



Public Health  
England

**NHS Forest Conference 2015**

28<sup>th</sup> Sept 2015

**How to convince health professionals green  
space is a good idea**

**or**

**Going from from blackberry to Blackberry  
– and back again**

**Carl Petrokofsky – Specialist in Public Health**

Acknowledgements: to many colleagues, esp Andre Pinto, Nick Bundle

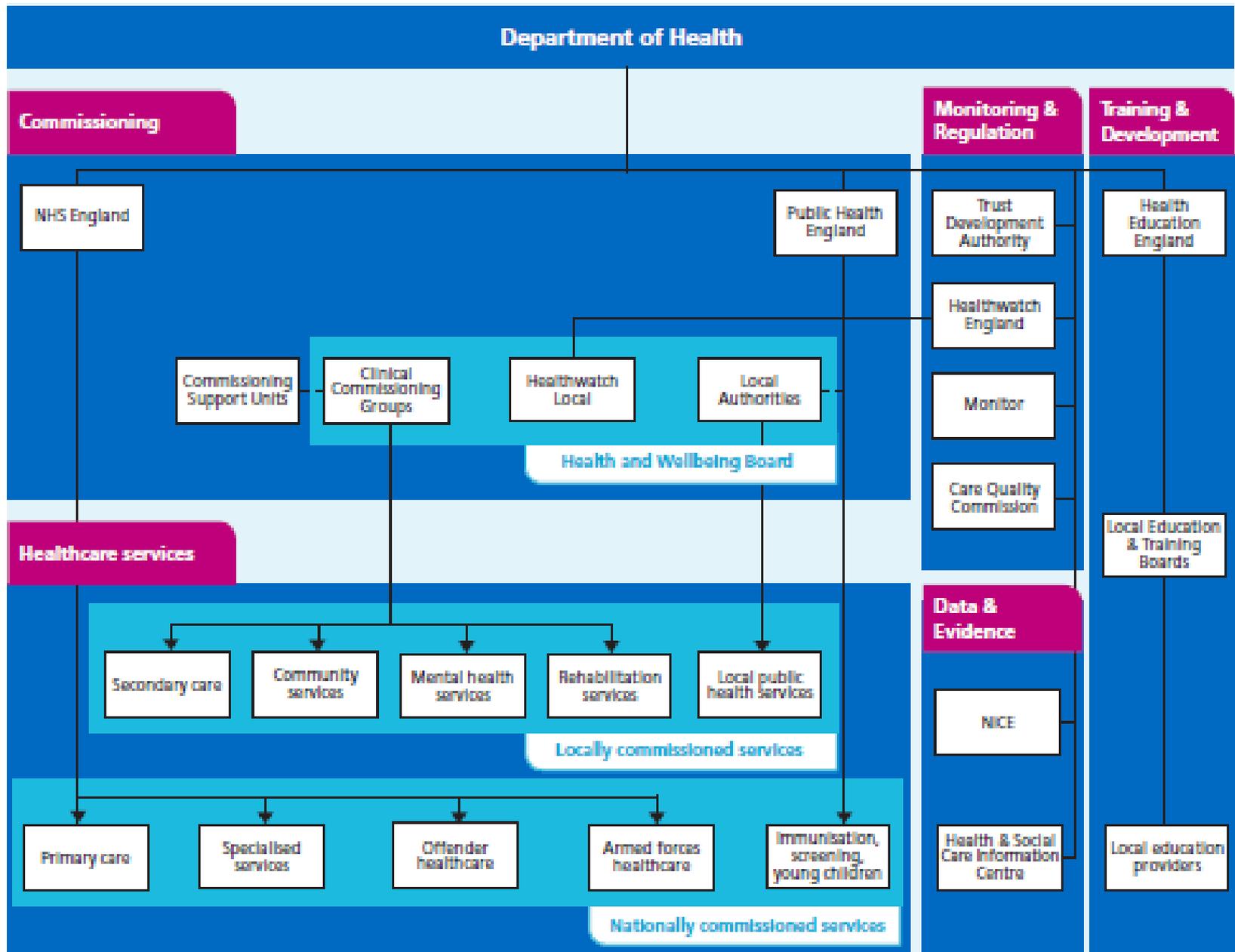


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**Public Health England** exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services.

PHE is an operationally autonomous executive agency of the Department of Health.



From: DH guide to the NHS. (See slide 29 for full reference)

In 2007, a new edition of the Oxford Junior Dictionary was published aimed at seven-to-nine-year-olds. OUP deleted a series of words as they were no longer considered relevant to modern day childhood, including:

Acorn, adder, ash, beech, bluebell, buttercup, conker, cowslip, crocus, cygnet, dandelion, fern, gorse, hazel, heather, heron, horse chestnut, ivy, kingfisher, lark, minnow, newt, otter, pasture, poppy, starling, sycamore, wren, willow -

blackberry was replaced by Blackberry

# Healthy People Healthy Places

The way we plan, design and manage the territory of places, spaces, facilities and buildings within our everyday community can have an impact on health, from either a positive and negative perspective (RCEP, 2007).



