

Provision of Physical Activity Survey and Data

A report by pmpgenesis
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Executive Summary

Study scope and methodology

In June 2009, pmogenesis, in association with the Centre for Sport and Exercise Science (CSES) at Sheffield Hallam University, was commissioned to undertake a physical activity survey and data study for the North East region on behalf of County Durham Sport, Northumberland Sport, Tees Valley Sport, Tyne and Wear Sport and NHS North East.

The overall objective of the study was to provide a baseline position of physical activity interventions and projects in the North East region, which could be used by key organisations such as the Department of Health (DH), County Sport Partnerships (CSPs) and Primary Care Trusts (PCTs) to inform future strategies and programmes in the sport, exercise, physical activity and health related environment.

The study comprised three key elements:

- a strategic policy review;
- an in-depth literature review on physical activity interventions; and
- a survey to identify physical activity interventions currently taking place across the four sub-regions in the North East.

Background

It is well known that physical activity performed on a regular basis is associated with significant positive physical and mental health benefits. Physical activity plays an important role in the prevention of various chronic diseases such as cardiovascular disease, ischemic stroke, hypertension, obesity, diabetes mellitus, osteoporosis, colon cancers and fall-related injuries.

The Chief Medical Officer (CMO) advises that adults should undertake at least 30 minutes of 'moderate intensity' (5.0 – 7.5 kcal/min) physical activity on at least five days of the week to benefit their health. However, in England the prevalence of physical activity at recommended levels is low. Data captured in 2005 shows that only 37% of men and 25% of women met the CMO's physical activity recommendation.

Health profile data produced by the Association of Public Health Observatories has highlighted that life expectancy and health profiles in the North East are generally worse than England as a whole and when compared with other regions; particularly in areas such as binge drinking, healthy eating, obesity, deaths from smoking, early deaths from heart disease/stroke and early deaths from cancer.

Strategic policy review

A strategic review of key national, regional and local documents relating to physical activity was undertaken as part of this study. The review highlighted that improving health and increasing physical activity is deemed highly important and as such, is referenced as a key priority within a wide range of national, regional and local strategic policy – most notably, in terms of:

- the national physical activity strategy 'Be Active, Be Healthy' published by the Department of Health (DH) in February 2009, which highlights how the DH will work with partners to increase physical activity levels across the country in the lead up to the London 2012 Games and beyond, through campaigns and initiatives;
- the regional health and wellbeing strategy 'Better Health, Fairer Health' produced by the Department of Health North East which has ten key themes, including diet and physical activity and sets out a vision that the region will be the most physically active in the country;
- PCT annual operating plans in the region, which all have a direct link to the regional strategy 'Better Health, Fairer Health' and reference the need to increase physical activity; and
- Local Area Agreements (LAA) in the region, which all prioritise health and wellbeing, healthy living or improved health as key themes and include a number of health related indicators, such as:
 - adult participation in sport and active recreation (NI 008);
 - obesity in primary school age children (NI 055 and NI 056);
 - children and young people's participation in high quality PE and sport (NI 057)
 - self reported measure of people's overall health and wellbeing (NI 119)
 - all age, all cause mortality rate - ie life expectancy (NI 120);
 - mortality rates from all circulatory diseases (NI 121); and
 - smoking cessation (NI 123).

As such, the policy review clearly highlights the strategic importance of improving health and wellbeing and the important role that increased levels of physical activity will play in helping to achieve key objectives and targets.

However, it should be noted, that although the need to increase physical activity was identified as a key priority in key documents, such as the PCT Annual Operating Plans, specific information relating to the budget available for physical activity programmes was not explicitly expressed. As such, there is often frustration amongst those tasked with increasing physical activity levels that without 'ring fenced' funding for physical activity, resources are often channelled into other areas.

In addition, the strategic review highlighted that the existence of local physical activity strategies is 'patchy'. Only a small number of authorities across the region have a strategy in place and where they do exist, most are at least four years old and as such, were developed before the regional strategy 'Better Health, Fairer Health' was in place and are not linked to LAA targets. Consequently, there is a need to encourage the development of more local strategies which should be guided by the overarching objectives set out within 'Be Active Be Healthy' and 'Better Health, Fairer Health' and should be coordinated at a sub-regional level.

Literature review

A comprehensive literature review, focusing on physical activity interventions within the UK and abroad was conducted by the CSES at Sheffield Hallam University. The purpose of the review was to provide a summary of the effectiveness of physical activity interventions for adults and to provide an evidence base to help make informed decisions about the future provision and promotion of physical activity interventions and projects.

The literature review highlighted that physical activity interventions can usually be categorised into three main areas:

- **informational approaches** - which are designed to increase physical activity by providing information necessary to motivate and enable people to change their behaviour, as well as to maintain that change over time. A typical example might include a 'point of decision prompt', such as signs placed by lifts and escalators to motivate people to use nearby stairs;
- **behavioural and social approaches** – which focus on increasing physical activity by teaching widely applicable behavioural management skills and by structuring the social environment to provide support for people trying to initiate or maintain behaviour change. These types of interventions often involve individual or group behavioural counselling and typically include friends and family members that constitute an individual's social environment. A typical example includes the 'lets get moving' Physical Activity Care Pathway programme developed by the DH in 2007; and
- **environmental and policy approaches** – which are designed to provide environmental opportunities, support and cues to help people develop healthier behaviours. This approach aims to create healthful physical and organisational environments through the development of policy that lends itself to creating supportive environments and strengthening community action, for example active transport programmes.

The literature review highlighted that interventions in the UK usually take the form of either:

- physical activity referral programmes (PARS) and community based exercise programmes for walking and cycling;
- brief interventions (eg opportunistic advice or discussion); and
- the use of pedometers to promote physical activity.

The literature review summarised the evidence of effectiveness of these three main forms of interventions. Although, it should be noted that despite the large number of interventions in the UK and literature growing exponentially, there is still limited evidence on 'what works' and given that most interventions tend to be short term, there is limited evidence of long-term impact.

However, the literature review was able to identify a number of key components related to successful interventions, which include interventions based on:

- behaviour change, teaching participants skills and tailoring content to meet individual needs;
- the promotion of moderate physical activity (not solely facility based);
- combined multiple strategies;
- the involvement of a wide range of key stakeholders;
- capacity building;
- having a genuine commitment of time and resources; and
- the establishment of comprehensive long-term strategies that focus on the social, physical, economic and policy environment.

Survey of interventions

In order to identify/map physical activity interventions currently taking place across the North East region, a survey of relevant organisations was carried out.

In consultation with the Steering Group, it was agreed that the survey would focus on capturing information on interventions which have a physical activity outcome, have a rationale for improving health and have a lead person or group. It was also agreed that the main focus of the study should be on interventions aimed at adults (aged 16+) – although it should be noted that some organisations also provided information on interventions that are predominantly aimed at children/young people.

An email and web link to an electronic survey was sent to approximately 300 relevant organisations across the region including representatives from PCTs, local authorities, charities and professional sports clubs, all of whom were thought to be involved in delivery of physical activity.

A total of 182 responses (interventions) were received during the survey period from 120 respondents - representing a response rate of 40%. However, it is important to note that in a number of cases, contacts included on the original database passed the email and questionnaire onto other colleagues to reply on their behalf and as such, the actual response rate is higher than the 40% implies.

Of this final total, the number of interventions was reduced to 146. This was based on the removal of duplicate projects and projects which did not meet the required criteria set out above.

The survey highlighted that of the interventions currently taking place across the North East region:

- most take the form of either community based exercise/sport programmes (44%) and physical activity referral schemes (31%);
- only a small number involve community based programmes for walking/ cycling (7%) or workplace health initiatives (3%);
- interventions utilise a wide range of different activities and methods to increase participation and improve the health of those involved such as walking, swimming, aerobics/exercise classes, gym sessions, yoga, dance, cycling, chair-based exercise classes, outdoor activities and the use of dance mats and Wii sports consoles;
- just over one-third (36%) include advice, support and counselling;
- most interventions target a range of target groups including those with pre-existing conditions (eg type 2 diabetes, coronary heart disease, obesity/weight management), low income groups, people with disabilities, older people and people from BME communities;
- the majority of programmes aim to either increase participation in physical activity amongst key target groups and improve health amongst those who are either 'at risk' or with pre-existing conditions. Although a small number are aimed at increasing skills/capacity and social inclusion;
- the majority of interventions are facility based, taking place either at leisure centres (26%), community venues such as village halls (18%), education sites (16%) and health based facilities (11%). Very few take place using the outdoor environment;
- the majority of the interventions involve a range of partners, with most involving the PCT (61%) and/or local authority (55%);

- a wide range of other partners were also identified, including Natural England, Sport England, Age Concern, Diabetes UK, Ground Works, Sure Start, Help the Aged, leisure providers/trusts and private sector sponsorship;
- given the diverse nature and length of the interventions, costs vary enormously from circa £3,000 to circa £1.7 million;
- funding is provided by a wide range of partners and sources – however, the majority of funding is provided by either the local authority and/or PCT; and
- responses indicate that most interventions (91%) undertake some form of monitoring to evaluate effectiveness. However, in most cases, only brief information was provided regarding the nature of the monitoring and evaluation systems in place. In many cases, it would appear that monitoring takes the form of self evaluation, via participant questionnaires/evaluation forms (37%) and attendance records (34%). There was little evidence of interventions measuring changes in knowledge, attitudes and skills.

Analysis of the current interventions has identified a wide range of good practice examples with many including some/all of the successful components identified via the literature review. However, there are also a number of areas where there is less evidence of good practice. A summary of the key strengths and weaknesses of the current interventions is summarised below.

Summary of key strengths and weakness of current physical activity interventions

Interventions in the North East	
Strengths	Weaknesses
<p>Interventions utilise a wide range of methods/strategies to promote increased physical activity. A number of interventions tailor their content to individual needs and focus not only on physical activities, but also on the provision of advice and support/teaching skills which can be important in promoting behaviour change.</p> <p>There is a variety of interventions targeting a broad cross-section of the community.</p> <p>Interventions targeting those most 'at risk' are mainly geared towards addressing key local health issues (eg obesity/weight management, CHD, type 2 diabetes)</p> <p>Most interventions have clearly defined aims.</p> <p>A number of interventions focus upon capacity building.</p> <p>The majority of interventions involve a range of key stakeholders.</p> <p>91% of interventions have monitoring and evaluation systems in place.</p>	<p>Survey responses suggest that there are only a limited number of workplace initiatives taking place. Due to the amount of time spent in the workplace, these types of interventions provide significant opportunities.</p> <p>Interventions are primarily reactive rather than preventative. Most are aimed at individuals, key target groups or those with pre existing conditions. There is limited evidence of interventions that are preventative. As such there is a real opportunity to look at providing programmes which are aimed at improving the general health and wellbeing of communities.</p> <p>Interventions mainly take place in 'formal' settings rather than promoting moderate physical activity in daily life or making changes to the overall environment/policy.</p> <p>Most interventions take place for a fixed time period (varying in length from just 8 weeks to 4 years) – thus long-term sustainability is an issue.</p> <p>There appears to be minimal involvement from 'wider' stakeholders beyond the health/leisure sector, such as urban planners, local</p>

Interventions in the North East

Project Coordinators appear to have genuine commitment and enthusiasm for the interventions.

government, the transport sector, environmental protection agencies, criminal justice organisations, community organisations and special interest groups. These need to be developed, particularly with those organisations that can influence the change/ adaptation of environments.

Limited information was provided regarding the monitoring and evaluation methods utilised. Interventions focus mainly on attendance records and/or participant questionnaires. More varied and in-depth measures are required to effectively monitor the impact.

