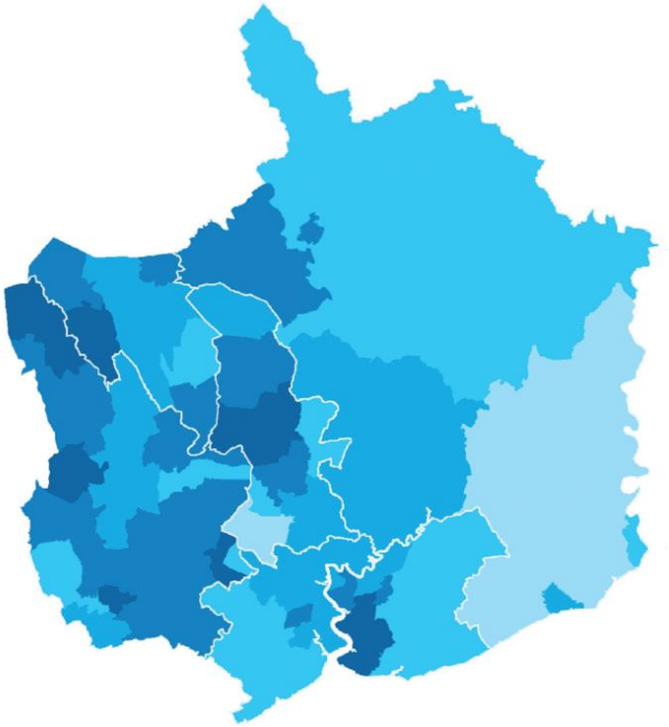
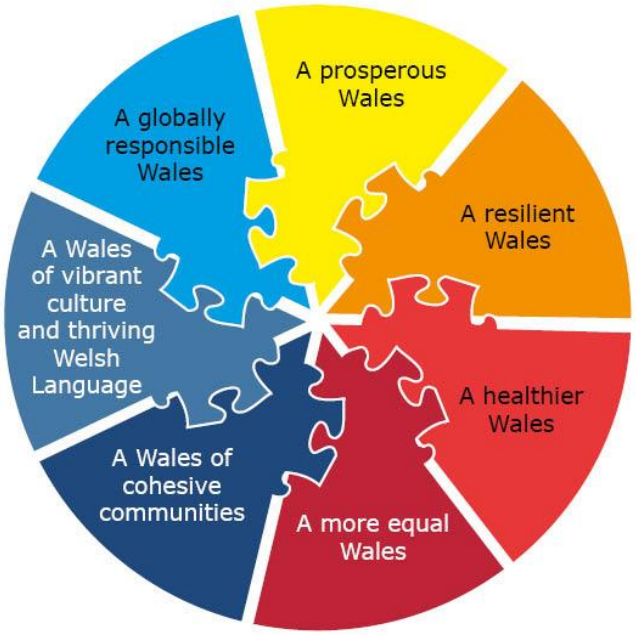
Fit for Future Generations
A childhood obesity strategy for Gwent to 2025





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Developed from the evidence with over 100 health professionals, local people, local authorities, communities first, play providers, early years, education, leisure service providers at health board and locality levels through a process of discussion, engagement and collaboration.

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The Local Authorities in Gwent, Third sector and Aneurin Bevan University Health Board including:
Communities First
Torfaen Voluntary Alliance
Flying Start
Health Visiting
Early Years Childcare
Dietetics
Paediatrics
Leisure Services
Midwifery
Play Services
Public Health
Healthy Schools
School Nursing

July 2015

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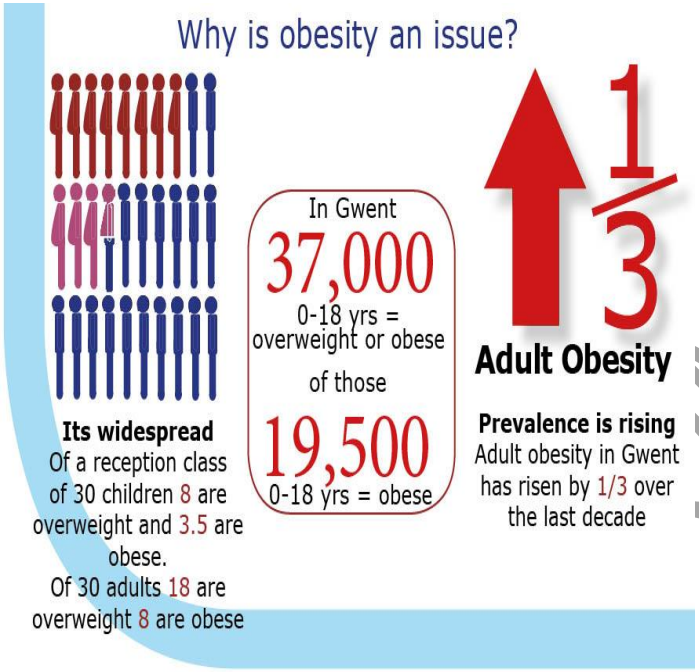
Introduction

A problem that demands an organisational and partnership solution

A child born today has a one-in-three chance of living beyond 100 years, so long-term health outcomes are ever more critical. Recognising the significant benefits to future generations' wellbeing from coordinated effective action on childhood obesity and, the amount of activity already in existence, this strategy is a *call to organise*. This strategy is the beginning of a collaborative journey to achieving our vision; it makes the case for the leadership, accountability and governance for coordinated collective action at both partnership and organisational levels.



Obesity is a consistently underestimated *public service* challenge. The harm it does to children in the short and long term has a negative and significant impact *across* the *Wellbeing Goals*.

Our vision is of healthier, fitter future generations – where obesity will not be harming children and limiting the wellbeing and health of future generations in Gwent as it is today. The recent trend towards present and future generations being more overweight, at a younger age, and having a shorter life expectancy than their parents will be reversed.

There are significant benefits for individuals, families and communities, public services, the environment, and the economy, across the range of *wellbeing goals* from making coordinated, small changes together. This strategy describes the benefits to society and organisations, even accounting for the significant financial constraints in public services, making the case that the timing is right to act now. The actions within this strategy are predominantly concerned with reorienting current activity and as such are low or no-cost.

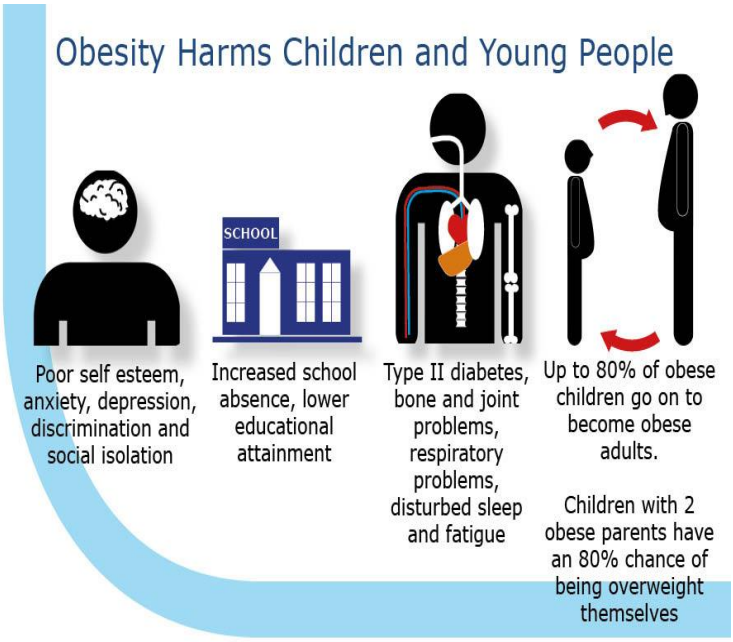
There are an estimated 37,000 children and young people (age 0 to 18 years) in Gwent who are overweight or obese of whom 19,400 are obese. Almost two thirds of the adult population in Gwent are overweight or obese and rates of adult obesity have risen by a third in the last decade. Rates of overweight and obesity are significantly higher in our more deprived communities.

The economic consequences are staggering and are as underestimated a problem as overweight and obesity themselves. Health and care organisations bear the burden of obesity's many co-morbidities, while obese individuals also have lower employment rates and lower productivity with more sick days, earning considerably less with significant impact on the overall economy.