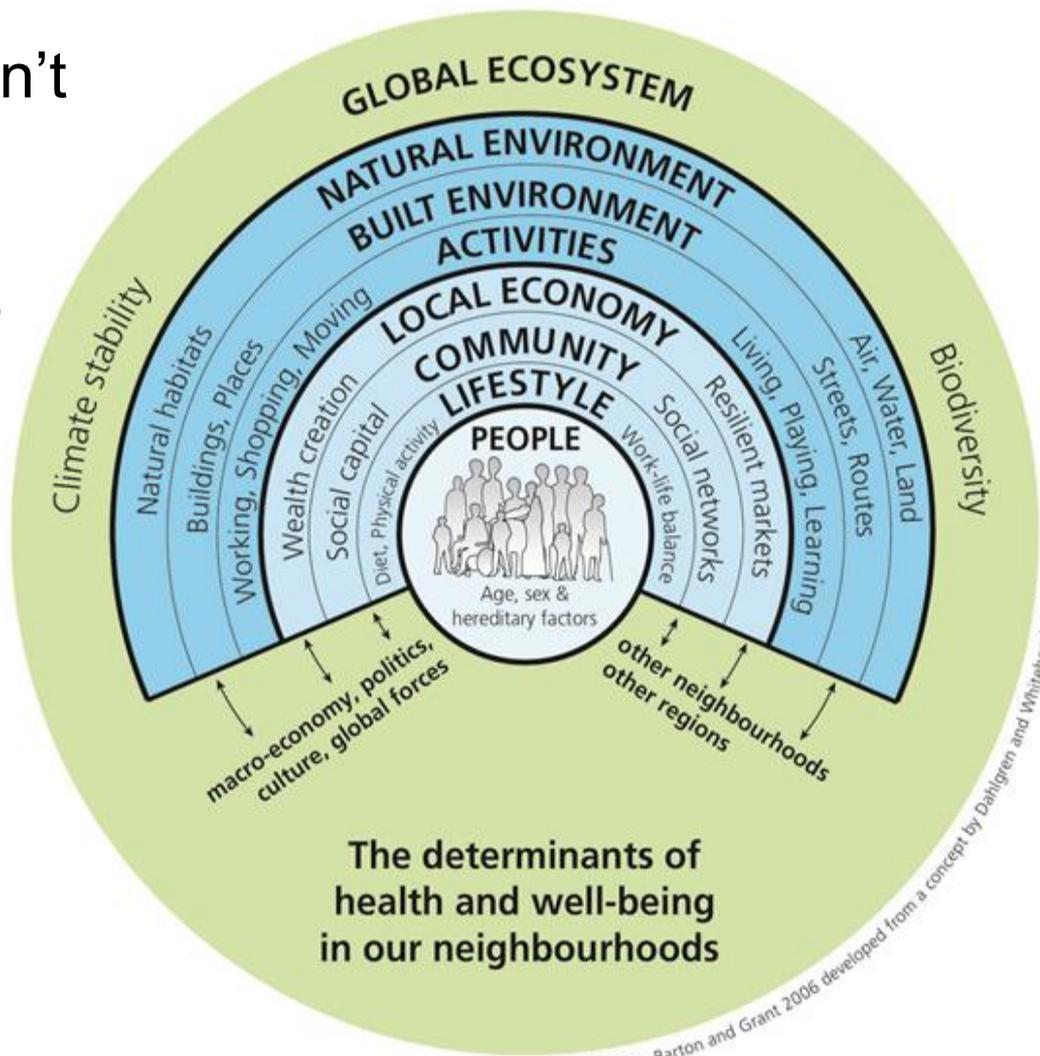
# Your health is determined by:

where you don't  
live

what you do

who you are

where you live

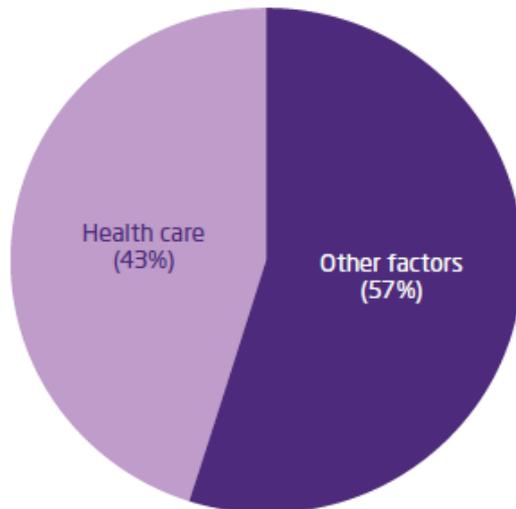


The health map: Barton and Grant 2006 developed from a concept by Dahlgren and Whitehead 1991