Focus for future interventions in the North East

Given the strengths and weaknesses identified above, it is recommended that future interventions take into consideration the following key factors to help promote successful interventions:

- **Multiple approaches** – interventions should combine a number of different approaches, which should ideally include educational, behavioural and cognitive behavioural strategies and offer individual advice and counselling. Interventions should provide options to participate in both supervised and unsupervised programmes of physical activity and aim to teach participants skills on how to perform physical activities within their own social environment;
- **Environmental approaches** – seek to provide more interventions that establish long term environmental strategies to create healthy physical environments that are aimed at improving the general health and wellbeing of communities as opposed to 'reactive' programmes aimed purely at key target groups or those with pre-existing conditions (for example via active transport and workplace health initiatives);
- **Informal settings** – provide interventions that are set in both formal and informal settings such as parks and open spaces and encourage participants to select moderate physical activity that can be taken from the home;
- **Wider partnerships** – partnerships should be developed to include a wider range of organisations and stakeholders beyond the health/leisure sector, particularly with those organisations that have the power to influence a change in policy and the environment - such as urban planners, local government, the transport sector, environmental protection agencies, criminal justice organisations, community organisations and special interest groups;
- **Workforce development** – the provision of adequate resources to ensure that appropriately trained and qualified staff are in place to deliver the interventions effectively. To ensure that relevant staff not only hold recognised fitness/exercise qualifications, but are also trained in behaviour change/motivational interviewing; and
- **Robust monitoring and evaluation** – interventions need to have robust systems in place to monitor and evaluate effectiveness. This requires evaluation methods and protocols to match the scheme's desired outcomes, baseline assessments to be established and the use of a variety of methods to capture both outcome measures such as levels of participation and health checks plus intermediate outcomes, such as knowledge, attitudes and skills. Ideally, long-term follow up of participants should be carried out to determine long-term impact and interventions may wish to make use of national monitoring and evaluation tools, such as the Active People Survey data, the

National Obesity Framework, the British Heart Foundation Exercise on Referral Toolkit and the General Practice Physical Activity Questionnaire (GPPAQ).

The way forward

The study has clearly highlighted the strategic importance of improving health and increasing physical activity at both a national, regional and local level. Given that health profiles in the North East are generally worse than England as a whole, particularly in key areas such as binge drinking, healthy eating, obesity, deaths from smoking, early deaths from heart disease/stroke and early deaths from cancer, it is essential that physical activity interventions continue to be resourced and developed.

If key objectives and targets set out within strategic policy documents are to be met, there is a need:

- for key organisations to 'ring-fence' adequate funding and resources specifically for physical activity interventions; and
- to utilise multiple approaches that includes interventions that are:
 - aimed at those who are 'most at risk' in order to help address key local health issues; and
 - aimed at developing more long-term environmental strategies in order to create an active environment to help improve the general health and well being of whole communities (ie preventative).

The study has identified a wide range of physical activity interventions and has provided a snapshot of the current situation with regards to physical activity in the region and four sub-regions. The academic review has established the attributes of successful interventions, provided evidence on what works and what doesn't work and identified good practice case studies from within the North East region and further afield. However, it should be viewed as a 'starting point' and it is important that:

- the database of physical activity interventions is uploaded onto relevant websites within the region for use by key stakeholders, organisations and individuals;
- the database is updated on a regular basis;
- key stakeholders with an interest/role in promoting physical activity be made aware of the location of the database;
- ensure that the findings of the study are used to address identified gaps in provision and areas for improvement;
- ensure that the findings of the study be as a baseline to assist in the development of physical activity plans/strategies; and
- ensure that the findings of the study be used to share best practice ideas and guidance on physical activity amongst physical activity and health professionals.

1. Background and Methodology

01

Background

In June 2009, pmpgenesis, in association with the Centre for Sport and Exercise Science (CSES) at Sheffield Hallam University, was commissioned to undertake a physical activity survey and data study for the North East region. This was on behalf of County Durham Sport, Northumberland Sport, Tees Valley Sport, Tyne and Wear Sport and NHS North East.

The overall objective of the study was to provide a baseline position of physical activity interventions and projects in the North East region, which could be used by key organisations such as the Department of Health (DH), County Sport Partnerships (CSPs) and Primary Care Trusts (PCTs) to inform future strategies and programmes in the sport, exercise, physical activity and health related environment.

In particular, the study aimed to:

- identify physical activity interventions currently taking place across the four sub-regions in the North East;
- provide a database of significant and influential strategies and policies relating to the physical activity agenda in the North East;
- provide a library of current thinking on physical activity interventions to include government policy, academic literature and medical and health literature; and
- provide a baseline and context for the development of four sub-regional physical activity plans.

The study was carried out in partnership with a client steering group which involved representatives from County Durham Sport, Northumberland Sport, Tees Valley Sport, Tyne and Wear Sport and the Department of Health.

Methodology

In order to meet the key aims and objectives set out above, the study methodology comprised three main elements:

- An academic literature review
- A strategic review
- A survey/mapping study to identify physical activity interventions/programmes currently taking place in the North East region

Further details relating to the methodology utilised for each key element are set out overleaf, with additional information provided in Appendix A.

Academic literature review

A comprehensive academic literature review was undertaken by the CSES at Sheffield Hallam University in order to:

- provide a clear understanding of the types of physical activity interventions that are evident in the United Kingdom (UK);
- identify the key drivers for success from those interventions that have demonstrated evidence of a positive impact on physical activity levels; and
- provide examples of best practice from both the UK and abroad.

A systematic search strategy was used, with both electronic and 'hand' searches (citations in papers/journals) undertaken. The initial search yielded a total of 6,627 studies, of which 904 were reviewed. Studies were then evaluated on the basis of abstract and title for suitability based on suitability to review topic and/or intervention design.

From the evaluation for suitability, the number of studies was reduced to 484. These 484 studies were then scrutinised further using the following exclusion criteria:

- Primary aim of the study not focused on physical activity
- Age groups of participants under 16
- Non-healthy population
- Non-English language

Based on the exclusion criteria, the number of relevant studies was reduced to 75 – these documents were then reviewed in detail in order to provide a summary review and catalogue of information.

Strategic review

In addition to an academic literature review, pmpgenesis undertook a review of key strategic documents relating to the physical activity agenda nationally, within the North East, and within each of the four sub-regions. This included a summary review of government policies and initiatives which support the promotion of physical activity, key regional documents such as the health and well-being strategy 'Better Health Fairer Health', PCT Annual Operating Plans, local physical activity strategies and local area agreements (LAAs).

The aim of the review was to provide a strategic overview of physical activity and health policies and gain an understanding of the priority/focus on physical activity in the North East and four sub-regions.

Survey/mapping study

In order to identify/map physical activity interventions currently taking place across the North East region, a survey of relevant organisations was carried out.

The initial phase of the survey/mapping study involved agreeing with the client steering group the scope of interventions that were to be included. Following discussions at the initial briefing meeting, it was agreed that for physical activity interventions to be included within the study, they had to meet the following criteria:

- Have a physical activity outcome
- Have a rationale for improving health
- Have a lead person or group

It was also agreed that the main focus of the study should be on interventions aimed at adults (aged 16+) – although it should be noted that some organisations also provided information on interventions that are predominantly aimed at children/young people.

The second phase of the survey/mapping study involved the creation of a contact database. Initial contact lists were provided by each of the four CSPs and the DH plus additional contacts were sourced by pmpgenesis via web searches and telephone calls. The contact database consisted of a range of contacts from the public, private and voluntary sector including representatives from PCTs, local authorities, charities and professional sports clubs, all of whom were thought to be involved in delivery of physical activity.

Once the contact database was completed it was circulated to all members of the steering group for verification. Approximately 300 relevant contacts were established across the region.

In consultation with the steering group, an electronic questionnaire was designed to identify and capture information relating to existing physical activity interventions in the region. The key principle behind the design of the survey was that it was user friendly and concise with a focus on identifying as many interventions as possible rather than obtaining large amounts of qualitative information about each programme. As such, the questionnaire was designed to capture information relating to:

- the project aims;
- the key target groups involved;
- the geographical areas covered by the intervention;
- the project setting;
- the activities involved;
- the partners involved;
- project costs and funding sources;
- the monitoring and evaluation systems in place; and
- key contact details.

A copy of the questionnaire is provided in Appendix B.

The questionnaire was sent to all contacts on the database via an email in mid-June, which explained the purpose of the study, timescale for response and provided a web link to the questionnaire.

After a two week period, a total of 151 surveys had been returned. A reminder email was then sent to all contacts during the week commencing 6 July 2009 and all remaining non-respondents were followed up with telephone calls during the week commencing 13 July 2009.

A final total of 182 responses were received from 120 respondents, representing a response rate of 40%. However, it is important to note that in a number of cases, contacts included on the original database passed the email and questionnaire onto other colleagues to reply on their behalf and as such, the actual response rate is higher than the 40% implies.

Of this final total, the number of interventions was reduced to 146. This was based on the removal of duplicate projects, blank returns and projects which did not meet the required criteria to be included.

The completed questionnaires were analysed using SNAP survey software at both a regional and sub-regional level to identify:

- the number of physical activity interventions - who they are targeting, how, where and when;
- key themes, patterns and trends from identified interventions;
- gaps in provision;
- good practise case studies;
- key learning; and
- priorities and recommendations for action.

Report structure

The remainder of this report is divided into four sections. Sections 2 and 3 summarise the key findings from the strategic review and academic literature review, Section 4 outlines the key findings from the survey/mapping exercise and Section 5 provides a summary of key learning, recommendations and next steps. For ease of reference, sections are divided as follows:

- Section 2 – Strategic review
- Section 3 – Literature review
- Section 4 – Physical activity interventions
- Section 5 – Recommendations and next steps.

2. Strategic Review

02

Background

A strategic review of key national, regional and local documents relating to physical activity was undertaken to provide an understanding of the context and to gain an understanding of the level of importance given to physical activity in the region.

National context

It is well known that physical activity performed on a regular basis is associated with significant positive physical and mental effects. Physical activity plays an important role in the prevention of various chronic diseases such as cardiovascular disease, ischemic stroke, hypertension, obesity, diabetes mellitus, osteoporosis, colon cancers and fall-related injuries.

The Chief Medical Officer (CMO) advises that adults should undertake at least 30 minutes of 'moderate intensity' (5.0 – 7.5 kcal/min) physical activity on at least five days of the week to benefit their health. However, in England the prevalence of physical activity at recommended levels is low. Data captured in 2005 shows that only 37% of men and 25% of women met the CMO's physical activity recommendation.

In addition, it has been shown that physical inactivity and over-nutrition are associated with a substantial economic burden. The figures contribute to the World Health Organisations data which suggests that globally there are more than one billion overweight and at least 400 million obese adults.

As such, the promotion of physical activity interventions has become a key priority for local, regional and national agencies. A summary of recent key government policies and initiatives which support the promotion of physical activity is set out below.

Foresight report

In 2006 the Foresight section of the Government Offices for Science commissioned work to draw together a range of expertise about obesity with a view to illuminating a sustainable response for the coming decades (Foresight 2007). A number of modelling and systems mapping exercises were undertaken, along with more conventional literature reviews, in an effort to integrate different disciplines and to forecast the likely trajectory of the problem and effective responses.

The report published in 2007 'Tackling Obesity: Future Choices – Project Report' argues that obesity is a complex problem that will require a paradigm shift across all levels of governance if it is to be tackled.

Without a sustainable system-wide response, the report estimates that over half of adults will be obese by 2050 with a consequent increase in costs for society.

The government supports the findings of the Foresight report 'Tackling Obesity: Future Choices – Project Report'; published in 2007, as a significant contribution to recognising the social and economic costs of obesity in the UK.

Healthy Weight, Healthy Lives

In early 2008 the government published 'Healthy Weight, Healthy Lives: A Cross Government Strategy for England' (HM Government 2008). This document set out the new ambition 'of being the first major country to reverse the rising tide of obesity and overweight in the population by ensuring that all individuals are able to maintain a healthy weight.' In anticipation of Healthy Weight, Healthy Lives the government set out a new Public Service Agreement in late 2007 in relation to Child Health and Wellbeing. The new ambition was by 2020 'to have reduced the proportion of overweight and obese children to 2000 levels'.

Be Active, Be Healthy

'Be Active, Be Healthy: A Plan for Getting the Nation Moving' was published by the Department of Health (DH) in February 2009. The plan is aimed at PCT Chief Executives, Directors of Public Health, Local Authority Chief Executives, Directors of Adult Social Services and Directors of Finance. This document supersedes Choosing Activity: A Physical Activity Action Plan (DH 2005).

'Be Active, Be Healthy' highlights how the DH will work with partners to increase physical activity levels across the country in the lead up to the London 2012 Games and beyond, through campaigns and initiatives. Key projects will include:

- working in partnership with a range of key partners to deliver national initiatives, such as the Government's Free Swimming Programme, expanding the Walking the Way to Health scheme together with Natural England and Change4Life;
- developing a range of new initiatives under the Bike4Life brand to boost participation in all forms of cycling;
- piloting a campaign that enables employers to incentivise active commuting and other forms of active travel for business purpose;
- establishing a working group to identify what role dance can play at national, regional and local level with an initial focus on older adults;
- the DH together with the Fitness Industry Association (FIA) piloting a 'Fit for the Future' incentive scheme to offer 5,000 16-22 year olds subsidised gym memberships linked to frequency of use;
- funding a national network of County Swimming Coordinators to promote swimming in every local area; and
- continuing to develop the Physical Activity Care Pathway model.

