring in the 1990s². This is a national and borough-wide problem, with the national obesity rate at age 11 (Year 6) being 18%.

² Lobstein, T.J., James, W.P. and Cole, T.J. 2003. Increasing levels of excess weight among children in England. *International Journal of Obesity and Related Metabolic Disorders*, 27(9):1136-8.

Figure 1: Percentage of school children overweight and obese in Wigan schools 2010



Source: National Child Measurement Programme for England, provisional data 2010

The problem for Wigan appears to be worse than the national average. As can be seen from figure 1, provisional data from NCMP shows that 9.8% of children are obese in reception and 19.1% obese in year 6 (11 years of age). Over the 7 years in between entering and leaving school, obesity levels double. The relationship of obesity with socio-economic status is not straightforward, the rate of increase in obesity was higher in children from “manual groups”, although in some areas the gap narrowed³. Some local variation does exist, with the highest levels of childhood obesity being in Westleigh, Tyldesley, Platt Bridge, Ince, Atherton, Leigh, Hindley, Lowton, Abram, Worsley Mesnes.

6.1.3 Physical inactivity in adults

Evidence shows that for general health, a total of at least 30 minutes a day of at least moderate intensity physical activity on five or more days of the week is required to maintain good health⁴. Recent estimates suggest that around 6 out of 10 men, and 7 out of 10 women are not active enough to benefit their health⁵. Activity levels vary with age, gender, class and ethnicity.

The results of the Health Survey England survey 2006 showed that within Wigan, three in five residents only achieve a low level of activity (which includes no activity) One in four were moderately active, whilst around one in seven were highly active. This equates to 60% low activity, 25% moderately active and 15% highly active.

³ . Buchan, I, Bundred, P., Kitchiner, D., Canoy, D, and Cole, T. J. 20-8-2006. The spread of child obesity, after birth, through the 1990s in England (abstract). *Obesity Reviews*, 7(2):39-98.

⁴ Department of Health (2004) At least five a week: evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer. London: Department of Health.

⁵ Joint Health Surveys Unit (2003) Health survey for England 2003. London: The Stationery Office

The results of the survey also showed that males and females have a similar level of low activity, but while more females were moderately active, (26% compared with 22%), men are more likely to be highly active (17% compared to 13%).

In addition, levels of activity were higher among younger residents with one in three (34%) aged 18-24 being highly active compared with one in ten of those aged 55 and over (9%).

The latest Wigan health profile populated from the Active People Survey also shows that only 9.8% of adults (>16 years) in Wigan participated in moderate intensity sport and active recreation on 20 or more days in the previous 4 weeks, (averaging 5 or more times per week) which is worse than the England average (11.2%). Further, the survey also suggests that only 20% of Ashton, Leigh and Wigan adult residents participate in sport and active recreation, at moderate intensity, for at least 30 minutes on at least 12 days out of the last 4 weeks (equivalent to 30 minutes on 3 or more days a week). This is a slight decrease from last year. For further detail of the results of the survey please refer to "Physical Activity in the Wigan Borough Health Needs Assessment 2009".

Transport survey data also shows that the average distance walked by adults annually has fallen: from 255 miles in 1975/6 to 192 miles in 2003. Bicycle mileage for the same years also fell from 51 to 34 miles per year⁶.

Physical Activity in older people

Older adults are the least active section of the population and there is currently a large shortfall between current and ideal levels of activity. Only 17% of men and 13% of women between the ages of 65-74 meet the CMO's recommendations and this drops to 8% and 3% respectively over the age of 75 (HSE 2003). National self report data indicate that less than 30% of people aged 65-74 years and 15% of over 75's engages in any sport or exercise of moderate intensity sustained for at least 10 minutes in the previous 4 weeks.

Older people are not a homogenous group, and vary considerably in their ability, motivation and interest to be physically active at any given age and a wide range of programmes and opportunities for physical activity would therefore need to be available to address the needs of all older adults in relation to physical activity.