There are significant challenges to be overcome, not least the unprecedented austerity in public services, but there are a number of very clear, very important messages which are consistent from the evidence gathered during the development of this strategy.

Action on childhood obesity prevents damage to other *wellbeing goals* for future generations. This strategy shows how tackling childhood obesity will support organisations and partnerships to demonstrate they are fulfilling their obligations to the Wellbeing of Future Generations (Wales) Act (2015). Tackling childhood obesity leads to:

- Reduced health inequalities
- Greater social cohesion and inclusion
- Stronger local economy
- Improved independence and reduced demand on health and social care services
- Better quality of life
- Less discrimination and bullying leading to better educational achievement
- Increased economic activity with less limiting long-term ill health
- Improved local environment
- Mitigating the impact of our aging population



No single intervention or organisation can offer a unilateral solution – reversing the current obesity trend requires multiple interventions, from multiple sectors, at the same time. There is no *main answer* that lies with another organisation. **We have to see obesity as a public service-wide issue which requires action in collaboration between many sectors and integration with action on the other wellbeing goals of partnership and organisations.**

There is a lot of work going on from all public services and community organisations in Gwent which could be linked to the potential for healthier weight in children and young people. The analysis shows, there is inconsistent delivery and that much of the work mapped as preventing childhood obesity was not really designed for that purpose. The **success of this strategy and the work behind it will depend on a renewed focus on coordination and reorientation of key systems or settings.**

The major sources of high quality evidence, national policy and strategic direction contain strikingly similar findings for the main areas of action required to turn the curve on childhood obesity. This strategy outlines key findings from major sources of evidence reviewed and, presents the areas for action. Included with this strategy is an action list with the things public services can do to move closer to effective action and the specific pieces of work for different professional groups.

The final message from the evidence is that **proper accountability, governance and leadership will be vital.** Local Service Boards/Public Service Boards are well placed to assess the variation of need in

their local communities and coordinate activity in particular areas or settings as well as arranging synergy from other work on the other *wellbeing goals*. The Wellbeing of Future Generations Act will strengthen their role in holding statutory and third sector partners to account for delivery against their priorities. Partnership will also ensure the sustainability of this work through public service reorganisation. The existing corporate governance and delivery structures WITHIN statutory services will be better placed than partnership to ensure consistent delivery and performance from the individual sectors or professional groups working to their separate corporate plans.

This strategy recommends the accountability, governance and leadership should be provided by *both* Partnerships *and* public service organisations using existing structures.

Vision

Healthier, *fitter future generations* – obesity will not be harming children and limiting the wellbeing and health of future generations in Gwent. The recent trend towards present and future generations having shorter life expectancy than their parents will be reversed.

Individuals, families and communities, the environment, the economy, and public services, will all reap the rewards from the small changes they make together which enable large scale changes in future generations' weight, health and wellbeing.

Future generations will enjoy vibrant, connected communities with people preferring walking and cycling for local journeys, families and children playing in shared open spaces and getting the most out of our abundant natural environment, active recreation facilities and organised activities. Town centres, high streets, market places and community shops will carry the visible, attractive offer of healthy food and drink, and these are patronised and promoted by individuals, communities and services.

The places where we live, work, learn and play make the healthy choice the easy choice, particularly for pregnant women and those families and settings with children in the early years. The media we consume and the virtual communities which we inhabit, which *we* shape *ourselves*, promote our families as healthy and active. Active, healthy weight children and families become the social norm.

Pregnant women, parents, children and young people as well as front-line service professionals understand the benefits of healthy weight, recognise and record overweight and obesity in childhood – and in pregnancy and parenthood – and are enabled with the knowledge and skills to act.

A priority *wellbeing objective* for Public Service Boards and organisations

Balancing what public services have to do today with tackling childhood obesity for future generations' wellbeing is increasingly challenging in the current economic climate. However, tackling childhood obesity has to be a priority in our long term development path for Wales and is probably *the* foremost relevant *wellbeing objective* to collaborate on and the timing has never been better. There is an almost unprecedented opportunity to collaborate now on talking childhood obesity:

- The benefits to people, services and society, across the range of wellbeing goals, from coordinated action to tackle childhood obesity
- The costs of doing nothing
- The addition of the Wellbeing of Future Generations (Wales) Act to already strong policy context for public service action on obesity
- The consistency of the evidence base – we know what we need to do
- Huge array of activity in multiple-sector silos already underway, just needs realigning
- Existing governance structure of LSBs and future PSBs along with corporate governance and accountability structures within the Health Board and five local authorities can deliver change

A single wellbeing objective with multiple outcomes

The evidence is there; obesity is not only impairing individuals' lives, but also societies' sustainability with regard to its social, economic and environmental dimensions (Reisch, Bietz and Gwozdz, 2010). The *effective and coordinated* action to improve diet, physical activity and healthy weight at population scale produces outcomes across *wellbeing goals* in addition to 'health', leading to a whole that is much greater than the sum of its parts. For example more walking and cycling leads to less car travel, safer more welcoming streets, increased social interaction, supports local business and improved environmental sustainability. Regulation of fast food outlets leads to less litter and a more appealing environment, reduced noise and congestion, improved access to healthier foods and, reduced health inequalities (NICE, 2012). A clear message from the evidence is that effective action on childhood obesity leads to:

- Reduced health inequalities
- Greater social cohesion and inclusion
- Stronger local economy
- Improved independence and reduced demand on health and social care services
- Better quality of life
- Less discrimination and bullying leading to better educational achievement
- Increased economic activity with less limiting long-term ill health
- Improved local environment
- Offset the impact of our aging population

The wide reaching outcomes following coordinated action on obesity has resulted in it becoming an explicit goal in many countries' political sustainability strategies across the EU. Some EU countries – Germany and Austria, for instance – as well as the EU itself have included the aim to reduce overweight and obesity in their population as a goal in their Structural Change Programmes, strategies and plans. Coordinated action on childhood obesity makes public money work smarter.

A central priority for Public Service Boards

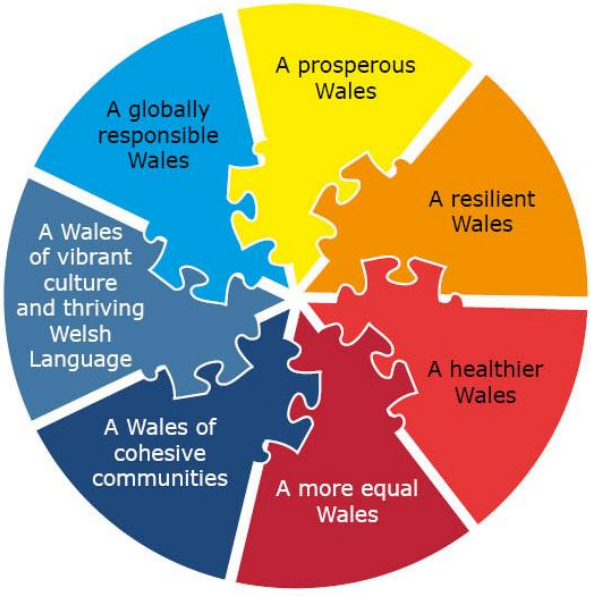
The National Assembly for Wales' inquiry in to childhood obesity (2014) described the issue as a crisis requiring a coordinated multi-faceted solution. Following that, Wales' Public Service Leadership Group (PSLG, 2014) recognised the serious need for action on childhood obesity to prevent poor wellbeing and contribute to sustainable public services for future generations. Emphasising that "public services can only provide an effective, *preventative* response if we regard childhood obesity as a public service-wide issue", the PSLG are explicit that only "*collaborative approaches have the potential to make a greater impact on this issue"*.

The PSLG are clear about the need for collective accountability and governance, and recommend Local Service Boards should prioritise childhood obesity and that they ensure that local areas are taking the necessary steps.

The Wellbeing of Future Generations (Wales) Act 2015 provides a unique opportunity to coordinate effective multi-sector action on childhood obesity. The Act places statutory responsibilities on public sector bodies to act in a manner which seeks to ensure that the needs of the present are met without compromising the wellbeing needs of future generations.

