



## CRADLE TO THE GRAVE EVIDENCE BASE FOR PHYSICAL ACTIVITY AND SPORT



CHILDREN & YOUNG PEOPLE

**Photo Credits** 

Photo 1: Community Games Shine a Light Event. Black Country BeActive Partnership

Photo 2: School Games 2012. Black Country BeActive Partnership

**Photo 3: Sport England** 

Photo 4: Health Walk. Supplied by Age UK

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www.blackcountrybeactive.co.uk



#### **Black Country Consortium Ltd**

The Deckhouse Waterfront West Dudley Road Brierley Hill West Midlands DY5 1LW

Tel: 08458 151515

Email: simon\_hall@blackcountryconsortium.co.uk

#### Message from the Black Country BeActive Partnership

I am delighted to introduce the Black Country Cradle to the Grave Evidence base. This is one of four documents which provide compelling evidence on the value and impact of physical activity and sport for each stage of the life course Early Years, Children and Young People, Adults Older Adults. Theses have been produced in response of need from those working in the physical activity and sport sector to provide stronger promotion and evidence on what sport and physical activity can achieve, as well as enabling those who grant aid or commission services to understand the value and impact physical activity and sport can make.

Its production is timely given the recent launch of Public Health England "Everybody Active, Everyday" and the increasing hard choices having to be made on budgets and investment decisions.

For the purpose of this document, we are using the World Health Organisation definition of physical activity as "any bodily movement produced by skeletal muscles that requires energy expenditure". It includes all forms of activity such as everyday walking or cycling to get from a to b, active play, work related activity, active recreation, dancing, gardening or playing active games as well as organised and competitive sport.

These documents provide:

- 1. The primary research evidence for physical activity and sport, particularly targeting preventative health.
- 2. Our own calculations on the potential savings to public health and other sectors as a result of increasing participation
- 3. Available products and programmes

It has been designed specifically for the Black Country and the key stakeholders working in the area. It has already proved to be invaluable in the co-owned "Black Country in Motion" programme and we hope this will be used as the evidence base for other emerging pipeline projects including future contracting and commissioning. We are also committed to updating the document on an annual basis.

I thank Sport England who provided Black Country Consortium Limited with funding to enable us to fund the completion of 2 out of the 4 evidence bases and grateful to Sport Structures for their work in researching the evidence base and good practice and to Michael Salmon, Suzanne Gardner previously with Black Country Consortium Limited and Gordon Andrews from Sandwell MBC who worked on the original Adult Cradle to the Grave document and provided the format, content and calculations used in these documents.

I do hope you find the documents useful for your planning and delivery of services.

Dr Raj Joshi Chair Black Country BeActive Partnership October 2014 CRADLE TO THE GRAVE EVIDENCE BASE FOR PHYSICAL ACTIVITY AND SPORT

**Children and Young People (aged 5-18)** 

Introduction

In March 2010 the Black Country BeActive Partnership Board approved the development of a cradle to the grave support tool for organisations working to increase participation in physical activity and

sport across the sub region. The recommendation came from an analysis of profiles of Black Country partners across Dudley, Sandwell, Walsall and Wolverhampton who strategically plan, deliver

and/or commission physical activity and sport. The approach would pull together the evidence base and intelligence regarding sport and physical activity to support effective commissioning and the

delivery of services taking a life course approach to determining need and evidence. This resource has been prepared by Sport Structures, on behalf of the Black Country Consortium ltd.

This document is a compendium of the data, intelligence, evidence base, cost effectiveness and investment opportunities for physical activity and sport. This is fundamental to the Black Country

BeActive Partnership and its stakeholders as they deliver strategic plans to increase participation in sport and physical activity. The Cradle to the Grave compendium provides the evidence base that

underpins the approaches being taken.

The compendium can be used to:

Advocate for investment into sport and physical activity

Support organisations to develop evidence based practice

Support organisations to develop intelligent commissioning approaches to investing in sport and physical activity

Make a robust business case for investing in physical activity and sport

Support organisations in determining where and how to invest funding to maximise value for money and impacts

This document provides summaries of the evidence and approaches that can be taken to drive up participation in sport and physical activity. It is highly recommended that you visit the primary sources

of information as referenced throughout the document to access the detail of recommendations and evidence to aid you in implementing programmes.

The evidence in this document comes predominantly from systematic review sources at a national/international level and sits alongside statistical, programme and cost effectiveness information

derived from identified sources. Any individual research such as Randomised Controlled Trials or programme evaluations that have been referenced in the document are highlighted by green text.

The document will continue to evolve at the evidence base for interventions and cost effectiveness develops.

For further information contact Simon Hall at Simon\_Hall@blackcountryconsortium.co.uk

Document dated: June 2014

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#### Context for the use of the Cradle to the Grave Compendium

#### **Commissioning Agendas**

The changes in Government Policy, resources and structures for sport, physical activity, public health, the NHS and the public sector more generally are beginning to embed. In April 2013 the Health and Well Being Boards and Clinical Commissioning Groups were made accountable for the commissioning of much of the Public Health and NHS budgets. The diagram below highlights the structure and responsibilities aligned to these structures<sup>1</sup>.

Commissioning agendas have received increasing prominence in local, county and national discussions with a focus on efficient use of resources to deliver maximum impact. A definition of commissioning is hard to determine but according to the National Audit Office successful commissioning is the delivery of the right outcomes at the right price. Commissioning models are often shown to be cyclical highlighting a number of processes and components that make up a high quality commissioning model. An important part of the commissioning process is the Joint Strategic Needs Assessments that will analyse the health needs of populations to inform and guide the commissioning of health, well-being and social care services within local authority areas. The JSNA will underpin the health and well-being strategies and commissioning plans. The JSNA will focus on the outcomes required, determine groups whose needs are not currently being met and determine priorities for local investment. It is expected that the JSNA's will increasingly take into account the evidence base for interventions that will work to deliver specific outcomes. This compendium aims to provide the evidence for how and what interventions can deliver a significant range of local outcomes. Specific commissioning support tools for culture, tourism and sport can be downloaded from the Local Government Association website at http://www.local.gov.uk/web/guest/culture-tourism-and-sport/-/journal\_content/56/10171/3510882/ARTICLE-TEMPLATE

#### **Public Health Outcomes Framework**

The Public Health, NHS and Adult Social Care Outcomes framework have been developed to measure progress towards meeting of a number of Government Strategies. The Public Health Outcomes Framework concentrates on two high-level outcomes to be achieved across the public health system. These are:

- Increased healthy life expectancy
- Reduced differences in life expectancy and healthy life expectancy between communities

The Public Health Framework sets out the public health indicators that will help focus understanding of progress year by year nationally and locally on priority areas. The indicators are grouped into four

- · improving the wider determinants of health
- health improvement
- health protection

'domains':

healthcare public health and preventing premature mortality

Physical Activity and Sport related indicators include:

- Proportion of physically active and inactive adults measured by Active people Survey (Health Improvement Domain)
- Utilisation of Green Space for exercise/Health Reasons (Improving Wider Determinants of Health Domain)

It should be recognised that Sport and Physical Activity has an important role to play in contributing to a number of priorities that the indicators represent.

#### **National Ambition for Physical Activity**

Alongside the publication of the Public Health Outcomes Framework for England in February 2012 the Government have set a new national ambition for physical activity that will be measured through the Outcomes Framework via the Active People Survey. The ambition is to deliver:

"A year on year increase in the number of adults doing 150 minutes of physical activity per week (in bouts of 10 minutes or more); and a year on year decrease in those who are inactive (defined as doing less than 30 minutes of physical activity per week, in bouts of 10 minutes or more)".

#### Sport England's Youth and Community Strategy 2012 - 2017

A core focus of the Sport England Youth and Community Strategy is a year on year growth in regular participation for all those aged 14+, this will be measured via Active People focusing on the % of people achieving 1 x 30 sport. Health is firmly back on the agenda for sport within the strategy and the new target aligns the delivery of sport more closely with the Public Health Outcomes of reducing inactivity (the % of people undertaking 0 x 30 physical activity) and maximising public health gains from moving people from 0 – 1 x 30 minutes of activity).

#### **Children and Young People context**

The term *children* is used when referring to those aged 5-11 years and the term *young people* when referring to those aged 12-18 years. This report covers a vast spectrum of physical activity needs, from primary school children to teenagers in employment.

Physical activity habits and preferences are largely formed during childhood and adolescence and as such there is a vast amount of research outlining the benefits and importance of taking part in physical activity as a child or young person. Sport is often used as a diversionary activity to engage with hard to reach groups of young people and there is now some powerful evidence on the effect of using sport and physical activity in this way. The term "the golden years" is used to describe the period when children are most receptive to learning skills such as fundamental movement and sports skills as well as social skills.

Schools have a great opportunity to instill in children and young people the importance of taking part in sport and physical activity. As such, the recommendations in the NICE guidelines on promoting physical activity for children and young people repeatedly advocate the importance of ensuring organisations are working with schools to promote physical activity.

## Compendium of Evidence, Data and Intelligence

Age Range / Category		Examples of how to use the information						
Public Health Recommendation	<ul> <li>All children and young poseveral hours every day</li> <li>Vigorous intensity activity</li> <li>All children and young pose and mental capability</li> </ul>	Background information						
Participation Data	Active People data provides instance Each data set uses different market Active people survey 7 (Oct 2)  Age group – 14 – 19 years.  Participation is defined as taking It includes recreational walking *APS 1 2,3,4,5,6 not undertaken for this active APS stem  APS stem  APS stem  Ox30  Black country  West Midlands  24.9  England  25.4  The Health Survey  Age Group 5-15 years.  This data is reported at a natio	g part in moderate intensit, cycling, aerobics, danceage group and sample sizes are too  APS7  1x30  N18  55.3  31.1  60.8  40.0  61.4  42.8	y sport and active exercise and gym	recreation for at le i. ley, Sandwell, Walsall,	east 30 minutes co			Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)  Inclusion in JSNA to highlight and interpret trends in activity level and sports participation and determine the scale of challenges to increase physical activity levels  Aid intelligent commissioning approaches
				Age group				Deliverers (NGBS, clubs,
		5-7 (%)	8-10 (%)	11-12 (%)	13-15 (%)	Total (%)		CSPs, community clubs,
	Boys							schools, childcare providers,
	Meets recommendations*	24	26	19	14	21		community safety teams etc.)
	Some activity  Low activity	39	34	38 43	44	39		<ul> <li>Use the information to</li> </ul>
	Girls	37	34	43	42	39		highlight your knowledge
	Meets recommendations*	23	16	14	8	16		of the challenges in the
				•				area when tendering for

Some activity	37	41	44	38	40
Low activity	40	43	42	54	45

<sup>\*</sup>Physically active for at least 60 minutes daily on 7 days a week

Summary Activity Levels participation in at least moderate intensity, activity (age standardised only) by region and gender (age 5-15)

Summary activity Standardised table only	Regions									
Boys	All regions	West Midlands %	North east %	North west %	Yorkshire and Humber %	East midlands %	East %	London %	South East %	South East %
Meet recommendations*	20	14	19	21	21	25	17	24	26	13
Some activity	38	43	45	26	40	40	42	34	43	32
Low activity	40	43	36	33	39	39	41	42	32	52
Girls	All regions	West Midlands %	North east %	North west %	Yorkshire and Humber %	East midlands %	East %	London %	South East %	South East %
Meet recommendations*	15	10	16	18	14	16	11	22	16	15
Some activity	40	42	39	35	46	38	46	34	36	47
Low activity	44	47	45	47	40	46	43	44	48	38

<sup>\*</sup>Meets recommendations: Physically active for at least 60 minutes on all 7 days per week.

#### **Local measurements**

It is recommended that local programmes and facilities ensure that they are able to understand the local context of participation in sport, leisure and physical activity by collecting and utilising attendance, adherence (retention) and behaviour change information to support local decision making and understand any changes in participation data determined by national surveys.