6.1.4 Use of parks and open spaces

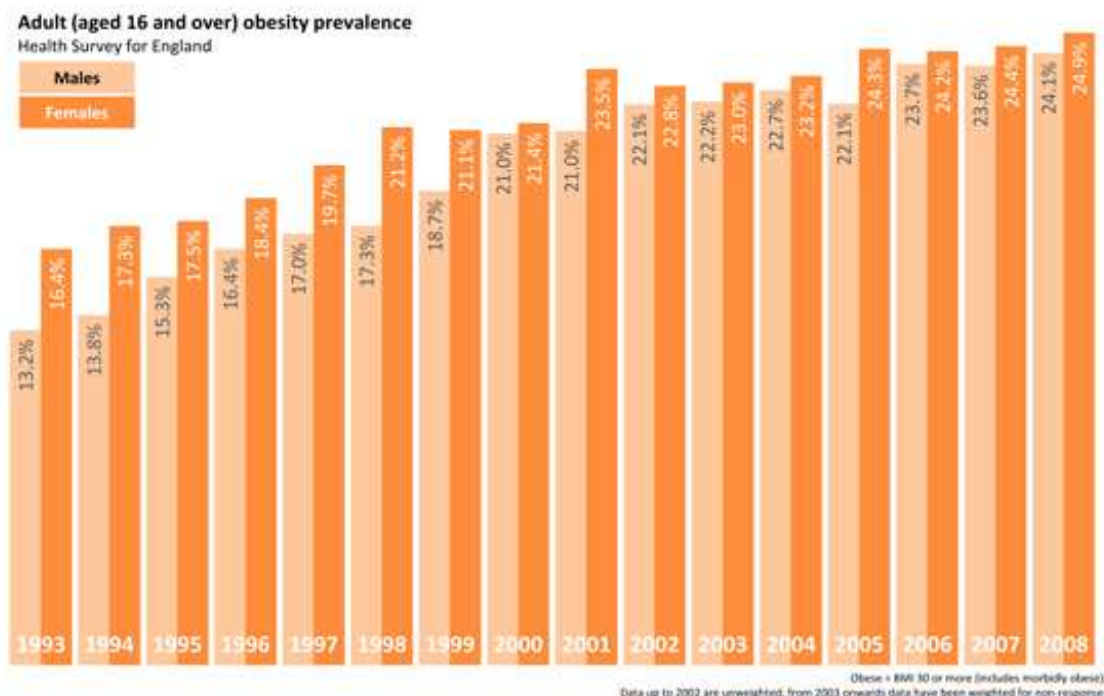
One source of physical activity is the use of parks and open spaces. Latest figures from the Wigan Leisure & Culture Community Survey shows that 40% of respondents had not visited any open spaces or parks provided or supported by the Trust for 6 months or more. Of the 27% of respondents who claimed to visit parks at least once a week, the highest percentage (42%) were from the Wigan North township, and the lowest percentage (8%) were from the Ashton Bryn Township. Of those respondents who said that they visited open spaces and parks at least monthly, 65% were aged 16-64, and 32% were aged 65+.

⁶ Office for National Statistics (2003) National Travel Survey: final results. London: The Stationery Office

6.1.5 Obesity in adults

As with children, decreasing physical activity is matched with increasing obesity, in fact the English obesity prevalence rose three- to four-fold across the two decades from 1980⁷, the trend to the most recent available data is shown below.

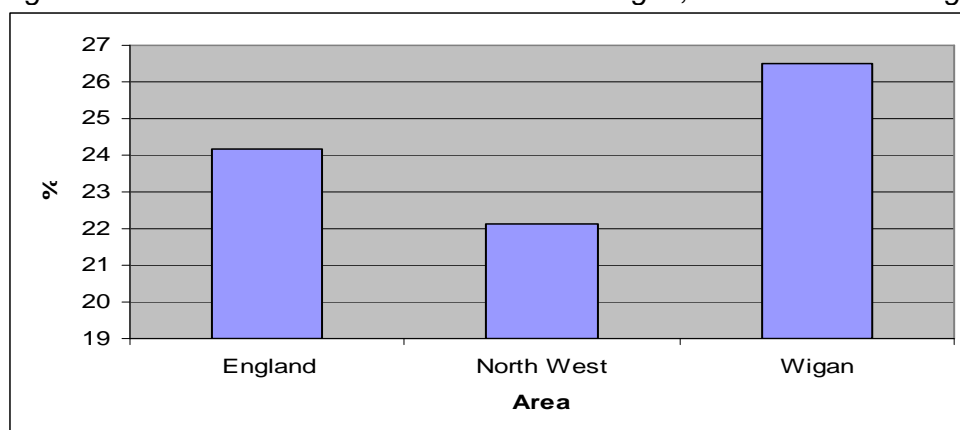
Figure 2: Trends in obesity prevalence, adults (16+ years), 1993 – 2008 England



Source: National Obesity Observatory, Health Survey England

There is a gender difference in the above trend, with males catching up, and in some years overtaking females, while both are becoming more obese. It is predicted that these numbers will have increased by the end of 2011. Once gained, weight is difficult to lose, therefore it is very important to focus on preventing people from gaining excess weight in the first place.

