

Protecting and improving the nation's health

Everybody Active, Every Day

An evidence-based approach to physical activity



About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through advocacy, partnerships, world-class science, knowledge and intelligence, and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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1. Introduction

Around one in two women and a third of all men in England are damaging their health through a lack of physical activity¹. It is an unsustainable situation, and one that is costing an estimated £7.4 billion a year^{2, 3}. If current trends continue, the burden of health and social care will destabilise public services, and take a real toll on quality of life for individuals and communities.

- over one in four women and one in five men do less than 30 minutes of physical activity a week, so are classified as 'inactive'¹
- physical inactivity is the fourth largest cause of disease and disability in the UK⁴

Public Health England wants to drive a step change in the public's health. Tackling physical inactivity is a key part of making this step change to reduce the burden of preventable death, disease and disability, and support people and their communities to achieve their potential.

We know from the experience of other high-income countries, like Finland,⁵ the Netherlands and Germany⁶, that this situation can be changed. The solution is clear: *Everybody needs to become more active, every day*.

If being active was a pill, we would be rushing to prescribe it. A wealth of evidence shows that an active life is essential for health. Activity reduces the risk of many preventable diseases, from cancer to diabetes, and conditions like obesity and depression. Being active increases your chances of staying independent in later life.

The benefits don't stop there. Being active is also good for children's educational attainment, it can boost workplace productivity and reduce sickness absence and it can even reduce crime and anti-social behavior⁷.

We know from the international experience that getting the whole nation active every day will only happen if we involve all sectors. To effect real and lasting change we need to take a long-term, evidence-based approach, building upon what we know works. We need to embed physical activity into the fabric of daily life and make it the easy, cost-effective and 'normal' choice in every community in England.

We want to engage with all professionals, providers and commissioners in health, social care, transportation, planning, education, sport and leisure, culture, the voluntary and community sector and both public and private employers to help us make the case for more – much more – physical activity for all of those who can.

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33% of men and 45% of women do not reach CMO recommendations for physical activity (HSE)



18% of disabled adults regularly take part in sport compared to 39% of non-disabled adults (APS)



19% of men and 26% of women are 'physically inactive' (HSE)

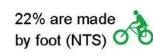
21% of boys and 16% of girls aged 5-15 meet the CMO recommendations for activity for children But...



47% of boys and 49% of girls in the lowest economic group are 'inactive' compared to 26% of boys and 35% of girls in the highest (HSE)



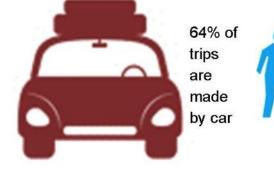
Walking trips decreased by 30% between 1995 and 2013 (NTS)



2% are made by bike (NTS)

Data Sources: Health Survey for England 2012 (HSE) Active People Survey 8, April 2103-April 2014 (APS) National Travel Survey July 2014 (NTS)

23% of girls aged 5-7 meet the recommended levels of daily physical activity, by ages 13 -15 only 8% do (HSE)



The Chief Medical Officer's Guidelines on Physical Activity¹²

For early years (under 5s)

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.

2. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.

3. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

These guidelines are relevant to all children under 5 years of age, irrespective of gender, race or socio-economic status, but should be interpreted with consideration for individual physical and mental capabilities.

For children and young people (5-18 years):

- 1. All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
- 2. Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
- **3.** All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled children and young people, emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health issues or risks.



The Chief Medical Officer's Guidelines on Physical Activity¹²

For Adults:

- Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
- 2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
- **3.** Adults should also undertake physical activity to improve muscle strength on at least two days a week.
- 4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled adults, emphasising that they need to be adjusted for each individual, based on that person's exercise capacity and any special health or risk issues.

For Older Adults (65+ years):

- 1. Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
- Older adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
- **3.** For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
- **4.** Older adults should also undertake physical activity to improve muscle strength on at least two days a week.
- 5. Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days a week.
- **6.** All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled older adults emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health or risk issues.

2. Inactivity is killing us

Physical inactivity is responsible for 1 in 6 (17%) of deaths in the UK⁸. This makes it as dangerous as smoking⁹. Yet over a quarter of us are still inactive, failing to achieve a minimum of 30 minutes of activity a week, and in some minority communities this falls to only one in ten adults. Whilst measurement differences limit direct comparisons, international studies using a single methodology consistently demonstrate that we lag behind most other similar countries in reducing physical inactivity (eg Figure 1).