The strategy also sets out how the Department of Health intend to 'energise delivery', through:

- the allocation of new funding (£1 million in 2008/09) to help County Sports Partnerships to develop ongoing plans for the delivery of physical activity (£3 million in 2009/10 to maintain the seamless coordination of physical activity alongside sport);
- commissioning an evidence-based tool allowing PCTs to stratify the cost burden of disease arising from physical inactivity for sub-groups of their population;
- continuing to fund the Regional Public Health Groups to coordinate physical activity across the region alongside support for the coordination of obesity programmes; and

- the formation of a new Physical Activity Alliance which constitutes physical activity professionals from major organisations across the country.

Local context and health profile

The North East region has a population of around 2.5 million comprising around 26% aged under 20 years, 52% aged 21-59 years and 22% aged 60 years and over.

The population profile in the region is ageing and over coming years, the proportion of people aged under 20 years is projected to decline whilst the proportion aged 60+ is projected to increase.

Health profiles in the North East are generally worse than England as a whole and when compared with other regions, the North East has the worst levels of deprivation and life expectancy and although progress is being made to reduce death rates, there are still above average rates of early deaths from cancer. The table overleaf outlines some of the key health issues in the region, where it can be seen that rates are significantly worse than the average for England in a number of areas, including:

- binge drinking;
- healthy eating; and
- deaths from smoking.

In addition, it can be seen that there are variations within the region, for example the health statistics for Northumberland are generally better than the regional average, whilst statistics are generally worse in areas such as Hartlepool and Middlesbrough.

Key health indicators

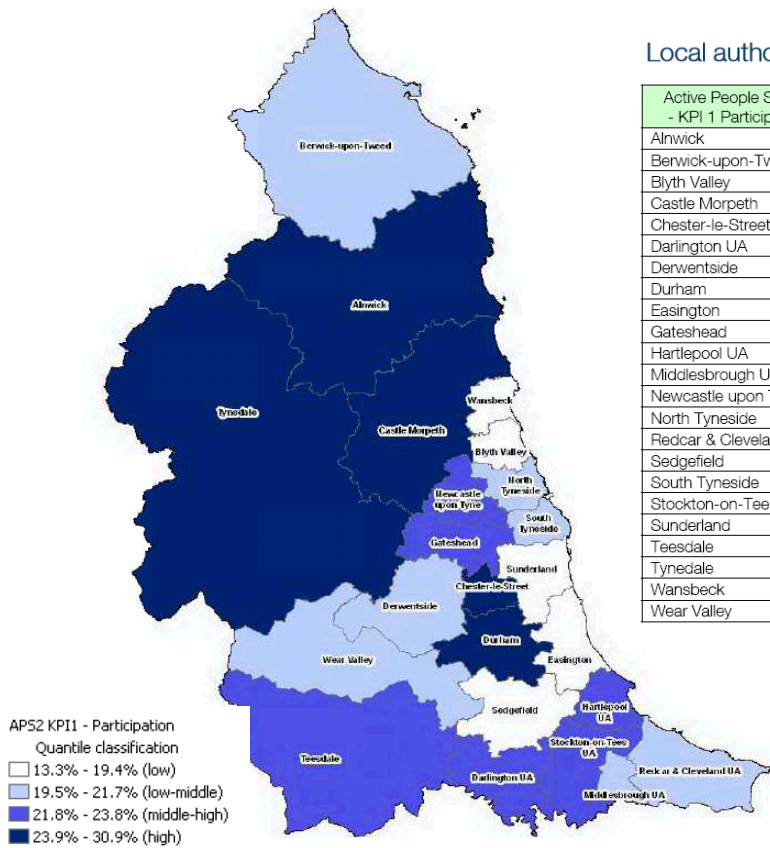
Indicator	England	North East	Durham	Northumberland	Darlington	Hartlepool	Middlesbrough	Redcar & Cleveland	Stockton-on-Tees	Gateshead	Newcastle	North Tyneside	South Tyneside	Sunderland
Life expectancy: male	77.7	75.8	76.5	77.7	76.3	75.1	75.0	76.7	76.5	75.8	75.7	76.7	75.6	75.6
Life expectancy: female	81.8	80.1	80.2	81.3	80.4	78.1	79.6	80.8	80.8	80.4	80.5	80.9	80.4	80.2
Adults who smoke	24.1	29.1	24.5	26.6	27.9	33.2	34.8	26.8	27.5	33.3	31.7	28.9	34.9	32.4
Binge drinking adults	18.0	26.5	23.8	23.0	25.3	26.3	27.8	25.5	25.7	27.1	28.9	25.5	27.1	26.8
Healthy eating adults	26.3	18.5	21.0	19.9	20.5	15.8	16.4	18.6	18.4	17.1	20.3	20.7	16.9	16.7
Obese adults	23.6	25.2	25.3	26.0	22.9	26.2	26.1	25.3	24.5	26.0	22.6	23.0	26.3	26.9
Obese children	9.6	10.9	9.6	10.0	10.0	13.0	11.0	9.8	16.2	11.9	10.9	8.5	10.1	10.3
Physically active children	90.0	87.0	90.8	90.7	88.6	93.2	93.4	87.6	90.8	86.6	91.6	91.0	88.8	91.5
Smoking in pregnancy	14.7	23.6	22.5	18.5	21.3	27.7	29.6	31.2	19.8	18.5	17.6	17.8	28.8	24.1
Breast feeding	71.0	49.8	52.9	59.4	57.9	35.9	46.5	52.5	53.1	59.6	56.4	56.7	50.9	40.3
Teenage pregnancy	41.2	49.7	48.6	36.7	53.0	69.5	58.4	49.9	50.6	47.5	55.3	49.7	48.1	56.9
Deaths from smoking	210.2	285.8	274.6	227.7	229.3	307.4	316.7	259.7	255.2	281.9	288.1	252.4	284.2	279.3
Early deaths from heart disease/ stroke	79.1	99.8	92.5	78.2	84.6	107.3	107.1	94.3	92.4	96.4	94.2	87.8	100.3	97.7
Early deaths from cancer	115.5	136	131.6	117.0	120.1	157.5	150.3	135.1	130.9	133.7	145.6	136.5	145.1	137.1

Source: Department of Health - Health Profiles 2009

Sport England's Active People Survey results reveal that on a regional basis participation rates in sport and physical activity are comparable with the national average, with 20.5% of the population in the region taking part in sport/physical activity for at least 30 minutes three times per week in 2005/06 and 21.3% doing so in 2007/08 compared to a national result of 21.3%. However, there are large variations within the region from 30.9% in Alnwick down to just 16.2% in Easington.

The below map and tables illustrate the variations in participation across the region.

Active People Survey 2 Results – Participation variation, by local authority



Local authorities

Active People Survey - KPI 1 Participation	APS 1 (2005/06)	APS 2 (2007/08)
Alnwick	25.9%	30.9%
Berwick-upon-Tweed	19.8%	20.8%
Blyth Valley	21.5%	19.1%
Castle Morpeth	24.2%	25.7%
Chester-le-Street	21.7%	23.9%
Darlington UA	21.0%	23.0%
Derwentside	19.5%	21.4%
Durham	26.8%	24.3%
Easington	16.8%	16.2%
Gateshead	17.7%	22.9%
Hartlepool UA	18.8%	22.1%
Middlesbrough UA	19.1%	21.0%
Newcastle upon Tyne	20.7%	21.9%
North Tyneside	20.7%	20.2%
Redcar & Cleveland UA	20.2%	21.5%
Sedgefield	16.8%	19.3%
South Tyneside	20.2%	19.8%
Stockton-on-Tees UA	24.4%	22.6%
Sunderland	20.0%	18.7%
Teesdale	22.1%	23.6%
Tynedale	23.2%	24.7%
Wansbeck	19.3%	18.7%
Wear Valley	17.9%	19.4%

County sport partnerships

Active People Survey - KPI 1 Participation	APS 1 (2005/06)	APS 2 (2007/08)
County Durham	20.1%	20.8%
Northumberland	22.1%	22.5%
Tees Valley	21.1%	22.0%
Tyne and Wear	19.9%	20.7%

County councils

Active People Survey - KPI 1 Participation	APS 1 (2005/06)	APS 2 (2007/08)
Durham	20.1%	20.8%
Northumberland	22.1%	22.5%

Two local authorities (Alnwick and Gateshead) in the North East have shown a significant increase in participation between 2005/06 and 2007/08.

Source: Sport England Active People 2 North East Factsheet

Strategic policy review

Given the health inequalities and large variations in levels of participation in sport/physical activity, improving health across the North East region is a key priority for many local and regional organisations. As such, a wide range of policy and strategy documents have been developed to drive improvements. A summary review of these documents is outlined collectively below with further details provided in Appendix C.

Better Health, Fairer Health (2008)

'Better Health, Fairer Health' produced by the Department of Health North East is a health and wellbeing strategy for the region and sets out a vision that the region will have:

“...the best and fairest health and well-being, and will be recognised for its outstanding and sustainable quality of life.”

The document has ten key themes comprising: economy/culture and environment, prevention, fair and early treatment, mental health, happiness and well-being, early life, tobacco, mature and working life, obesity, diet and physical activity, later life, alcohol and a good death.

Of particular relevance to this study is that under the obesity, diet and physical activity theme, the document sets out a vision that the region will:

“be the most physically active in the country, both in its activities of daily living and in its recreational choices. The support available for individuals to alter their activity levels will be clearly and fairly defined and will be provided according to individual need.”

The document provides important evidence and strategic direction for the region, which should be used to guide policies and interventions in a coordinated manner.

Mapping Physical Activity in the North East Region (2006)

It is also important to note that a previous mapping study has been undertaken in the region. This study aimed to provide an initial picture of the nature and extent of direct and indirect sport, exercise and/or physical activity projects, initiatives and policies in the North East region.

The study identified 228 projects varying from walking schemes to workplace initiatives and identified a range of good practice case studies.

Key recommendations of the study included the need for the database to be regularly updated, greater co-ordination at a regional level, increased monitoring/evaluation of the programmes and a need to consider ways of sourcing main-stream funding for the programmes.

The report and key findings from this document were taken into consideration in the development of this survey and data study.

PCT Annual Operating Plans

A review of all PCT annual operating plans in the region has been undertaken. Importantly, it can be seen that the Plans have a direct link to the regional strategy 'Better Health, Fairer Health'. Each of the plans reference the need to increase physical activity, for example:

- Darlington and County Durham PCT Annual Operating Plan 2009/10 contains specific information relating to obesity, diet and physical activity;
- Tees PCT Annual Operating Plan 2009/10 highlights the burden of ill health and low uptake of regular physical activity;
- North of Tyne Annual Operating Plan 2009/10 stresses local health challenges including diet and physical activity; and
- South of Tyne Plan 2008/2011 highlights the need for improved management of chronic diseases.

It should be noted, that although the need to increase physical activity was identified in each operating plan, specific information relating to the budget available for physical activity programmes was not explicitly expressed. As such, there is often frustration amongst those tasked with increasing physical activity levels that without 'ring fenced' funding for physical activity resources are often channelled into other areas.

However, there are some examples of PCTs allocating significant sources of funding specifically for physical activity. For example within the North East Region, NHS County Durham has allocated £5 million for a programme which aims to increase levels of physical activity amongst people (and their households) aged 40-74 years in County Durham with an estimated and actual risk calculation of Cardio-vascular disease (CVD) greater than 20%.

In addition, Barnsley Metropolitan Council and Barnsley PCT have recently commissioned a physical activity programme worth approximately £1.2 million over a two year period. The aim of the project is to increase the amount of physical activity amongst the 34% (67,000) of the Barnsley population who are overweight, and their immediate families. These are individuals with a Body Mass Index (BMI) of between 25 and 30. The project will focus around nine deprived areas within the Barnsley area and where appropriate will utilise current physical activity provision in each of these areas.

Local Area Agreements (LAAs)

A review of all Local Area Agreement (LAA) documents was carried out for the study. The review highlighted that health and wellbeing, healthy living or improved health are identified as key themes of the LAAs and within Middlesbrough and Stockton-on-Tees LAAs there is a specific focus on improving the health of older residents.

Indicators of particular relevance contained within the LAAs include:

- increasing adult participation in sport and active recreation (NI 008);
- reducing obesity in primary school age children (NI 055 and NI 056);
- increasing children and young people's participation in high quality PE and sport (NI 057);
- self reported measure of people's overall health and wellbeing (NI 119);
- increasing life expectancy (NI 120);

- reducing mortality rates from all circulatory diseases (NI 121); and
- smoking cessation (NI 123).

As such, physical activity interventions will play a key role in helping authorities to achieve the specific targets and indicators set out within the LAAs for increasing participation rates and improving health. A summary of relevant LAA targets selected by each authority is set out in table format overleaf.