Figure 3: Estimate of adults who are obese in Wigan, North West and England 2010



⁷ . Bajekal, M., Boreham, R., Erens, B., Falaschetti, E., Hirani, V., Primatesta, P., Prior, G. and Tait, C. 1999. *Health Survey for England 1998*. 5[1]. London: The Stationery Office

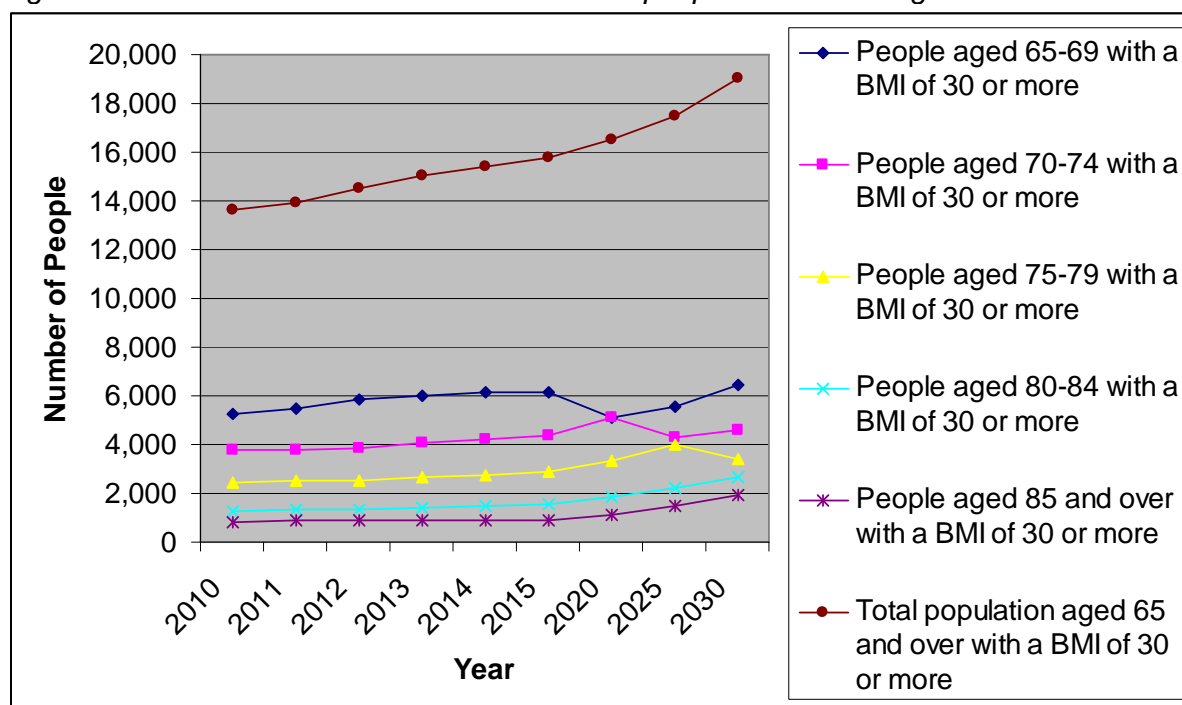
Source: Association of Public Health Observatories 2010, reporting Health Survey for England

The Health Survey for England has collected data on adults since 1991. This data is more robust than local survey data, as it is based on objective measurements, compared to self reports. For example the 2006 Wigan Lifestyle showed 20% of male adults and 21% male adults being obese, while the national estimates were 22% and 25% respectively. This is thought to be because people have a tendency to under report their weight through 'wishful thinking'.

6.1.6 Obesity in Older People

People are living longer which means that the over 65 population is growing. Mobility tends to decrease with age, and this is a major contributor to loss of independence. A study carried out by ESRC⁸ aimed to assess mobility patterns in successfully ageing adults. The study also aimed to assess the relationship between mobility, health and lifestyle by examining the predictors and consequences of mobility with a view to determining interventions that could have an impact on maintenance of mobility. The project indicated that changes occur as adults age, and initiation of activity may be more challenging for older adults especially later in the day. This suggests that scheduling and timing of exercise programmes for older people will be important if activity levels are to improve. Longitudinal measures also suggested that neuroticism (ungrounded fears for safety if moving), social network size (number of friends to visit and engage in activities with) and health are important predictors of current mobility in older people.