#### **Market Segmentation**

There is currently no market segmentation data available for this age group

# Change 4 Life Market Segmentation information

Social Marketing is the systematic application of marketing and other concepts and techniques to achieve specific behavioural goals using comprehensive understanding of the people (consumers) that you are trying to reach and their drivers for behaviour change at individual and societal levels. At the initiation of the Change4Life campaign the Department of Health invested in research to determine family attitudes and behaviours to physical activity, diet and weight status. This included analysis of the Family Food Panel, surveys, food consumption data, demographics and market research. This research determined that families could be grouped into six clusters regarding their behaviours relating to the obesity agenda. This information has been used to develop the Change4Life campaign.

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

 Inclusion in JSNA to highlight dominant market segments and gain an understanding of how to

commissions and highlight how your approach can aid increasing activity levels at 1 x 30.

 Use age specific data depending on the audience targeted

Some activity: Physically active for 30-59 minutes on all 7 days.

Low activity: Lower levels of activity.

#### Cluster 1

Struggling parents who lack confidence, knowledge, time and money. High levels of sedentary behaviour in these groups as physical activity is viewed as costly, time consuming and not enjoyable. Lack of confidence to be physically active. High intent to change physical activity behaviours. The promotion of innovative, accessible activities that encourage family activity may appeal. Activities that can be incorporated into day to day routines can help build confidence in this group<sup>4</sup>, <sup>5</sup>.

#### Cluster 2

Young parents who lack knowledge and parenting skills to implement a healthy lifestyle. Families in this cluster have a low intent to change activity behaviour. Parents consider children to be active enough there is a lack of knowledge about healthy lifestyle. Projects that encourage parents to develop knowledge and understanding of risks of current lifestyle and promote family engagement through active travel and play may be beneficial<sup>6</sup>, <sup>7</sup>.

#### Cluster 3

Affluent families, who enjoy indulgent food. Families in this cluster are generally affluent. Lack of confidence in more traditional sporting environments means that less mainstream sports and recreational activities can be more attractive to this group e.g. horse riding, dance etc<sup>8</sup>,

#### Cluster 4

Families in this cluster live healthily but may lack confidence in relation to children's physical activity. Programmes should focus on helping parents and children to become more confident to increase and formalise participation through joining local clubs or activity groups rather than infrequent informal participation<sup>10</sup>, <sup>11</sup>.

#### Cluster 5

High levels of sedentary behaviour in these groups as physical activity is viewed as costly, time consuming and not enjoyable. Families in this cluster are likely to be attracted to traditional sports rather than alternative/developing sports. Activities offered in short sessions without long-term commitment and supported by social networking means that their desire to devote time to being strong parents is not compromised. Activities where parents feel like they are setting a good example to children will be attractive. Whilst there is significant intent to increase physical activity levels, parents believe that their children are not confident in engaging with traditional forms of exercise. The promotion of innovative, accessible activities that encourage family activity may appeal<sup>12</sup>, <sup>13</sup>.

#### Cluster 6

Families in this cluster are generally active (particularly the children). Parents in this group are constantly looking for more ways to become more active as a family<sup>14</sup>, <sup>15</sup>.

- deliver the needs of different family segments to aid priority setting and the development of investment plans and commissioning scopes.
- Aid intelligent commissioning approaches

- Use the information to gain an understanding of the market segments most likely to respond to your offer and determine which local authority areas you would want to work in.
- Use the pen portraits for each segment to gain an understanding of how to target this market most effectively to aid you in tailoring services
- Use the information to show how you would meet the needs of commissioners in any tenders.

#### C4L and Sport England Segmentation Mapping in the Black Country

Department of Health (DH) West Midlands felt it would be beneficial to analyse the obesity segmentation data against Sport England's sport market segmentation data in order to gain an understanding into families' attitudes towards sport & physical activity.

The West Midlands Public Health Observatory carried out this piece of work using the 6 obesity segments and 5 out of the 19 Sport England segments. The 5 segments we are focusing on are those which include young children. The piece of analysis highlights similarities between the 2 data sets.

Relationships between the two data sets can further enhance our understanding of the population. This could potentially allow more detailed and specific work enabling PCT's and partners to undertake more targeted service plans, interventions, and communications and inform commissioning.

Dudley C4L Market Segmentation Cluster Report <a href="http://www.wmpho.org.uk/resources/segmentation/Dudley\_Final\_Segmentation.pdf">http://www.wmpho.org.uk/resources/segmentation/Dudley\_Final\_Segmentation.pdf</a>

Sandwell C4L Market Segmentation Cluster Report <a href="http://www.wmpho.org.uk/resources/segmentation/Sandwell\_Final\_Segmentation.pdf">http://www.wmpho.org.uk/resources/segmentation/Sandwell\_Final\_Segmentation.pdf</a>

Walsall C4L Market Segmentation Cluster Report <a href="http://www.wmpho.org.uk/resources/segmentation/Walsall\_Final\_Segmentation.pdf">http://www.wmpho.org.uk/resources/segmentation/Walsall\_Final\_Segmentation.pdf</a>

Wolverhampton C4L Market Segmentation Cluster Report <a href="http://www.wmpho.org.uk/resources/segmentation/Wolverhampton\_Final\_Segmentation.pdf">http://www.wmpho.org.uk/resources/segmentation/Wolverhampton\_Final\_Segmentation.pdf</a>

# Using Data to determine priority locations Priority Locations

Two methods have been used to identify the priority locations:

- Identification of the top 5 mid super output areas, in each Local Authority area, with the highest population within this age group 16.
- Identification of the top 5 mid super output areas, in each Local Authority area, with the highest number of obese children within the age group<sup>17</sup>.

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

 Inclusion in JSNA to determine priority locations where the highest populations of the targeted age group are and therefore a disproportionate amount

				of funding may need to be
	Location	Priority areas due to highest population of 5-19 year olds	Priority areas due to highest number of obese children (10-11* years old)*	allocated.  • Aid intelligent
	Black country	<ol> <li>Palfrey (Walsall,3959)</li> <li>Soho and Victoria, (Sandwell, 3661)</li> <li>Bushbury &amp; Larkhill (Wolverhampton, 3525)</li> <li>Pleck (Walsall, 3449)</li> </ol>	1. Bilston East (Wolverhampton, 30.8%) 2. West Bromwich Central (Sandwell, 29.8%) 3. Upper Gornal and Woodsetton (Dudley, 29.8%) 4. Tipton Green (Sandwell, 29.8%)	commissioning
		5. St Pauls (Sandwell, 3399)	5. Bushbury south and Low HIII (Wolverhampton, 28.8%)	Deliverers (NGBS, clubs,
	Dudley	<ol> <li>St Thomas (3091)</li> <li>Castle &amp; Priory (2986)</li> <li>Netherton, Woodside and St Andrews</li> <li>St James (2617)</li> <li>Upper Gornal and Woodsetton (2547)</li> </ol>	<ol> <li>Upper Gornal and Woodsetton, 29.8%</li> <li>Coseley East, 26.0%</li> <li>Brockmoor and Pensnett, 25.9</li> <li>Cradley and Wollescote, 25.5%</li> <li>St Thomas, 25.9%</li> </ol>	<ul><li>CSPs, community clubs,</li><li>schools, childcare providers</li><li>etc.)</li><li>Use the information to</li></ul>
	Sandwell	1. Soho and Victoria (3661) 2. St Pauls (3399) 3. Hately Heath (2944) 4. Smethwick (2870) 5. Princes End (2734)	1. West Bromwich Central, 29.8% 2. Tipton Green, 29.8% 3. Greets Green and Lyng, 28.7% 4. Smethwick, 28.5% 5. Oldbury, 28.4%	determine where your services may have most impact and value for money.
	1. Palfey (3959)  Walsall 2. Pleck (3449) 3. Blakenall (3191) 4. Willenhall (304)	1. Palfey (3959)	1. Darleston South, 25.4% 2. Blakenall, 25.6% 3. Bloxwich west, 25.7% 4. Birchills Leamore, 24.9% 5. Palfrey 26.2%	Use the information to show how you would meet the needs of commissioners in any
	Wolverhampton	1. Bushbury South and Low hill (3525) 2. Ettingshall (2725) 3. Oxley (2699) 4. Bilston East (2637) 5. Fallings Park (2586)	1. Bilston East, 30.8% 2. Bushbury South and Low hill, 28.8% 3. Blackenhall, 28.1% 4. Fallings Park, 26.2% 5. St Peters, 26.1%	tenders and how you can target specific needs of communities.
			CMP is an annual programme that measures the height and	
Evidence for Strategy  Development	There is no one single s	Commissioners and Strategists (Local Authorities,		
	<ul> <li>Work with schools and</li> <li>Schools provide the financial and/or training</li> </ul>	Commissioning Boards, NGBs, Sport England, CSPs, Schools)		
	Schools that deliver academic achiever		nment figures <sup>20</sup> . Physical activity has a positive effect on	Use to develop strategic approaches to sport and

- Encourage and support schools to assess the whole school environment, ensuring that the ethos behind the schools policies help young people to be active<sup>22,23</sup>
- Support schools to develop active travel plans. Work with them to integrate the plans across all schools in a geographical area<sup>24</sup>
- Engage with primary schools to maximise the investment of the PE and sport premium for primary schools<sup>25</sup>
- Maximise the opportunity created by the Education and Skills Act 2008, of young people being engaged in education for longer, to tackle
  the 16+ drop off in participation<sup>26</sup>

#### Community

- Map physical activity opportunities against local needs and address gaps in provision<sup>27</sup>
- A co-ordinated strategy to increase physical activity among children and young people, families and carers is vital. This should include
  partnership working, evaluation, removal of barriers at a local level and indoor and outdoor activities as part of multi component
  interventions including active travel<sup>28</sup>
- Ensure the outcomes and the overall impact are measured for any programme, including tracking the programme's overall progress by goal setting and setting benchmarks for the participants, teachers, coaches, parents and caregivers<sup>29</sup>
- Ensure strategies account for the fact that play can impact many areas of a child's development including their social, cognitive and physical development<sup>30</sup>
- Identify champions within the local community who will drive forward changes to children's play provision<sup>31</sup>
- Use playful and child-centred methods to facilitate consultation with children to ensure that the child's perspective is fully understood,
   this could include games or pictures and maps<sup>32</sup>
- Ensure family based, multi component weight management services are available within the community. Ensure long term resources are assigned<sup>33</sup>
- Identify patterns and trends of outcomes for children and young people in your area such as substance misuse or youth offending rates.
   Use the data to agree the scale of the local challenge and set aside resources accordingly<sup>34</sup>
- Focus on targeted programmes, such as when children are young, and targeting those most 'at risk'35
- Leverage digital media, as a medium used extensively by young people, to promote a positive attitude to sport and physical activity<sup>36</sup>

#### Facility and services provision

- Develop local services that meet the needs of playing children<sup>37</sup>
- Consider play space typology in your local area and ensure the provision meets the need of the local child population<sup>38</sup>
- Maximise the access to school sites for leisure facilities, encouraging schools to honour the requirements they have to serve their communities<sup>39</sup>
- Play facilities are most valued when they are close at hand. Ensuring facilities are no more than a few hundred metres away ensures
  regular use does not decline<sup>40</sup>

- physical activity including outcomes frameworks and commissioning plans.
- Use to lobby local delivery agents to ensure their strategic focus meets the needs of the local area
- Use different sections of the research to focus commissioning on a target group.

### Deliverers (NGBS, clubs, CSPs, community clubs, schools, childcare providers etc.)

 Gain an understanding of the strategic needs of sport and physical activity and develop approaches to align services to these.

