

Primary Care and Climate Change

Is there a link?

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26th Sept 07



Chris Goodall

Individuals – rather than governments or companies – are going to have to be the driving force behind reductions in greenhouse gases.

Governments and companies will follow what the voters ask for or the purchasers require.

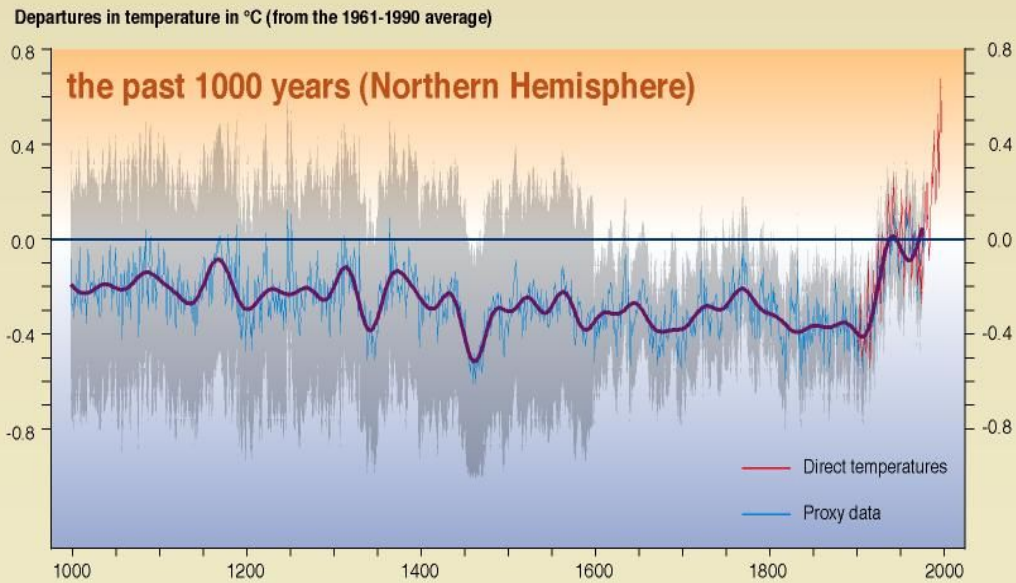
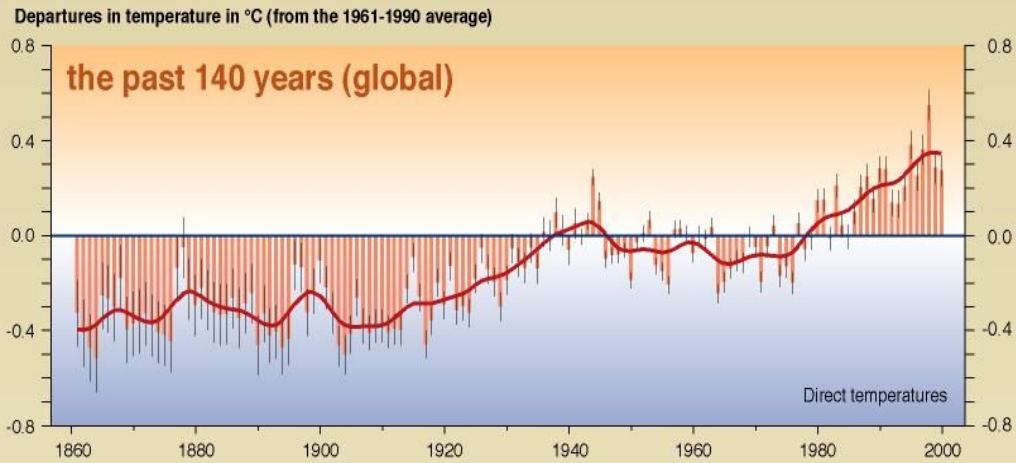


Three parts

- Background information
- NHS direct CO2 emissions
- Patients and climate change



Variations of the Earth's surface temperature for...



SYR - FIGURE 2-3

Climate change threatens the basic elements of life for people around the world - access to water, food production, health and the use of land and the environment

Stern Report 2006

Drier, warmer summers and milder, wetter winters.

Increase in both the number and extent of extreme events such as floods, heatwaves, droughts and storms.