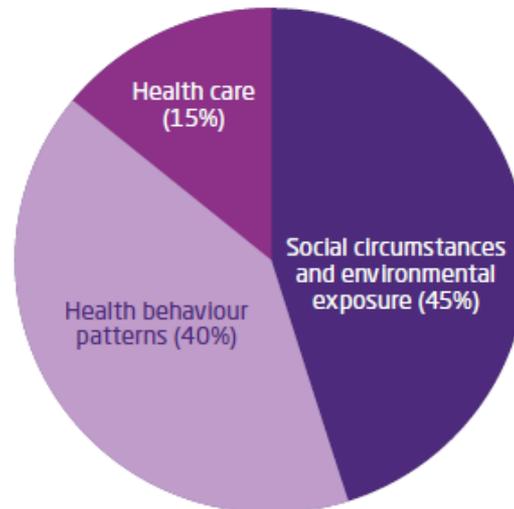
## The importance of public health

Our health is determined by our genetics, lifestyle, the health care we receive and our wider economic, physical and social environment. Although estimates vary, the wider environment has the largest impact.

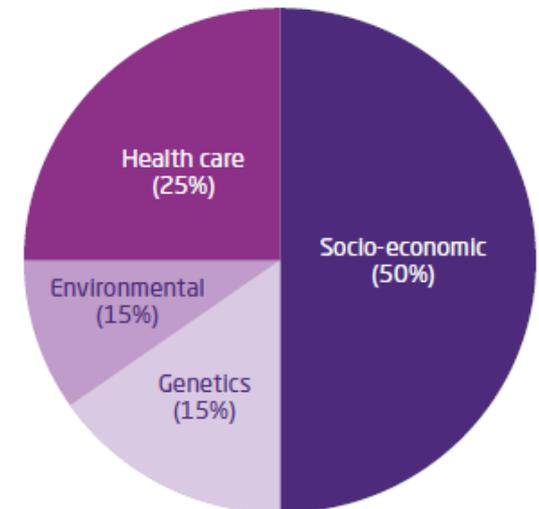
**Bunker et al (1995)**



**McGiniss et al (2002)**



**Canadian Institute of Advanced Research (2012)**





# 1. Policy context: What do we know

1. There is significant and growing evidence on the health benefits of access to good quality green spaces. The benefits include better self-rated health; lower body mass index, overweight and obesity levels; improved mental health and wellbeing; increased longevity.
2. There is unequal access to green space across England. People living in the most deprived areas are less likely to live near green spaces and will therefore have fewer opportunities to experience the health benefits of green space compared with people living in less deprived areas.
3. Increasing the use of good quality green space for all social groups is likely to improve health outcomes and reduce health inequalities. It can also bring other benefits such as greater community cohesion and reduced social isolation



## 2. Policy Context – what do we know

- In developed regions, ~17% of deaths were attributed to environmental causes;
- In developed countries, It is estimated that 16% (10—34%) of cancers in men (other than lung cancers), and 13% (10—23%) in women, were attributable to the environment;
- Poor air quality is estimated to be causing up to 40,000 premature deaths in the UK each year;
- Children in the 10% most deprived areas are twice as likely to be obese than children living in the 10% least deprived areas;
- 66% of all carcinogenic chemicals are released in the 10% most deprived areas in the country.



## 3. Policy context: What do we know

- older people live longer in areas where there is more green space close to their homes
- children who live close to green spaces have higher levels of physical activity and are less likely to experience an increase in BMI over time
- people living in the most deprived areas are 10 times less likely to live in the greenest areas
- the most affluent 20% of wards in England have 5 times the amount of parks or general green space compared with the most deprived 10% of wards

“However, there are many factors that affect human health and wellbeing, of which access to green space is just one.

It is usually not practical to conduct experiments to test the effects of green space on health, so researchers often rely on observations. As a result, the evidence is statistically less certain than would be expected for medical treatments”.

Houses of Parliament. Office of Science and Technology. Urban Green Infrastructure. Postnote. Number 448 November 2013

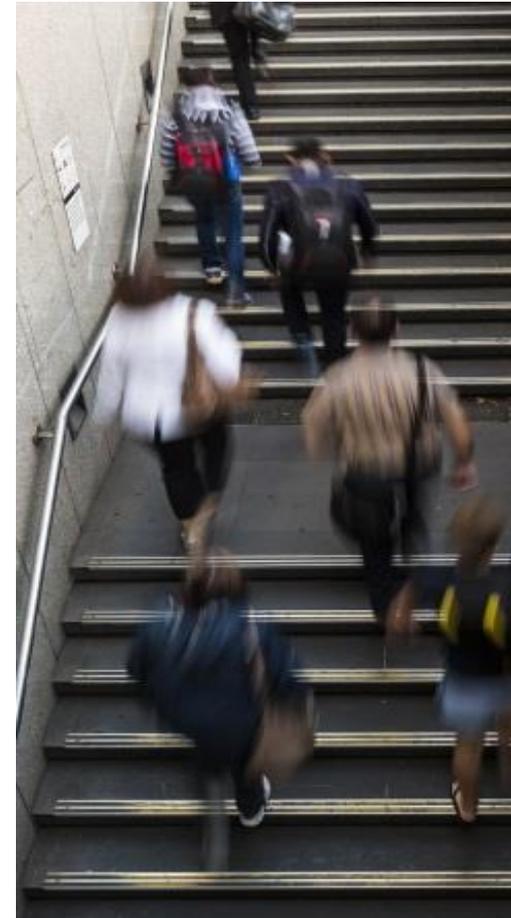
# Health compromised by lifestyle changes