 Playground markings and structures can increase the amount of moderate to vigorous physical activity that children take part in<sup>41</sup> London 2012 Legacy The 2012 Games may have the potential to contribute to an increase in the frequency of participation in sport or the more formal physical activities of existing participants or to rekindling interest in lapsed participants (Demonstration Effect)<sup>42</sup> • The 2012 Games may have the potential to contribute to stimulating the contemplation of physical activity or the most informal sport related activities among those who have not previously contemplated participation (Festival Effect)<sup>43</sup> **Evidence for** The window before age 10 represents the most crucial developmental period for when preferences and motivation are cemented<sup>44</sup> **Commissioners and** interventions Strategists (Local Authorities, Community based - children **Commissioning Boards**, Creating good relationships with schools will improve the quality of PE delivered. Supporting schools to track attainment will enable the NGBs, Sport England, CSPs, positive effects of the development of key physical skills in young people to be evident<sup>45</sup> Schools) Tailor activities to suit the child's developmental age and physical ability<sup>46</sup> • Utilise the evidence for • Community members, such as children's centre staff or a physical activity development officer, can be involved in helping to extend interventions within JSNA physical activity provision either through providing expertise, a venue or resources<sup>47</sup> approaches to drive the • Review what provision is needed and how it should be offered – play supervision is a balance between enabling creativity and providing application of evidence the freedom to learn whilst managing risk<sup>48</sup> based practice principles Children's physical activity is characterised by intermittent short duration (<5 minutes) bursts of all-out activity alternated with periods of</li> within localities. rest and recovery, interventions should be planned to reflect this<sup>49</sup> Ensure the correct • The greatest impact of physical activity affecting the well-being of a child can be seen for children who previously took part in no activity measures are in place to and began an activity such as walking or cycling, even a small amount of activity has a positive impact on well being<sup>50</sup> evaluate the impact of a • Equipment does not need to be expensive, and imprompt household items are often more stimulating than bought toys. For the full programme benefits of active play to be realised, play should not be overly parent-led<sup>51</sup> Community based – young people Deliverers (NGBS, clubs, • Branding is important to young people, and projects need names and brands that appeal. The term 'youth club' is off-putting and CSPs, community clubs, associated with being old-fashioned or focused on the wrong audience<sup>52</sup> schools, childcare providers • Competitive sport provides a particular opportunity for young people to develop their character, resilience, and team working skills<sup>53</sup> etc.) Invest in good teachers, coaches and mentors to achieve the best results<sup>54</sup> • Use the evidence to develop evidence based Family inclusion practice within your Interventions should address lifestyle within family and social settings<sup>55</sup> programmes and • Family interventions should include the education and awareness raising of recommendations and benefits, family activity sessions, the services. When

involvement of parents and carers and active travel<sup>56</sup>

developing new services

- Weight management programmes, including physical activity, that incorporate the family and are acceptable to all, will have a greater chance of success<sup>57</sup>
- Parents should be supported to get the balance right between encouraging play and physical activity, and minimising the risk of injury<sup>58</sup>
- use it as a start point.

  When reviewing
  programmes consider
  how they are meeting the
  evidence base.
- Identify innovative ways to introduce interventions

# Treatment and Prevention of Health Conditions

Physical activity is important for children and young people's heath and wellbeing and contributes to their physical, social, emotional and psychological development. Physical activity can help prevent long-term medical conditions and help manage existing conditions<sup>59</sup>

There is a growing body of evidence that there is a 'dose-response' relationship between exercise and physiological health outcomes, that means the more physical activity done, the better the physiological outcomes<sup>60</sup>

#### Childhood asthma

- Bronchial hyper-responsiveness increases with decreasing hours of exercise per week
- Swimming can increase aerobic fitness and decrease asthma morbidity. Swimming is less likely to trigger exercise-induced bronchoconstriction (EIB) than running
- Exercise may decrease EIB severity by increasing the threshold for triggering bronchospasm as well as improving aerobic capacity.

  Approximately 50% of affected individuals can experience this 'refractory period' up to 4 h after initial exercise, resulting in decreased bronchoconstriction during subsequent exercise<sup>61</sup>
- Children can take part in physical activity without negatively affecting their asthma<sup>62</sup>

#### Childhood cancer

• There are some small benefits of physical activity in children with acute lymphoblastic leukaemia (ALL) (the most common type of childhood cancer) on body composition (percentage of fat mass, muscles, and bones), flexibility, and cardiorespiratory fitness (endurance capacity). However, the evidence for a benefit on physical fitness of these interventions is limited<sup>63</sup>

#### Type 1 diabetes

Parents can support children to take part in physical activity in group settings<sup>64</sup>

#### Cardiovascular disease risk factors:

• Regular participation in physical activity during childhood results in a 20-35% lower risk of cardiovascular disease including coronary heart disease, stroke and improved cholesterol profiles

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

 Utilise the evidence for interventions within JSNA approaches to drive the application of evidence based practice principles within localities.

- Gain an understanding of how physical activity and sport can play a role in preventing and treating health conditions.
- Use the evidence as an advocacy tool to develop effective links between sport and physical activity and potential investors

	Physical activity is important to protect against clustering of CVD risk factors in young children (although this is more consistent in those	
	older than 6 years).	Being Boards, Clinical
	Multifactorial interventions, involving exercise, nutrition education, and behaviour therapy, are effective in improving CVD risk factors in	
	obese children <sup>65</sup>	Learning Disability
	Musculoskeletal health:	Partnerships etc.
	Ankle and foot problems are significantly more common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 66  Herberg triangle in the common in overweight and obese children compared with normal weight children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common in overweight and obese children 67  Herberg triangle in the common 67  Herberg triangle in the common 67  Herber	
	<ul> <li>Under certain conditions, physical activity may be beneficial for musculoskeletal health<sup>67</sup></li> </ul>	
	Motor skill development:	
	Children in the highest tertile of locomotor scores spent significantly less time in sedentary activity than children in other tertiles	
	Children with poorer motor skill performance were less active than children with better-developed motor skills	
	This relationship between motor skill performance and PA could be important to the health of children, particularly in obesity prevention.	
	Clinicians should work with parents to monitor motor skills and to encourage children to engage in activities that promote motor skill	
	performance <sup>68</sup> .	
	Psychological, social and emotional health	
	Physical activity can improve the physiological and psychological health of children and young people with increased self esteem, self	
	confidence, social skills and reduced anxiety <sup>69</sup>	
	<ul> <li>Physical activity is beneficial for later cognitive development and understanding abstract concepts<sup>70</sup></li> </ul>	
	• Young people who participate in sport every day are twice as likely to have high levels of happiness than those who participate in sport on two or fewer days a week <sup>71</sup>	
	• The importance of play for the cognitive, social and emotional well-being of children and adolescents is well acknowledged 72.	
	Weight status:	
	<ul> <li>Physical activity can lead to reduced body fat and maintaining a healthy weight<sup>73</sup></li> </ul>	
	Increasing physical activity and decreasing a range of sedentary behaviours may be an effective strategy in the management of weight	
	and obesity in children and adolescents, alongside appropriate nutritional intake <sup>74</sup>	
Health Impact of	There are no financial estimates of the health impact of physical activity for children. Please refer to the Cradle to the Grave Evidence Base for	Commissioners and
Physical Inactivity	Physical Activity and Sport ADULTS and OLDER PEOPLE for this data for adult populations.	Strategists (Local Authoritie
	Children who are obese in childhood are likely to remain obese into adulthood. Only 3% of overweight or obese children have parents	Commissioning Boards,
		NGBs, Sport England, CSPs

	who are not overweight or obese: it is vital to work with parents, taking a whole-family approach <sup>75</sup>	Schools)
	<ul> <li>There is a growing body of literature to demonstrate the positive immediate and long-term, physical health and psychological benefits that children and young people can gain from being physically active. The evidence base is growing rapidly; recent large-scale epidemiological studies, utilising valid measures of physical activity, have demonstrated stronger associations than have been observed previously and helped to clarify dose–response relationships between activity and specific health outcomes.</li> <li>Evidence suggests that there is a dose-response relationship between physical activity and health benefits, namely, as activity increases by intensity and duration, the individual will experience greater benefits. By increasing physical activity and in particular vigorous activity, the individual will experience greater health benefits, these include cardiorespiratory fitness, metabolic health, muscular and bone strength. Increased bone strength is of particular benefit for adolescents prior to growth spurts<sup>76</sup></li> <li>In the Cochrane Collaboration Review of schools based physical activity interventions for children and young people, health risk factors are named in relation to physical activity, specifically, obesity, cardiovascular disease, hypertension, anxiety and depression. In addition, physical activity patterns track from childhood into adulthood, therefore those who are inactive in childhood are more likely to be inactive adults<sup>77</sup></li> </ul>	<ul> <li>Use as a guideline         advocacy tool for the         preventative health         agendas and public health         promotion</li> <li>Use to demonstrate the         importance and value of         early interventions</li> </ul>
Evidence for Active Environment	Specific recommendations for changes and modifications to the environment:	Commissioners and Strategists (Local Authorities,
	<ul> <li>Physical Activity Facilities</li> <li>Ensure facilities are suitable and accessible for all (lower socioeconomic groups, minority ethnic groups and those who have a disability).</li> <li>Both indoor and outdoor facilities should be safe (privacy, lighting, accessibility)</li> <li>There should be access to school facilities before, during and after the school day, at weekends and during school holidays</li> <li>Public parks and facilities, as well as more non-traditional spaces (e.g. car parks outside working hours), should be promoted as active spaces</li> <li>Urban active open spaces and outdoor facilities (e.g. for in-line skating) should be provided and these facilities should be located close to walking and cycling routes.</li> <li>Ensure that spaces and facilities meet recommended safety standards for design, installation and maintenance.</li> </ul>	Commissioning Boards, NGBs, Sport England, CSPs, Schools)  • Use to develop strategic approaches to creating

	Assess proposals for signs and notices restricting physical activity in public spaces (e.g. banning ball games) and the potential impact on physical activity.
	Active Transport
	Ensure local authority transport and school travel plans are aligned
	Ensure local authority transport plans are aligned with the provision of physical activity spaces and facilities
	Ensure local authority transport plans acknowledge any potential impact on opportunities for physical activity.
	• Facilitate active travel such as walking and cycling through the provision of support and infrastructure. Children and young people with additional needs should be considered in provisions
	<ul> <li>Work with schools to develop, implement and promote school travel plans (mapping safe routes to school, organising walk and bike to school days and walking buses, organising cycle and road safety training, helping children to be 'streetwise' and training courses for school travel plan advisers).</li> </ul>
	Identify and improve transport policy barriers that inhibit children and young people from using modes of travel involving physical activity (such as walking or cycling) <sup>78</sup>
Evidence for	Guidance on individual approaches to behaviour change does not offer specific recommendations in relation to children and young people (it

### schools, childcare providers etc.)

• Use to determine policies and procedures to support the creation of an active environment

# **Behaviour Change**

ple (it states that this will be a future focus). In the review it was acknowledged that intervention research tends to declare the theoretical underpinning of the intervention employed but there is a lack of evidence to suggest how theoretical concepts can be synthesised to provide evidence. The general NICE (2007) guidelines can also be employed with this age group<sup>79</sup>

Recommendations for the inclusion of behaviour change suggest strategies that encourage self-regulation/monitoring such as goal-setting. A number of practical strategies are offered:

- Teach self- monitoring of effort during physical activity sessions (perceived exertion, heart rate or breathing patterns).
- Teach the skills of setting realistic session goals and monitoring progression.
- Educate about the importance of being physically active for current and future physical and psychological health.
- Include behavior change skills across curriculum subjects<sup>80</sup>

Within the academic discipline of psychology there are several behaviour change theories which can be clustered into two distinct approaches, namely:

- Staged-based approach
  - Stage-based models such as the Transtheoretical Model suggest that individuals pass through several discreet stages as they attempt to change their behavior (adopt or maintain a new behavior such as physical activity).
- Cognitive based approach

Commissioners and **Strategists (Local Authorities, Commissioning Boards**, NGBs, Sport England, CSPs, Schools)

 Consider how to fully utilise context altering interventions as part of behaviour change approaches

Deliverers (NGBS, clubs, CSPs, community clubs, schools, childcare providers etc.)