Figure 4: Predicted numbers of obese older people to 2030 in Wigan



Source: Projecting Older People Population Information System extracted 2010

⁸ McInnes, Lynn et al (2010) New metrics for exploring the relationship between mobility and successful ageing ESRC End of Award Report, RES-352-25-0023. Swindon: ESRC

As the number of over 65s increases over the next 20 years, so will the numbers of obese elderly, assuming there are no radical changes in behaviour over the next couple of decades. The people who are obese at 50 are likely to be obese at 70.

Not only obesity, but the onset of dementia can be delayed by keeping people active in middle age into old age, and if they haven't been active when young it is never too late to benefit from increasing activity.

6.2 Interventions and Evidence

Before birth - Physical Activity in 'mums to be'

Regular physical activity is important in the overall health and wellbeing of mums-to-be, new mums and her unborn child and will also help her to achieve a healthy weight after giving birth.

NICE provide the following advice:

Before pregnancy: Regular physical activity, combined with healthy eating, is important to help women to achieve or maintain a healthy weight before they become pregnant. If a pregnant women is obese (BMI of 30 or more) this will have a greater influence on her health and the health of her unborn child than the weight she may gain during pregnancy. Dieting during pregnancy is not recommended.

During pregnancy⁹: recreational exercise such as swimming or brisk walking and strength conditioning exercise is safe and beneficial; the aim of recreational exercise is to stay fit, rather than to reach peak fitness; if women have not exercised routinely they should begin with no more than 15 minutes of continuous exercise, three times per week, increasing gradually to daily 30-minute sessions (NICE CG43) – if this level of activity is too much they should start to build activity into their routines and avoid being sedentary as far as is possible; if women exercised regularly before pregnancy they should be able to continue with no adverse effects.

After pregnancy: if pregnancy and delivery are uncomplicated, a mild exercise programme consisting of walking, pelvic floor exercises and stretching may begin immediately. But women should not resume high-impact activity too soon after giving birth; after complicated deliveries, or lower segment caesareans, a medical care-giver should be consulted before resuming pre-pregnancy levels of physical activity, usually after the first check up at 6-8 weeks after giving birth (NICE PHG 27)

Recommendations

1. Increase the number of women with a BMI of 30¹⁰ or more, who may become pregnant or who have previously been pregnant, to achieve a healthy weight by linking with 'Lose Weight feel Great' adult weight management care pathway.
2. Increase the number of pregnant women, especially those with a BMI of 30 or more, who receive advice, information and support on the importance of a healthy weight during pregnancy by linking with the 'Lose Weight feel Great' maternity care pathway (currently under development).

⁹ The recommendations for during and after pregnancy are those issued by The Royal College of Obstetrics and Gynaecology and approved by NICE.

¹⁰ The Lose Weight Feel Great adult weight management pathway and maternity pathway accepts clients with BMI 25+.

3. Increase the number of women who receive advice, information and support to achieve a healthy weight after childbirth by linking with 'Lose Weight feel Great' maternity care pathway or adult weight management care pathway as appropriate

Children and Families, Adults:

The Chief Medical Officer (CMO) recommends that 30 minutes or more, of least moderate intensity physical activity a day, on 5 or more days per week is recommended for he

alth (DH 2004). This may be achieved by enabling people to accumulate as much moderate exercise as possible over the course of the day (lifestyle related Physical activity) plus additional bouts of vigorous exercise where possible. 30 minutes may be achieved in one session or through several shorter sessions of 10 minutes or more (Murphy, Nevill & Hardman, 2000). For weight loss / maintenance, extended bouts of cardiovascular exercise - 30 minutes or more, of **at least** moderate intensity physical activity is required. This guidance supplements the more vigorous exercise training guidelines of continuous aerobic activity, on 3-5 days per week at a vigorous intensity for 15-60 minutes per session (American College of Sports Medicine (ACSM) 1990).

Further, the American College of Sports Medicine (2007) have recently updated their guidelines and currently recommend for healthy adults under 65 years: Moderate intensity cardio (aerobic) activity for at least 30 minutes a day, on 5 days per week, or do vigorously intense cardio activity for 20 minutes per day, on 3 days per week. In addition to 8-10 strength training exercises with 8-12 repetitions of each exercise, twice per week. For weight loss or maintenance of weight loss, ACSM recommend between 60-90 mins /day of physical activity.

There is a dearth of research on the cost-effectiveness of interventions designed to increase physical activity. NICE Guidance on physical activity assessed 4 commonly used interventions to increase physical activity: <http://guidance.nice.org.uk/PH2/Guidance/doc/English> and recommendations 1 to 6 use this evidence.