19.3%

43.1%

Figure 1: Eurobarometer comparison of inactivity (Finland, UK, Netherlands and France)¹⁰

There are many reasons for the continued epidemic of physical inactivity. Social and economic trends over decades have 'designed' physical activity out of daily life. Fewer of us have manual jobs. Technology is more and more dominant in home and work, the two places where most of us spend much of our time. It encourages us to sit still for long periods – at the computer, mobile phones, tablets and the TV, or at electronic gaming systems. Over-reliance on cars and other motorised transport is another factor.

Our cities, towns, buildings and even parks too often work against physical activity. The design of schools, public buildings and urban spaces prioritise convenience and speed instead of encouraging people to walk or cycle. It is often easier to find the lift than the stairs. Concerns about vandalism and maintenance have left public spaces without the benches and toilets that allow older or disabled people to venture out. Traffic, not pedestrians, dominates most public spaces.

The Government's target, reiterated in the *Moving More, Living More* as the Olympic and Paralympic legacy commitment, is to increase the number of adults taking at least 150 minutes of exercise per week and reduce the number taking less than 30 minutes per week, year on year. Although there has been progress, it remains too slow.

With time and commitment in short supply, being active every day is – and always has been – about integrating incidental activity into our daily lives. It's about taking the opportunity to make short everyday trips on foot, by bicycle or using public transport – as well as doing whatever you enjoy in terms of exercise, dance or sport.

A Quick Snapshot

- more than 1 in 17 adults in the UK¹¹ are living with diabetes; more than 90% with type 2 diabetes. Being active can reduce the risk of developing this illness by 30-40%¹². Those living with it can reduce their need for medication and the risk of complications by being more active¹³
- 1 in 8 women in the UK are at risk of developing breast cancer at some point in their lives¹⁴. By being active every day they could reduce their risk by up to 20%^{12,15}
- dementia affects 800,000 people in the UK. Repeated studies have shown that being active every day can reduce the risk of vascular dementia and also have an impact on non-vascular dementia¹⁶
- the link between physical activity and obesity is well established. With more than half of adults and almost a quarter of children overweight or obese¹⁷, most of us can benefit from being more active every day
- depression is increasing in all age groups. Inactive individuals have three times the rate of moderate to severe depression of active people¹⁸. Being active is central to our mental health and feelings of general wellbeing

Disease and disability creates costs, and not just for the NHS. Long term conditions like diabetes, cardiovascular and respiratory disease can lead to greater dependency on domiciliary care, residential and ultimately nursing care. This creates avoidable costs for local authorities as well as economic and social pressure on families

The problem of inactivity

Being inactive is an issue at every age. Spending long periods sitting in one place – so many of us are spending long periods on the sofa, the computer and the desk chair – can be bad for your health. This applies even to those who are already taking vigorous regular exercise.

This is important for our state of mind as well as the body; activity increases feelings of wellbeing, mental alertness and energy.

More than 40% of women and 35% of men are spending more than 6 hours a day sitting still. Those aged 16-24 and 64-75 have similar amounts of sedentary time¹. Although many of us become more sedentary as we get older, this is not inevitable. Lots of older adults remain active, which helps to keep them more engaged in the community, and contributing to society, as well as preventing falls and circulatory problems.

Generally, the more we do, the greater the benefit. Moving from being inactive to a significant level of activity has the greatest benefit to individuals (and consequently communities and local services) but any shift helps. There is a three-year difference in life expectancy between minimally active and inactive people¹⁹. This incentivises a focus on the most inactive; identifying these individuals and investing resources appropriately to support us all to be active every day.