The Act expects public bodies and new statutory Public Service Boards, to demonstrate their actions under the seven *wellbeing goals* (see figure one opposite), contribute to improving economic, social, environmental and cultural wellbeing, and securing it for future generations. It is about *defining the long-term development path for the people of Wales*.

Figure 1: Wellbeing of Future Generations (Wales) Act 2015 – seven *wellbeing goals*



The Act requires public bodies to select *wellbeing objectives,* preferably which contribute to multiple *wellbeing goals* and, which require organisations to demonstrate consideration of five things in achieving the objective (see figure 2 below).

With organisations and the Public Service Boards prioritising childhood obesity as a central *wellbeing objective,* then considering the size and scale of its impact on wellbeing and costs, they will demonstrate their commitment to *safeguarding long-term needs*.

Figure 2: Five things public bodies must demonstrate in applying the Sustainability Principle; Wellbeing of Future Generations (WALES) Act 2015

Recognising the wellbeing burden childhood obesity places on future generations – and future generations' public services – and taking action to *prevent* the impacts getting worse, demonstrates the *long term* view required under the legislation.

The research consistently shows the impact of childhood obesity is wide ranging, harming children's health in the short term AND having even bigger impact across the range of wellbeing goals, most notably: health, prosperity, equality, cohesion and resilience.

All detailed analyses of tackling obesity, without exception, emphasise the critical need for action to be public service wide and requiring coordination through collaboration.

Many of the actions in this plan will require involving people and communities particularly when acting on inequality or attempting to change social norms.

Benefits to public service organisations

In addition to benefits across the *wellbeing goals* of the *Wellbeing of Future Generations (Wales) Act 2015*, effective coordinated action on childhood obesity provides significant strategic and operational benefits for public service organisations.

Collaborating towards the longer term outcome of preventing rates of obesity getting worse, by tackling childhood obesity now, will release significant savings to health and care budgets including: packages of health and care provision for people with obesity, clinical management of chronic ill health conditions, dealing with acute exacerbations and emergency hospital admissions, social care, equipment and home adaptations.

Local authorities

Action on childhood obesity helps local authorities demonstrate good performance against a whole range of national policy and legislation. The Social Services and Wellbeing (Wales) Act 2014 and National Outcomes Framework contains action on improving physical and mental health and wellbeing and includes increasing physical activity using a range of environmental and personal development approaches. Action on obesity also supports local authorities response to the Child Poverty Strategy for Wales 2015, Active Travel (Wales) Act 2014, the Core Aims of the United Nations Convention on the Rights of the Child, common outcomes framework for the poverty programmes including Families First, Flying Start and Communities First, national play policy, Schools

ESTYN inspection, food vending and catering standards in schools and leisure centres, national guidance (TAN) for town and country planning and regeneration and, leisure service sector strategies, among others. Our need to involve citizens, supporting people to have more input in to public service planning and delivery, is increasingly central to national policy and legislation relating to local government. This childhood obesity strategy requires understanding of local need to be able to better tailor health promotion messages and services to the people who need them most and through the process of involvement will support local authorities in describing citizen involvement.

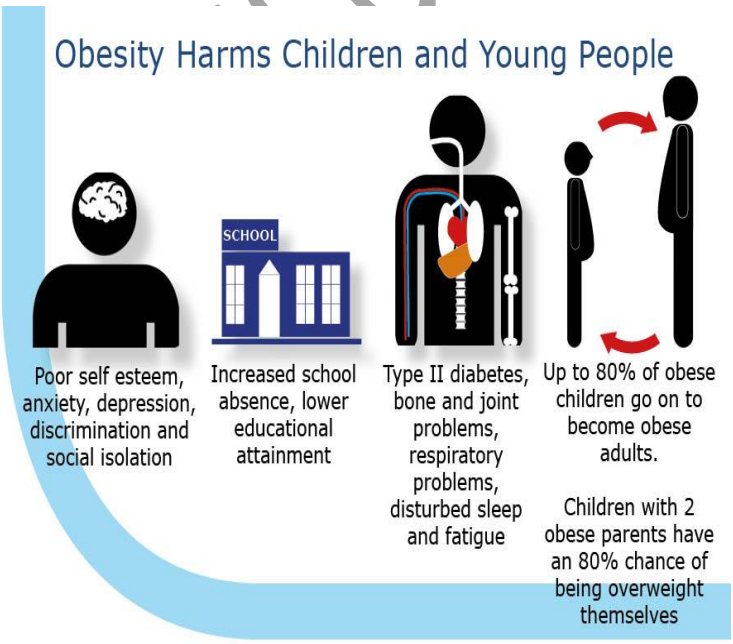
Aneurin Bevan University Health Board

Effective coordinated action on obesity and childhood obesity enables ABUHB to meet important strategic and performance requirements. The NHS Wales National Outcomes Framework (2015/16) includes childhood obesity and the ABUHB three-year plan contains a range of NHS actions on childhood obesity. Action on childhood obesity will contribute to the long-term prevention elements of *Together for Health* Delivery Plans. Making *prudent healthcare* happen to sustain the NHS in Wales for future generations means ABUHB demonstrating a greater focus on prevention, and promoting wellness. Helping families and children to better manage their weight will not only prevent chronic disease and unnecessary health and care interventions in adulthood over the longer term but evidence shows that weight management would be the least intensive intervention to treat many co-morbidities in childhood.

Why children?

With a child born today having a one-in-three chance of living beyond 100 years, long-term health and wellbeing outcomes are therefore ever more critical.

Obesity harms children in the short term but also, as most (between 55 to 80%) go on to become obese adults, childhood obesity harms *life chances* undermining a range of wellbeing goals in future generations. For example, research shows that a healthy weight in childhood predicts better health and wellbeing in adulthood even independently of adult weight, whereas adult obesity which began in childhood results in greater risk of premature illnesses than those who became obese in adulthood.



The human capital (the health, education and skills) of the next generation, will be fundamental in determining their labour market success and the future prosperity of the Welsh economy. Obesity in adolescence has been linked to a range of social and economic consequences in adulthood and these relationships exist even after controlling for socioeconomic background and child ability (Jones, Blackaby and Murphy, 2011).

Effective, preventative action in pregnancy or childhood has a positive impact on several generations simultaneously, and can lead to huge savings when compared with an action with adults. Healthy diet and weight in pregnancy alone has been shown to improve the health of pregnant women, yields better outcomes in pregnancy and labour, and also provides independent health benefits in adult life.

In addition to numerous important benefits to wellbeing from breastfeeding which track through to adulthood, infants exclusively breastfed have healthier weights compared to both formula fed infants and to those introduced to solid foods early.

Behavioural patterns are laid down early, reinforced through childhood and continue through to adulthood making behaviour change in adults more difficult emphasising the importance of intervention in childhood.

Early policy intervention is also more effective in changing the fortunes of those from disadvantaged backgrounds with the rate of return to policy interventions among young children being higher than those at any other age.

The cost of doing nothing

Wellbeing and health goals

Obesity harms children and young people. The World Health Organization regards childhood obesity as one of the most serious global public health challenges for the 21st century. Being overweight or obese in childhood has serious consequences for wellbeing both in the short term and the longer term.

The harms to child health and wellbeing caused by obesity are serious and wide ranging and include physical, psychological and social harms (see figure 3 below). Children with obesity are more likely to be ill, be absent from school due to illness, experience health-related limitations, suffer disturbed sleep and fatigue and, use health and care services more than normal weight children (Wijga et al, 2010). The emotional and psychological damage to wellbeing is often seen as the most immediate and serious by children themselves. They include teasing and discrimination by peers; low self-esteem; anxiety and depression.