- Since 1950s, travel by bicycle, bus and on foot have declined in the UK:
- Over the last 30 years, there has been a loss of 1800 kcal of activity per person per week due to:
  - Impact of cars
  - Impact of technology and innovation
  - Ageing and increasing numbers of frail older people with multiple medical problems



# Physical Inactivity is killing us

- Kills 1 in 6
- A factor in at least 40% of long term conditions.
- In the UK adults are less active – and getting worse
- Youth inactivity



# Physical activity: Our greatest defence

Physical Activity contribution to reduction in risk of mortality and long term conditions		
Disease	Risk reduction	Strength of evidence
Death	20-35%	Strong
CHD and Stroke	20-35%	Strong
Type 2 Diabetes	35-40%	Strong
Colon Cancer	30-50%	Strong
Breast Cancer	20%	Strong
Hip Fracture	36-68%	Moderate
Depression	20-30%	Moderate
Hypertension	33%	Strong
Alzheimer's Disease	20-30%	Moderate
Functional limitation, elderly	30%	Strong
Prevention of falls	30%	Strong
Osteoarthritis disability	22-80%	Moderate



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# Everybody active, every day! So make every contact, count!

If being active was a pill we would be rushing to prescribe it. Physical activity is essential for health and reduces the risk of many preventable diseases and conditions from cancer to depression



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## Everybody Active, Every Day

Cross sector approach for national and local action



# 4. Policy Context: Climate change: threat to health



**Climate change is the biggest global health threat of the 21st century**

**Effects of climate change on health will affect most populations in the next decades and put the lives and wellbeing of billions of people at increased risk. During**

Source: Lancet and UCL Institute for Global Health Commission (Costello et al., 2009)



## UK Climate Change Risk Assessment: Government Report

In addition to this Government Report, the UK Climate Change Risk Assessment 2012 Evidence Report, which sets out the evidence base for the risk assessment, was laid before Parliament on 25 January 2012.



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# UK health effects



Source: Health Protection Agency (Vardoulakis and Heaviside, 2012)