> Embed key behaviour change principles within activity interventions.

 Cognitive-based approaches propose that physical activity behaviours are determined by cognitions such as attributions, motivation and self-efficacy (popular approaches include the Health Belief Model, the Theory of Planned Behaviour and the Self-determination Theory)

Interventions grounded in Self Determination Theory could positively influence participants' behavioural, cognitive and affective responses to exercise and should be considered when designing future interventions studies<sup>81</sup>.

# Wider Impact measurement

#### **Social Capacity & Social Cohesion**

Research into the impact of sport in the community suggests that:

- Correlations exist between national levels of sports membership and levels of social trust and well-being, although this may be a reflection of the type of people are likely to participate in sport rather than a function of participation itself.
- Sports clubs can perform a wide range of socio-cultural functions including leadership, participation, skill development, providing a community hub, health promotion, social networks and community identity.
- Sport is likely to be one of a number of factors that influence national identify but that this varies between nations and sports.
- There is a need to develop a theory of change approach to the provision of sporting opportunities to diverse ethnic minority populations with consideration given to perceived and real barriers to participation<sup>82</sup>
- The social effects of sport are enhanced confidence and self-esteem, empowered disadvantaged groups, improved capacity of the community to take initiatives, reduction in crime, vandalism and delinquency, increased social integration and co-operation, encouraging pride in the community, improved employment prospects, increased productivity through a fit and healthy workforce, improved health and improving the environment<sup>83</sup>
- A higher percentage (18.7%) of young people aged 14-25 volunteer in sport than any other age group<sup>84</sup>

#### Tackling anti-social behaviour

Research into sports based programmes for "at risk" communities and those aimed at the rehabilitation of offenders suggests that:

- Sport appears to be most effective as part of a broader developmental programme (i.e. community support services, youth services etc.).
- Sport's salience with young people enables it to attract young people to such programmes
- Programmes with educational components appear to aid positive changes to attitudes and perceptions within participants.
- The level, intensity, type of participation, socio-institutional context, peer group influences and interaction all effect the extent to which sports participation produces long term positive and negative behaviours<sup>85</sup>
- Evidence suggests that traditional facility-based programmes have a limited impact. Outreach, bottom-up approaches, credible leadership, and non-traditional, local, provision appear to have the best chance of success with the most marginal at-risk groups<sup>86</sup>
- Sport for development work is projected to have an impact across a range of social outcome areas. The biggest improvements were

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

- Recognition of sport and physical activities ability to meet cross cutting agendas within JSNA
- Use as an advocacy tool to develop business plans to draw investment for sport and physical activity and determine expected outcomes for interventions.

- To make the business case for investment into a range if sport and activity interventions.
- To support the development of tenders

recorded in relation to substance misuse (19.2%) and crime and anti-social behaviour (15.81%)<sup>87</sup> for commissioning. • Sport creates additional opportunities to move away from anti-social behaviour such as mentoring, role modelling, and opportunities to coach others. These activities can increase self-esteem and self-confidence as well as impact on employment opportunities 88 Strengthening attachments in communities and reducing social inequalities are particularly important mechanisms for preventing violence and offending<sup>89</sup> Cost savings attributed to diversionary activities to tackle anti social behaviour • 2nd Chance uses sports coaching to help young offenders build relationships, improve behaviour, obtain sports qualifications and receive guidance from mentors once released. If just five of the 400 young people they work with each year are prevented from re-offending the value for every 1 invested is 4.70. It is estimated that the cost to society and services of one offender at the institute is 80,000 per year. At a running cost of 87,000 per year, 2nd Chance demonstrates the significant value in investing in sports provision for prevention of crime<sup>90</sup> • It is estimated that the cost of sending one pupil to a Pupil Referral Unit is between £13,000 and £18,000 per year compared to around £5,200 per year to send one pupil to a regular secondary school. The cost per pupil for the FairPlay programme (RFU programme targeting hard to reach young people) was £311, which went up to £451 when looking only at those who completed the programme – a fraction of the cost of Pupil Referral Units<sup>91</sup> **Evidence of Cost QALY Information Commissioners and Effectiveness** Definition: QALY = Quality adjusted life year, a year of life adjusted for its quality or its value. A year in perfect health is considered equal to 1.0 Strategists (Local Authorities, QALY. **Commissioning Boards**, The National Institute for Clinical Excellence sets costs effectiveness thresholds for interventions (including new drugs). Current thresholds NGBs, Sport England, CSPs, interventions with an incremental cost-effectiveness ratio of less than £20,000 per QALY are cost effective and that interventions with costs of Schools) more than £30,000 per QALY it would not be considered cost effective 92. Use to consider the cost effectiveness of different programmes using QALY Physical activity interventions in children and adolescents To assess the cost effectiveness of four interventions to increase physical activity in children and adolescents, a 'case-study' or scenario and Social return on analysis approach was taken, as far as was practical with the data\* investment information. \*There is a large amount of uncertainty associated with these results as, due to the limitations of the evidence, it was necessary to make a Use as an advocacy tool to number of unverified assumptions within the analyses, and the results were also shown to be sensitive to changes in these assumptions. develop business plans to draw investment for sport and physical activity Use to determine preferred approaches to investing in

Summary estimates of the cost-effectiveness of the four interventions

	Cost per QALY (£)	'Best case' (£)*	'Worst case' (£)*
Walking Bus	4,007.63	2,431.51	26,306.42
Dance classes	27,570.06	15,545.23	150,794.48
Free swimming	40,461.56	-	-
Community sports	71,456.21	-	-

The community sports scheme particularly highlighted the difficulties of estimating the benefits of a programme in terms of QALYs which are specific to the child as such an approach would not encompass any non-health benefits or any benefits that might accrue to the family or wider local community that the scheme was designed to improve<sup>93</sup>

\*The best case scenario indicates the cost effectiveness of the intervention when all relevant assumptions are at their most favourable. The worst case scenario is intended to indicate whether the intervention is still cost-effective when all relevant assumptions are at their least favourable. For full details on the variables, please refer to the original source.

#### Brief Intervention for physical activity in primary care

Costs between £20 and £440 per quality adjusted life year (QALY) when compared to no intervention.

Net costs saved per QALY gained of between £750 - £3150.

Brief intervention in general practice to improve exercise uptake can deliver cost savings of £3,300 per person<sup>94,95</sup>.

#### Department of Health Local Exercise Action Pilots programme evidence

Costs between £50 and £510 per quality of life year (QALY).

Future savings to the NHS determined to be £700 - £4900 per participant

Costs per participant who increased their physical activity levels was £260 - £2,790 $^{96}$ 

**Birmingham BeActive Scheme** (collaborative scheme offering free access to local leisure facilities and activities for all Birmingham residents at off peak times)

The value for money evaluation on the programme demonstrated a cost per QALY of £1,164<sup>97</sup>. The net benefit per person was shown to be £3,200 based on 2011 prices<sup>98</sup>.

#### **Swimming**

An estimate of the economic value and cost effectiveness of Swimming in the Community showed that the cost per QALY derived by members of the public from regular swimming in public pools is around £12,000<sup>99</sup>.

different interventions.

- Be aware of caveats for using this information by visiting initial sources of data
- Aid intelligent commissioning approaches

- To make the business case for investment into a range if sport and activity interventions.
- To support the development of tenders for commissioning.

#### Range for physical activity interventions detailed above

Cost per QALY evidenced to be between £20 - £12,111 depending on the intervention

Savings per QALY gained evidenced to be between £367 - £4,900 depending on the intervention

#### Cost effectiveness of behaviour change model

This short-term and long-term cost-effectiveness study of a theory-based online health behaviour intervention which was investigated in a Randomised Control Trial (RCT) in comparison with a control group in young people starting university:

Cost £292 per participant in the RCT.

Rollout estimated at £19.71 per participant.

Short-term cost per QALY = £244,000 $^{100}$ 

#### **Social Return on Investment Modelling Information**

#### **Sport**

Using an income compensation approach to estimate the value of policy outcomes using a subjective wellbeing measure, someone in a median income participating regularly in sport (at least once a week as opposed to not participating in sport) brings the equivalent increase in sense of wellbeing (happiness) as earning an additional £11,000 a year would bring. Income compensation valuations of subjective wellbeing can be contentious and is a developing area if public policy as such this should be seen as relative measure of value rather than taken too literally<sup>101</sup>.

#### **Promotion of Active Travel**

In the UK evaluated interventions promoting active travel (cycling and walking) have an average benefit cost ratio of 19:1 (for every £1 invested there is a health benefit equivalent of £19)<sup>102</sup>.

NICE have developed a physical activity return on investment tool to help decision making in physical activity programme planning at local and sub-national levels. Use the tool to evaluate interventions in their geographical area and model the economic returns that can be expected in different payback timescales<sup>103</sup>

# Comparison to cost effectiveness of other PH interventions

There is no data currently available. For more information about the cost of inactivity in adult populations, please refer to Cradle to the Grave Evidence Base for Physical Activity and Sport ADULTS and OLDER PEOPLE.

Cost of Inactivity	There is very little data currently available. For more information about the cost of inactivity in adult populations, please refer to Cradle to the	Commissioners and
	Grave Evidence Base for Physical Activity and Sport ADULTS and OLDER PEOPLE.	Strategists (Local Authorities,
		Commissioning Boards,
	The long term annual health costs associated with treating each obese child growing up to be an obese adult are £585-£683 per child 104	NGBs, Sport England, CSPs,
		Schools).
		Use as an advocacy tool to
		develop business plans
		Deliverers (NGBS, clubs,
		CSPs, community clubs,
		schools, childcare providers
		etc.)
		<ul> <li>To support the</li> </ul>
		development of tenders
		for commissioning.

Potential Savings of getting population more active

See Appendix 1 for the assumptions and caveats that sit alongside the methodology for these approaches.

Please contact the
Black Country
BeActive Partnership
for further information
regarding the
methodology and to
arrange for the
methodology to be
applied to your
locality.

There are different methods that can be taken to calculate the potential savings of increasing the physical activity levels within the Children & Young People population of the Black Country. This document provides 2 examples based on savings that could be made to prescription costs. Due to insufficient data being available for the sport and physical activity rates of this cohort, the assumption has been made that participation rates remain the same for 5-18 year olds as they do for the adult population. The 150 minutes+ calculation shows the potential savings if the proportion of Black Country residents doing 150 minutes+ is raised to the same level as the national average. The 0x30 calculation focuses on inactivity and shows what savings could be made if young people in the Black Country currently doing no physical activity changed their habits over time to exercise at the recommended amount.

#### **Model1: Increasing Participation model (Aspirational)**

150 minutes + Physical Activity – To raise the Black Country 150 minutes + rate to the national average would require increasing 15,197 additional 5-18 year olds to be active at this rate. If these people were to participate at this level the following savings could potentially be made on medication costs if the percentages of incidences of these conditions that are attributable to inactivity are taken into account:

Diabetes: £506,487.61
Depression: £540,973.49
Total: £1,047,461.10

Less than 30 minutes – There are 72,584 children and young people in the Black Country who live sedentary lifestyles, taking part less than 30 minutes of physical activity per week. If these people were to become more active and achieve 5 x 30 minutes and the percentages of incidences of these conditions that are attributable to inactivity are taken into account: the following savings could potentially be made:

Diabetes: £2,419,144.79 Depression: £2,583,860.22

Total: £5,003,005.00

Another method of assessing the potential cost is by analysing the possibility of using physical activity as a treatment. To do this requires accurate statistics on the prevalence of diseases amongst a given population. The examples below are related to diseases for which there is data available at Local Authority level. Due to a lack of prevalence data specifically for children and young people the assumption has been made that rate for children and young people is the same for the whole of the population.