These will disproportionately affect poorer people


NHS exists to reduce inequalities in health



Person / year CO2 tonnes

- Home heating 1.5
- Car, bus, rail 1.3
- Air 1.8
- The rest 1.4

- Office, fertilizer, ore smelting, concrete 6.5

- Annual total 12 tonnes  3 tonnes

(Chris Goodall)

Our legal obligation

Kyoto Protocol

12.5% reduction in greenhouse gases by 2012

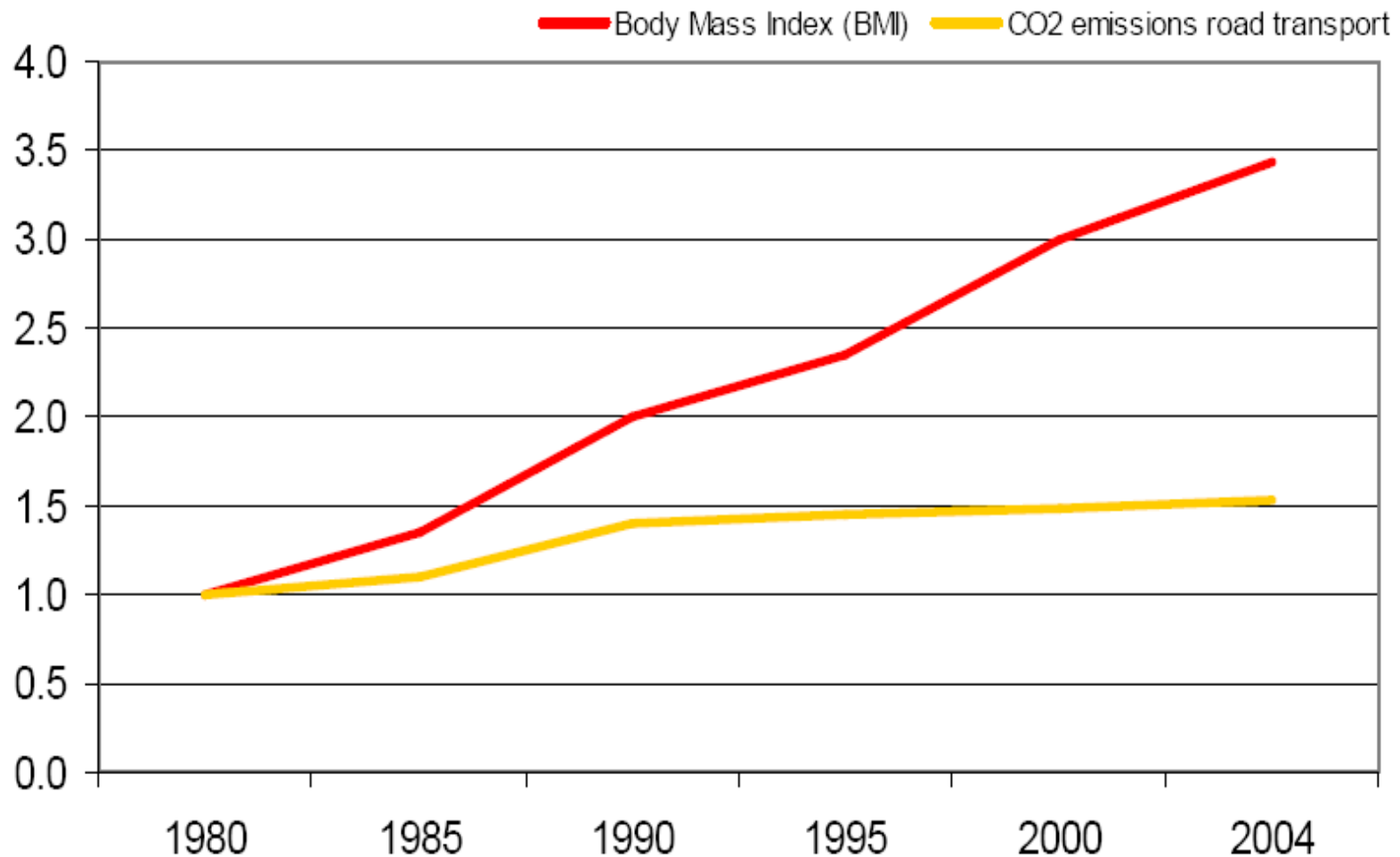
2003 Energy white paper

20% reduction in CO₂ emissions by 2010

60% cent by 2050.