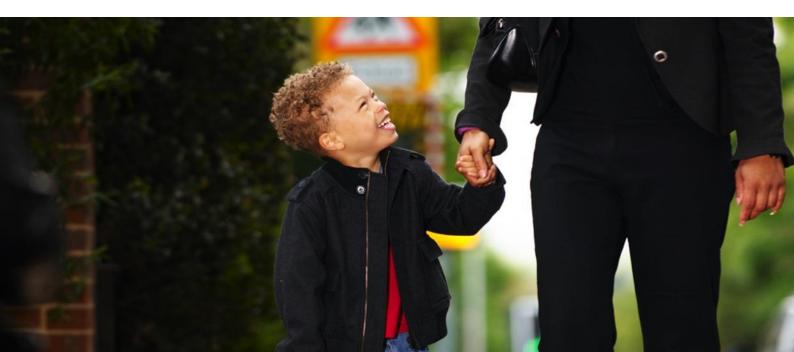
Payback

It's not just in terms of health and social care that physical activity pays back. Although there is much still to work on in terms of evidence, physical activity can create economic growth.

Businesses with more active workforces are more productive, have lower sickness rates and less staff turnover. Pedestrians help keep local high streets alive.

In every way, activity gets us outside the front door and connecting with others, avoiding social isolation and increasing social capital and community spirit.

So getting the nation moving every day is essential. At national level it will help keep the welfare state economically viable. At a personal level it's fun and sociable – and helps people stay well, both physically and mentally.



3. Inequalities: closing the gap

Being active every day needs to be embedded across every community in every aspect of life - not something where cost, access or cultural barriers are at issue. The association between physical activity and a healthy, happy life means an active life needs to be made easy and accessible for all.

Here are just some of the inequalities in physical activity in England:

- Geography
 - People living in the least prosperous areas are twice as likely to be physically inactive as those living in more prosperous areas²⁰
 - South East England has the highest proportion of both men and women meeting recommended levels of physical activity, while North West England has the lowest¹
- Age
 - Physical activity declines with age to the extent that by 75 years only 1 in 10 men and 1 in 20 women are sufficiently active for good health²¹
 - Between 2008 and 2012, inactivity in boys rose by 7% and in girls by 2%, and the proportion of those reaching the healthy recommended levels of activity fell by 7% for boys and 3% for girls²²
- Disability
 - Disabled people are half as likely as non-disabled people to be active
 - Only 1 in 4 people with learning difficulties take part in physical activity each month, compared to over half of people without a disability²³
- Race
 - Only 11% / 26% of Bangladeshi women and men are sufficiently active for good health, compared with 25% / 37% of the general population²⁴
- Sex
 - Men are more active than women in virtually every age group, with 6 in 10 women not participating in sport or physical activity²⁵
- Sexual orientation and Gender Identity
 - Over a third of lesbian, gay, bisexual and transgender youth do not feel they can be open about their gender identity in a sports club²⁶

Alongside this document we are publishing a series of specific topic overviews that give more detail about issues of inequality.

4. Responding to the challenge

We are 24% less active than in 1961. If current trends continue, we will be 35% less active by 2030.²⁷ We have to turn the tide.

Physical activity does not need to be strenuous to be effective. Thirty minutes a day of moderate aerobic activity can mean a brisk walk, a swim, or gardening. Each ten-minute bout that gets the heart rate up has a health benefit. Although sport is part of the picture, fitness does not have to be a 'regime'. Dancing can be as beneficial as going to the gym, and walking or cycling to the shops or work can be a great way to get heart pumping as part of doing the everyday chores.

Being active is not just about moving more. We also need to build our muscle strength and skills, and our 'physical literacy'. In the early years of life, active play is a fundamental part of physical, social and emotional development. As children grow, being active builds the foundation for an active life. Once learnt, a skill like swimming or being able to ride a bike is there for life.

From the age of 30, an adult's muscle and bone mass peaks and begins to decline slowly²⁸. Performing simple resistance-type activity - such as press-ups or light lifting - twice a week improves muscle strength and stability. It also helps prevent the development of musculoskeletal disease. We need to revise our physical literacy as we get older, changing our expectations of what we can do so that we have the confidence to do it. That will help maintain independence as long as possible.

With over a fifth of the nation not managing even 30 minutes of physical activity a week, this may seem like too major a challenge. However, change on a national scale is possible.

Once the world record holder for heart disease, 40 years ago Finland started a nationwide campaign for change⁵. The government shifted money to local authorities, a move similar to the shift in England of the Public Health Grant. Authorities responded by creating heritage and conservation trails; building active outdoor play and exercise spaces; and encouraging sport at all levels, both formal and informal. They developed innovative approaches for distinct groups, such as the elderly or the persistently hard-to-reach. Increases in leisure time physical activity have been seen across all age groups: young people, working aged and older people⁵.