Commissioners and
Strategists (Local Authorities,
Commissioning Boards,
NGBs, Sport England, CSPs,
Schools)

- Use to document the potential savings to the NHS if sections of the population were to become more active.
- Use as an advocacy tool to develop business plans to draw investment from health and well-being boards for sport and physical activity.
- Highlight the need for Public Health to be on Clinical Commissioning Agendas
- Aid intelligent commissioning approaches

- To make the business case for investment into a range if sport and activity interventions.
- To support the development of tenders for

commissioning.

#### Model 2: Decreasing prevalence of disease (current trend model)

#### **Diabetes**

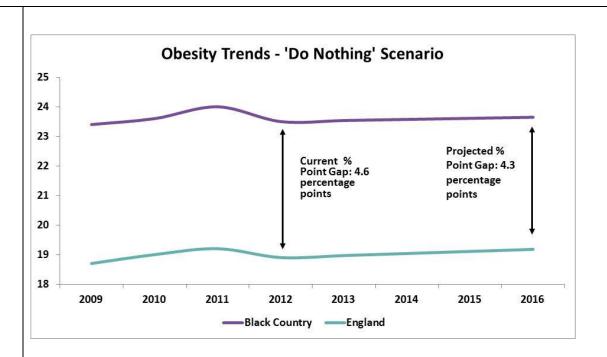
Assuming the same proportion of 5-18 year olds are affected as with the adult population, 25,805 people in this cohort have diabetes <sup>105</sup>. Based on this number the cost to the NHS in the Black Country is £127,736.65, however the Chief Medical Officer stated that intervention studies using aerobic exercise reported improvements in glucose metabolism of up to 36% <sup>106</sup>. To assume that physical activity could aid up to 36% of people with diabetes would therefore reduce the potential savings to £45,985.19. Applying the average number of annual prescriptions per patient in the UK (18.7) <sup>107</sup> this represents a potential annual saving of £860,068.97.

#### **Depression**

Due to limited data on the prevalence of depression by age, this document makes the assumption that depression is prevalent amongst 5-18 year olds at the same rate as with the adult population. In the 2012-2013 30,091 children and young people in the Black Country were being treated for depression. With the average prescription cost to the NHS being £6.34 this equates to potential savings of £190,779.49. However, studies suggest that physical activity can reduce levels of depression in up to 30% of cases, suggesting more realistic potential savings of £57,233.85. Applying the average number of annual prescriptions per patient in the UK (18.7)<sup>108</sup> this represents a potential annual saving of £1,070,272.96.

#### **Model 3: Obesity**

To look at potential savings regarding obesity, the assumption has been made that the child obesity rates for 10-11 year olds remains consistent across the 5-18 cohort. An average of the four local authority obesity rates shows that in 2012-2013, 23.5% of Black Country children & young people were obese. The national average was 18.9%. The situation is getting gradually worse; from 2009-2012 rates have increased in the Black Country by 0.2%. The following graph shows the consequences if trends continue with no action.



If nothing is done to halt obesity rates and they continue to rise at current rates there will be a 4.3 percentage point gap between Black Country child obesity levels and the national average. This equates to an **additional 15,796 obese people in the Black Country by 2016**. The cost to the NHS of prescriptions to counter obesity averages at £30.46 per treatment. Applying the average number of annual prescriptions per patient in the UK (18.7)<sup>109</sup> this represents a potential annual saving of £8,997,433.

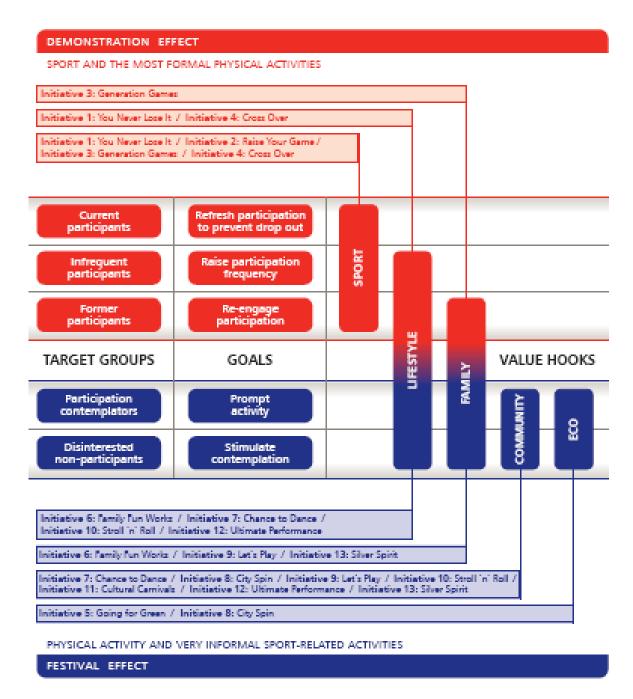
#### **Potential Savings per Local Authority**

The following table lists the potential savings for each Local Authority for each disease. More detailed breakdowns are available to view in Appendix 1 of this document. The obesity figure refers to the potential savings that could be made if projected increases in obesity by 2016 are avoided. Due to rounding, figures for the four local authorities won't necessarily add up to the Black Country figures calculated previously.

	Diabetes	Depression	Obesity
Dudley			£14,721,070.6
Dudioy	£227,027.78	£282,562.12	1
Sandwell	£239,968,24	£298,668.00	£3,926,784.48
Walsall			£16,681,682.1
	£208,892.23	£259,990.34	5
Wolverhampton			£12,735,649.9
	£184,034.86	£229,052.49	6

## **Active Celebration** Games to Get the **Nation Moving**

The Active Celebration: Using the London 2012 Games to Get the Nation Moving publication provides an evidence based set of case studies Using the London 2012 and strategies to act as a blueprint to document which schemes are likely to work, in which settings to meet key outcomes to drive up participation in sport and physical activity by harnessing the demonstration and festival effects of the London 2012 Games. The evidence base considers target groups, goals, value hooks and the range of informal and formal opportunities. A diagram to document how these interlink can be seen below<sup>110</sup>.



Commissioners and Strategists (Local Authorities, **Commissioning Boards**, NGBs, Sport England, CSPs, Schools)

- Support to consider the target groups, goals, value hooks and the range of informal and formal opportunities that may be needed to drive up participation in sport and physical activity and aid the targeting of local interventions and commissioning.
- The development of outcomes and impacts for commissioning scopes

- Consider how current and future delivery aligns to the target groups, value hooks
- Determine approaches that are evidenced based to drive up participation.

Projects from Active
Celebration Using the
London 2012 Games to
Get the Nation Moving

Initiative 1 "You Never Lose It": Projects should aim to re-activate motivations for sport participation among those whose participation has lapsed for a range of reasons. The most successful activities are likely to be more traditional sports played at school, college, University or in the years after leaving. Sports should be offered in a turn up and play structure that does not require long term commitment. Activities can be supported by social networking sites. Key market segmentation audiences are Change4Life Cluster 5 families. Example: Dads and lads Programme or alternative sports sessions such as canoeing or rock climbing funded by Sportivate/Small Grants.

Initiative 2 "Raise Your Game": Projects should aim to get those participating to participate more, activities should be aimed at non club members who participate on a pay and play basis or informally and encourage them to join clubs. Target sports include Swimming, Cycling, Jogging/Running, Badminton, Table Tennis, Squash, martial arts fitness classes. Key market segmentation audiences are Change4Life Cluster 4 families. Example: Satellite clubs

Initiative 3 "Generation Games": Projects can focus on pay as you play or more formal club based models to get families to try new sports together or encourage parents to try the sports that their children play. This may involve adult sessions being put on at the same time as children's sessions where it is difficult for them to play together. Key market segmentation audiences are Change4Life Cluster 5 & 6 families, Example: Dads and lads rugby, Sport Relief and Swim Britain.

Initiative 6 "Family Fun Works": These can be one off events or more sustainable programmes to bring together families to take part in activities and games either indoors or outdoors to prompt activity and stimulate contemplation of taking up sport and activity. Examples include buggy fit programmes. Key market segmentation audiences are Change4Life Cluster 1 & 5

Initiative 7 "Chance to Dance": These projects promote and develop dance classes and workshops that combine one off "taster events" with more sustainable dance classes in a variety of local settings. Key market segmentation audiences are Change4Life Cluster 3. Examples Sportivate dance programmes.

Initiative 8 "City Spin": Outdoor cycling projects that are promoted with the occasional or interested non-cyclists in mind. These projects could include cycle maintenance, marking of cycling routes, cycling groups etc that provide activities according to cycling ability. Key market segmentation audiences are Change4Life Cluster 2. Examples include British Cycling's SkyRide programmes.

Initiative 9 "Let's Play": These programmes provide a range of activities for people to engage in things that they have not tried before. The events are based on experiencing one off activities in local community settings that are accessible, low cost and bring people together. Key market segmentation audiences are Change4Life Cluster 1, 2, 4 & 5. Example Community Games

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

- Support to consider the target groups, goals, value hooks and the range of informal and formal opportunities that may be needed to drive up participation in sport and physical activity and aid the targeting of local interventions and commissioning.
- The development of outcomes and impacts for commissioning scopes

- Consider how current and future delivery aligns to the target groups, value hooks etc.
- Determine approaches that are evidenced based to drive up participation.

Initiative 10 "Stroll 'n' Roll": One off events based on participants completing a defined route and distance in any way that they can – run, jog, walk, roll, stroll, scooter, pushchair, wheelchair etc. Key market segmentation audiences are Change4Life Cluster 1, 2, 3, 4 & 5. Example BHF Stroll 'n'roll.

Initiative 12 "**Ultimate Performance**": Provide genuinely inclusive opportunities for people to engage in physical activity through dynamic theatre and performing arts projects. Audience is focused on people with disabilities.

All of the above are referenced at 111

#### PHYSICAL ACTIVITY AND SPORT OPPORTUNITIES AND PRODUCTS WITH A GROWING EVIDENCE BASE

#### **Promising Local**

#### Practice (taken from

Black Country BeActive,
BeHealthy Headline
Review profiles and
information from Local
Authority Officers)

#### **DUDLEY**

#### **Dudley Healthy Towns**

The Dudley Healthy Towns project saw £4.5 million of investment into the borough under the government's Healthy Community Challenge Fund, which aimed to pilot ways of reducing childhood obesity levels. Dudley's programme aimed to encourage families to make the most of outdoor areas and used the money to transform five of the borough's parks and play areas into healthy hubs. Each hub has a free outdoor gym, a Healthy Towns building and a dedicated Park Physical Activity Ranger. Funding has also been invested into active travel corridors promoting walking and cycling across the borough. Further information is available at <a href="http://www.dudleyhealthytowns.co.uk/">http://www.dudleyhealthytowns.co.uk/</a>

#### Walking for Health

Dudley has had a successful programme of health walks delivered in the borough since 2006. The nationally accredited Dudley Walking programme delivers a number of popular health walks to groups across the borough through the national Walking for Health programme. In 2012/13 there were 612 registered participants who collectively completed 13,350 hours of walking.

over the past 3 years, Dudley has been leading the way in the development of the programme nationally. In 2010 a national pilot project with the Walking for Health programme was delivered in Dudley, taking a new approach to the recruitment and training of walk leaders. In the past 3 years there have been 107 walk leaders recruited and trained from a range of backgrounds and settings. The scheme co-ordinator is also a representative on the National Scheme Coordinators Advisory Panel which is currently helping to steer the new developments and direction of the programme for the next 2 years.