Physical Activity/Sports Strategies

A research exercise was undertaken to identify and review the existence of local physical activity strategies. The review highlighted that the existence of these is 'patchy'. Only a small number of authorities across the region have a strategy in place and where they do exist, most are at least four years old and as such, were developed before the regional strategy 'Better Health, Fairer Health' was in place and are not linked to LAA targets.

In general, the objectives of the strategies tend to focus on:

- providing access for all;
- improving coordination and partnerships;
- sustainable approaches; and
- reducing health inequalities.

Given the age of many of the existing strategies and inconsistent provision, there is a need to encourage the development of more local strategies. The strategies should be guided by the overarching objectives set out in 'Better Health, Fairer Health' and should be coordinated at a sub-regional level.

To further guide strategy and policy developments an academic literature review has been conducted to provide information in relation to physical activity interventions that have been conducted both within the UK and abroad. This review is summarised in section three which follows.

Summary relevant Local Area Agreement (LAA) Targets

LAA Target	Durham	Northumberland	Darlington	Hartlepool	Middlesbrough	Redcar & Cleveland	Stockton-on-Tees	Gateshead	Newcastle	North Tyneside	South Tyneside	Sunderland
Active participation in sport and active recreation (NI 008)		✓	✓	✓	✓	✓		✓				
Obesity in primary school aged children in reception (NI 055)						✓						
Obesity in primary school aged children in Year 6 (NI 056)	✓	✓	✓		✓		✓	✓	✓		✓	✓
Children and young people's participation in high quality PE and sport (NI 057)		✓	✓									
Self reported measure of people's overall health and wellbeing (NI 119)	✓								✓			✓
All age, all cause mortality rate (NI 120)		✓		✓		✓		✓	✓	✓		✓
Mortality rates from all circulatory diseases (NI 121)	✓	✓			✓		✓					
Stopping smoking (NI 123)	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Healthy life expectancy at 65 years (NI 137)											✓	

Source: Communities and Local Government website (Sept 2009)

3. Literature Review

03

Background

A comprehensive literature review, focusing on physical activity interventions within the UK and abroad was conducted by the CSES at Sheffield Hallam University. The purpose of the review was to provide a summary of the effectiveness of physical activity interventions for adults and to provide an evidence base to help make informed decisions about the future provision and promotion of physical activity interventions and projects.

Detailed findings from the literature review, including case study examples from both the UK and abroad plus all references are set out in Appendix D, with a summary of the key findings set out below.

Types of physical activity interventions

The literature review highlighted that physical activity interventions can generally be categorised into the following three areas:

- informational approaches;
- behavioural and social approaches; and
- environmental and policy approaches.

Informational approaches

Informational approaches are designed to increase physical activity by providing information necessary to motivate and enable people to change their behaviour, as well as to maintain that change over time. These types of interventions use primarily educational approaches to present both general health information, including information about cardiovascular disease prevention and risk reduction, as well as specific information about physical activity and exercise. The main aims of informational approaches are to:

- change knowledge and behaviour;
- increase awareness of how to increase physical activity;
- explain how to overcome barriers and negative attitudes about physical activity; and
- increase taking part in community based activities.

Examples include 'point of decision prompts', such as signs placed by lifts and escalators to motivate people to use nearby stairs, 'community campaigns' via as paid advertisements, donated public service announcements and feature items and also 'mass media campaigns' to increase knowledge, influence attitudes and beliefs using channels such as newspapers, radio, television and billboards.

Behavioural and social approaches

Behavioural and social approaches focus on increasing physical activity by teaching widely applicable behavioural management skills and by structuring the social environment to provide support for people trying to initiate or maintain behaviour change. These types of interventions often involve individual or group behavioural counselling and typically include the friends or family members that constitute an individual's social environment.

This type of approach focuses on recognising cues and opportunities for physical activity, ways to manage high-risk situations, and ways to maintain behaviour and prevent relapse.

Family based programmes typically include joint or separate educational sessions on health, goal-setting, problem-solving or family behavioural management and will often incorporate some physical activities. Whilst social support interventions in community settings will typically involve setting up a 'buddy' system or making a 'contract' with others to achieve specified levels of physical activity or setting up walking or other groups to provide companionship and support whilst being physically active.

A typical example would be the 'lets get moving' Physical Activity Care Pathway programme developed by the DH in 2007, which focuses on helping sedentary adults and those at risk of adverse health outcomes associated with low activity levels become more physically active. The programme is an evidence based behaviour intervention that takes into account the individual's needs, preferences and circumstances, agrees goals with them, provides written supporting information and follows up with patients at regular intervals.

Environmental and policy approaches

Environmental and policy approaches are designed to provide environmental opportunities, support and cues to help people develop healthier behaviours. This approach aims to create healthful physical and organisational environments through the development of policy that lends itself to creating supportive environments and strengthening community action.

Interventions that adopt this approach are not directly related to individuals but rather to physical and organisational structures. The main aim of this approach to increase physical activity through changing social networks, organisational norms and policies, the physical environment, resources and facilities, and laws.

Environmental and policy interventions will focus less on individuals and more on the whole community and organisations, such as schools, workplaces and sporting clubs etc. For example the active transport programmes that are taking place in a number of towns and cities both within the UK and abroad, such as Peterborough. Peterborough is one of three towns taking part in the government's sustainable travel demonstration town programme. The Council has used part of £3.2 million in funding to implement individualised travel marketing, which works with households to offer tailor made information and support to enable them to consider alternatives to the car. The impact has been a 13% reduction in car use, a 21% increase in walking, a 25% increase in cycling and a 13% increase in public transport (see also the active transport example from Australia, provided in Appendix D).

Physical activity interventions in the UK

A NICE review conducted in 2006 found that the majority of interventions in the UK are delivered in or through healthcare/community environments and utilise specialist support and can generally be categorised into the following categories:

- Physical activity referral schemes (PARS) and community based exercise programmes for walking and cycling

- Brief interventions
- The use of pedometers to promote physical activity

A summary of information relating to these three main categories of interventions are set out in the table below together with evidence of effectiveness.

Overview of the evidence of commonly used physical activity interventions in the UK

Intervention	Description of activities	Summary of evidence
PARS	<p>Physical Activity Referral Schemes (PARS) typically direct individuals to a service offering an assessment of need, develops a physical activity programme and monitor progress.</p> <p>Programmes are typically 12 weeks in duration.</p> <p>PARS are typically local authority run and funded.</p> <p>PARS often share a community based programme element eg walking or cycling groups.</p> <p>These elements of regular participation in moderate intensity activity are associated with health benefits and represent activities which can become part of everyday life, such as walking to work or school.</p> <p>The Fitness Industry Association (FIA) estimates that there are around 600 schemes in England.</p> <p>A recent national survey reported that 89% of primary care organisations in England have an exercise referral programme.</p>	<p>Despite the number of PARS schemes currently in existence, there is no solid evidence for their effectiveness.</p> <p>Exercise referral schemes have a small effect on sedentary people, but it is not certain that this small benefit is an efficient use of resources.</p> <p>Adherence to these schemes can be as low as 20-30%.</p> <p>Where increases in physical activity are evidenced these are rarely maintained.</p> <p>PARS tend to focus on the needs of specific populations ie those referred for CHD risk factors, osteoporosis, arthritis, obesity and hypertension. It is unlikely that these schemes will benefit all individuals.</p> <p>Current evidence suggests that many individuals lack the lifestyle skills to be able to sustain behaviour change.</p> <p>Key challenges for future schemes are to increase uptake and improve adherence, perhaps by considering readiness to engage in behavioural change or by considering individual differences in self-determination and behaviour regulation.</p>
Brief interventions	<p>Brief interventions often involve opportunistic advice, discussion, negotiation or encouragement.</p> <p>Often used in health promotion, interventions vary from basic advice to more extended, individually focused attempts to change factors that influence activity levels.</p>	<p>Whilst there is considerable support for the use of brief negotiation in the field of addiction the evidence for physical activity is somewhat limited.</p> <p>The diverse nature of the content and style of brief interventions makes it difficult to identify what works.</p> <p>However, brief interventions can help in terms of providing feedback about current activity levels versus recommendations,</p>

Intervention	Description of activities	Summary of evidence
		assessing confidence and motivation, providing an information exchange and helping with decision making.
Pedometers	<p>Pedometers are a common aid to increasing physical activity through walking.</p> <p>Much of the research about pedometers has involved comparing the validity and reliability of different models of pedometers.</p>	<p>There is conflicting evidence as to the usefulness of pedometers and exercise diaries as a method of promoting physical activity.</p> <p>Pedometer use has only been seen to be effective when supported by a programme of goal setting. When pedometers are given without first setting goals no increase in physical activity is generally observed.</p> <p>It is likely that the use of such tools have a role to play in supporting individuals to stay active, as a supportive tool to help monitor activity, rather than as an intervention in itself, but the extent of this requires further clarification and research evidence.</p>

Key success factors

The review highlighted that although there is an exhaustive amount of physical activity interventions in existence, there is a lack of evidence of what 'works' and what 'doesn't work'. In addition, it appears that current physical activity interventions often only have a short term impact.

However, the review was able to identify four components which are deemed critical if interventions are to promote behavioural change, namely that interventions should:

- be based on theories of behaviour change;
- teach participants skills relating to the control of behaviour;
- tailor the content of the programme to the needs of the individual; and
- seek to promote moderate physical activity and should not be solely focused on facility based physical activity.

The review suggested that the most effective interventions are those that are based on multiple approaches at multiple levels and involve a range of key stakeholders and the community. Ideally, with regular contact with an exercise specialist to increase effectiveness, however, this is less cost effective.

Centre based projects appear to be superior in the short term for producing fitness outcomes among those with cardiovascular disease, although adherence to physical activity programmes was greater in home-based programmes.

Structured exercise programmes have high drop out rates and can create additional barriers for some people, including scheduled class times, need for travel to the facility, and entrance fees.

Several randomised trials have shown that a lifestyle approach to physical activity among previously sedentary adults may provide an effective alternative to the traditional structured approach to physical activity promotion.

Maintenance of initial physical activity change is directly related to the intensity of the intervention programme during the maintenance period. Once interventions and the incentives provided are not prominent, physical activity tends to decline.

Physical activity interventions in the workplace

In addition to the main types of physical activity interventions set out above, there is an increasing number of interventions being set up within the workplace.

Early research suggested that there was little evidence that workplace initiatives were having a positive impact on levels of physical activity. However, more recent research is indicating that there is evidence to suggest that workplace initiatives can result in increased levels of physical activity.

Individually tailored, motivational programmes guided by behaviour change theory, as well as programmes using strategically placed prompts, encouraging stair use for example, appear to be the most successful approaches. However, current research tends to suggest that work place initiatives generally only have a short term impact.

Future thinking

Based on the evidence currently available, organisations should:

- undertake ongoing research and innovative design that focuses on lifestyle physical activity in addition to or instead of structured class based activity to promote physical activity behaviour change;
- consider the significant opportunity presented by workplace initiatives, due to the large amount of time that adults spend at work; and
- consider the use of computer, technology and interactive DVD based interventions, which can be effective in the short term.

Summary

In summary, the literature review has highlighted, that the most effective interventions appear to be those that combine multiple strategies at multiple levels, and that involve a range of key stakeholders and the community. Therefore, the way forward potentially involves using capacity building strategies for developing leadership, building partnerships and facilitating cooperation. However, this approach depends on a genuine commitment of time and resources, and participation by governments, organisations and members of the community.

There is also a need to improve access to opportunities and active environments (e.g. walking or biking trails, local activities in local centres and workplaces, educational counselling, risk screening and workshops), along with educational activities which are connected to these opportunities, are likely to increase physical activity and should be encouraged.

Social support also makes it easier for individuals to maintain their involvement in physical activity by increasing their motivation, providing practical assistance (such as shared childcare) and/or providing someone with whom to be active. Therefore, interventions should seek to involve creating new social networks (such as a walking group) or building on existing networks (such as the workplace).

The key attributes of effective interventions include the provision of:

- individual advice and counselling for behaviour change with supporting written physical activity materials;
- opportunities for the participant to examine their beliefs, experiences and confidence about physical activity;
- goal setting, self-monitoring and identifying social support with regular follow-up and re-assessment of progress;
- encouragement to self-select moderate-intensity physical activity that can be taken from the home, particularly walking is advisable; and
- options to participate in supervised and unsupervised programmes of physical activities including aerobics, walking and cycling.