## 4. Climate change: opportunity for health

### Co-benefits of mitigation

- Health
- Emissions
- Economic
- *Triple bottom line*

### Health co-benefits: key sectors

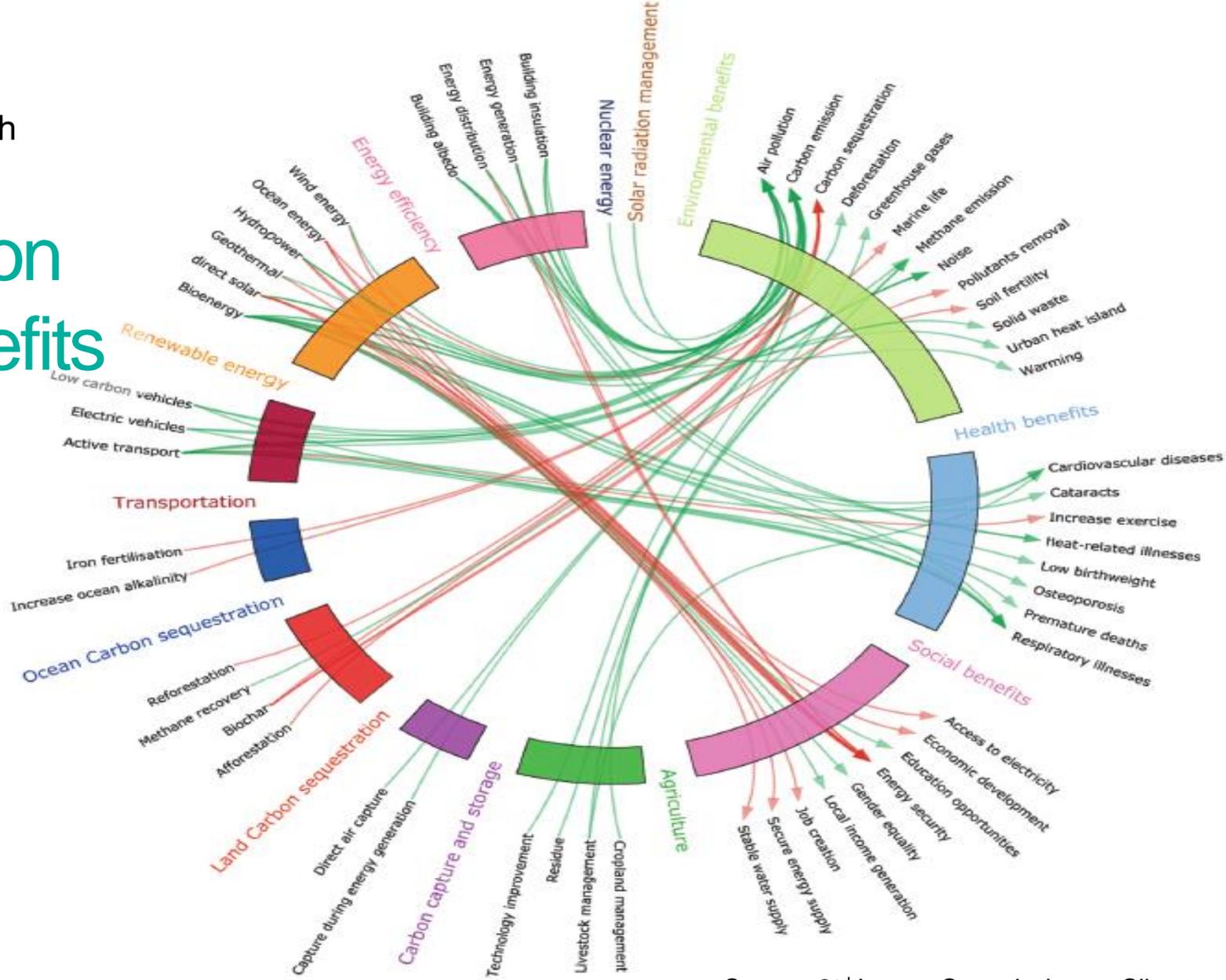
- Transport
- Energy
- Food production
- Healthcare

### Health co-benefits of adaptation

- Ecosystem-based adaptation



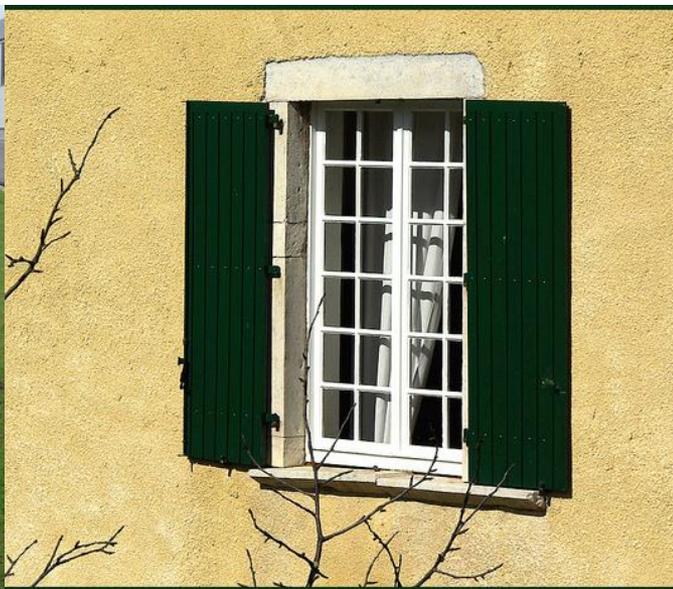
# Mitigation co-benefits



Source: 2<sup>nd</sup> Lancet Commission on Climate Change and Health (Watts et al., 2015)



# A. Protect health: mediate climate impacts





# Protect against heat



Credit: Graniers (creative commons v2.0)



- Shading
- Painting
- Public cool areas
- Water bodies
- Urban greening

Source: Adapted from ARUP (2014a)



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# Protect against floods

Sustainable urban drainage  
systems (SUDS)



Credit: John Lord (creative commons v2.0)



# 6. Professional & organisational implications





# What is a Healthy Community? (Source: NPPG)

A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities.

It should enhance the physical and mental health of the community and, where appropriate, encourage active healthy lifestyles and healthy living environments for people of all ages