A number of common characteristics are apparent in effective action to increase population levels of physical activity²⁹. These include two common factors: persistence and collaboration. Change requires all of us to take action: no single agency or organisation can respond to the challenge alone.

5. Four domains for action

What we need to do is simple: be more active.

This is a question of creating cultural change. Numerous reports have already stated the urgent case for a more active nation, including national government³⁰, across all parties³¹, the private sector³² and the voluntary sector³³, which makes vital contributions. We now need it to happen.

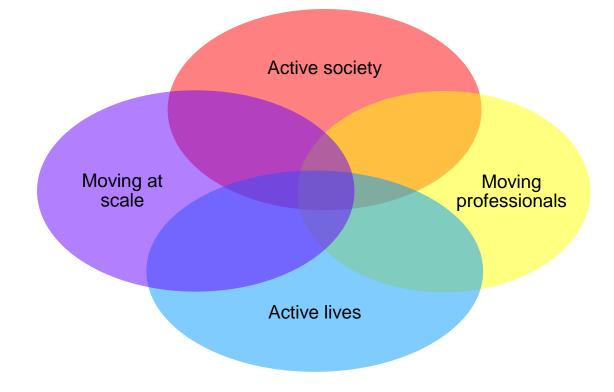
Physical activity needs to be made easy, made fun and made affordable. If we want everyone to be active every day, exercise and active recreation must be available to all, at every stage of life in every community across England.

To deliver this vision requires action across four areas (Figure 2), at national and local level.

- active society: creating a social movement
- moving professionals: activating networks of expertise
- active lives: creating the right environments
- moving at scale: scaling up interventions that make us active

A pro-activity movement needs to cascade right through society. To enable the country to get on its feet, we need to think smarter, using existing resources better. Government (national and local), the private sector, voluntary sector, communities and individuals must use their joint muscle to make this happen.

Figure 2: Four domains for action at national and local levels



Active Society: creating a social movement

PHE has already developed a communications strategy that aims to strike deep into the national psyche. This includes the Change4Life '10 minute shake-up' campaign, with the entertainment giant Disney. This initiative saw a quarter of million families sign up in the first month. PHE will build on this success, with new campaigns for adults and young people; yet this is only part of the action needed to change the social 'norm'.

Social norms can only truly shift if we can change general attitudes to physical activity. The message that being active is not just fulfilling and fun, but can be an easy choice needs to be a linking thread that unites the public sector with the voice of charities and community leaders. It's a message that can be woven into the policies, commissioning and planning decisions made every day across the country, by all of us.

This is especially true in communities where there are significant inequalities in health. The communities with the lowest levels of physical activity often have the highest burden of disability and disease.

PHE can help lead the movement for change, but this can only come about if all sectors in the places we live and work act together. These include: national and local government; schools; transport, leisure and sports providers; community and voluntary leaders and organisations; employers and health and social care professionals.

The common vision is to get everybody active every day, driving a radical shift in the take-up of physical activity on a national scale - and make it a routine part of daily life in England.

We need a cultural turnaround in attitudes to physical activity. There is no quick fix. We need long-term promotion of physical activity over months, years and decades. This is a journey which starts today.



Moving professionals: activating networks of expertise

We already have the ideal information network available; the hundreds of thousands of professionals and volunteers who work directly with the public every day.

The existing push for 'making every contact count'³⁴ needs to come from all sectors and disciplines, not just health specialists. We need to activate professionals in spatial planning, social care, psychology, sport and leisure, the media, trades unions, education and business to bring about radical change.

Education

Teachers at every level of education, from early years and primary school to further education, have a huge impact on people's emotional, physical and social development and wellbeing. There are many ways to inspire the next generation to be active every day. It can come through discussing forces and energy transfer in physics, designing active cities with urban planning students, or understanding team dynamics within psychology or business studies.

Sports

It is easy to assume that sport and fitness professionals do not need support, but many welcome the opportunity to know more about the impact of physical activity. They will find new ways to use that knowledge to motivate and inspire the people they work with. We also need to do more to develop and engage those professionals working in very targeted programmes with individuals who need extra support to be more active; those with complex health needs or impairments.