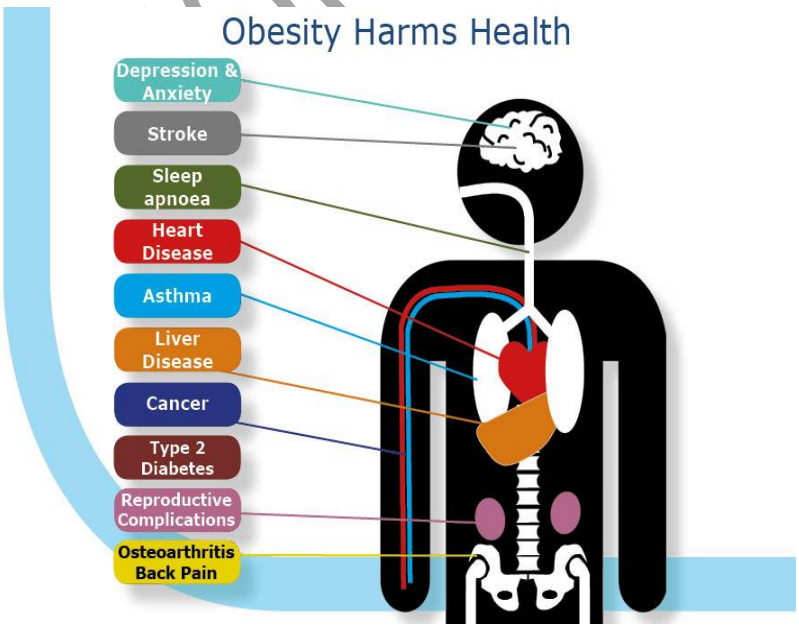
Figure 3: Obesity harms child health and wellbeing

Complications of childhood obesity	
Psychosocial	Poor self-esteem, Anxiety, Depression, Eating disorders, Social isolation, Lower educational attainment
Neurological	Pseudotumor cerebri
Endocrine	Insulin resistance, Type 2 diabetes, Precocious puberty, Polycystic ovaries (girls), Hypogonadism (boys)
Cardiovascular	Dyslipidemia, Hypertension, Coagulopathy, Chronic inflammation, Endothelial dysfunction
Pulmonary	Sleep apnea, Asthma, Exercise intolerance
Gastrointestinal	Gartoresophageal reflux, Steatohepatitis, Gallstones, Constipation
Renal	Glomerulosclerosis
Musculoskeletal	Slipped capital femoral epiphysis, Blount's disease, Forearm fracture, Back pain, Flat feet

Source: Ludwig, D. 2007.

The severity and likelihood of poor wellbeing increase as children age and progress through adolescence in to adulthood. Childhood obesity leads to and exacerbates adult obesity which in turn causes or exacerbates our most prevalent limiting long term ill health conditions which also have serious effects on

Adult obesity results in less healthy life expectancy and shorter life expectancy.



Maternal obesity and excess weight gain in pregnancy poses serious risks to the mother and child including: gestational and type II diabetes, pre-term deliveries, macrosomia, late foetal loss, stillbirth, congenital anomalies and increased neonatal intensive care. In addition the evidence suggests that maternal obesity and excess weight gain during pregnancy are related to obesity and ill health in childhood and in adulthood. Pregnant women are particularly relevant to this strategy; the short, medium and long term benefits of healthy weight to a mother and baby, and the importance of preparation for parenthood, all point to pregnancy as a unique intervention point for preventing the intergenerational impacts of obesity.

The Public Services Leadership Group report the overwhelming consensus of the evidence: problems associated with obesity are broader than the direct impact on health, disease and healthcare.

Good health is a resource for life. Obesity and the ill health it causes result in poor wellbeing through: less contribution to family and community; reduced employment opportunities, less income; reduced productivity and absenteeism; and poor school performance. Obesity causes and is caused by low socio-economic status so with rising obesity so equity and fairness erode (Reisch, Bietz and Gwozdz, 2010).

In the same context, poor mental wellbeing, sense of poor self-image, social ostracism or bullying and real or perceived stigma, jeopardizes cohesion and social sustainability.

Economic consequences of doing nothing

The costs of obesity to the economy and health and care services are truly staggering and widely underestimated.

In the UK the economic impact of obesity generates an annual loss to the total UK economy of more than £44 billion (3% GDP) (Mckinsey, 2014). In that analysis obesity ranks second amongst the biggest "social burdens caused by humans" including: 3) armed violence, war and terrorism; 4) illiteracy; 5) alcoholism; 6) drug use; 7) air pollution; 8) climate change; 9) road accidents; and 10) workplace risks.

On the societal level, the *economic consequences* of obesity come in the form of increased healthcare costs and impact on the labour market. Health and care organisations bear the burden of obesity's many co-morbidities, and obese individuals have lower employment rates, lower productivity with more sick days, and people with obesity earn considerably less.

Obesity costs employers in the UK an estimated £4.3 billion annually with the majority £3.2 billion from reduced productivity as opposed to days lost (McKinsey, 2014).

Healthcare spending increases directly with increases in BMI. In 2008 the NHS Wales were estimated to spend between 1.3 and 1.5 per cent of the total budget treating and managing the proportion of disease directly resulting from overweight and obesity. The estimated direct annual costs of obesity to NHS Wales across primary, community and secondary care was £73 million, which increases to nearly £86 million if overweight people are included (Welsh Assembly Government Social Research, 2011).

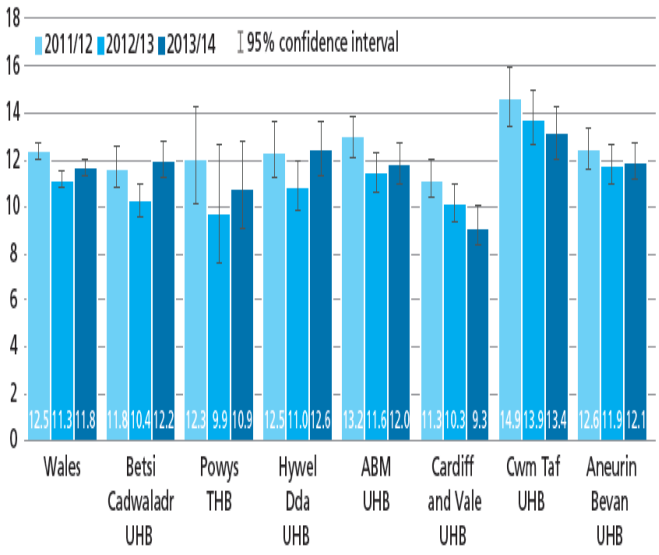
Gwent residents make up about a fifth of the Welsh population, even without adjusting for higher rates of overweight and obesity in Gwent, the *annual* cost to ABUHB could be crudely expected to be in the region of £17 million.

If popular estimations of overweight and obesity doubling in the next 30 to 40 years occur, as in the Foresight report, the costs to ABUHB, without inflation, could also double. The rate of increase over the last decade in Gwent (Figure 5) indicate the situation could be *at least* that bad if we do nothing more than we do currently.

Gwent adult and childhood obesity rates are high, and rising

The Public services Leadership Group state that obesity is steadily increasing, and has been described as a worldwide epidemic (2014). Recent figures suggest rates of childhood obesity more than doubled between 1984 and 2002 (Jones, Blackaby and Murphy, 2011). The most comprehensive analysis in the UK suggested that 60 per cent of adult men, 50 per cent of adult women and about 25 per cent of all children under 16 could be obese by 2050, and that the annual UK NHS costs attributable to overweight and obesity could double to £9.7 billion (Foresight, 2007).

Figure 4: the proportion of children aged 4 to 5 years who are obese, Wales and Health Boards 2013/14 (Produced by Public Health Wales Observatory using CMP data (NWIS))



The most reliable data available on childhood obesity comes from the Child Measurement Programme (CMP) Wales, surveillance of weight for height of children aged four to five years in primary school reception year. Latest data from CMP measured in 2013/2014 (CMP, 2015) shows that over a quarter of children in Gwent aged just 4 and 5 years are overweight or obese with more than one in every ten already obese in reception year (26.4 and 12.1% respectively; *figure 4*).