In summary, research suggests that organisations promoting physical activity should:

- seek to establish comprehensive long term strategies that focus on the social, physical, economic and policy environment;
- seek to ensure the sustained involvement of multiple stakeholders from many sectors beyond health, including urban planners, local government, the transport sector, environmental protection agencies, criminal justice organisations, community organisations and special interest groups;
- develop interdisciplinary teams and coalitions, including target groups and user groups, that have well defined roles in the design and implementation of physical activity programmes; and
- seek to commission multiple level interventions that focus concurrently on the social, physical, behavioural, economic and policy environments - these interventions are most likely to be effective and have the potential to yield more sustainable change.

The physical activity interventions currently taking place across the North East region have been identified via the survey/mapping study. The profile of these interventions and apparent strengths and weaknesses are set out in section four which follows.

4. Physical Activity Interventions

04

Introduction

This section sets out the key findings from the survey undertaken to identify the current physical activity interventions in the North East in order to:

- provide a baseline of the current position across the North East region as a whole and also within each of the four sub-regions;
- analyse the strengths and weaknesses of current physical activity interventions;
- identify good practice case studies in the region; and
- identify areas for improvement.

As highlighted in section one, a total of 182 questionnaires were returned during the survey period. From these submissions, the total number of interventions identified was 146. This was based on the removal of duplicate projects, blank returns and projects which did not meet the required criteria to be included (*for example a number of responses were received from projects related to Sports Unlimited and these were not included as they were deemed to be outside the scope of this specific study*).

The questionnaires were analysed using SNAP survey software to identify key findings and the responses provided will be utilised to provide the client team with a database of the current interventions identified.

It should be noted, that a number of the questions were designed to allow respondents to type 'literal' or 'free text' responses; to aid analysis and interpretation, where appropriate, 'literal' responses have been grouped into specific categories/types. Where survey findings have been provided in percentage format, the results have been rounded up to whole numbers and therefore, in some instances the results will sum to slightly above or below 100%.

Physical activity interventions in the North East

A total of 146 physical activity interventions were identified in the North East during the study period. The table below summarises the different types of initiatives currently taking place.

Types of physical activity interventions in the North East

Category	Percentage
Physical activity referral schemes/rehabilitation	31%
Brief interventions	0%
Pedometer interventions	0%
Community based exercise programmes for walking or cycling	7%
Other community based sport/exercise programmes	44%
Workplace health initiatives	3%
Other	13%

As can be seen above, just under one-third of the interventions currently taking place take the form of physical activity referral programmes (PARS) or rehabilitation programmes. The interventions in place are typically aimed at individuals either at risk or with pre-existing conditions such as diabetes, weight management/obesity, coronary heart disease and comorbidities. A typical example would be the exercise referral programme offered in South Tyneside:

- the intervention aims to provide a pathway for long term support for continuing exercise based rehabilitation programmes, adherence to exercise and lifestyle change for those groups at risk/referred from a medical professional;
- the intervention comprises a 24 week programme. Six month post programme support plus six and twelve month post programme follow up;
- activities include exercise classes, gym sessions, specialist cardiac classes, pulmonary classes, green gym, cycle sessions, walking group sessions, swimming , group educational presentations and diet advice sessions; and
- partners involved include the local authority, PCT and South Tyneside Foundation Trust; with funding provided by the PCT.

Only a small proportion (7%) take the form of community based exercise programmes for walking or cycling. A typical example would be the 'walking the way to health' programme offered in Northumberland:

- the intervention aims to provide free local walking groups throughout Northumberland that are led by trained volunteers who are managed by paid walking co-ordinators. These groups aim to improve both physical and mental health by providing physical activity in a supportive local community environment;
- the intervention provides a range of walking groups across Northumberland; and
- partners involved include Blyth Valley Arts and Leisure, North Country Leisure, Natural England

A much higher proportion (44%) take the form of community based sport/exercise programmes that use a broader range of activities than just walking or cycling, such as dance, exercise classes, swimming, supervised gym sessions advice and guidance, motivational support and sports such as football, cricket and badminton. The interventions often target groups which typically have below average participation rates in sport/physical activity, such as older people, BME communities, people with disabilities and low income groups. A typical example would be the 'women begin to.....' programme in Hartlepool:

- the intervention aims to increase participation/improve health in women, specifically 'Paula's' identified through Sport England market segmentation research;
- the intervention targets women in deprived wards and offers a range of activities including swimming, running, aerobics and badminton at various settings within Hartlepool; and
- partners involved include the main leisure providers and Sport England.

Although the main focus of this study was on interventions aimed at adults, some organisations also provided information regarding programmes which target children/young people. As such, this category also includes interventions which aim to improve health through increased participation in sport/physical activities plus advice and information.

Just 3% of the interventions are workplace health initiatives. The programmes typically aim to encourage employees to be more active during their working day to improve health and reduce sickness absence through a range of activities, such as football, swimming, badminton, climbing, walks, running and cycling. A typical example is the 'cycle to work' project, a national initiative which is being operated at the University Hospital of North Durham:

- the intervention aims to increase the number of staff cycling to work to promote fitness to support the Trust's 'Green Plan' at the University Hospital of North Durham; and
- the intervention offers a cycle hire and purchase scheme and is self-financing.

The remaining 13% of interventions offer 'other' types of initiatives, which embrace a wide-range of schemes, such as capacity building programmes, social inclusion, computer based initiatives and support via telephone, SMS messaging, email and printed literature for identified target groups.

The survey did not identify any brief interventions or pedometer based programmes.

Activities/methods utilised

As highlighted above, the interventions utilise a wide range of different activities/methods to increase participation and improve the health of those involved. However, in most cases, the interventions used a combination of different physical activities and often also included consultation, advice and guidance to encourage behavioural change as can be seen in the table below (*Categorisation was based on 'best fit' using information provided by respondents*).

Activities/methods used within the physical activity interventions

Category	Percentage
Range of physical activity and sports sessions (eg dance, exercise classes and swimming)	44%
Consultation, advice/guidance plus a combination of different physical activities (eg exercise classes, gym sessions)	36%
Sports specific sessions (eg golf, football and cricket)	12%
Walking	9%
Cycling	2%
Chair-based exercise	2%
Advice, mentoring and support	2%
Technology based initiatives (eg using wii fit and dance mats)	2%

Respondents were asked to indicate whether their intervention was aimed at any specific target group or groups. As can be seen below, most interventions target more than one group, so for example as many interventions target both males and females, the percentages sum to greater than 100%.

Target groups which interventions are aimed at

Target group	Number of interventions	Percentage
Males	91	62%
Females	100	68%
Adults aged 16 – 34	68	46%
Adults aged 35 – 49	64	44%
Adults aged 50 – 64	70	48%
Adults aged 65+	66	45%
Infants aged 0 -2	9	6%
Preschool aged 2 – 5	11	7%

Target group	Number of interventions	Percentage
Primary school children	44	30%
Secondary school children	37	25%
Adults identified as at risk - cardiac rehabilitation	36	25%
Adults identified as at risk - weight management	47	32%
Adults identified as at risk - type 2 diabetes	40	27%
Children identified as at risk - weight management	36	24%
Individuals with learning disabilities or poor mental health	43	29%
Individuals with physical disabilities	38	26%
Antenatal	11	7%
Postnatal	19	13%
Family	43	29%
Ethnic minority groups	45	31%
Low income groups	54	37%
Unemployed	36	25%
Other (please state below)	40	27%

When considering the gender, it can be seen that a slightly higher proportion of interventions target females (68%) than males (62%), with a large proportion aimed at both men and women.

The results also suggest that interventions aim to attract adults across all age groups, with no one age group being specifically targeted.

There are fewer interventions in the region aimed at targeting children and young people. However, given that the study was predominantly aimed at identifying physical activity interventions amongst adults 16+ that is to be expected.

When looking at the specific 'at risk' groups, the results indicate that there are a greater number of interventions aimed at people with disabilities and people who have been identified as being 'at risk – weight management' and 'at risk – type two diabetes' than those who are 'at risk – CHD'.

In terms of specific target groups within the community, interventions appear to be mainly aimed at low income groups (37%) and BME groups (31%). Although it should be noted that 29% of interventions were aimed at families and around a quarter (27%) were aimed at other groups, which included adults with 'other long term conditions', falls prevention and deprived communities.

Based on the survey returns, there appear to be only a limited amount of interventions targeting antenatal (7%) and postnatal (13%) women.

Intervention aims

The survey asked respondents to outline the key aims of their initiative using free text. Analysis of responses highlighted that the aims of projects can predominantly be categorised into five categories:

- to increase participation in physical activity and improve health, particularly amongst key target groups, such as older people, BME groups and people with disabilities that traditionally have low levels of participation;

- improve health amongst those who are either 'at risk' or with pre-existing conditions;
- to tackle obesity;
- to increase skills/capacity; and
- as a means of social inclusion.

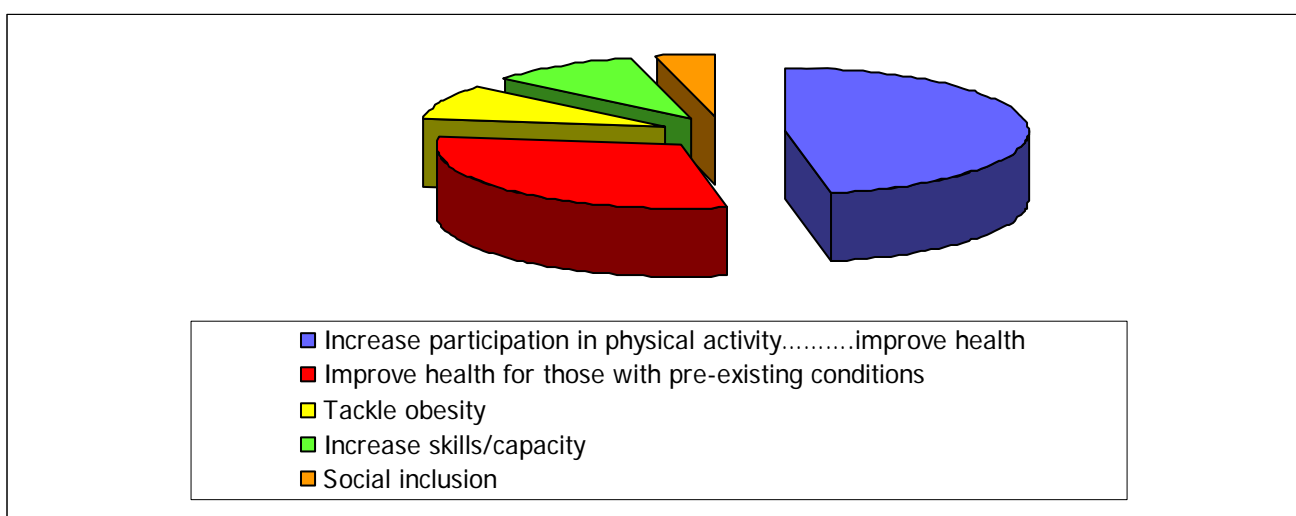
To further illustrate, the table below provides some examples of stated project aims.

Intervention aims

Intervention aim	Example
Increase participation in physical activity - improve health	<p><i>'To provide an opportunity to increase physical activity levels in people who are disengaged from physical activity, have had a break from exercise or who have never exercised before'</i></p> <p><i>'To offer physical activity opportunities for new mothers who want to improve their health and fitness...'</i></p> <p><i>'To provide physical activity opportunities for people aged 50+ but particularly the more elderly and those living in disadvantaged communities with limited access to traditional leisure services'</i></p>
Improve health	<p><i>'To support clients referred for cardiac and comorbidities...'</i></p> <p><i>'To run a lifestyle intervention which ensures people newly diagnosed with diabetes adopt a healthier and more active lifestyle which will significantly reduce the risk of complications'</i></p> <p><i>'To provide appropriate exercise sessions to give positive health benefits and maintain/improve respiratory function. To reduce frequency of hospital admissions...'</i></p>
Tackle obesity	<p><i>'To provide an expert, multi discipline approach to weight management. The specialist service is exclusively for patients with a BMI greater than 39'</i></p> <p><i>'Direct weight management intervention programme to assist 5-16 year olds who are above the 91st Centile'</i></p> <p><i>'Programme for identified overweight children and their families; weight maintenance, reduce sedentary behaviour by increasing physical activity and educate families on the importance of a balanced diet'</i></p>
Increase skills/capacity	<p><i>'The chair-based exercise leadership training service aims to train activity co-ordinators and other allied health professionals in care homes to competently deliver chair-based sessions...'</i></p> <p><i>'To deliver promote and train leaders to lead health walks. That will help improve physical health, emotional well being and social inclusion through the groups'</i></p> <p><i>'To qualify those interested in coaching the community..'</i></p>
Social inclusion	<p><i>'Social inclusion programme using support and leisure activities to engage with disadvantaged and socially marginalised'</i></p> <p><i>'To provide the opportunity for those from disadvantaged communities to enjoy and make the most of the natural environment through physical activity. Through these opportunities the aim is to target those people who are less likely to use the natural environment and with the greatest health inequalities'</i></p>

Intervention aim	Example
	<i>'To engage hard to reach participants in physical activity. Reduce social isolation and loneliness. Promote healthier lifestyles through physical activity. Achieve desired health and social outcomes....'</i>

The proportions within each category are illustrated in the graph below. Highlighting, that a significant proportion of interventions aim to increase participation in physical activity (particularly amongst key target groups) and ultimately improve health. Plus a large proportion aim to improve health for those either 'at risk' or with pre-existing conditions.