#### **Groundwork West Midlands – CHD Community Prevention**

Groundwork deliver a portfolio of projects aimed at engaging local communities to create changes to physical environments. These changes help to create environments that encourage and support a greater uptake in physical activity and include the 5 to 18 year old group where applicable.

Commissioners and
Strategists (Local Authorities,
Commissioning Boards,
NGBs, Sport England, CSPs,
Schools)

- Identify promising local practice that can be replicated across the Black Country.
- Consideration given to approaches being taken in other areas within JSNA, Strategic plans and commissioning plans.

#### **Junior Exercise Referral**

Patients are signposted from Primary Care settings into one of three referral options, dependant on the patient's medical history and current activity levels. The three tiers to the exercise referral are;

- **1. Exercise Referral programme (age 12+)** Patients are referred to either the Action Heart Cardiac Rehabilitation Centre or one of the three Dudley Council Leisure Centres. At the referral station, the patient will be given a 12 week programme of exercise, developed specifically to suit the patient. At the end of the 12 weeks, the exercise instructor will outline a range of activity options to the patient to help them sustain their activity levels.
- 2. Discount Leisure Scheme (age 12+) Patients engaging with the scheme receive a 50% subsidy at all of Dudley Council's Leisure Centres on a 'pay & play' basis. The subsidy acts as a motivation for people to attend the centres for activities including gym, swimming, exercise classes and badminton. Following the 3 month subsidy period Steps to Health members become full paying leisure centre customers or are offered membership via the Council Discount Scheme.
- 3. Green Exercise (age 12+) The PAT receive referrals from Primary Care and contact the patient and discuss a range of outdoor activity options available. The most suitable activities are identified and relevant information is posted to the patient. The options available to patients focus on walking and cycling either in a group setting or individually. The majority of the options are free of charge, therefore providing options for those patients who are unable to afford the cost of gym based activity.

The Exercise referral programme was cited as good practice within the national CVD strategy 2012 and was a finalist of the 2013 Integrated Care Pathways Awards

#### Waterways to Wellbeing

Rowing is currently being organised through the Waterways for Well-Being project which is funded by Dudley Metropolitan Borough Council and British Rowing. The aim of the project is to develop both indoor and outdoor rowing opportunities in the surrounding Dudley area and at Dudley Watersports Centre by offering this local opportunity that aims to get more people physically active on the water.

#### **Dudley MBC - Skyride**

Dudley Council is able to fund a two-year sky ride programme thanks to a successful bid to NHS Dudley's Clinical Commissioning Group. The Skyides have successfully led to more Council support for cycling including support of the Dudley Cycle Forum. The Council has been successful in a bid for the Local Sustainable Transport Fund which is looking to increase cycle use in and around Brierley Hill; has a cycle to work scheme; has a travelwise programme; has a Dr Bike service which attends events and offers free bike MOTs; offers free Breeze training

for female cycle instructors; offers cycle safety training to all borough schools and is introducing cycle racks at various locations around the borough and is looking for additional funding to improve infrastructure in order to encourage greater cycle use.

#### Stop to Move (11 years old +)

Is an 8 week programme funded by Dudley Stop Smoking Services. Upon completion of a CO test and remaining 4 weeks smoke free, patients are rewarded with the use of Dudley metropolitan leisure facilities free for 4 weeks (4 smoke free weeks = 4 weeks free leisure pass).

#### **Sportlink**

The Sportlink programme, managed by Dudley Sport and Physical Activity service has been successfully running for over 15 years in Dudley. The programme is aimed at Dudley primary schools and offers sports specific and multi skills activities in curriculum and optional extra – curricular clubs. Years 1 and 2 are offered gymnastics curriculum taster sessions with an optional out of hours club. Years 3 and 4 are offered multi skills curriculum taster sessions along with an optional out of hours club. Years 5 and 6 are offered six priority sports of; basketball, cricket, football, netball, rugby and tennis, delivered by Dudley sport and physical activity coaches. The sports rotate on a cluster basis with two sports offered to each school each term.

#### **SANDWELL**

#### **Mytime Active Programmes**

**Boost** is a community and school-based weight management programme for children aged 5– 13 years old operating in various locations across the borough. It is primarily a family-focused intervention and there is an expectation that parents/carers attend the community-based programmes with their children. The secondary school-based programme is for older children and can be delivered in curriculum time, therefore parents or carers are not required to be present. The main features include; low impact physical activity/games, nutrition and a facilitated group session as part of the programme content, where participants are encouraged to adhere to a long-term healthy lifestyles plan by setting and achieving small goals each week. There have been 564 referrals to Boost from November 2011 – October 2014 and 168 completers within the same time frame.

Children's Cycling will be offered, in partnership with Sandwell MBC, to 10 primary schools in Sandwell and approximately 600 Year 4 pupils. This will involve Bikeabilty Level 1 tuition, in accordance to National Cycle Standards, and Dr Bike cycle maintenance. This initiative is to encourage more children to cycle, support safer cycling in schools and raise awareness of cycle maintenance. It also acts as a prerequisite to Level 2 Bikeabilty training offered to Year 6 pupils by Sandwell MBC. During the last period (November 2011 – October 2012), 1,434 Year pupils either achieved Bikeabilty Level 1 status or participated in a Dr Bike cycle maintenance session.

#### **Sandwell Leisure Trust Programmes**

Free swimming for 16 and under is available for any public or family swimming session throughout Sandwell school holidays. The scheme is

available at 5 centres and participants have to register for the scheme on line. To be eligible, participants must be 16 or under, and be a resident of Sandwell. There are currently 7,573 children and young people registered to the scheme recording 12,408 attendances between the initiative launch in July 2013 and February 2014.

**Doorstep Sports Clubs** are operated by Sandwell Leisure Trust, in partnership with Streetgames, across the borough targeting 14-25yr olds to get more active. Sessions are designed to offer young people multi-sport activities in a friendly and informal environment that supports sustained participation as well as offering the opportunity for young people to get involved with volunteering and gain coaching qualifications. Two successful doorstep sports clubs launched in 2013 and have supported over 60 young people (including 40 young people with disabilities) to now participate on a weekly basis. A further two clubs are due to launch in 2014.

#### **Young Volunteers Programme**

Sandwell Leisure Trust, in partnership with Streetgames Co-Operative Young Volunteers initiative, is continuing to successfully support the engagement and up-skilling of young volunteers from across Sandwell. The project helps to develop young people and supports them into officiating and marshalling roles for a wide variety of Sandwell events including the Sandwell Indoor Athletics League, Sandwell Valley Sport Relief, Business in the Community - Give and Gain Day and Sandwell Schools Tennis competitions. The programme has won numerous awards, the most recent awards include the Kids Count Inspiration Award 2013 presented at the House of Commons and the Streetgames Co-Operative Young Volunteers National Awards 2013, where 2 of the young volunteers were recognised for their hard work and contributions to sport in Sandwell. The programme registered 71 young volunteers for 2013/14. Of these, 57 were female, bucking the national trend.

**Sandwell Minor League** provides competition for children and young people and has been in existence since 2004. The minor league currently supports 52 teams (U8's to U16's) participating in football fixtures on a weekly basis. The league also provides additional club development support and advice, including coach education courses and regular league meetings to discuss football developments in Sandwell.

#### **WALSALL**

**Make it count** is a 12-week programme for 4-7 year olds and their families, and uses a family centred approach to increase physical activity levels and knowledge of healthy eating. The programme aims to support families making small changes to become healthier by promoting the national Change4Life message.

Each week children and their families can take part in 60 minutes of fun by playing a variety of games and developing their knowledge of healthy and unhealthy food choices as well as understanding how the different areas of the Eat Well Plate help their bodies to develop. Children will build up a week by week folder of information about healthy living which includes colouring sheets, crosswords and word

searches.

Throughout the programme parents are encouraged to play the games with their children and act as an active role model. The parents will also get the opportunity to gain tips about preparing healthy meals and how to reduce salt, sugar and fat. In 2013/14 the programme was accessed by 586 children with 87% increasing their fruit and vegetable consumption and 86% increasing their levels of physical activity.

#### **Food Dudes**

#### **WOLVERHAMPTON**

Wolverhampton has some universal services that target the whole population to promote healthy weights and some services that target those who are overweight or obese. These are mapped out in the following diagram for different age groups. This is not an exhaustive list of services in Wolverhampton and further mapping needs to be undertaken. This diagram supports the Public Health Team Annual Report Weight? We can't wait. A call to action to tackle obesity in Wolverhampton. Annual Report of Public Health 2013/14.



# National Sport England Programmes (\* Indicates that CSPs are accountable for the delivery in their area)

#### Sportivate\*

Sportivate targets semi sporty 11 - 25 year olds and provides them with the chance of taking part in 6 - 12 weeks of coaching in a sport of their choice and will support them in the longer term to continue to playing sport once the session have finished.

#### **Protecting Playing Fields**

The programme identifies and funds projects that help communities improve and protect playing fields.

#### **Iconic Facilities**

This programme will see the development of a small number of strategic facility projects that will significantly increase participation in sport and will be promoted as best practice examples.

#### Improvement fund

This programme will invest in the modernisation and extension of clubs and open up community facilities for sporting use. The funding will be used for local projects that are developed and delivered predominantly by the community and voluntary sector.

#### **Inspired Facilities**

This programme will invest in the modernisation and extension of clubs and open up community facilities for sporting use. The funding will be used for local projects that are developed and delivered predominantly by the community and voluntary sector.

#### **Small Grants**

Funding programme that awards between £300 - £10,000 to support community sports projects that increase or sustain participation in sport or provide opportunities for people excelling in sport.

**Communication sport activation fund** .funding programme **d**esigned in response to local demand, the Community Sport Activation Fund is a £47.5 million Lottery funding programme provide grassroots activity at a very local level aimed at families 14+

**Inclusive sport** – Funding programme is designed to increase the number of disabled young people (aged 14+) and adults regularly playing sport as part of Sport England's wider commitment to increasing regular sport participation by disabled people

# Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

- Understanding of national level programmes that can support local strategic delivery to meet strategic outcomes and create maximum impact as part of the delivery chain for sport and physical activity
- Use data to determine and target specific areas for sports initiatives listed.

- Understand where there are opportunities for added value to work that you are undertaking.
- Opportunities to align delivery to wider programmes
- Opportunities to bring in funding to support the work that is being delivered.

#### NGB Participation Programmes

#### **Archery**

**Arrows** is a 'mini' version of archery provides teachers with child-friendly equipment and resources to get you started quickly and easily. Simple ideas for activities and competitions are provided that can be used in PE lessons, across the curriculum, in out of hours clubs and as part of the School Games.

#### **Athletics**

**Sportshall athletics** is an indoor form of track and field for children between the ages of 4 and 16. It was created to provide a safe and warm environment for young athletes to train during the cold and dark winter months

**QuadKids** is an exciting sporting concept designed to give more children the opportunity to enjoy the benefits of athletics and to identify the stars of tomorrow

#### **Badminton England**

**Bisi badminton** - The Bisi Programme is endorsed by BADMINTON England and offers that first step to progress from beginning to medal winner. Bisi Badminton Primary is aimed at pupils who are beginning their physical education journey within the National Curriculum. Bisi activities and resources map closely to the National Curriculum Key Stages. There are both primary and secondary resources

#### **Basketball**

**IM Basketball:** (14-25 in education) – Aims to maintain and grow current levels of participation. With the flexibility of the sport at its core, IM Basketball is designed to offer informal participation opportunities primarily for those in schools, colleges and universities.

**Ball Again:** (16+ not in education) – The participant-centred programme of coaching and games not only for lapsed players but also those new to the sport, participants can play basketball for fun, to get fit or simply as a social activity.\*

\*both programmes have temporarily been removed but should be available again in the near future.

#### **Bowls**

**Have mat will travel:** A transit van equipped with an indoor and an outdoor short mat, fenders, bowls, table, chairs, marketing material and promotional goodies will visit events or venues with a high footfall to promote the sport.