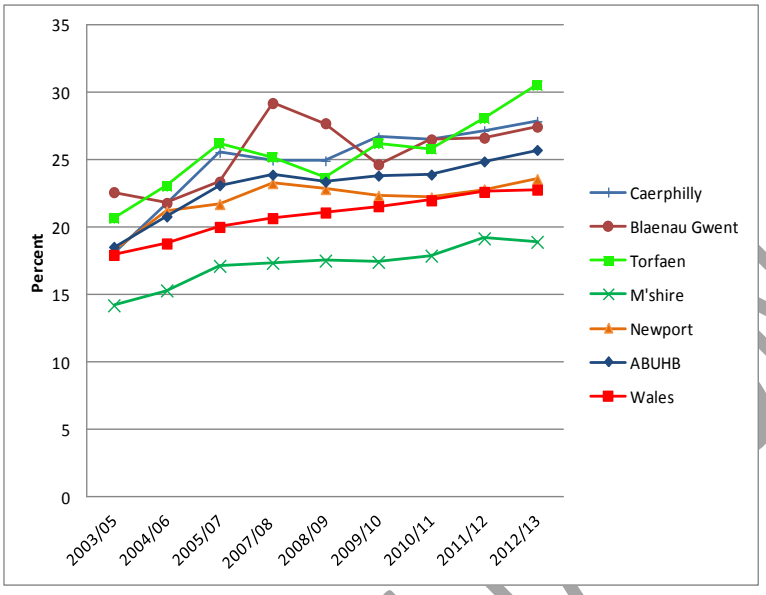
Rates in Gwent are similar to Wales – higher than any English region – with no significant change since measurements began. The trend is similar for overweight.

For older children there is little available data for overall rates of overweight and obesity at Gwent or local authority area level. The rates of overweight and obesity are available at a national level, and for groups of ages. Using the most reliable rates available from the CMP, the Welsh Health Survey and Health Behaviour in School-Age Children Survey we applied them to the Office of National Statistics mid-year population estimates (2013) for ABUHB at the relevant ages.

In Gwent there are an estimated 37,000 children and young people aged 0 to 18 years who are overweight or obese including 19,400 classified as obese.

Almost two thirds of the adult population of Gwent are overweight or obese (61%) with over a quarter (26%) obese (WHS 2012 and 2013). Overweight has now become so common that it is almost unnoticed in society; in a class of 30, four and five year old, children, about eight are overweight or obese, as they age the rate increases until in adulthood more than every other person is overweight or obese – in fact the rate is closer to two out of every three people. Obesity alone rises from nearly four in the reception class of 30 to adult rates of more than one in every four people.

Figure 5: Rising rates of adult obesity in LAs, ABUHB and Wales, WHS 2003 to 2013



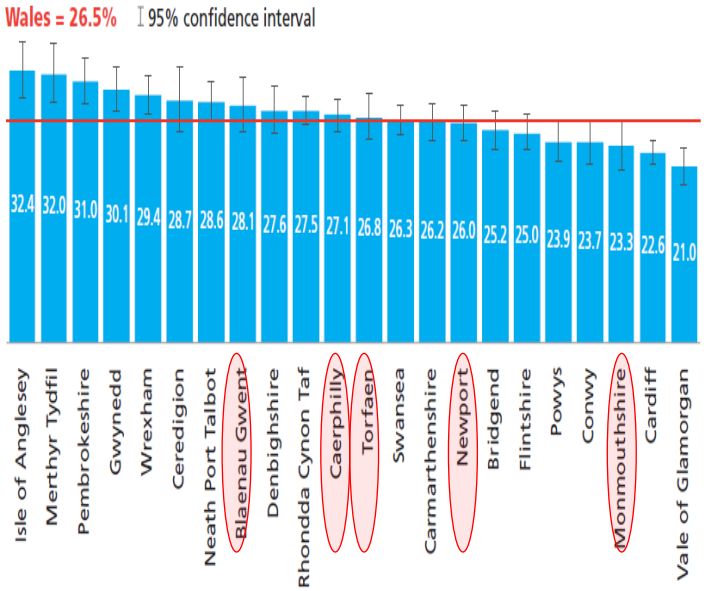
Rates of adult obesity have been rising steadily for decades (see figure 5).

Rates of obesity are rising faster in Gwent than Wales as a whole with rates nearly a third higher in 2012/13 than they were in 2003/2005. Whilst the rise in obesity rates in Monmouthshire is similar to Wales, in Torfaen population rates of obesity have gone up by 50 percent, with an extra 1 in 10 people obese in 2013 compared to 2003.

Obesity and an unequal Gwent

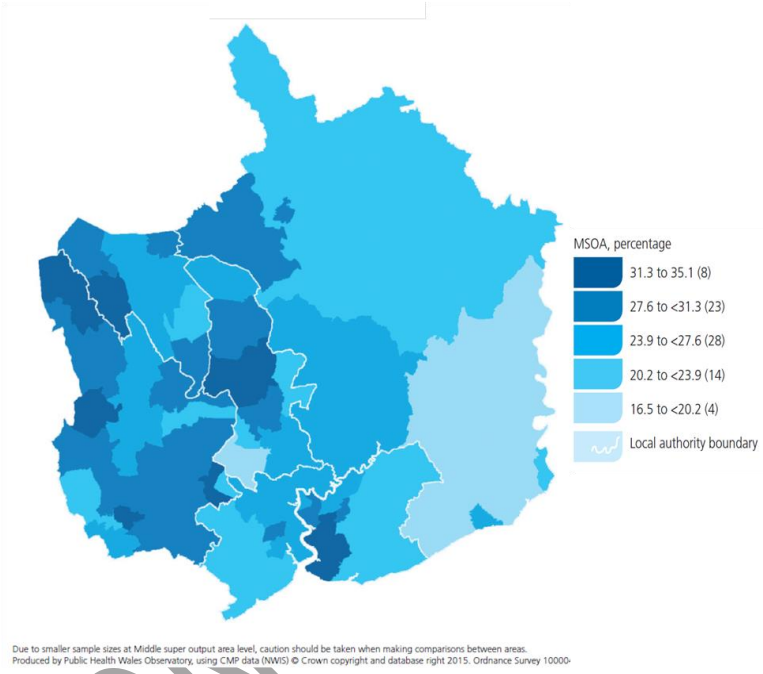
There is significant variation in the rates of obesity across Gwent amongst both adults and children.

Figure 6: the proportion of children aged 4 to 5 years who are overweight or obese, CMP 2013/14



By the time children reach reception year at school, rates of overweight and obesity already vary by local authority. Monmouthshire consistently has the lowest rates of overweight and obesity compared to the other Gwent local authorities, but that is still nearly a quarter of all children aged just four or five years overweight or obese. Blaenau Gwent, Caerphilly, Torfaen and Newport are not statistically different to the Welsh average, with Monmouth alone likely to be lower than Wales as a whole.

Figure 7: Overweight or obese, aged 4 and 5 years, Gwent MSOA, (CMP: 2011-12, 2012-13 and 2013-14)



The map in *figure seven* shows significant variation in rates of overweight or obesity from the CMP at medium super output area level. At the age of just four or five years, many children are at greater risk of becoming overweight or obese just because of factors associated with where they live.

The map is similar for adults with overweight and obesity much more prevalent in the Gwent Heads of the Valleys Region and some areas of Newport.

Each local authority area in Gwent has areas where overweight and obesity is impacting across the wellbeing goals as described. Rates of overweight and obesity are increasing in every local authority area.

Analysis of the CMP data by the Welsh Index of Multiple Deprivation shows that overweight and obesity amongst four and five year olds increase as deprivation increases. Children aged just four and five years old living in areas ranked amongst the most deprived fifth, have significantly higher rates of obesity compared to the Wales average and children living amongst the most affluent 40 per cent. Given the harms to children now and their futures, this is an unacceptable inequity, particularly at this age.

Once more adult overweight and obesity shows the same social gradient with high rates rising as deprivation increases. Obesity causes inequality in wellbeing goals through its impact on health, prosperity, cohesion and resilience AND, multiple deprivation (Welsh Index of Multiple Deprivation) also increases the risk of overweight or obesity.

As obesity has a higher incidence among deprived communities, it also imposes a *disproportionate* burden on these already disadvantaged households, magnifying its usual consequences. Obesity is passed from generation to generation for a wide range of reasons further ingraining this unequal cycle for future generations in Gwent.