Intervention settings

Respondents were asked to provide information on the 'setting' for the intervention i.e. where the programme usually takes place.

The responses have been grouped into various categories and the findings are outlined in the table below.

Settings of interventions

Setting	Percentage
Leisure/sport centres	26%
Community venues (eg community centre, village hall)	18%
Educational establishments	16%
Health based venues (eg hospitals, health centres)	11%
Open spaces/outdoor sports facilities	13%
Sports clubs	1%
Workplace	1%
Other (eg 'various settings' or where a setting has yet to be confirmed)	14%

The most common setting for interventions is at leisure/sports centre (26%), followed by community venues (18%) and educational establishments (16%).

Fewer interventions take place at open spaces or outdoor sports facilities (13%) and there is a limited amount of interventions set at sports clubs (1%) or in the workplace (1%). Interestingly, most appear to be facility based rather than encouraging moderate intensity activity that can be taken from the home or informally.

Partners

The survey responses indicate that the majority of the interventions identified have a number of partners involved from the public, private and voluntary sector. The main partners involved in each intervention have been categorised and this information is detailed in the table below.

Partners

Main partner	Proportion of interventions (%)
Local authority	55%
PCT/NHS	61%
School Sport Partnerships/Schools	16%
Voluntary sector	6%
Leisure providers	17%
Sports clubs	7%
NGBs	5%
Other organisations	53%

The above table indicates that local authorities and PCTs/NHS are the main partners involved in the provision of physical activity interventions in the North East, whilst leisure providers and education based organisations are also involved in a relatively large number of interventions.

However, there are also a wide range of 'other' partners involved in the interventions including national organisations and charities, such as Sport England, Natural England, Age Concern, Help the Aged, Diabetes UK, Groundwork, Sure Start and English Federation of Disability Sport (EFDS) and also many local organisations.

Funding sources and intervention costs

Given the wide range of partners involved in the interventions, it is perhaps not surprising, that funding is provided via many different sources. However, analysis of responses indicates that local authorities and PCTs provide the main sources of funding.

In addition, interventions have also been successful in securing funding from a variety of public, private and voluntary organisations, including:

- Sport England
- Leisure Trusts
- Football Foundation
- Charities e.g. Big Lottery
- Sponsorship from commercial organisations

From the information provided, it would appear that most of the interventions are provided with funding for a specific time period or programme and few are supported by mainstream funding, which limits long-term planning and sustainability.

Given the diverse nature and length of the interventions it is not possible to provide accurate information in relation to average costs per programme or per participant. However, given the information provided, it would appear that costs vary enormously from just £3,000 to circa £1.7 million.

Similarly, when considering those interventions that have a cost per annum, costs also range widely from £5,000 per annum to run the 'weekly programme' in Hartlepool, which provides community based sessions such as gentle exercise and chair-based exercise classes in community centres and care homes etc. to £200,000 per annum to run the 'community physical activity coordinator programme' in Durham which provides a range of sessions for young people at risk of offending.

Monitoring and evaluation

91% of respondents indicated that they undertake some form of monitoring to evaluate their intervention. However, in most cases, only brief information was provided regarding the nature of the monitoring and evaluation systems in place. In many cases, it would appear that monitoring often takes the form of:

- self evaluation – participant questionnaires/evaluation forms (37%);
- attendance records/levels of participation (34%);
- monitoring of weight/Body Mass Index (10%);
- monitoring of key health statistics e.g. blood pressure, waist circumference (10%);
- measurement against KPIs (9%); and
- other methods, such as individual goal setting, increased knowledge (circa 1%).

Interventions often use both attendance records and participant questionnaires/evaluation forms. However, few gave detailed information regarding the content of the questionnaires or the nature of KPIs collected.

A small number of interventions referenced the use of national monitoring and evaluation systems or tools, such as:

- British Heart Foundation toolkits
- substance monitoring systems
- Sport England KPIs
- Sustrans Monitoring and Evaluation Unit

Physical activity interventions in the four sub-regions

To assist each of the four CSPs in the North East region to understand the current position within their area, the survey responses have also been analysed on a sub-regional basis. Information from this analysis is set out in summary format below plus a list of the interventions by sub-region is provided in Appendix E.

County Durham

County Durham	
Number of interventions	43
Key target groups	<ul style="list-style-type: none"> • low income groups (19) – 44%; • individuals with learning disabilities/poor mental health (19) – 44%; • family (18) – 42%; and • adults identified as at risk – weight management (15) – 35%.
Exercise referral programmes	17
Type of activities	<ul style="list-style-type: none"> • range of physical activity and sports sessions– 19; • consultation, advice/guidance plus a combination of different physical activities – 12; • walking schemes – 6; • advice, monitoring and support – 4; and • cycling – 2.
Settings	<ul style="list-style-type: none"> • community venues – 12; • leisure/sports centres – 10; • educational establishments – 6; • open spaces/outdoor sports facilities – 5; • health based facilities – 3; and • other/various – 7.
Partners	<p>Main partners identified are local authorities and PCTs/NHS.</p> <p>Other partners include external companies, Sport England and SSPs.</p>
Funding sources	<p>The majority of interventions are funded through local authorities and PCTs.</p> <p>Other funders include Sport England, Football Foundation and external agencies e.g. Groundwork.</p>
Monitoring and evaluation	<p>95% of interventions are monitored and evaluated.</p> <p>Monitoring and evaluation is undertaken using a variety of methods, with the most common being measurement against KPIs and participant questionnaires.</p> <p>A number of interventions require the production of a quarterly report to the relevant organisation.</p>

Based on responses to the physical activity intervention survey, there are 43 physical activity intervention projects in County Durham. 17 of these interventions are exercise referral or rehabilitation programmes. The key target groups of interventions in the sub region are low income groups, individuals with learning disabilities or poor mental health and families.

The majority of interventions revolve around general sport and physical activities, such as running, football and multi sport activities. Interventions in County Durham are predominantly facility based, with community venues e.g. community halls and leisure/sports centres the most common settings for interventions.

The main partners of interventions are the local authority and PCT. Other partners include external companies, Sport England and School Sport Partnerships. Funding is predominantly provided by local

authorities and the PCT, whilst other funders include Sport England, the Football Foundation and Groundwork.

96% of interventions indicate that they undertake monitoring and evaluation, with the most common method being via KPIs and participant questionnaires.

Northumberland

Northumberland	
Number of interventions	28
Key target groups	<ul style="list-style-type: none"> • low income groups (14) – 50%; • family (11) – 39%; • individuals with learning disabilities/poor mental health (10) – 36%; and • individuals with physical disabilities (9) – 32%.
Exercise referral programmes	5
Type of activities	<ul style="list-style-type: none"> • range of physical activity and sports sessions– 17; • consultation, advice/guidance plus a combination of different physical activities – 8; and • advice, monitoring and support – 3.
Settings	<ul style="list-style-type: none"> • leisure/sports centres – 8; • educational establishments – 7; • community venues – 5; • open spaces/outdoor sports facilities – 5; • health based facilities – 1; and • other/various – 2.
Partners	<p>The main partners of interventions are Northumberland Care Trust and Blyth Valley Arts and Leisure Trust.</p> <p>Other partners include SSPs and charities e.g. Age Concern.</p>
Funding sources	<p>The key funding sources are identified as Northumberland Care Trust and external bodies, such as Big Lottery, Sport England and the Football Foundation.</p> <p>A number of interventions are also funded by SSPs.</p>
Monitoring and evaluation	<p>89% of interventions are identified as being monitored and evaluated.</p> <p>Monitoring and evaluation is predominantly undertaken in the form of monitoring the number of participants, the measurement of key health statistics and participant questionnaires.</p>

A total of 28 interventions are currently run in Northumberland, of which five interventions are exercise referral schemes. The key target groups of interventions are low income groups, families and individuals with learning disabilities or poor mental health.

Interventions are most commonly based around general sport/physical activities and exercise/fitness sessions. However, walking programmes are also popular in Northumberland. Consistent with the findings for County Durham, interventions are very much facility based, with leisure/sports centres and educational establishments the most common settings for interventions.

Northumberland Care Trust and Blyth Valley Arts and Leisure Trust are the most common partners of interventions. Charities, such as Age Concern and School Sport Partnerships are two other key partners in the sub-region. Northumberland Care Trust and external organisations, such as Sport England and Big Lottery are the most common sources of funding for interventions.

89% of interventions are monitored and evaluated, with measurement of the number participants and measurement against key health statistics being the most common forms of monitoring and evaluation.

Tees Valley

Tees Valley	
Number of interventions	89
Key target groups	<ul style="list-style-type: none"> • ethnic minority groups (18) – 20%; • low income groups (16) – 18%; • adults identified as at risk – weight management (16) – 18%; and • individuals with learning disabilities/poor mental health (15) – 17%.
Exercise referral programmes	11
Type of activities	<ul style="list-style-type: none"> • range of physical activity and sports sessions– 39; • consultation, advice/guidance plus a combination of different physical activities – 18; • walking schemes – 15; • advice, monitoring and support – 8; • technology based initiatives – 3; • chair-based exercise – 3; and • other / various (e.g. leisure passes) – 3.
Settings	<ul style="list-style-type: none"> • leisure/sports centres – 24; • open spaces/outdoor sports facilities – 27; • community venues – 13; • educational establishments – 7; • health based facilities – 5; and • various – 5.
Partners	<p>PCTs are the most common partners of interventions in Tees Valley. Local authorities are also identified as key partners.</p> <p>Other partners include organisations from the voluntary sector.</p>
Funding sources	Limited information was provided on funders, however, PCTs, local authorities and external agencies were identified as the main sources of funding for interventions.
Monitoring and evaluation	<p>Respondents state that 96% of interventions are monitored and evaluated.</p> <p>Monitoring and evaluation is predominantly undertaken using attendance records and feedback forms.</p> <p>Only a limited amount of interventions are assessed against KPIs.</p>

The greatest numbers of physical activity interventions are located in this sub-region, with 89 interventions identified. 11 of these interventions are exercise referral schemes/ rehabilitation programmes and the majority of interventions are based upon general sport/physical activities.

Leisure/sports centres are the most common setting for interventions and open spaces/outdoor sports facilities are the second most popular setting. PCTs are the partners identified the most by respondents and local authorities are also key partners of interventions in Tees Valley.

PCTs and local authorities are the most common sources for funding in the sub-region. 96% of interventions are monitored and evaluated and the most common methods used are attendance records and feedback from participants.

Tyne and Wear

Tyne and Wear	
Number of interventions	87
Key target groups	<ul style="list-style-type: none"> • low income groups (28) – 61%; • ethnic minority groups (24) – 52%; • family (18) – 39%; and • adults identified as at risk – weight management (18) – 39%.
Exercise referral programmes	13
Type of activities	<ul style="list-style-type: none"> • range of physical activity and sports sessions– 34; • consultation, advice/guidance plus a combination of different physical activities – 30; • walking schemes – 12; • advice, monitoring and support – 6; • chair based exercise – 1; and • cycling schemes – 1.
Settings	<ul style="list-style-type: none"> • educational establishments – 22; • community venues – 20; • leisure/sports centres – 15; • open spaces/outdoor sports facilities – 15; • health based facilities – 10; and • various – 3.
Partners	<p>Local authorities and PCTs are the main identified partners of interventions. A significant number of interventions also have partnerships with SSPs.</p> <p>Other partners include NGBs, Age Concern and Groundwork.</p>
Funding sources	<p>Unsurprisingly given their partnership involvement, local authorities and PCTs are the main funders.</p> <p>Additional funding sources come from a variety of sources including Big Lottery, Football Foundation and SSPs.</p>
Monitoring and evaluation	<p>85% of projects are monitored and evaluated.</p> <p>Monitoring and evaluation appears to be more robust in this sub-region - the majority of interventions require the production of reports and are measured against set KPIs. Other forms of monitoring and evaluation include the measurement of key health statistics and number of participants.</p>

82 physical activity interventions are currently run in the sub-region. 13 of these interventions are exercise referral schemes/ rehabilitation programmes. The most common identified target groups are low income groups, ethnic minority groups and families.