The authoritative, cross-government "Tackling obesity: Future challenges" Foresight report¹¹ describes the complexity and inter-relationships of the obesity creating system. It emphasises the futility of isolated approaches. What is needed is a system-wide approach, involving strategic and policy approaches across the board, operating at many levels, national and local and across the life course. http://www.bis.gov.uk/assets/bispartners/foresight/docs/obesity/obesity_final_part1.pdf

The Foresight report also recommended interventions to change the environment in favour of cycling and walking as one of its top 5 policy choices. It is likely that the greatest impact would be achieved by a focus on short journeys. 70% of all trips are less than 5 miles long (8km). Half of these are made by car. A distance of 5km is generally thought to be a reasonable cycling distance, and 3km can be walked. Reducing the proportion of journeys driven has the potential to make improvements to road safety; air quality; journey ambience; social inclusion, noise and climate change,

¹¹ Foresight "Tackling obesity: Future challenges". Project report", 2nd edition. Government Office for Science (not dated on report, but released in 2007)

in addition to the associated health benefits. Interventions which are effective at promoting a modal shift are: targeted behaviour change programmes; commuter subsidies; building new public transport infrastructure. Other interventions which promote walking and cycling are traffic calming; construction of trails and cycle networks; road closures; road user charging and safe routes to schools (NICE guidance).

Interventions to promote walking include those tailored to people's needs, **targeted at the most sedentary** or at those most motivated to change, and delivered either at the level of the individual (brief advice, supported use of pedometers, telecommunications) or household (individualised marketing) or through groups. (Ogilvie, 2007). It has been estimated that in England, if a group of 120 healthy individuals aged over 60 years started to walk 2 miles per day, then over 10 years there would be approximately 20 less deaths, 7 less heart attacks, 3 less strokes, 2 less new diabetics and 13 less people with some disability from osteoarthritis of the knee.

Walking and cycling interventions are most effective when utilising ecological models that recognise multilevel components: Population wide, community and locality and one to one support. The commissioning of such services should be clearly linked to local Greenspace strategies. Commissioners should also only endorse pedometers and walking and cycling schemes to promote physical activity that are part of a properly designed and controlled research study to determine effectiveness. Measures should include intermediate outcomes such as knowledge, attitude and skills, as well as measures of physical activity levels, (NICE Guidance PH2). It is noted that interventions to promote recreational walking and cycling are important in effecting a modal shift for active transport..

Further, Cycling England's Cycling Demonstration Town Programme (Sloman, 2009) has shown an average increase in cycling of 27% across the six demonstration towns; a reduction of 10% in the proportion of people classed as sedentary and a benefit to cost ratio of at least 3:1, with reductions in mortality accounting for the greatest part of the benefit.

There is a lack of research into population measures to help people *maintain* a healthy weight¹². Nevertheless the NICE clinical guideline "Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children (NICE clinical guideline) comes up with some consensus based recommendations. Further information can be found at:

www.nice.org.uk/page.aspx?o=Obesity

In Wigan Borough there are large amounts of green space and it is vital that this is used to its full potential. NICE Guidance on physical activity and the environment (NICE, 2008b) highlighted the need for research to develop knowledge about physical activity and how it is influenced by the environment. Recent research has shown that the characteristic of a person's living and working environment does influence their physical activity. The inequality in all-cause and circulatory disease mortality related to income deprivation is lower in populations who live in the greenest areas. There is also an independent association between residence in the most green areas and decreased rates for all cause and circulatory mortality. This highlights the potential for improvements in health by developing allotments for green

¹² Hill, J.O., Thompson, H. and Wyatt, H. 2005. Weight maintenance: what's missing? *Journal of the American Dietetic Association*, 105(5):S63-S66, Supplement

gyms, community gardens and 'grow your own' programmes. This not only supports people to be physically active and eat healthy produce, but supports the sustainability agenda, through reducing food miles and packaging.

Exercise referral schemes

High quality "Exercise on Prescription" schemes based on the NQAF should be focused on those with existing disease or those at high risk, who fall outside the overarching advice to achieve 30 minutes moderate activity on at least 5 days a week. Recent audits have highlighted that there is substantial variation between practices in terms of referral into the local exercise on prescription scheme. There are many patients who would benefit from this intervention but are not currently benefiting. Evidence suggests that this is an area where the 'inverse care law' applies and those in greatest need are least likely to benefit. This suggests significant opportunities exist to improve care.

The Active Living Team, Wigan Leisure & Culture Trust, has been collecting data on users of their referral services (includes the local exercise on prescription scheme "Steps to Health", and 12 other programmes for several years. 3731 participants who had a start date between January 2007 to end November 2009 completed a baseline and 12 month assessment with a questionnaire [the Short form International Physical Activity Questionnaire (IPAQ)]. The summary results are presented below.