From systems of causes to systems for solutions

The cause of overweight and obesity

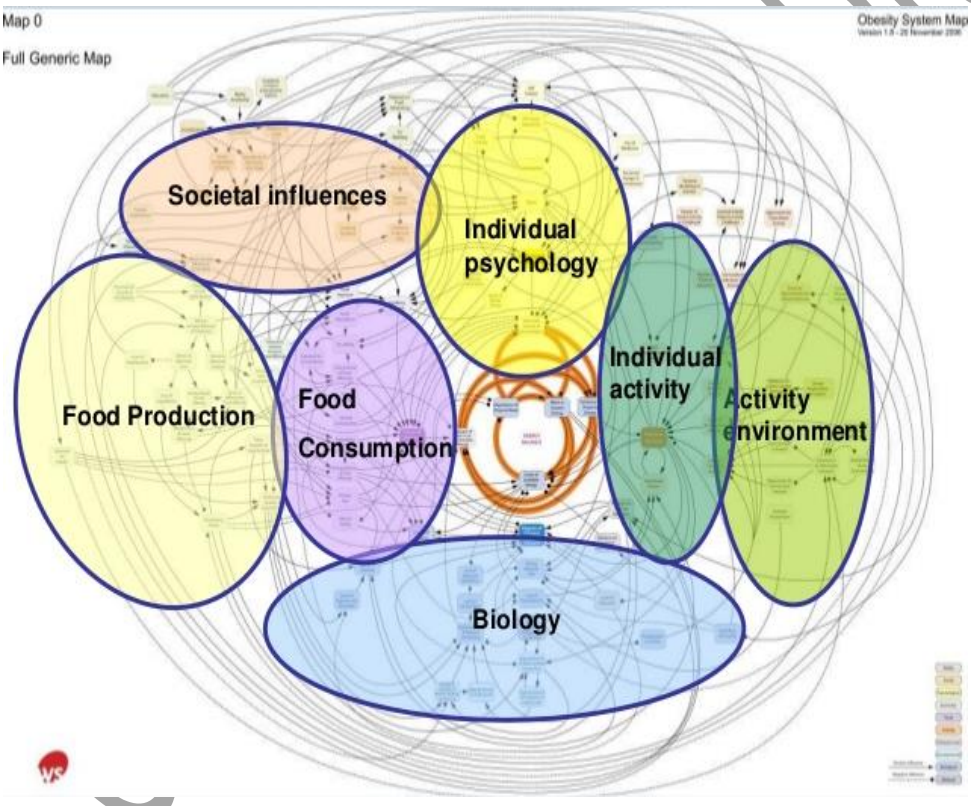
In simplest terms overweight and obesity is caused by consuming more calories than we use, with the excess being stored as fat. Over weeks, months and years the extra fat we store accumulates

until it becomes damaging to our health and wellbeing. Having a poor diet or having low levels of physical activity both independently cause significant damage to our health and wellbeing.

If all things were equal between all people, and whether to be physically active or eat more healthily was just down to personal choice we would not have geographical variation, particularly with deprivation and especially at such early ages.

The reality is many factors influence our ability to be more active or eat more healthily (see figure 8 below). There are many factors which influence our diet and activity levels which go beyond individual choice, further than our individual skills and knowledge, through the social norms of our family and communities, to the availability and promotion of unhealthy food and whether our physical environment makes the healthy and active choices the easy choices. It is important we understand these influences if we are to mount an effective response to this crucial issue. These causes of physical inactivity, poor diet and obesity are the things we must tackle if we are to make an impact on childhood obesity.

Figure 8 – causes of overweight and obesity (Foresight 2007)



This is of course even more relevant when considering childhood obesity; in the antenatal period, infancy and the early years, choices are made for children and behaviours are learned. Through primary school years default behaviours are becoming ingrained and children begin to increase their influence on family choices, however their family, childcare and the school environment still have the major role. As young people grow through secondary school years they gain more personal autonomy of their food and physical activity choices. As with their parents, their peers, the social norms and the physical environments where they live, learn and play continue to influence their choices and continue to do so through adulthood and parenthood.

The challenge – an obesogenic society

One of the reasons society has failed to deal with the obesity crisis is that *there is no one single solution* and that to have a measurable impact at a population level, sustained, effective action on many of the key causes *at the same time* is required.

At the same time, the range of causes mean that many sectors have a small but important role to play, which on their own would have little impact, leading decision makers in individual sectors to other priorities. In addition, because the impact of single interventions is small and multi-sectoral the *invest to save* case for action on obesity in a single sector does not incentivise investment. Furthermore, the research into effective solutions is also limited by the fact that it is the additive effect of multiple action across these determinants which will have an impact, studies into the effectiveness of individual elements have lead to the widespread mis-conception amongst the media and policy makers that there is little we can do.

Neither people, parents, front line professionals nor policy makers see ourselves or our children as overweight or obese. It is well known that adults underestimate their own weight and research shows that over half of parents do not recognise their children are overweight or obese. The sheer scale of the problem has normalised it in society and the media tend to use images of extreme obesity in highlighting the issue. We all consistently underestimate the health impacts, and the benefits of regaining healthy weight, particularly in otherwise healthy children.

Family and community norms remain from generations of food poverty, particularly in more deprived communities with the legacy of heavy industry, where "eating well" actually means overeating, where saving our energy is prioritised over activity and where overweight and even obesity is seen as healthy – this is particularly true in pregnancy, infancy and the early years. Breastfeeding is not visibly commonplace and whilst attitudes are changing and much activity is undertaken, particularly in the health sector, rates of breastfeeding and even intention to breastfeed are still very low.

If we don't see it as a problem we are less likely to act, the situation is gradually improving but still breastfeeding rates or weight and body mass index are not routinely measured and recorded, less still physical activity status or nutritional intake. When we do recognise overweight or obesity as a problem, parents and professionals alike find it a difficult topic to raise: it is a sensitive issue, mis-conceptions exist about damaging therapeutic or caring relationships, there is no agreed single set of key messages or resources, there is a lack of confidence in our ability to intervene effectively, no knowledge of the resources in communities that can help families eat healthily or become physically active and a lack of effective services for treating significant obesity in children for parents or professionals to get help. We all know people who have tried and failed to do something about it.

Although eating more costs more, there is a common concern that healthy diets are more expensive and that becoming physically active requires significant investment of time and money. The food and physical activity environments of the places where we live, learn, work and play have a big influence on how we eat and how active we are.

Healthy food and drink is not marketed in the same comprehensive way as unhealthy food and drink; health just doesn't have the same brand power. It is incredible that the billions of industry pounds spent annually on marketing unhealthy food and drink, associate their brands with slim,

healthy, active, happy, successful children and families. There is a serious amount of money invested in this: it is sustained, effectively targeted at children, young people and families, and is at the leading edge of 21st century web, gaming and social media. The ban on advertising junk food before the 9pm watershed on television doesn't stop our children seeing adverts in cinemas reinforcing the fast food brands just before the feature, at a time of excitement and happiness – the shops are just outside too. The current advertising restrictions do not cover targeted marketing through the games, apps and social media young people use daily. These industry tactics mostly go unnoticed by policy makers, parents and of course the children themselves – we have to try to disrupt that.

Many shops, particularly in more deprived communities, and even public service food provision, sell a significantly larger selection of unhealthy options as they don't think there is a market for healthy choices – despite the overwhelming majority of people wanting to be slimmer or currently trying to manage their weight. That fresh fruit and vegetables are perishable is a further disincentive for retailers. Profit drives food supply, food purchasing promotions disproportionately incentivise o food and drink, high in fat, sugar and salt, particularly in deprived communities.

Structured physical activity is less accessible to parents, it is not marketed at parents specifically and often does not cater for family activity. Almost any investment in our high streets or town centres is seen to have desirable consequences overall: less empty retail units, more revenue, more employment and more choice to encourage people to patronise our local economy. Over the last 20 to 30 years there has been huge growth of food vending in our towns and high streets and along our daily commutes which has increasingly promoted over consumption of energy dense higher fat, sugar and salt foods.

Being careful of unintended consequences, there is a large potential to use local policy and planning vehicles to move closer to what the evidence says support gradual favourable change to our physical environments which make the healthy and active choice the easy choice for future generations.

Currently public service sector actions to tackle the obesity issue are too fragmented to be effective at a population scale (McKinsey, 2014). There is a lot of activity currently undertaken in Gwent, by all sectors, which undoubtedly has beneficial influence on overweight and obesity across the life-course. Coordination, leadership, governance and accountability will be crucial.