General sport/physical activities and exercise/fitness classes are the most popular types of activities run by interventions and the most common settings for interventions are health based venues e.g. health centres, hospitals and educational establishments.

Local authorities and PCTs are the main partners of interventions in Tyne and Wear. School Sports Partnerships also provide partnership support to a number of interventions. Unsurprisingly given their partnership involvement, local authorities and PCTs are the main funders of interventions in the sub region.

85% of interventions are monitored and evaluated and monitoring and evaluation appears more robust. The most common methods of monitoring and evaluation are measurement against KPIs and a number of interventions require the production of a report to detail this information.

Summary

The survey has identified a variety of physical activity interventions currently taking place across the region, with most taking the form of:

- physical activity referral schemes; and
- community based sport/exercise programmes.

Interventions utilise a wide range of different activities and methods to improve health and levels of participation in sport/physical activity including the provision of support, guidance, advice and mentoring.

However, the survey responses suggest that there are only a limited number of workplace initiatives and green exercise initiatives taking place in the region. The academic literature review found that due to the amount of time that adults spend in the workplace these types of interventions provide significant opportunities for physical activity promotion. Whilst green space initiatives can make best use of open space and environmental assets and can be cost effective and can provide a more informal and inviting setting.

Target groups

There is generally an even split in the gender and adult age groups which interventions are aimed at in the North East. The most common groups specifically targeted by the interventions appear to be:

- low income groups;
- adults identified as at risk – weight management; and
- BME groups.

Fewer interventions are targeting antenatal, postnatal and adults identified as at risk – cardiac rehabilitation.

Settings

Interventions are predominantly 'facility based'. This is highlighted by the fact that leisure/sports centres, community venues and educational establishments are the most common settings for interventions.

The academic literature review highlighted that whilst centre based projects can be successful in the short-term, long-term adherence is often greater in home-based programmes. In addition, 'facility based' programmes may be seen as providing a very 'formal environment', which may discourage users. As such, it is important that interventions also focus upon encouraging behaviour change/adaptation of the environment.

Partners and funding

Interventions have a wide range of partners and funding sources from the public, private and voluntary sector. However, the main partners and funders of interventions in the North East are local authorities and PCTs.

Ensuring the sustained involvement of a range of partners is essential to the success of interventions and whilst interventions generally have a range of partners involved, it should be noted, that there appear to be few examples of interventions with engagement from 'wider partners', such as urban planning, environmental agencies and the transport sector. It is these stakeholders that will be able to provide guidance on changing and adapting the environment. There also appear to be only a small number of interventions which have mainstream funding sources in place.

Monitoring and evaluation

93% of interventions indicated that they undertaken some form of monitoring and evaluation to assess the programme's impact. The main methods of evaluation appear to be via the monitoring of attendance records/participation and self evaluation/participant questionnaires. However, limited information was provided regarding the content of the questionnaires or KPIs utilised making it difficult to evaluate the success of interventions, particularly in the long term success.

Where more detailed monitoring information was provided, it would appear that the focus is predominantly based around measuring changes in levels of physical activity or specific health indicators, such as height, weight, blood pressure, peak flow and resting heart rate etc. There was little evidence of interventions measuring changes in knowledge, attitudes and skills.

The table overleaf summarises the strengths and weaknesses of the interventions identified.

Summary of key strengths and weakness of current physical activity interventions

Interventions in the North East

Strengths

Interventions utilise a wide range of methods/ strategies to promote increased physical activity. A number of interventions tailor their content to individual needs and focus not only on physical activities, but also on the provision of advice and support/teaching skills which can be important in promoting behaviour change.

There is a variety of interventions targeting a broad cross-section of the community.

Interventions targeting those most 'at risk' are mainly geared towards addressing key local health issues (eg obesity/weight management, CHD, type 2 diabetes)

Most interventions have clearly defined aims.

A number of interventions focus upon capacity building.

The majority of interventions involve a range of key stakeholders.

91% of interventions have monitoring and evaluation systems in place.

Project Coordinators appear to have genuine commitment and enthusiasm for the interventions.

Weaknesses

The survey responses suggest that there is only a limited number of workplace initiatives in place. Due to the amount of time spent in the workplace, these types of interventions provide significant opportunities.

Interventions are primarily reactive rather than preventative. Most are aimed at individuals, key target groups or those with pre existing conditions. There is limited evidence of interventions that are preventative i.e. aimed at improving the general health and wellbeing of communities.

Interventions mainly take place in 'formal' settings rather than promoting moderate physical activity in daily life or making changes to the overall environment/policy.

Most interventions take place for a fixed time period (varying in length from just 8 weeks to 4 years) – thus long-term sustainability is an issue.

There appears to be minimal involvement from 'wider' stakeholders beyond the health/leisure sector, such as urban planners, local government, the transport sector, environmental protection agencies, criminal justice organisations, community organisations and special interest groups. These need to be developed, particularly with those organisations that can influence the change/ adaptation of environments. Since the reorganisation of local government earlier in 2009, there are real opportunities, particularly in Northumberland and Durham, to engage with and involve wider stakeholders.

Limited information was provided regarding the monitoring and evaluation methods utilised. Interventions focus mainly on attendance records and/or participant questionnaires. More varied and in-depth measures are required to effectively monitor the impact.

Good practice examples

The academic literature review highlighted key components of successful interventions, which included the following; interventions that:

- teach behavioural change;
- teach participants skills relating to the control of behaviour;
- tailor content to individual needs;
- combine multiple strategies and involve a range of key stakeholders;
- involve capacity building strategies and build partnerships; and
- have genuine commitment of time and resources.

Within the North East there is evidence of interventions that are replicating best practice guidance and include some/all of the successful components set out above. For example, a number of interventions teach behavioural change and skills relating to the control of behaviour to participants. These types of interventions are generally those which provide support and advice on health, nutrition and physical activity. The Health Trainers programme in Northumberland is an excellent example. This programme aims to support adults to become more active and adopt a healthier lifestyle through the provision of one-to-one support and advice on physical activity and healthy eating.

A selection of good practice case studies from each of the four sub-regions are provided below.

County Durham

Intervention name: Cardiac Rehabilitation – Phase 3.

Aims: Targeting individuals who have had a cardiac event. The project aims to improve health, knowledge and confidence as secondary prevention.

Activities: Exercise and health education, discussion and advice delivered by multidisciplinary teams e.g. nurses, fitness professionals, dieticians etc.

Partners: Durham County Council and County Durham and Darlington NHS Trust.

Funding: Durham County Council and County Durham and Darlington NHS Trust.

Monitoring and evaluation: Brief evaluation by Durham County Council through participant self evaluation and detailed data collected by the Cardiac Rehabilitation Team.

Behaviour change	✓	Teaching skills relating to behaviour change	✓
Tailored content to individual needs	✓	Combines multiple strategies	✓
Capacity building		Involvement of a range of stakeholders	✓
Genuine commitment	✓		

Northumberland

Intervention name: Healthy Living Initiative.

Aims: To promote healthy living, particularly to residents in the south east of Northumberland and working with communities to encourage ownership of sustainable activity and lifestyle changes.

Activities: Weight managements sessions, exercise referral schemes, dance sessions, class health checks, exercise programmes for those on incapacity benefits.

Partners: Job Centre Plus, children's services, Northumberland Care Trust, Age Concern, Welfare Centres, Health Trainers, Wansbeck Hospital, Women's Health Advice Centre, Primary Care and Northumberland County Council.

Funding: Communities for Health and Northumberland County Council.

Monitoring and evaluation: Various methods used, predominantly in the form of participant questionnaires, case studies and the monitoring of key health statistics.

Behaviour change	✓	Teaching skills relating to behaviour change	✓
Tailored content to individual needs		Combines multiple strategies	✓
Capacity building		Involvement of a range of stakeholders	✓
Genuine commitment	✓		

Tees Valley

Intervention name: New Life, New You.

Aims: To change the behaviour of 500 individuals, particularly targeting those people unlikely to participate in sport and physical activity and at greater risk of developing Type 2 diabetes.

Activities: Weight management sessions, various physical activities, healthy cooking sessions and behavioural change materials and messages.

Partners: Sport England, Public Health North East, Middlesbrough PCT, Middlesbrough Council, Diabetes UK, Tees Valley Sport, Newcastle University and National Social Marketing Centre.

Funding: Sport England, Public Health North East, Middlesbrough PCT and Middlesbrough Council.

Monitoring and evaluation: Undertaken by Newcastle University using various methods. Monitoring and evaluation is completed at various stages and includes an assessment of Type 2 diabetes and physical activity data.

Behaviour change	✓	Teaching skills relating to behaviour change	✓
Tailored content to individual needs	✓	Combines multiple strategies	✓
Capacity building		Involvement of a range of stakeholders	✓
Genuine commitment	✓		

Tyne and Wear

Intervention name: Specialist Weight Management Service.

Aims: To provide an expert and multidisciplinary approach to weight management. The programme is specifically for patients with a BMI greater than 30 and who have previously attempted a weight management service without success.

Activities: Physiological interventions, specialist nutritional advice sessions and specialist one to one and group exercise sessions.

Partners: Sunderland City Council, City Hospitals and Sunderland Teaching Primary Care Trust.

Funding: Sunderland Teaching Primary Care Trust.

Monitoring and evaluation: Number of referrals and monitoring of weight loss and health improvements.

Behaviour change	✓	Teaching skills relating to behaviour change	✓
Tailored content to individual needs	✓	Combines multiple strategies	✓
Capacity building		Involvement of a range of stakeholders	✓
Genuine commitment	✓		

Gaps

Although the above case studies highlight interventions that are replicating some of the components of best practice guidance, there are a number of areas where there is less evidence of good practice. For example:

- the majority of programmes revolve around formal, facility based activities rather than those which promote informal, moderate physical activity;
- there is less evidence of comprehensive long term strategies/interventions that focus on changing/adapting the social, physical and policy environment;
- there is a lack of long term interventions - many projects run for a fixed period and lack mainstream funding. Thus meaning that there is a limited amount of long-term sustainable projects;
- there is a lack of comprehensive and robust monitoring and evaluation, making it difficult to evaluate the success of interventions. Many merely record levels of attendance or at most appear to measure changes in levels of physical activity or health indicators as opposed to also collecting data on changes in knowledge, attitudes and skills of the participant, which are critical if long-term behaviour change is to take place; and
- although there is evidence that some interventions tailor the programme to meet individual needs, there are also a large number which provide only group-wide activities without any individual tailoring.

As such, these provide potential areas for future improvements and best practice guides for any new interventions. Section five which follows provides further recommendations and next steps guidance.

5. Recommendations and Next Steps

05

Summary

The study has highlighted the important role that physical activity can play in improving health and its increasing significance on the political agenda and in particular, the need for increased action, if the North East region is to achieve the vision set out in 'Better Health, Fairer Health' of being '*the most physically active region in the country, both in its activities of daily living and in its recreational choices*'.

The survey has identified a variety of physical activity interventions currently taking place across the region, with most taking the form of:

- physical activity referral schemes; and
- community based sport/exercise programmes.

Analysis of the current interventions has identified a wide range of good practice examples and key strengths particularly in terms of:

- interventions utilising a wide range of methods/ strategies to promote increased physical activity (including tailoring content to meet individual needs, a combination of physical activities and advice and guidance to teaching skills/promote behaviour change;
- there being a variety of interventions targeting a broad cross-section of the community;
- interventions which target those most 'at risk' being mainly geared towards addressing key local health issues (eg obesity/weight management, CHD, type 2 diabetes);
- interventions having clearly defined aims;
- the existence of interventions which focus on capacity building;
- the majority of interventions involving a range of key stakeholders; and
- Project Coordinators appearing to have genuine commitment and enthusiasm for the interventions.

However, analysis also identified some gaps/weaknesses in the current provision, which mainly relate to:

- traditionally, interventions primarily being reactive rather than preventative – with most aimed at individuals, key target groups or those with pre existing conditions. There appears to be limited evidence of interventions that are preventative i.e. aimed at improving the general health and wellbeing of communities – which presents a real opportunity;
- interventions mainly taking place in 'formal' settings rather than promoting moderate physical activity in daily life or making changes to the overall environment/policy;
- interventions mainly take place for a fixed time period (varying in length from just 8 weeks to 4 years) – thus long-term sustainability is an issue;

- a lack of involvement from 'wider' stakeholders, particularly those from organisations that can influence the change/adaptation of environments;
- monitoring and evaluation methods, which appear to focus mainly on attendance records and/or participant questionnaires - more varied and in-depth measures are required to effectively monitor the impact; and
- there being a limited number of workplace initiatives identified. Due to the amount of time spent in the workplace, these types of interventions provide significant opportunities.