Health

Social care professionals and volunteers need more information about the ways physical activity can increase independence and autonomy for the people they care for. When it comes to health professionals, in both primary and secondary care, the evidence is clear: there is not enough action taken to integrate and recommend physical activity as a part of treatment. Both the NHS and patients are losing out because of it.

Active lives: creating the right environments

The World Health Organisation defines a healthy city as one that: 'supports health, recreation and well-being, safety, social interaction, easy mobility, a sense of pride and cultural identity and ... is accessible to the needs of all its citizens'. The same principles apply to rural villages, towns and communities of all shapes and sizes.

The way land is used in communities has an immense impact on the public's health. Although many surveys show it's the quality, not just the quantity of public parks and spaces that make people want to walk more, there is evidence that just having access to open space makes a crucial difference. One study in Bristol showed that respondents living closest to formal parks were more likely to achieve good physical activity levels. They were also less likely to be overweight or obese³⁵.



Those with close access to green space live longer than those without it, even adjusting for social class, employment and smoking. The impact is most significant amongst the least well off. The health of older people increases where there is more space for walking near home, with parks and tree-lined streets nearby³⁶. Children become more active when they live closer to parks, playgrounds, and recreation areas³⁷.

Being active can be for fun, but it can also be part of the daily commute or the journey to school. We are surrounded by existing spaces which can be used to help everyone become more active, from forests to multi-storey car parks. With imagination and communities at the heart of the planning, these can become vibrant spaces that reduce isolation, sustain communities and improve health. Creating environments that support active living is about re-shaping the world we live in. We need to make active living the easy and enjoyable choice. We can help older people and those with impairments to be more active with simple measures such as dropping the kerbs on pavements and introducing park benches. Introducing cycle parking and showers at workplaces; improving stairwells so they are as attractive a choice as the lifts, are just some of the ways we can make being active a more attainable goal.

Local authorities are seizing the opportunity to link local health policy with other policy strands such as planning, transport infrastructure and housing. This opens up the opportunity to create new networks of expertise, and design in physical activity from the ground up. New partnerships - for example between architects and urban planners working directly with professionals in health and leisure - are already finding new ways of reversing the downward trends in activity levels.



Moving at scale: scaling up interventions that make us active

We need to create the appetite for a revolution in physical activity and health. In partnership with local and national government, professionals in schools, the health sector, transportation, the sports, leisure and voluntary sectors can all be energized to achieve the common goal. We just need to light the touch paper.

The evidence shows that positive change needs to happen at every level, to everyone, in every locality. It needs to be measurable; permanent and consistent. It needs hardwiring into our national culture and consciousness.

NICE has published multiple pieces of guidance which will help to get the nation active every day. Local Health and Wellbeing Boards have the right knowledge and understanding of their local community and the assets they can build on to implement this guidance and make it a reality.

Guideline	Date	Title	
	published		
PH2 ¹	2006	Four commonly used methods to increase physical activity	
PH8	2008	Physical activity and the environment	
PH13	2008	Promoting physical activity in the Workplace	
PH17	2009	Promoting physical activity for children and young people	
PH41	2012	Walking and Cycling: local measures to promote walking	
		and cycling as forms of travel or recreation	
PH44	2013	Physical activity: Brief advice for adults in primary care	

Existing NICE guidelines

Much of this is not about new investment; it's about maximizing the potential of the many assets we already have in parks, leisure facilities, community halls, and workspaces, and thinking differently about the way we commission and plan public sector services so that being active is at the core of everything we do every day.

There are challenges in evaluating what works. PHE has published alongside this document an overview of the evidence base, a set of promising practice case studies and an overview of existing 'return on investment' tools. We will add to this with additional guidance on using the standardised evaluation framework. Building the evidence base will boost our understanding of what works.

¹ We anticipate PH2 Recommendation 5 will be superseded in September 2014 and the document will be updated once the new guidance from NICE is published.

6. Measuring impact

As we call for everybody to be active every day we recognise the need to monitor progress and measure impact at a population, organisational, programme and individual level.