**Short mat bowls:** Short mat bowls is an all-year sport played in village halls, schools, sports and social clubs, where space is restricted and is also required for other purposes.

• Develop new participants

## Commissioners and Strategists (Local Authorities, Commissioning Boards, NGBs, Sport England, CSPs, Schools)

- Understand the sporting products available from NGBs to support the delivery of strategic aims and objectives
- Consider sport within the wider commissioning needs of the locality

- Consider collaborative approaches to seek investment.
- Understand the wider sporting offer to communities
- Develop menus of opportunities

#### **Boxing**

**Box Fit:** A boxing fitness programme.

#### Canoeing

**Go Canoeing:** Canoe England Clubs/ Centres are running a series of taster sessions for absolute beginners- you don't need any experience, kit or special skills and it is suitable for everyone from 8 years old to 80 years old! There are lots of different types of canoeing which means there will be something for everyone's personal taste and ability. <a href="http://www.canoe-england.org.uk/clubs-i-centres/go-canoeing-days/">http://www.canoe-england.org.uk/clubs-i-centres/go-canoeing-days/</a>

#### **Cricket**

**KWIK Cricket** aims to provide children of all levels of ability and experience with an opportunity to regularly participate in a fun, introduction to cricket and to encourage fair play by all. The format is suitable for all ages but is mostly suitable for players under the age of 11.

#### **Cycling**

**SkyRide:** Sky Ride is a national campaign from Sky and British Cycling created to inspire and help everyone whatever their age or ability to get on their bikes and have fun. There are a whole range of ways for people to get involved. From big traffic-free events, to local rides, from routes and trails to courses and training. <a href="http://www.goskyride.com/">http://www.goskyride.com/</a>

**Go-Ride** is British Cycling's development programme for young people. The programme provides a fun and safe way to introduce young riders to the world of cycle sport and provides a platform to improve bike handling skills.

#### **Equestrian**

**Take Up the Reins** - Involves a team of three mechanical horses (RoboCob, Trigger and their little sister, Queenie) who tour the country to spread the word. They will stop off at county events, holiday parks, town centres, shopping malls, universities and colleges. Everyone who has a test ride will be presented with a certificate, rosette and goody bag to mark the occasion.

**HOOF Local Equestrian Networks**: Aimed at empowering equestrians within the regions to work together to increase participation, professionalism and profitability.

#### **Fencing**

**Go/Fence** - is the fun, safe and easy way to start fencing using plastic fencing equipment. There are lots of ways and places to try it - at school, the leisure centre, youth clubs and in local clubs.

#### **Football**

**Get Into Football Areas:** There are 33 Get into Football Areas in England which each have Local Area Plans for progressing the sport and these are supported by a Get Into Football Officer to lead on coordinating delivery. http://www.thefa.com/GetIntoFootball

**The FA Tesco Skills** is a unique football coaching programme that gives 5-11s of all abilities the opportunity to get active, learn new football skills and enjoy the game.

#### Golf

**Get Into Golf** – an extension of the current integrated marketing campaign, which is supported by web, social media and a 0800 number for people to call. A network of consumer communication partners will support the development of content aimed at priority segments. Targeted county and local messages using a variety of media sources in areas with large populations of core segments

#### **Gymnastics**

**GymFit** is a programme which can be used to improve general fitness and physical condition via a series of fun and challenging exercise work cards.

#### Handball

**Handball in 5 -** is a way of trying handball with friends or family using equipment that is easy to resource and public facilities. It's a fun and informal way of having a go at the game on your doorstep. A simple one-side resource is made freely available for self-starters that wish to run handball activity with their friends and colleagues informally – effectively learning a version of the game 'in 5 minutes'

**Handball in a Box -** is a progression from Handball in Five. England Handball will offer support to appropriately qualified local providers that wish to organise and deliver entry to low level handball activity in their community. These providers could be leisure centres, local sports development staff, private providers etc. The 'box' is the tailor made offer that will aim to complement local need.

## Hockey

Rush Hockey: New, fun, accessible, innovative, informal team sport that gives you a physical and emotional rush. Flexible format – Mixed, 4/5 a side, multi-surface, indoor or outdoor, larger and lighter ball, no goalkeepers, self-umpired, 4 basic rules for safety, enjoyment and fun.

Quicksticks is a 4 a side game, designed especially for 7-11 year olds. It can be played on any surface, and uses a larger, lighter and safer ball. Quicksticks is fun, safe and exciting and has been designed so that anyone can deliver the game regardless of previous experience In2Hockey is a fun, exciting and dynamic game designed for 10 to 14 year olds to help them develop their hockey skills and techniques, and to provide a gradual progression into the 11-a-side version of the game.

## Ice Skating

**Skate UK** is the approved Learn to Skate course developed by the National Ice Skating Association as the fundamental training scheme for anyone wanting to Learn to Skate. The SkateUK program teaches movement and basic ice skating skills for skaters of all ages in 8 clear stages.

## Judo

**JudoFit** - is a combat style aerobic workout to music that was developed during 2009-13. Targeted at adult gym users it is a high energy workout programme that focuses on core strength. Pilots have been undertaken during 2012 and delivered through the leisure centre instructor workforce.

#### Lacrosse

**POP Lacrosse** is a non-contact version of the Lacrosse which uses inexpensive plastic-headed sticks and oversized Lacrosse balls. POP Lacrosse was introduced in the 1980s and since then has become very popular with primary schools and is particularly suitable for delivering Key Stages in the National PE Curriculum. The game is usually played as a five-a-side mixed boys and girls game and is fast paced and fun to play.

## **Netball**

**High 5** is the entry game of netball. It's a great way for kids to get active, enjoy themselves and make new friends. It's designed specifically for children, aged 9-11, and uses fun and variety to get them into the game, polish skills and aid fitness

#### **Orienteering**

**Community O+** - is aimed at attracting and retaining participants with focused offers including an introduction to the sport, RunChallenge offers a more informal/social experience for a younger adult audience, Xplorer for the family market and a Student Starter offer for participants in education between the ages of 16 and 25. <a href="http://www.britishorienteering.org.uk/page/community\_orienteering">http://www.britishorienteering.org.uk/page/community\_orienteering</a>

**Virtual Orienteering** – is designed to target 'recreational runners' and to meet the needs of potential participants seeking an 'on demand' orienteering solution. This is based on similar mobile applications that exist in running, but with the ability to incorporate fixed points in line with traditional orienteering maps.

#### **Pentathlon**

Have a go Pent developing skills through multidiscipline coaching at clubs and coaching environments to prepare for competition at all levels. Working with core disciplines NGBs of Swimming, running, shooting, fencing and riding linking with and building on their products <a href="https://www.pentathlongb.org">www.pentathlongb.org</a>

#### **Rounders**

**Star Centres:** STAR Centres, (Satellite Training Academies for Rounders) are community clubs based at suitable venues around the country; they are based at Sports colleges, Universities, Sports Centres and recently, RFU (Rugby Football Union) clubs. <a href="http://www.roundersengland.co.uk/rounders/index.cfm/play/star-centres/">http://www.roundersengland.co.uk/rounders/index.cfm/play/star-centres/</a>

## Rowing

**Indoor Rowing:** Indoor rowing has its own competitions and events and is easily accessible with machines often being seen in gyms, sports centres and rowing clubs across the country. <a href="http://www.britishrowing.org/indoor-rowing">http://www.britishrowing.org/indoor-rowing</a>

**Explore Rowing:** Aims to get 10,000 more people rowing once a week by the end of 2013. This programme focuses on explore rowing clubs making new links with communities. http://www.britishrowing.org/about-rowing/explore-rowing

**Junior rowing** is an online guidance toolkit to teach junior rowers the basics of rowing through videos and pictures <a href="http://www.britishrowing.org/taking-part/juniors">http://www.britishrowing.org/taking-part/juniors</a>

## **Rugby League**

13 a side: A standard game involves two teams of 13 multi-skilled players with the simple aim being to score more points than your opponents. <a href="http://www.therfl.co.uk/play">http://www.therfl.co.uk/play</a>

**Tag/Touch**: Fast moving, evasive and involving minimal contact, Touch Rugby is a game played all over the world by men and women of all ages and skills levels. <a href="http://www.therfl.co.uk/play/touch">http://www.therfl.co.uk/play/touch</a> Play Touch Rugby League is a programme to acquire new regular participants and improve retention via 2 offers. Competitive Leagues and Turn Up & Play. Majority of delivery will take place in Powerleague sites.

## **Rugby Union**

15 a side: Standard 15 a side format game <a href="http://www.rfu.com/TakingPart/Play.aspx">http://www.rfu.com/TakingPart/Play.aspx</a>

**O2 Touch Rugby:** Touch Rugby is a non-contact version of the game, there are no scrums, no line-outs, no rucks and no mauls. http://www.rfu.com/TakingPart/Play/O2TouchRugby.aspx

## Sailing

**Start Sailing / Go Sailing:** is about learning to sail small dinghies or learning to windsurf. Both sports offer a fun and affordable way of getting afloat. Delivered through participating clubs and centres over a series of sessions, these then link into regular sailing opportunities through Go Sailing.

**Start Racing / Go Racing** is all about introducing new participants to fun racing within a club environment. These weekly sessions tend to be informal focusing on boat handling skills and introducing the basics of racing in a small dinghy. Go Racing allows a progression into more competitive, yet equally enjoyable club racing. These sessions tend to be more structured with regular racing offered in a clubs calendar. **Youth Sailing Scheme** The certificates within the scheme are a significant achievement. Instructors sign off each skill as you complete it and, once completed, your certificate can be of use in other areas of your study or activities such as PE at school, or the Duke of Edinburgh Award Scheme.

## Skiing & Snowboarding

**GO SKI GO BOARD (GSGB)** An overarching participation programme targeted at beginners, improvers and recreational skiers and snowboarders over the age of 14. After a 6 week programme of activity they are then encouraged to sustain their participation through joining a club or continuing with recreational access.

## Squash

**Mini Squash** is an exciting game that encourages children aged 5 to 11 to get on court and have fun. Using specialised equipment designed to help children learn the basic skills as well as develop coordination and balance, Mini Squash provides the ideal introduction to squash The following 4 products come under the banner of "The Big Hit"

Try It - targets people to try squash and racketball with different offers and discounts

Play It - involves Social Squash and racketball sessions that run once a week that introduce new players of all abilities to try the sport in an informal, fun and social group session

**Court Challenge** - is a flexible competition programme focusing on retention, and increasing participation frequency of informal squash and racketball players

**Squashercise** - is an exercise to music product, using squash movements and squash ball hitting exercises on a squash court.

#### **Swimming**

**NPTS** The British Gas ASA Learn to Swim Pathway is an all-inclusive programme which takes the non swimmer from his or her first splash to developing confidence and competence in the water.

**SwimBritain** is a series of fun team swimming relays that take place across Britain every September. It's all part of the British Gas/British Swimming partnership. Our goal is to inspire more people across Britain to swim more regularly – and get fit!

## **Table Tennis**

**Ping!** is a National programme with significant strategic input and a high level of creative input. It increases awareness by linking Sports and the Arts, taking sport to the community and reaching new audiences in a non-traditional way. It focuses on acquisition and retention of participants through free play, events and different exit routes. <a href="http://pingengland.co.uk/">http://pingengland.co.uk/</a>

**Indoor Ping!** intends to utilise Small Grants to provide an equipment package that will allow community organisations to deliver non-traditional participation opportunities. These include a table, bats / balls and materials to support communication and evaluation.

Outdoor Ping! similar to the indoor offer but comprising a table suitable for outdoor use

**Ping Pong Jam** is a partnership with StreetGames and music content provider SBTV, the jam will create a table tennis led culturally relevant environment that is positive, aspirational and 'cool'.