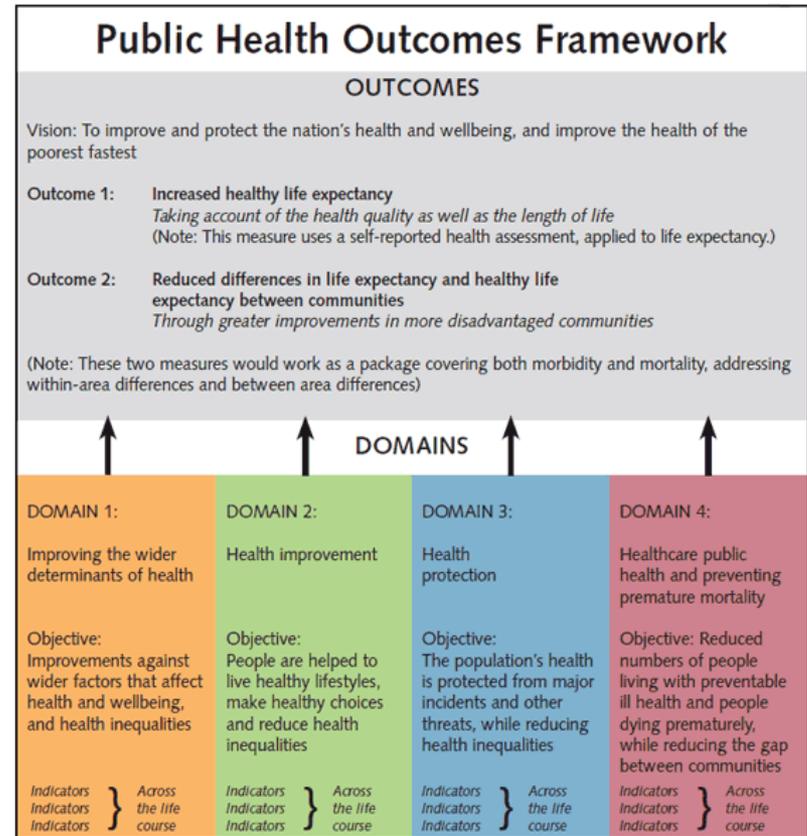
# Why should Planning and PH pick this up?

## National Planning Policy Framework

- Promoting Healthy Communities - The planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities. Source: DCLG (2012)

## National Planning Practice Guidance - Health

- Local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making. Source: DCLG (2014)



# PHOF indicators that can be +’ly influenced by integrating GI into our towns and cities: Landscape Institute 2015.

## **Domain 1 – Improving the wider determinants of health**

- The percentage of the population affected by noise.
- Utilisation of green space for exercise/health reasons.
- Social connectedness.
- Older people’s perception of community safety.

## **Domain 2 – Health improvement**

- Diet.
- Proportion of physically active and inactive adults.
- Self-reported wellbeing.

## **Domain 3 – Health protection**

- Air pollution.

## **Domain 4 – Healthcare public health and preventing premature mortality**

- Mortality from causes considered preventable.
- Mortality from all cardiovascular diseases (including heart disease and stroke).
- Mortality from respiratory diseases.
- Health-related quality of life for older people.
- Dementia and its impacts.

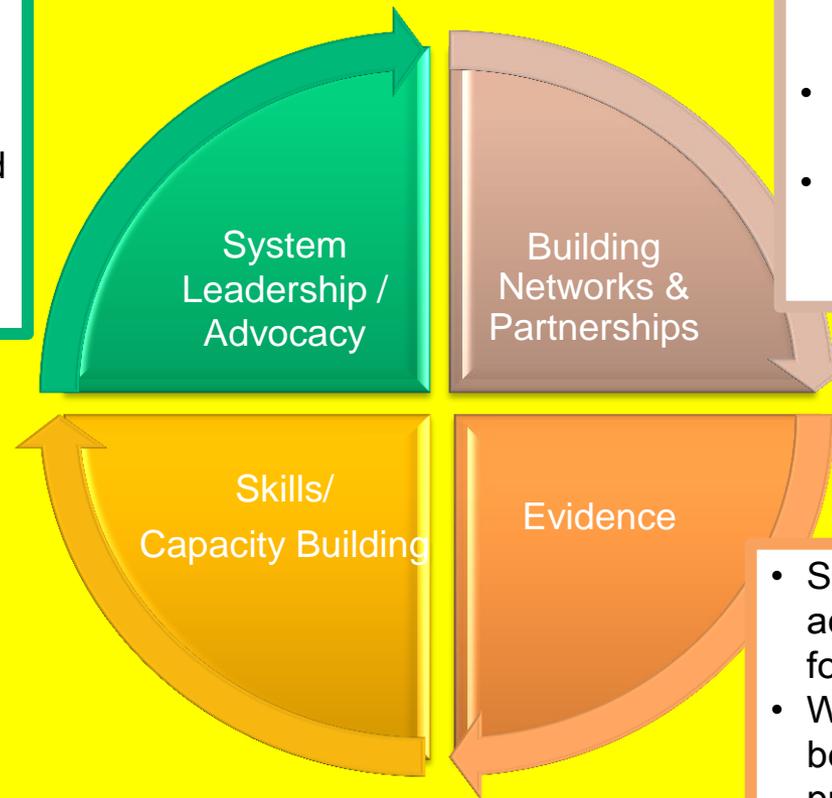


# Healthy People Healthy Places

**Provide System leadership and high level engagement** with other government departments and national stakeholder organisations.