Figure 5: *Change in activity category over one year, in **male** participants of Active Living Team programmes, 2007 – 2009 to 2010*

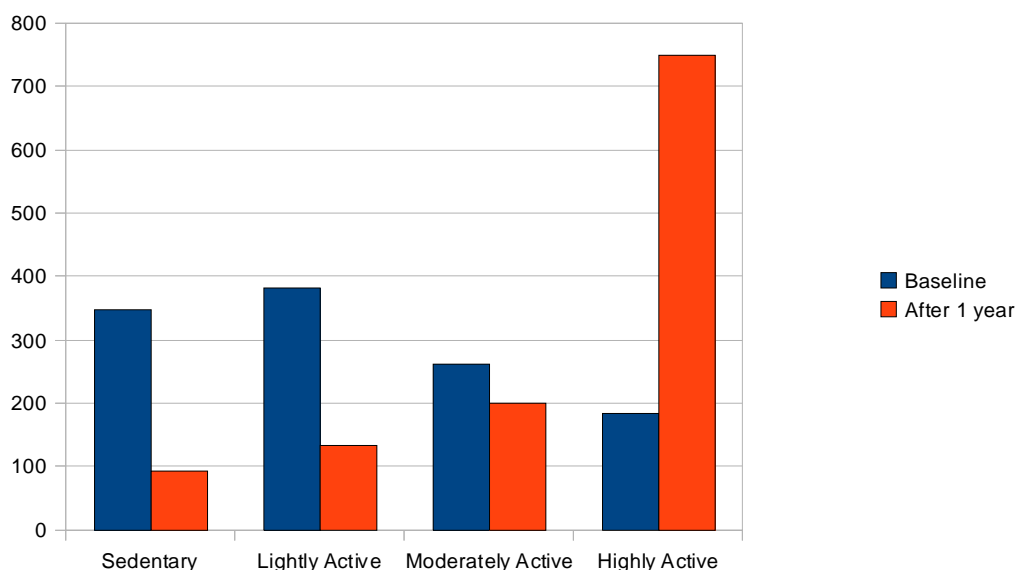
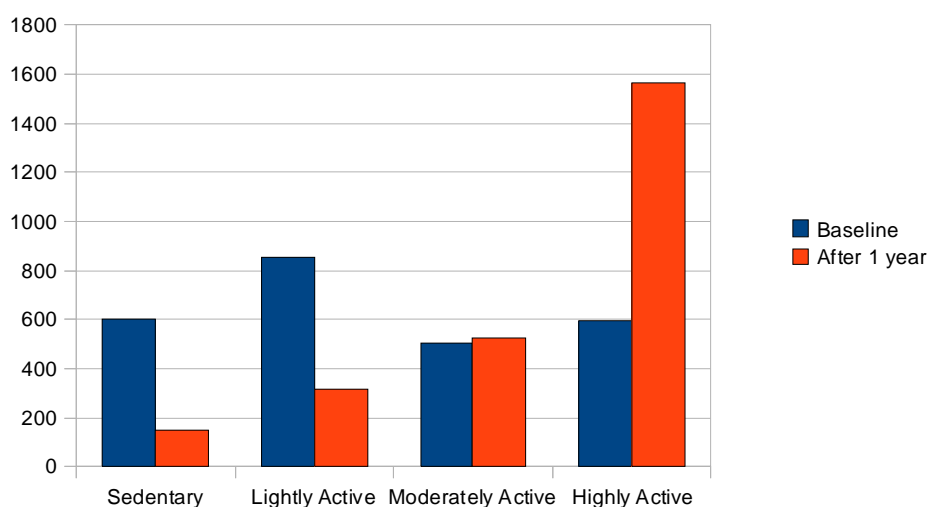


Figure 6: Change in activity category over one year, in female participants of Active Living Team programmes, 2007 – 2009 to 2010



It should be noted that the scales are not the same, about twice as many women used the referrals services than men.

Clearly in both men and women activity increases significantly at one year from initial attendance for a baseline assessment. The sample will be biased in that those who have become more active will be more likely to want to respond, whereas those whose activity has got worse but will less likely to respond, but nevertheless the results show an impressive.