Current activity

There has been comprehensive mapping of activity which could impact on childhood obesity in Gwent. The Public Services Leadership Group received comprehensive activity reports from Local Service Boards in six key areas: increase walking and cycling to and from school; safe environments for children to play; more children participate in and become hooked on sport; school children's access to healthy meals on a daily basis; personal skills of children and parents to recognise, eat and prepare healthy food and; healthy choices are easier to access than unhealthy choices.

What is clear from those analyses is that there is a lot of activity currently undertaken in Gwent by all sectors and in all local authority areas, which contribute to healthy weight. These assets include but are not limited to: work of community organisations like Communities First, Gwent Association of Voluntary Organisations, Torfaen Voluntary Alliance and the rest of the third sector and volunteers; leisure services, sporting and active recreations groups and Sport Wales; management of the physical activity and food environment by environmental health, planning, transport,

countryside regeneration, and others such as Groundwork or Natural Resources Wales; play and youth services, Neighbourhood Care Networks; and Aneurin Bevan Health Board across primary, community and secondary care.

However, when we map services we tend to look across the whole provision and include those actions which logically could have an impact on childhood obesity – they are the things we were doing anyway and are rarely designed from what evidence says can reduce childhood obesity. Furthermore, there is a lot of inconsistency with different sectors, focussing on different and individual parts of the solution – rather than a coordinated plan.

This strategy has used the analyses of current activity, and the practical knowledge of the Strategy Development Group, along with what the evidence says we should do, to recommend appropriate actions which will lead to reorientation towards more consistent and effective provision. Apart from developing childhood weight management services this strategy is not recommending new actions requiring new investment.

The challenge of this strategy is to coordinate that work and realign it from this policy perspective towards more and more effective activity aimed at reducing childhood obesity. This strategy recommends that both organisations *and* partnerships take an improvement approach to get from where we are to where we need to be through existing leadership, governance and accountability frameworks.

What we have to do – from evidence to action

The Child Measurement Programme in Wales has followed a group of children from their first measurement at age four to five years with a second measurement at age eight to nine. Analysis shows that children in all categories move up and down healthy and unhealthy weight categories leading to some key messages which are broadly supported by other research:

1. Childhood overweight and obesity is open to change.
2. Action for children is needed across all levels of the pathway to
    a. help healthy weight children stay a healthy weight,
    b. help overweight children halt unhealthy weight gain and grow in to a healthy weight
3. More intense intervention is likely to be required to help children who are obese improve their weight for height.

There is a lot of evidence with a high degree of agreement about the key areas we should focus on collectively and the effective components of action by individual sectors which can have biggest impact. The most recent analysis (McKinsey, 2014) suggests that if we can coordinate the deployment of an ambitious, comprehensive, and sustained portfolio of specific initiatives across the whole of society, at a national level, the rise in obesity could be halted with 20 per cent of the overweight and obese population returning to healthy weight category within five to ten years.

Approach

The public health team with the strategy development group reviewed the evidence, guidance, strategy and policy which suggest the range of important things we should focus on to achieve a

population benefit in rates of childhood obesity. The strategy development group held a number of consultations with the population groups they work with to understand what local people felt about the priority of childhood obesity and the type of action that would be acceptable. Practical actions for each partner have been identified and cross checked and agreed though wider consultation with stakeholders. There were a number of key documents which summarise the available body of evidence, they are outlined below.

Evidence-based action

The Foresight report examined the systems causes of obesity and identified *areas for action* which could have the biggest impact and which were potentially modifiable. The report recommends the most promising policies of:

1. Investment in early-life interventions
2. Increased walkability/cyclability of the built environment
3. Controlling the availability of and exposure to obesogenic food and drink
4. Targeting health interventions for those at high risk

The Public Service Leadership Group considered policy context, known activity and remit of local government policy areas in recommending the six areas they want to see improvement in:

1. Increase walking and cycling to and from school,
2. Safe environments for children to play,
3. More children participate in and become hooked on sport,
4. School children's access to healthy meals on a daily basis,
5. Personal skills of children and parents to recognise, eat and prepare healthy food and,
6. Healthy choices are easier to access than unhealthy choices.

The report goes further in recommending specific actions which they feel are practical and achievable most of which are congruent with the evidence of effectiveness elsewhere.

Public Health Wales have reviewed the evidence and identified ten areas we should focus on in three stages of: preconception and pregnancy, infancy (0 to 24 months) and, two to five years. These are:

1. Adults who are parents or are planning to become parents are a healthy weight
2. Weight gain during pregnancy is within recommended levels
3. Babies are breastfed
4. Babies do not have solid food before the age of six months
5. Babies grow steadily within the first year of life
6. Children play outdoors every day
7. Screen time is kept below eight hours a week

8. Children eat fruit and vegetables every day
9. Children get enough sleep
10. Children have healthy drinks most of the time (water, milk or diluted fruit juice)

There is a large range of guidance, evidence briefings for local authorities and pathways published by the National Institute for Health and Care Excellence (NICE). NICE systematically review evidence of effectiveness and make recommendations for policy makers and practitioners. There are 14 published pathways recommending the actions organisations and partnerships can take in prevention, identification and management of overweight and obesity. In addition to those pathways there are 10 guidelines specifically related to addressing healthy weight and obesity and more in development. In addition there are several guidance documents on nutrition and physical activity with seven dedicated to physical activity alone.

Active Travel (Wales) Act 2013 and Action Plan requires local authorities to identify and map the enhancements that would be required to create a fully integrated network for walking and cycling, and develop a prioritised list of schemes to deliver this network. The ensuing Active Travel Action Plan contains other activities including the promotion of opportunities to be active.

Recent analysis by McKinsey (2014) identifies 74 interventions which the authors place in 18 categories, and which they claim could reduce obesity by 20 per cent if implemented systematically at scale. They include

1. Active transport
2. "Healthcare payors" (incentives and rewards)
3. Healthy meals
4. High calorie food and drink availability
5. Labelling
6. Media restrictions
7. Parental education
8. Pharmaceuticals
9. Portion control
10. Price promotions
11. Public health campaigns
12. Re-formulation of food products
13. School curriculum
14. Subsidies taxes and prices
15. Surgery
16. Urban environment
17. Weight management programmes
18. Workplace wellness

Whilst several of the interventions outlined above require legislative or government action, potentially at the UK level and as such are beyond our control, the vast majority of areas and actions are congruent with the rest of the evidence reviewed for our action plan and can be influenced by public service organisations and Partnerships at regional and local level.

An agenda for action in Gwent

The action list appended to this strategy contains practical and achievable actions from across sectors. The small number of actions for a wide number of partners are not intended to constitute a binding "action plan" for organisations and partnerships. It is more a description of activities different actors can do to get closer to effective action on reducing childhood obesity. It is for the bodies accountable to the LSBs/PSBs and the partnerships themselves to set the pace and priorities which they can achieve. This strategy is clear though, as previously mentioned, there is no one single or even small number of actions from a small number of individuals, that will change things. The actions recommended in this strategy are grouped under the following themes:

- **Disrupt obesogenic social norms** – a sustained and targeted media strategy developed in consultation, particularly in deprived communities where rates of obesity are highest, which engages people and begins to challenge current status quo. Enabling parents, families and professionals to recognise the benefits of a healthy weight and the harms of overweight and obesity to children and their futures. Enabling children and young people to recognise the power of big brands and multi-billion pound targeted marketing on their choices.

- **Support a healthy start in life** – the first 1000 days of a child's life are crucial for future wellbeing; from dedicated weight management services for pregnant women, through breastfeeding and parenting support programmes, to the key actions of early years childcare and education providers; standard effective messages and more coordinated action in from a range of early years professionals, programmes and settings to promote and sustain healthy weight.

- **Coordinate and improve the efforts in early years and schools settings** – practical policy and activity which maximises contribution from children, parents, staff, the curriculum and the environment which promote healthy eating, sport, active recreation and active travel throughout the school day.

- **Influence healthy food choices in our communities** – maximising the community cooking assets as part of coordinated programmes to improve healthy eating, working with local food vendors, including public services who provide food for the public, to increase and promote healthier options. Make the most of planning guidance and local policy to regulate the growth in fast food outlets particularly in close proximity to schools.