Specialist Advice, Support and influence on Spatial Planning, Housing, and the Built Environment and Health

**To build skills & capacity** and give confidence to local teams by providing a set of tools, training and learning events to support local awareness and good practice; the bringing together of planners and health professionals at a local level to develop a shared understanding



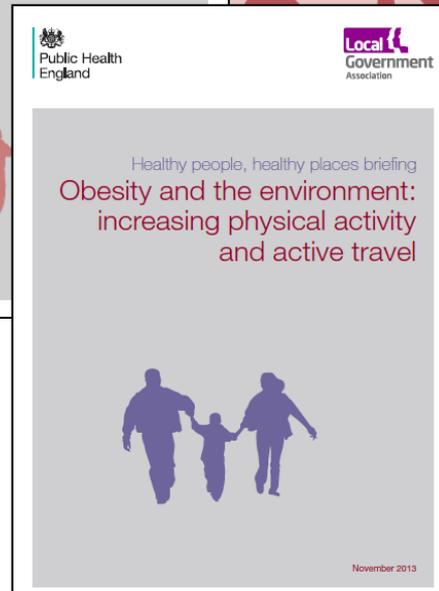
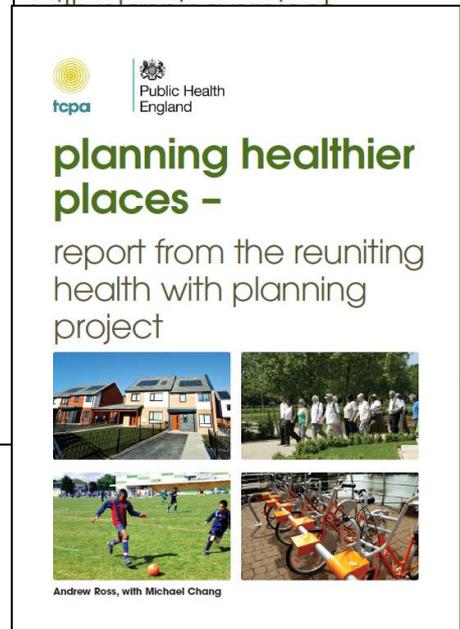
- **a strong network of partners** from a wide range of national and local stakeholders
- Specialist evidence based advice, support and influence with local partner organisations
- Co-production of publications/ workshops and other initiatives
- Direct work with PHE Centres and local PH teams and local networks

- Support development of, and access to the **evidence base** for PHE and local teams
- Working at the interface between academic, policy and practitioners to support development and dissemination of the evidence base



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# PHE Briefing and Evidence Reviews

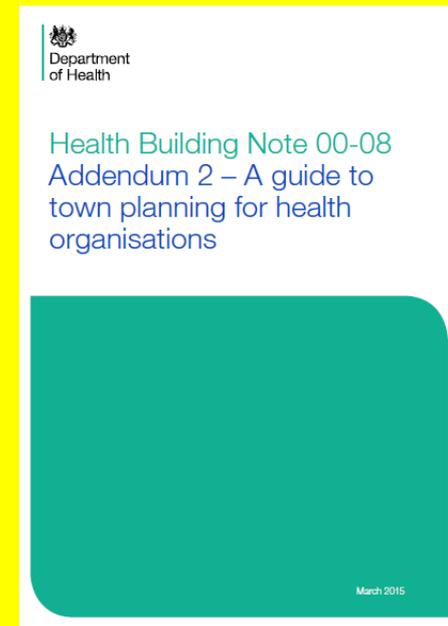
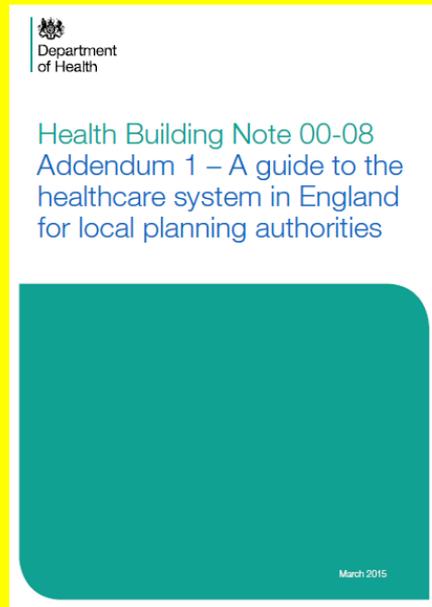


A Memorandum of Understanding (MoU) to support joint action on improving health through the home

December 2014

# DH Guides to the NHS and to the Planning System - March 2015

Useful guides to the NHS and public health for Planners and Planning for the NHS and Public Health



[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/414137/hbn08-addend1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414137/hbn08-addend1.pdf)

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/414138/hbn08-addend2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414138/hbn08-addend2.pdf)



## planning healthy-weight environments –

a TCPA reuniting health with planning project



Andrew Ross and Michael Chang

Local authority planners have a key role in creating places that enable people to achieve and maintain a healthy weight. But they cannot do this on their own:

planners must work closely with public health practitioners as well as other built and natural environment professionals, elected members and communities.