The data collection started when Wigan was one of the 9 Local Exercise Action Pilots in England. The overall findings from the pilots were that all LEAP interventions were cost-effective, but the economic analysis was unable to identify which intervention types were the most cost-effective. The programmes were most successful in reaching females, therefore consideration needs to be given towards encouraging males, in terms of timing, type of activity, venue, marketing and availability of male instructors, and the marketing needs to be carefully targeted. Sustained effort is required to reach sedentary populations, as they are likely to be 'hard to reach'. Greater concentration of time and skilled staff and resources to make an impact with these groups. Ensure enjoyment of and confidence in the activity of choice, as this leads to further sustained activity.

Brief interventions in primary care

GPs, Practice Nurses and Healthcare Assistants can deliver "brief interventions" – so-called because they only take a few minutes to do. The "Let's Get Moving" behaviour change programme has demonstrated its feasibility for use in primary care and wider implementation and which utilises motivational interviewing, a patient centred approach which elicits and strengthens people's intrinsic motivation to change their behaviour. (NICE guide behaviour change; Hillsdon & Thorogood, 1999).

Primary care practitioners (GP, practice nurse, healthcare assistant) should embed the promotion of physical activity into their day to day work and systematically identify inactive adults and advise, encourage and negotiate with them to aim for 30 minutes of moderate activity on 5 days of the week (or more). The interventions and tools used should be in line with the Department of Health's Let's Get Moving Care

Pathway. This includes use of a validated tool, such as the Department of Health's general practitioner physical activity questionnaire (GPPAQ), to identify inactive individuals. (N.B. This tool is currently used in Wigan as part of the Find & Treat CVD screening programme). They should agree goals with the patient and follow up at intervals over 3 to 6 months (NICE Guidance PH2).

Recommendations

1. **Develop a co-ordinated local strategy** to increase physical activity from birth to adulthood (0-18 years) and reduce time spent in sedentary behaviours, in line with the CMO's recommendations, targeting those in most need and which involves and consults with children and young people and has support from senior management across organisations.
2. **Maximise schools' potential to promote physical activity** Recent reviews have demonstrated that school-based interventions tend to be effective. Simple intervention strategies focused on classtime physical activity and playtime may be effective in increasing daily physical activity levels at school. Particular attention should be paid to modifications to school policies and use of school environments by the wider community when school closed.
3. **Encourage Active Play/make streets more child friendly**
Encourage active play, e.g. dancing and skipping, by ensuring the external environment is safe and attractive. Introducing a 20 mph speed limit, and using Road Safety Officers to teach children how to play safely on pavements would help create confidence in parents to let their children "play out".
4. **Encourage families to be active**
Encourage families to be more active in their daily lives, e.g, walking and cycling to school and shops, using parks and informal play space, which are all free. This means the local authority should direct its resources to making and keeping the walking environment appealing, e.g. well-paved, clear of undergrowth and litter. Where possible physical activity commissions should maximise upon Wigan Borough's existing community assets such as its greenspace, parks and other outdoor recreational resources.
5. **Promote Brief interventions in primary care**
Primary care practitioners (GP, practice nurse, healthcare assistant) should take the opportunity, whenever possible, to identify inactive adults and advise, encourage and negotiate with them to aim for 30 minutes of moderate activity on 5 days of the week (or more). They should use their judgement to determine when this would be inappropriate (for example, because of medical conditions or personal circumstances). They should use a validated tool, such as the Department of Health's general practitioner physical activity questionnaire (GPPAQ), to identify inactive individuals. (N.B. This tool is currently used in Ashton Leigh and Wigan as part of the Find & Treat CVD screening programme). They should agree goals with the patient and follow up at intervals over 3 to 6 months (NICE Guidance PH2)
6. Ensure the existing **Exercise on Prescription scheme** is appropriately targeted and that it is systematically offered as part of a fully integrated care pathway approach. "Exercise on Prescription" schemes based on the NQAF should be focused on those with existing disease or those at high risk, who

fall outside the overarching advice to achieve 30 minutes moderate activity on at least 5 days a week. Recent audits have highlighted that there is substantial variation between practices in terms of referral into the local exercise on prescription scheme. There are many patients who would benefit from this intervention but are not currently receiving it.