A range of population level surveys of physical activity provide information at national, regional and local levels. These include:

Health Survey for England Active People Survey National Travel Survey Labour Force Survey

Most surveys use self-reported physical activity data. Although surveys which contrasted this with accelerometers showed that most of us overestimate the level of activity undertaken, the Chief Medical Officer's Guidelines took this into account.

To support the evaluation at a local level of interventions, Public Health England has developed the Physical Activity Standard Evaluation Framework (SEF)³⁸. This explains what information should be collected in any evaluation of an intervention. It is aimed primarily at interventions which work at an individual or group level. PHE also provides training and guidance on how to use the SEF, and we will be further developing this in 2015-16.

We recognise the significant challenge in measuring impact and return on investment. PHE will continue to work with partners to support better evaluation of interventions, as well as monitoring the impact of our own work in getting everybody active every day.

7. Making it happen

Capacity-building over time

Delivering a vision of everybody active every day will not be achieved in one, five or even ten years. This document provides a framework for action and is supported by resources us that will be updated and adapted to keep pace with change.

A companion *Implementation and evidence guide* is being consulted upon alongside with evidence-based opportunities for action that could be taken at National, local and organisational levels across the public health system. These include five steps for local areas to support change:

- teach every child to enjoy, value and have the skills to be active every day build environments that are age friendly, safe for cyclists and make walking easier
- make every contact count for professionals and volunteers to encourage active lives
- lead by example in every public sector workspace
- evaluate and share the findings so that the learning of what works can grow

Public Health England is working with partners including the Local Government Association, ukactive and the County Sports Partnership Network to continue the programme of regional fora to support and energise action at a local level and continue to build capacity across the public health system to make this change happen.

Governance and Leadership

At National level, the Parliamentary Under-Secretary of State for Public Health through the chair of the Olympic and Paralympic Cabinet Committee - Ministerial Sub-Group on Physical Activity will continue to oversee action to deliver the national commitment to increasing activity across the nation, supported by the civil service officers group.

At local level, Health and Wellbeing Boards are pivotal to developing and delivering the partnership actions required to truly shift society forward. Local Community Sports Partnerships are developing in many areas to become Active Networks that bring together organisations providing sport, active travel, dance and cultural activity and outdoor activity opportunities to support Local Government and their partners in delivering at pace.

Public Health England will continue to work with partners at National level and through our Centres to support their implementation and build the evidence base around their return on investment.

8. PHE actions to support implementation

Alongside Everybody Active, Every Day PHE is publishing supporting documents that provide in-depth information and resources to support local and national action.

These include:

- a set of topic overview reports providing more in-depth discussion and analysis of issues specific to certain groups. We will continue to add to and expand these over the next 18 months. The first set launched alongside Everybody Active, Every Day include: Older People; Children and Young People; Disability; Ethnicity; Gender; Lesbian, Gay, Bisexual and Transgender People; Data and Evaluation; and Active Places
- a toolkit for members of parliament and local elected members, to support their role in local leadership on physical activity
- a report commissioned from Sheffield Hallam University and ukactive on promising practice interventions from across England. Using the NESTA criteria to evaluate the 960 submissions received by PHE, the academic team has identified those with the strongest published evidence of impact, and those developing strong design and evaluation
- free E-learning resources commissioned from BMJ learning. Subjects include motivational interviewing techniques to support behaviour change and nine modules on physical activity and clinical conditions, including diabetes, depression and cancer
- a definitive review of return on investment evidence for health and wider outcomes. This is commissioned from the British Heart Foundation National Centre – Physical Activity + Health and Brunel Health Economic Research Group. This will summarise the economic benefits of physical activity not only on health but the wider social benefits. The review will consider social care, regeneration, travel and transport, business and economic productivity, crime and education. The results should help those building the case for intervention locally. It will also give practical guidance on return on investment tools available for local practitioners
- work commissioned from the British Heart Foundation National Centre and University of Brunel to map the academic landscape for physical activity.
- work with the National Centre for Sports and Exercise Medicine on how physical activity can be implemented practically into clinical care pathways in acute settings
- PHE will also be working with professional bodies and leaders (eg Royal Colleges, Health Education England, Allied Health Professionals Networks) to develop expertise and leadership amongst health professionals

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