<http://www.tcpa.org.uk/pages/planning-out-obesity-2014.html>

# Planning Healthy-Weight Environments

## Components of a healthy weight environment: an illustration



- A Movement and Access**
  - Clearly signposted and direct walking and cycling networks
  - Safe and accessible networks and public realm for all
  - Well-designed buildings with passive surveillance
  - Walking prioritised over motor vehicles, and vehicle speed managed
  - Area-wide walking and cycling infrastructure provided
  - Use and monitoring of travel plans
- B Open spaces, play and recreation**
  - Planned network of multi-functional green and blue spaces to achieve multiple benefits
  - Easy to get to natural green open spaces of different sizes from dwellings
  - Safe and easy to get to play spaces for all with passive surveillance
  - Sports and leisure facilities designed and maintained for everyone to use
- C Food**
  - Development maintains or enhances existing opportunities for food growing
  - Development avoids over-concentration of hot food takeaways (AS use) and restricts proximity to schools or other facilities aimed at children and young people
  - Shops/food markets sell a diverse offer of food choices and are easy to get to by bike, walking or public transport
- D Neighbourhood spaces**
  - Community and healthcare facilities provided early as a part of new development
  - Services and facilities co-located within buildings where feasible
  - Public spaces are attractive, easy to get to and designed for a variety of uses
- E Buildings**
  - Dwellings have adequate internal spaces for bike storage, dining and kitchen facilities
  - Development includes adequate private or semi-private outdoor space per dwelling
  - Car parking spaces are minimised across the development
  - Development includes a travel plan that promotes sustainable transport
- F Local economy**
  - Development enhances vitality of local centre through providing more diverse retail and food offer
  - Centres and places of employment are easy to get to by public transport, and on walking and cycling networks
  - Facilities provided for people who are walking and cycling to local centres and high streets such as benches, toilets and secure bike storage

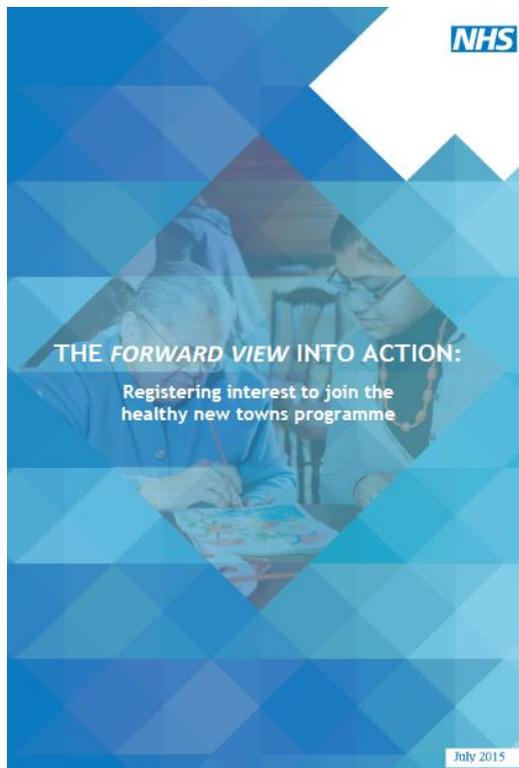
For full description of the elements please see Part 1

tcpa

© David Lock Associates Ltd  
For illustrative purposes only. Not to scale.



## NHSE/PHE Healthy New Towns Programme



- NHS England with support from PHE are inviting local authorities, housing associations and the construction sector to identify development projects where they would like NHS support in creating health-promoting new towns and neighbourhoods in England
- EOIs by 30<sup>th</sup> September 2015



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# Key Messages:

# 1. Shaping the built (and natural) environment

- There is clear evidence that urban form strategies can have converging benefits for public health and climate change
- There is good evidence in this area linking access to green spaces and health outcomes.
- Planners and policymakers have an opportunity to use changes in the built environment to make progress toward healthier and more sustainable communities.
- The NPPF/ PPG provides an opportunity for public health and planning departments to work together to improve the health of local communities. Improving access to green spaces is an important part of this work
- The importance of Green Space for health has become more recognised by the NHS (eg NHS New Towns work; Social Prescribing schemes)

## 2. Some Challenges:

### How to improve access to green spaces\*

- Create new areas of green space and improve the quality of existing green spaces.
- Increase accessibility of green spaces and improve engagement with local people.
- Increase use of good quality green space for all social groups

### Possible Pressures on NHS to sell land for housing vs keeping as Green Space

### Change in behaviour and expectations of NHS clinicians/ patients (prescribe a walk not a pill)

### It requires leadership, partnership and development of shared agendas across organisational boundaries



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# Thank you!