7. **Walking and cycling interventions** are most effective when they are multilevel, population wide, community and locality and one to one support. The commissioning of such services should be clearly linked to local greenspace strategies. Interventions to promote recreational walking and cycling are important in effecting a modal shift for active transport.
8. **Continue to support “Lose Weight Feel Great”** and ensure that the physical activity element is fully evaluated. Further research needs to be done to evaluate the impact of this programme on people's maintenance of increased physical activity levels in the long term.
9. **Increase support for active travel initiatives**, including Active Travel Wigan [Interventions to increase physical activity should focus on activities](#) that fit easily into people's everyday life (such as walking), should be tailored to people's individual preferences and circumstances and should aim to improve people's belief in their ability to change (for example, by verbal persuasion, modelling exercise behaviour and discussing positive effects). Ongoing support (including appropriate written materials) should be given in person or by phone, mail or internet, (NICE Guidance CG43). The Active Travel Wigan infrastructure incorporates these features.
10. **Monitoring of weight status should continue**, in both children and adults, children at school and adults at their GP surgery. Data from these measurements should be collated and used to inform and evaluate population strategies.

Older People

Long-term regular physical activity, including walking, is associated with significantly better cognitive function and less cognitive decline. For every mile walked per day, over a sustained period of time, there is a 13% reduction in risk of cognitive decline.

As previously mentioned a supportive built environment involving the local community (including older adults) and experts in the development of policies and plans, the prioritisation of the need to be active for all including those with impaired mobility and access to safe, attractive and welcoming public open spaces on foot (NICE guidance (17). Particular attention should be paid to the needs of hard to reach and disadvantaged communities, including minority ethnic groups, when developing service infrastructures to promote physical activity

There is emerging evidence of the importance of physical design in preventing falls among people with dementia, with particular attention paid to colour contrast, floors and lighting (19). Falls: the assessment and prevention of falls in older people. *NICE clinical guideline* no. 21 (2004). Available from: www.nice.org.uk/CG021

Occupational therapy and physical activity interventions to promote the mental health and well-being of older people should be promoted in residential care. (NICE guidance.

Evidence suggests that programmes should be of a longer duration (18 months), either group/class or home-based activity, tailored to individual needs with choices which are accessible and which include cognitive-behavioural strategies and goal setting along with telephone support and continued contact.

Key messages to maximise the impact of lifestyle advice should focus on improving strength and balance and encouraging people to personally choose the advice and activities that suit them (Help the Aged).

Evidence also suggest that the use of seniors as motivators and counsellors; accessible local activity classes (both for older people generally and also for specific groups (e.g. those with arthritis); providing participants with educational materials with information; support and skills training can be effective in overcoming barriers and increase their physical activity levels (<http://sbs.ucsf.edu/iha>).

Specific activities that promote improved strength, coordination and balance are particularly beneficial for older adults and are particularly effective in reducing the incidence of falls and for tasks of daily living such as walking or getting up from a chair. These can be group or home based activity delivered by specialist trained professionals. (Department of Health.

Recommendations

1. **Keep older people active and independent**

Older people are not an homogenous group, and vary considerably in their ability, motivation and interest to be physically active at any given age, and a wide range of programmes and opportunities for physical activity should therefore be provided.

2. **Increase the use of evidenced based population level interventions to increase activity levels**

Historically investment in Physical Activity services has tended to be concentrated in the top two tiers of the 'at risk' pyramid with an emphasis on treatment - rather than prevention across all relevant population groups. Ideally from a public health perspective, investment needs to take place across all levels of this model. The cost/head ratio reduces as you move down the model. Future investment should be balanced across this investment pyramid with more investment being made in areas of public health capacity building (bottom two tiers of the pyramid) which might include policy alignment, building infrastructure, training volunteers and Health Trainers to deliver front line brief interventions around physical activity.

3. **Targeted interventions** aimed at those older adults who have particularly low levels of activity and/or who have the greatest potential health gain: black and minority ethnic elders, older men, isolated older people living at home (and in rural communities) and those in the transitional phase of life (DoH, 2001), that is, those who are losing physical function and on a spiral of decline in relation to for example, mental health. Post menopausal women over the age of 65 should also be targeted and all adults over the age of 80 or those who have had a previous fall, due to their increased risk of falling (BHF, 2009). Social support; Active choices, health contracts; perceived safety; performance feedback; positive reinforcement are recommended for a safe and effective physical activity programme (The National Council on Active Aging).

4. **Balance, strength and flexibility exercises;** moderate and/or vigorous exercise are recommended for older adults by the American College of Sports Medicine and the American Heart Association (13). The Chief Medical Officers new recommendations for older adults will be based on these guidelines.

5. **Falls reduction programmes.** A multi component programme which incorporated leg strengthening and progressive balance re-training exercises, a walking plan, individually prescribed exercises, instruction booklet with instructions for each exercise and ankle cuff weights to provide resistance for strengthening exercises, activity diary and telephone support led to a reduction in falls and injuries, with greatest effect in high risk groups, those over 80 and those with a previous fall (Otago exercise programme 21)