Focus for future interventions in the North East

Given the strengths and weaknesses identified above, it is recommended that future interventions take into consideration the key factors set out below to help promote successful interventions.

Future direction for interventions in the North East

Future direction	
Recommendations	What this means
<p>Multiple approaches – Interventions should combine a number of different approaches, which should ideally include educational, behavioural and cognitive behavioural strategies and offer individual advice and counselling.</p>	<p>Interventions should provide options to participate in both supervised and unsupervised programmes of physical activity. They should also aim to educate participants on physical activity and health and should teach participants skills on how to perform physical activities within their own social environment.</p> <p>Self monitoring and goal setting should be used to motivate participants. Plus opportunities should be provided for participants to examine their beliefs, experiences and confidence about physical activity.</p>
<p>Environmental approaches – Seek to provide more interventions that establish long term environmental strategies.</p>	<p>Interventions should seek to create healthy physical environments through development of policy in order to improve the general health and wellbeing of communities (for example via active transport and workplace health initiatives) as opposed to only providing 'reactive' programmes aimed purely at key target groups or those with pre-existing conditions;</p>
<p>Informal settings – Interventions should be set in both formal and informal settings. This may increase participation among particular social groups and allows for the transference of skills into an individuals social setting.</p>	<p>More interventions should take place in informal settings, such as parks and open spaces and encourage participants to select moderate physical activity that can be taken from the home.</p>
<p>Wider partnerships – Current partnerships should be developed to include a wider range of organisations and stakeholders.</p>	<p>Stakeholders responsible for interventions should seek to create wider partnerships, particularly focusing on those organisations that have the power to influence a change in policy and the environment.</p>
<p>Workforce development – the provision of adequate resources to ensure that appropriately trained and qualified staff are in place to deliver</p>	<p>For interventions to be effective, it is essential that relevant staff not only hold recognised fitness/exercise qualifications, but are also trained in behaviour</p>

Future direction

the interventions effectively.

Robust monitoring and evaluation – Monitoring and evaluation of interventions should utilise a variety of methods and follow a robust process.

change/motivational interviewing.

Interventions need to have robust systems in place to monitor and evaluate effectiveness. This requires evaluation methods and protocols to match the scheme's desired outcomes, baseline assessments to be established and the use of a variety of methods to capture both outcome measures such as levels of participation and health checks plus intermediate outcomes, such as knowledge, attitudes and skills.

It is vital that rigorous data collection systems are in place and that monitoring and evaluation is carried out on a regular basis.

Long-term follow up of participants should be carried out to determine long-term impact.

Interventions may wish to make use of national monitoring and evaluation tools, such as the Active People Survey data and National Obesity Framework. The National Obesity Framework is available on the National Obesity Observatory website and it provides helpful advice on developing a standard evaluation framework, including guidance on why evaluation is important, types of evaluation, ethics, analysis and reporting. Or other templates also exist, such as the British Heart Foundation Exercise on Referral Toolkit or the General Practice Physical Activity Questionnaire (GPPAQ)

What does this mean for the North East and four sub-regions?

Evidence suggests that organisations within a physical activity remit should:

- seek to establish comprehensive long term strategies that focus on the social, physical, economic and policy environment;
- seek to ensure the sustained involvement of multiple stakeholders from many sectors beyond health, including urban planners, local government, the transport sector, environmental protection agencies, criminal justice organisations, community organisations and special interest groups;
- develop interdisciplinary teams and coalitions, including target groups and user groups, that have well defined roles in the design and implementation of physical activity programmes;
- seek to commission multiple level interventions that focus concurrently on the social, physical, behavioural, economic and policy environments - these interventions are most likely to be effective and have the potential to yield more sustainable change;
- seek to ensure that there is genuine commitment of time and resources to promote, initiate and sustain physical activity and strong leadership;

- assess whether there has been community involvement in the establishment of interventions - ideally, consultation should be undertaken with users and key stakeholders; and
- ensure that there is a robust monitoring and evaluation system in place.

Potential funding sources

In addition, to the organisations that have been identified as currently providing funding for physical activity interventions in the North East region (*which are heavily reliant on local authority and PCT funding sources*), there are a range of other organisations which provide potential funding sources. A summary of these organisations and potential funding sources are set out in the table below.

Potential funding sources

Organisations	Funding sources
NHS Funding	NHS funding is available via a range of sources for collaborative projects. However, all require an NHS lead. Funding opportunities include the National Institute for Health Research (NIHR) which commissions research for a number of NIHR and DH research programmes, the Research for Patient Benefit Programme (RfPB) which operates three competitions per year and the Policy Research Programme (PRP) which commissions studies to meet DH needs.
Big Lottery Fund	The Big Lottery provides a range of funding sources, programmes of relevancy include the Awards for All programme which aims to help improve local communities and the lives of people most in need, the BASIS programme, which aims to improve the infrastructure support available to voluntary and community sector organisations.
Heritage Lottery Fund	The Heritage Lottery Fund is currently operating a programme called 'Parks for People', which offers grants for projects involving urban or rural green spaces designed for informal recreation and enjoyment. Closing dates for applications are either August 2009 or March 2010.
Community Development Fund	<p>The CDF is a charitable non governmental body set up by the Department for Communities and Local Government to lead and empower community development.</p> <p>It runs "Grassroots Grants", a £130 million fund available from 2008-2011 to strengthen the community sector. It is divided into two parts:</p> <ul style="list-style-type: none"> • £80 million small grants fund for community organisations; • £50 million endowments programme to enable local foundations to generate additional donations from the private sector on a matched basis and invest them in endowments, thereby building their capacity to provide long-term funding for frontline community organisations.
Community Foundations	<p>Community Foundations are local charities located across the UK dedicated to strengthening local communities, creating opportunities and tackling issues of disadvantage and exclusion.</p> <p>The Foundations collect money from local donors and endowments and then provide grants to their local community organisations across the areas of arts and culture, education, environment, health, community development, children and young people and older people.</p>
Coalfields Regeneration Trust	<p>An independent charity established in 1999 dedicated to improving the quality of life for people in Britain's coalfield communities. Their aim is to lead the way in coalfields regeneration and to restore healthy, prosperous and sustainable communities.</p> <p>The grants programme is about helping groups who respond to local need, which include projects which address key issues such as worklessness, isolation, skills, sector development and sustainability.</p>
Heart Research UK	This is a charity which aims to support pioneering research into heart disease. It

Organisations	Funding sources
	<p>runs a funding stream, 'Healthy Hearts', which supports innovative projects designed to promote heart health and to prevent or reduce the risks of heart disease in specific groups or communities.</p> <p>Grants are given to community groups, voluntary organisations and researchers who are spreading the healthy heart message.</p> <p>Government or local authority funded institutions are not supported, but community and voluntary groups aided by public money may apply.</p>
DCSF - Myplace	<p>This is a £190 million fund, to be distributed between 2008 and 2010, which is being administered by the Big Lottery Fund on behalf of DCSF. However, it is not Lottery funding. Myplace aims to deliver world class youth facilities driven by the active participation of young people and their view and needs.</p> <p>Funded projects must deliver all the following outcomes:</p> <ul style="list-style-type: none"> • exciting and safe places for youngsters to go in their leisure time where they can get involved in an attractive range of activities; • increased participation by young people (particularly disadvantaged youngsters) in positive leisure time activities that support their personal and social development; • increased access for young people to information, advice and support services from within places they feel comfortable; • stronger partnership working between local authorities, third, private and public sector partners to plan, deliver and operate financially sustainable youth facilities with and for young people. <p>Myplace will only fund projects that will deliver on all four of these outcomes and demonstrate evidence of the following:</p> <ul style="list-style-type: none"> • real participation of young people, particularly disadvantaged young people, in the development, design and future of running of the project • genuine cross-sector partnership between public sector bodies and third and/or private sector organisations. <p>Bids can be made by any one organisation, whether private, public or third sector (if private sector, it must be a not-for-profit organisation).</p>
The Trusthouse Trust	<p>The Trusthouse Charitable Foundation was formed out of Forte plc which inherited investments in the Granada Group. It makes grants across three areas; health care and disability, community support and education and the arts. Applications are accepted from anywhere in the UK, especially those concerned with areas of deprivation. The Trust runs two grant programmes; a small grants programme, which provides grants for capital and revenue to small organisations with revenue of less than £300,000 per annum and a large grants programme which provides capital grants only.</p>
Kelloggs Active Living Fund	<p>This fund aims to remove the 'barriers' which prevent people from leading an active life. It provides small grants to fund projects and activities which lead to people taking part in sustained physical activity.</p>
Foyle Foundation	<p>The Foyle Foundation is an independent grant making trust that distributes grants to UK charities whose core work is in the area of learning, arts and health.</p>
Rowan Bentall Charitable Trust	<p>The Rowan Bentall Charitable Trust has been giving grants to a wide range of community based projects since 1972. The trust focuses on projects that benefit the environment and public health.</p>

Organisations	Funding sources
Gerald Micklem Charitable Trust	The Gerald Micklem Charitable Trust is a grant-making trust and a registered charity. It provides grants to UK charities working on a national basis in the following areas; disability, deafness and blindness, medical conditions affecting both adults and children, medical research, but not in substitution of NHS spending, people with learning disabilities, children and young people, especially the disadvantaged and environment and wildlife.
The Garfield Weston Foundation	This is a UK based, general grant-giving charity endowed by the late W Garfield Weston and members of his family. It provides grants for projects in the categories of the arts, community, education, welfare, medical, social, religion, youth and environment. Support can only be given to organisations or groups which are charitable - including UK registered charities and excepted or exempt charities such as churches, hospitals, educational establishments, museums and housing corporations.
Bernard Sunley Charitable Trust	This is a private charity trust which considers applications from charities and particular organisations. Approximately 10% of grants are made to sports projects. Emphasis on capital funding, but funding is also provided for revenue costs.
Legacy Trust UK	Legacy Trust UK is a £40 million Trust, which aims to support the 2012 Olympic and Paralympic Games, through the promotion of culture and sport among young people and communities. The Big Lottery Fund, the Arts Council and the Department for Culture, Media and Sport have endowed Legacy Trust UK with £40m. This - and other funds that the Trust will raise from other public and philanthropic sources - will be used to support cultural, artistic, educational and sporting activities that celebrate the 2012 Games. Currently there are plans for projects that benefit the whole UK, including £6million for the UK School Games. The rest of the money will be allocated to specific projects via the three nations and nine English regions of the UK. There are plans for three other UK wide projects which will go out to tender in the spring.
Opportunities for Volunteering	There are a number of national charities that distribute grants as part of the DH's Opportunities for Volunteering scheme. These charities are known as National Agents. The focus of these projects is to involve volunteers in the delivery of health and social care services.

The way forward

The study has clearly highlighted the strategic importance of improving health and increasing physical activity at both a national, regional and local level. Given that health profiles in the North East are generally worse than England as a whole, particularly in key areas such as binge drinking, healthy eating, obesity, deaths from smoking, early deaths from heart disease/stroke and early deaths from cancer it is essential that physical activity interventions continue to be resourced and developed.

If key objectives and targets set out within strategic policy documents are to be met there is a need:

- for key organisations to 'ring fence' adequate funding and resources specifically for physical activity interventions;
- to utilise multiple approaches that includes interventions that are:
 - aimed at those who are 'most at risk' in order to help address key local health issues; and

- aimed at developing more long-term environmental strategies in order to create an active environment in order to help improve the general health and well being of whole communities (ie preventative).

This study has identified a wide range of physical activity interventions and has provided a snapshot of the current situation with regards to physical activity in the region and four sub-regions. The academic review has established the attributes of successful interventions, provided evidence on what works and what doesn't work and identified good practice case studies from within the North East region and further afield. However, this study should be viewed as a 'starting point' and it is important that:

- the database of physical activity interventions is uploaded onto relevant websites within the region for use by key stakeholders, organisations and individuals;
- the database is updated on a regular basis;
- key stakeholders with an interest/role in promoting physical activity be made aware of the location of the database;
- the findings of the study are used to address identified gaps in provision and areas for improvement;
- the findings of the study be as a baseline to assist in the development of physical activity plans;
- the findings of the study be used to influence funding for physical activity interventions in the North East and four sub-regions; and
- the findings of the study be used to share best practice ideas and guidance on physical activity amongst physical activity and health professionals.