**Instant Ping Pong (IPP)** provides everything you need to play at anytime, anywhere (no need for a table tennis table) with anyone providing a unique and accessible opportunity to play. The pack includes 1x roll net, 7 bats, play cards and a tube of table tennis balls in a drawstring bag.

#### Tennis

**Allplay:** allplay is a national campaign, brought to you by the LTA, with a simple goal - to help more people play tennis. http://www.lta.org.uk/allplaytennis/about/

**Cardio Tennis:** Cardio Tennis is a high energy fitness activity that combines the best features of the sport of tennis with cardiovascular exercise aerobic workout. It is a very social and fun class for players of all ability levels taught by a tennis teaching professional. Target audience: Chloe, Helena, Alison. <a href="http://www.lta.org.uk/players-parents/Cardio-Tennis/Home/">http://www.lta.org.uk/players-parents/Cardio-Tennis/Home/</a>

Touch tennis leagues in parks, community environments, clubs, commercial clubs: Touch Tennis follows the same basic rules but on a smaller court and moves away from "power-hitting," to more cultured & strategic play based on speed of mind, understanding of the rival's weakness and exquisite touch count far more than physical strength and power. Target audience: Jamie, Kev, Ben. http://www.lta.org.uk/clubs-schools/touchtennis/

#### **Triathlon**

**Simply Tri** low cost multi sport events delivered locally with distances to suit novices. Supported by triathlon specific training sessions hosted by gyms and run by gym instructors, leisure staff or club volunteers.

### Volleyball

Go Spike: Taster sessions providing an opportunity to try Volleyball. <a href="http://www.gospike.net/">http://www.gospike.net/</a>

**4play4:** is a new format for delivering volleyball at all levels solving key barriers to participation such as facility access / cost and traditional formats being unappealing to potential participants looking to playing recreationally and not in traditional competition formats. 4v4 volleyball is fast, enjoyable and sociable specifically aimed at those new to the game or looking to play for reasons not determined by skill level or long term

competitive 4Play4. 4play4 can also be applied to all disciplines of the sport.

**Sitting Volleyball**: is the disability specific strand of the plan and will be delivered inclusively as part of the participation growth programmes Let's Play Volleyball (Satellite Clubs), Student Volleyball and Go Spike.

## **Waterskiing and Wakeboarding**

**Cutting Edge-**This programme is BWSW's youth development programme. For 2013-17, this programme will be adapted and expanded to provide, for the first time, a formal offer to attract new adult participants, and disabled people.

**Cutting Edge Young People-** BMSWs introduction to the sport for young people progressing them up the pathway to competition **Cutting Edge-** Inclusive disability participation programme

#### Wheelchair Basketball

The Capture programme will be the main entry point for new participants in wheelchair basketball. The programme will work in partnership with agencies that have a key role in the life of people with disabilities such as Wheelchair Services and Rehabilitation Services. The Capture programme will involve cross sport working with other NGBs including Great Britain Wheelchair Rugby, Goalball UK, Boccia and Powerchair Football with BWB leading this area of work.

# Specialised products and programmes for children and young people

#### **Sustrans**

- Big shift- Free online challenge to motivate the school community to travel more actively
- Bike to school week Resources to help you run a bike to school week any time of year
- **Big street survey -** Curriculum resource to investigate the area around schools and create a manifesto to make it safer and green.
- School mark Accreditation recognising and supporting schools' excellence in active and sustainable travel
- Moving up- An individual award scheme recognising pupils' skills and achievements in walking, scooting and cycling
- Suss it out activity sheets-Five themed sheets with 10, 20 and 30-minute simple, snappy activities to inspire active travel
- Active travel to school guide- Step-by-step 6-week guide to increase walking, cycling and scooting on the school journey
- The big pedal- The UK's biggest school cycling and scooting event.

http://www.sustrans.org.uk/our-services/what-we-do/getting-young-people-active

#### **Change 4 Life**

Change 4 Life Sports Clubs take the principles and specific skills from a range of Olympic and Paralympic sports and place them in a fun, vibrant and exciting activity club giving young people the confidence and competence to take part in lifelong physical activity. Schools can set up two types of change4 life sports clubs:

- Primary clubs deliver across 5 multi sport themes adventure, creative, combat, flight and target
- Secondary clubs are sport-specific and are designed around a need to increase the opportunities for young people to participate in

non-traditional sports and continue that from the school club to the community club. The National Governing Bodies of Sport involved are: badminton, boccia, fencing, handball, table tennis, volleyball and wheelchair basketball.

http://www.nhs.uk/change4life/Pages/sports-clubs.aspx

#### **StreetGames**

StreetGames is a charity that brings sport to the doorstep of young people in disadvantaged communities across the UK to change lives. The approach focuses on supporting a network of projects that give sports and volunteering opportunities to young people (aged between 11 - 25 years old), putting sport on peoples doorsteps at the right time, the right price, the right place and the right style.

## Programmes include:

- Us Girls: The project will focus on over 50 specific areas of high disadvantage spread throughout England. From March 2011, 64 organisations will work together for 3 years to achieve a 30,000 increase in sports participation. The work is focusing on the market segment, defined by <a href="Sport England">Sport England</a> as <a href="Leanne">Leanne</a>, aged 18-25</a> and emerging Leanne's who are aged 16-18yrs.

  <a href="http://www.streetgames.org/www/ug/content/home">http://www.streetgames.org/www/ug/content/home</a>
- The Co-operative StreetGames Young Volunteers: StreetGames places great emphasis on volunteering within its projects and, in partnership with the Co-operative, runs The Co-operative StreetGames Young Volunteer (CSYV) programme in over 80 of its projects. http://www.streetgames.org/www/volunteering/content/intro
- Street games Training Academy: The StreetGames Training Academy workshops, coaching courses and resources prepare the doorstep sport workforce to provide high-quality sporting opportunities at the right time, in the right place, for the right price and in the right style. <a href="http://www.streetgames.org/www/training/content/training-academy">http://www.streetgames.org/www/training/content/training-academy</a>
- Doorstep Sports Clubs: One of the "Creating a Sporting Habit for Life" Strategy commitments is for StreetGames to develop 1,000 new doorstep sports clubs (subject to Sport England's funding) to support 150,000 14 25 year olds into sport. The new Doorstep Sport Clubs will draw on the increasing expertise of a large number of agencies delivering doorstep sport sport at the right time, for the right price, in the right place and in the right style. <a href="http://www.streetgames.org/www/dsc/content/doorstep-sport-clubs">http://www.streetgames.org/www/dsc/content/doorstep-sport-clubs</a>

#### **Playday**

Playday is a celebration of children's right to play, and a campaign that highlights the importance of play in children's lives. Through local authority partnership, streets are closed so that children can actively play in their street environment <a href="http://www.playday.org.uk/about-playday/whats-play.aspx">http://www.playday.org.uk/about-playday/whats-play.aspx</a>

# **DEVELOPED BY**

The impact study team at Sport Structures, in partnership with Dr Ruth Lowry, University of Chichester. This document is based on the compendium model created by the Black Country Consortium Limited.

Black Country Consortium Limited is the accountable body and employing body for the Black Country BeActive Partnership and is recognised by Government and Sport England as one of the national network of County Sport Partnerships in England.

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Simon Hall BeActive Partnership Director, Black Country Consortium Ltd

Suzanne Gardner Senior Health Manager, Sport England Strategic Lead – Health, Sport England

Dean Hill Primary Prevention Services Manager, Dudley MBC

# APPENDIX 1: Cradle to the Grave Evidence Base for Physical Activity and Sport: Children and Young People: Economic Modelling Paper

The Economic modelling contained in the Cradle to the Grave Evidence Base for Physical Activity and Sport: Children and Young People is based on 2 models focussing on the potential costs savings from using physical activity to prevent Cardiovascular Disease, Diabetes, Breast Cancer and Depression. A third model has been developed to identify the potential costs savings for obesity.

The modelling has focused on these conditions due to the level of evidence regarding physical activities ability to prevent these conditions.

## **Model 1: Increasing Participation (aspirational model)**

The first of the models takes an increasing participation focus to determining the potential cost savings.

Model 1 uses the following evidence and assumptions in the methodology:

• That increasing physical activity levels will decrease the prevalence of health conditions by set amounts (according to the evidence in the CMO report)

Diabetes: 40%

Mental Illness: 30%

These percentages are applied to the calculations to determine the potential cost savings

- The calculations only utilise prescription costs and do not incorporate surgical or other interventions for these conditions. This means that the potential savings are conservative estimates.
- That people will have an average of 18.7 prescriptions per year according to the Health and Social Care Information Centre.
- Average costs of prescription rates are based on 2010 data.
- Only drugs with >10% of total prescriptions used for that condition have been factored into the calculations. This is to take into account the large range of medications and the varying costs associated with them.
- For illnesses where there is more than one standard type of treatment, a mean average of the treatments was calculated across the medications.
- Active People Sport and Physical Activity data is the source for the missing people and numbers of people to get more active.

Model 1a looks at the potential savings if the participation levels in the Black Country reached the national average levels of people participating in 150+ minutes of activity per week. The model takes into account the % of each condition that could be prevented if people were active to this level. This gave a potential cost saving of £1,047,061 per year.

Model 1b looks at the potential savings if all of the sedentary people in the Black Country (318,206) were to increase their activity levels to 150+ minutes per week. This gave a potential cost saving of £5,003,005.

Model 2 – Decreasing prevalence of disease focus

The second of the models takes a decreasing prevalence of disease focus to determining the potential cost savings. This means that the figures featuring are based on the current incidences of a

condition, the % that could be prevented/treated with physical activity and the costs of medication treatments for the condition.

Model 2 uses the following evidence and assumptions in the methodology:

• That increasing physical activity levels will decrease the prevalence of health conditions by set amounts (according to the evidence in the CMO report)

Diabetes: 40%

Mental Illness: 30%

These percentages are applied to the calculations to determine the potential cost savings

The calculations only utilise prescription costs and do not incorporate surgical or other interventions for these conditions. This means that the potential savings are conservative estimates.

That people will have an average of 18.7 prescriptions per year according to the Health and Social Care Information Centre.

Average costs of prescription rates are based on 2010 data.

• Only drugs with >10% of total prescriptions used for that condition have been factored into the calculations. This is to take into account the large range of medications and the varying costs

associated with them.

• For illnesses, where there is more than one standard type of treatment, a mean average of the treatments was calculated across the medications.

Model 2 indicates the following potential annual savings if the % of conditions that could be prevented are attributed to prevalence in the Black Country:

Depression: £1,070,272.95

Diabetes: £619,954.87

**Model 3: Obesity** 

A third model has been developed for obesity. This model is unable to into account the % of incidences that could be prevented if people were physically active as this figure is not yet available in

literature.

The obesity model has been developed using data that looks at if current trends continue for the Black Country and England. Current trends suggest that by 2016 there could be an additional 15,796

people who are obese in the Black Country. If we can implement the right interventions etc to get these people more active and prevent them becoming obese (thereby significantly changing trends)

calculations suggest that a potential saving of £8,997,433 could be made.

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Model 3 uses the following evidence and assumptions in the methodology:

- Obesity trend data modelled to highlight potential new numbers of people who are obese by 2016 if trends continue.
- The calculations only utilise prescription costs and do not incorporate surgical or other interventions for these conditions. This means that the potential savings are conservative estimates.
- That people will have an average of 18.7 prescriptions per year according to the Health and Social Care Information Centre.
- Average costs of prescription rates are based on 2010 data.
- Only drugs with >10% of total prescriptions used for that condition have been factored into the calculations. This is to take into account the large range of medications and the varying costs associated with them.
- For illnesses where there is more than one standard type of treatment, a mean average of the treatments was calculated across the medications.
- This model does not take into account co-morbidity factors associated with obesity.

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