- **Encourage active recreation and play for families** – prioritising the needs of families and children, particularly in the early years, getting the most out of open space assessments and play sufficiency audits to plan and promote shared spaces for active recreation and play. Services engaging with parents and families, particularly to identify barriers to participation of provided active recreation and play opportunities.

- **Create active and safe communities** –improving the walkability and cyclability of specific communities and new developments: creating, maintaining and promoting the attractive option of walking and cycling in the natural and built environment, prioritise plans which connect communities to places of community interest, prioritise traffic calming measures in deprived communities and close to schools.

- **Provide community and healthcare based weight management interventions for families who need them** – Ensuring weight management programmes are based on evidence of effectiveness and are multi-component, develop Level 2 and 3 childhood weight management services in line with NICE guidance, developing and testing new models of

community-based level 2 weight management programmes and prioritising young women and parents of young children in existing adult weight management services including evidence-based commercial providers.

Mobilising to deliver

In addition to the striking similarity of the priority areas for action, a small number of vitally important messages about how we should organise to implement. It is unequivocal that:

- No single intervention or organisation can offer a unilateral solution
- The main answer does not lie with another sector in another organisation
- There is the potential for big savings and benefits to society and public services but they are spread across sectors and organisations.
- Reversing the current obesity trend requires multiple interventions, from multiple sectors, at the same time
- This is hardly about new investment, it is about a renewed focus on coordination to harness and reorient current work with incidental impact, towards effective and synergistic action.
- Leadership, accountability and governance are crucial and should be provided by both partnership and organisations.

Systems improvement approach

As well as systems of causes there are also systems of assets – people, places and services – in different settings which need to collaborate, reorienting towards the solutions described. These systems have existing organising structures with strategic, managerial and operational activity; these are the leaders who can generate the scale of reorientation we need at both policy and operational levels. Key systems would be: Antenatal; pre-school and school settings; those who manage the food and physical activity environment; communities, Communities First and the third sector; Neighbourhood Care Networks including early years healthcare professionals and; public service communications professionals and the media. We have to reach and inspire and empower the leaders within these systems to act differently.

Leadership for change

If we are going to achieve the scale of change required to realise our vision then we need to enable people from all levels across the important public service systems that can make that change possible. Engendering and enabling leadership at all levels across those systems from Cabinet and Board through operational management and front-line personnel to the people who live work and play in our communities today will be important to our success. Building the commitment for change through collaboration and inspiring others with our shared purpose has to come from within the system itself, with the mutual respect only the inside knowledge of shared values and shared experiences can bring. Internal system leaders also enable a better spread of innovation through existing networks and, their ideal placement to locate the resources, risk takers, knowledge, tools, and relationships essential for spreading innovation and change at scale and pace. The 'bodies' we recommend are accountable for delivery against this strategy need to be able to harness that potential for change. The action list accompanying this strategy provides the evidence based actions

which partnerships and organisations can work towards together to have the best chance of turning the curve on childhood obesity.

Using an improvement method

Gaining large scale change across the systems will require small scale process changes by leaders and teams within the systems. Using an improvement method will enable change to be rigorously delivered in discrete parts of the system in a managed way, improvement methods are essentially concerned with: agreeing what success looks like and how that can be measured; with the system identifying and agreeing the timely implementation of appropriate and realistic changes and actions; re-measuring using comparators and benchmarking and reacting with different or greater intervention. There are many methodologies to choose including Lean, Total Quality Management or Model for Large Scale Change.

To manage this work will require senior level leadership and, sound accountability and governance frameworks. The accountable structures will agree the performance and delivery measures they will use to assure themselves that requisite change has followed and will be at the requisite level, ensuring barriers and conflicts are removed with necessary facilitators put in place.

Suggestions for using existing governance and accountability structures are provided in the next section but the urgent first task for each accountable body is to agree the relevant actions from the list, the measures they will use to demonstrate progress and the timescales. The agreed accountable bodies should agree and report on a three-year rolling plan with annual refresh.

Accountability and governance structures

The Public Service Leadership Group, NICE guidance and the All-Wales Obesity pathway recommend different structures to be accountable for making these actions happen in Wales. The PSLG specifically acknowledges the risk in collective accountability. However, due to the public service wide response required to turn the curve on childhood obesity, and the different roles and competence of partnership and organisational leadership, single accountability and governance would likely fail. There are also different governmental reporting structures for organisations and Partnerships.

Therefore this strategy recommends, whilst ABUHB are providing the initial leadership and call to organise, that the accountability and governance should be at senior strategic levels *both* within organisations and Partnerships (LSB/PSG) providing assurance to Council Cabinet, ABUHB Board and LSB/PSB on sufficient progress. This strategy recommends that the UHB, the five local authorities and the five local service boards adopt childhood obesity as a priority piece of work and as a "Wellbeing Objective" under the Wellbeing of Future Generations (Wales) Act 2015.

Partnerships will not currently be the most efficient place, for example, to enable all Midwives to receive training in *brief intervention* for weight management but they are much more able than organisations to assess the variation of need in their local communities and coordinate activity in particular areas or settings. Through the Wellbeing of Future Generations (Wales) Act 2015 Public Service Boards will develop stronger mechanisms for holding composite organisations to account for delivery against jointly agreed priorities. Public Service Boards will also be able to ensure sustainability of this strategy through public service organisational change. LSB/PSB must be

accountable for the *coordination* of actions to meet local priorities, reduce inequalities in health and ensure maximum integration with partnership action on the other six *wellbeing goals*.

Organisational accountability and governance will be required to reorient to provide activity contained within single sectors. Within the ABUHB the Public Health and Partnerships Committee, will provide assurance to the University Health Board for the actions of a *healthy weight delivery group* with representation from the relevant Divisions including NCNs. The strategy recommends a Board-level champion is nominated as a senior leader for this work within the UHB and as an advocate with partners.

This strategy calls for the five local authorities in Gwent to identify the relevant existing internal cross-organisational structure(s) who can provide: 1) assurance to Cabinet on progress against the childhood obesity "wellbeing objective", 2) hold local authority departments and other providers accountable for delivery and 3) provide the appropriate cross-policy scrutiny for policy and activity which could impact on childhood obesity. Each local authority may have different structures which can perform this function. We recommend a Cabinet champion be nominated as a senior leader for this cross-government agenda.

Local Service Board (and future Public Service Boards) structures predominantly concerned with health and equality should provide the locality partnership accountability for directing and coordinating local delivery to local need also considering the activity on the other wellbeing goals. These groups already have governance arrangements in place through to LSB and have the existing networks of practitioners.

Outcomes and delivery framework

Outcomes

Outcomes

- Proportion pregnant women gaining more than recommended weight gain during pregnancy
- Breastfeeding rates: initiation and 10 days
- Proportion of children aged 4 and 5 years overweight or obese and obese (CMP)
- Percent of children reporting walking or cycling to school (National Survey for Wales, WG)
- Percent of adults walking or cycling for active transport (National Survey for Wales, WG)
- Percent of children Hooked on Sport, School Sports Survey Sport Wales

Delivery

Appropriate indicators drive change and measure delivery and performance. The data and information on progress will need to be selected at an action-based level and will often be system or product completion based on the action plan. There are also data currently available or which can be captured which can show improvement over time. Examples of such indicators are provided below, but, as with the actions, the indicators used in delivery will need to be agreed with the accountable delivery team.

- Implementation reports against actions in plan.
- Pregnant women referred and treated by antenatal weight management services
- Percent of parents satisfied with child play areas (National Survey for Wales (LA area?))
- Proportion of pregnant women with a BMI at booking, at 36 weeks
- Proportion solely breastfeeding at 10 days and six weeks
- Proportion of children aged 0-3 with a recorded BMI
- Introduction of solids guidelines implemented
- Numbers of midwives, health visitors and school health nurses trained in weight management BI annually
- Numbers of Primary Care and other front line professionals trained in weight management Brief Advice
- Numbers AWMS participants who are parents of children in the early years or school age
- Number of parents of children in early years or of school age participating in Foodwise
- Live within a 10 minute walk of green or blue space (NSW)
- Safe for children to play outside in local area (NSW)
- WIMD of target areas for
- Walkability of new developments
- Inclusion of healthy environment criteria in CIL or S106/nos HIA carried out on planning

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