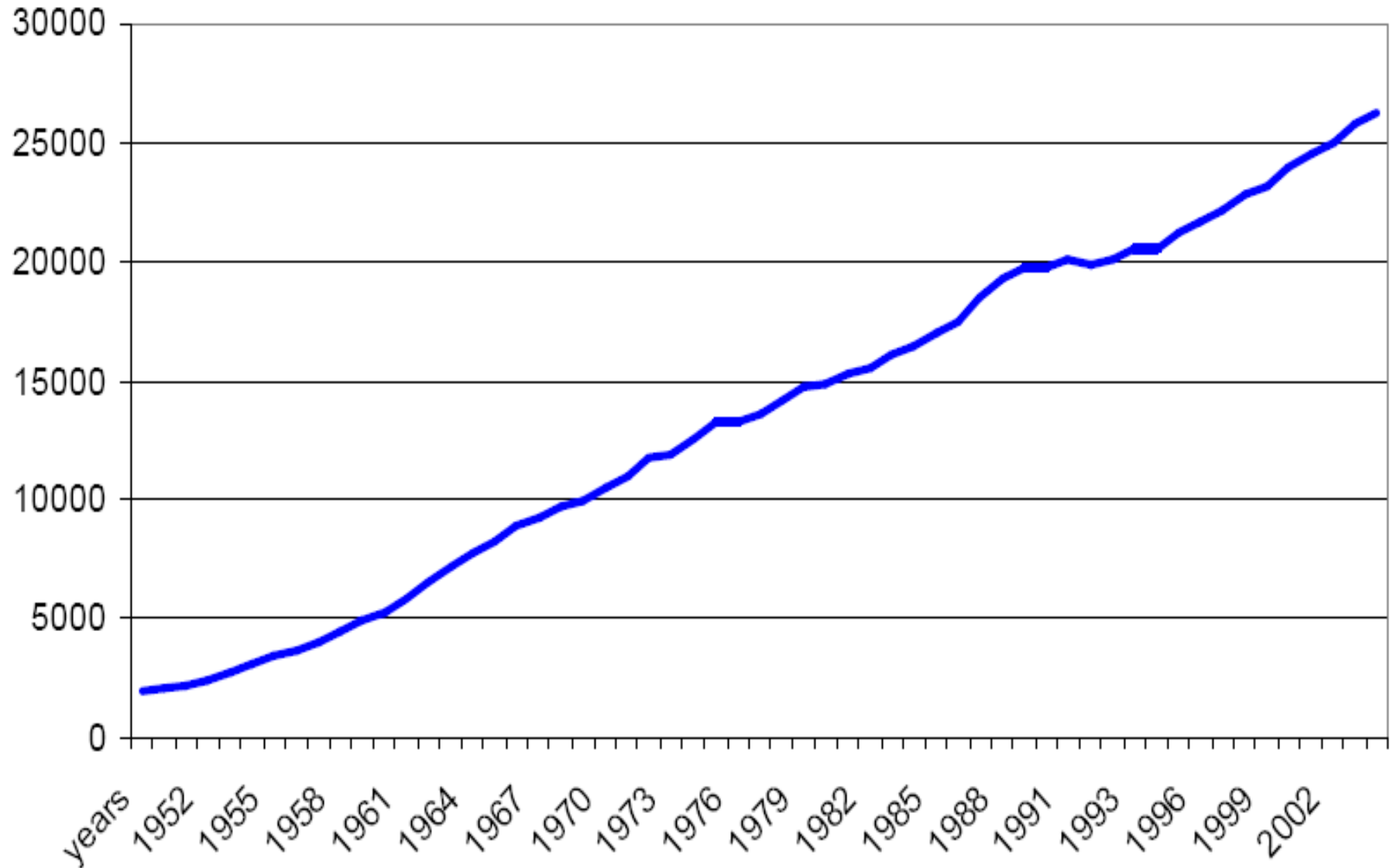
Figure 1: CO₂ emissions from passenger cars and Body Mass Index (1980 – 2004)



Source: IEEP elaboration of National Atmospheric Emissions Inventory, 2004; Health Survey for England from 1993 (and predecessors)

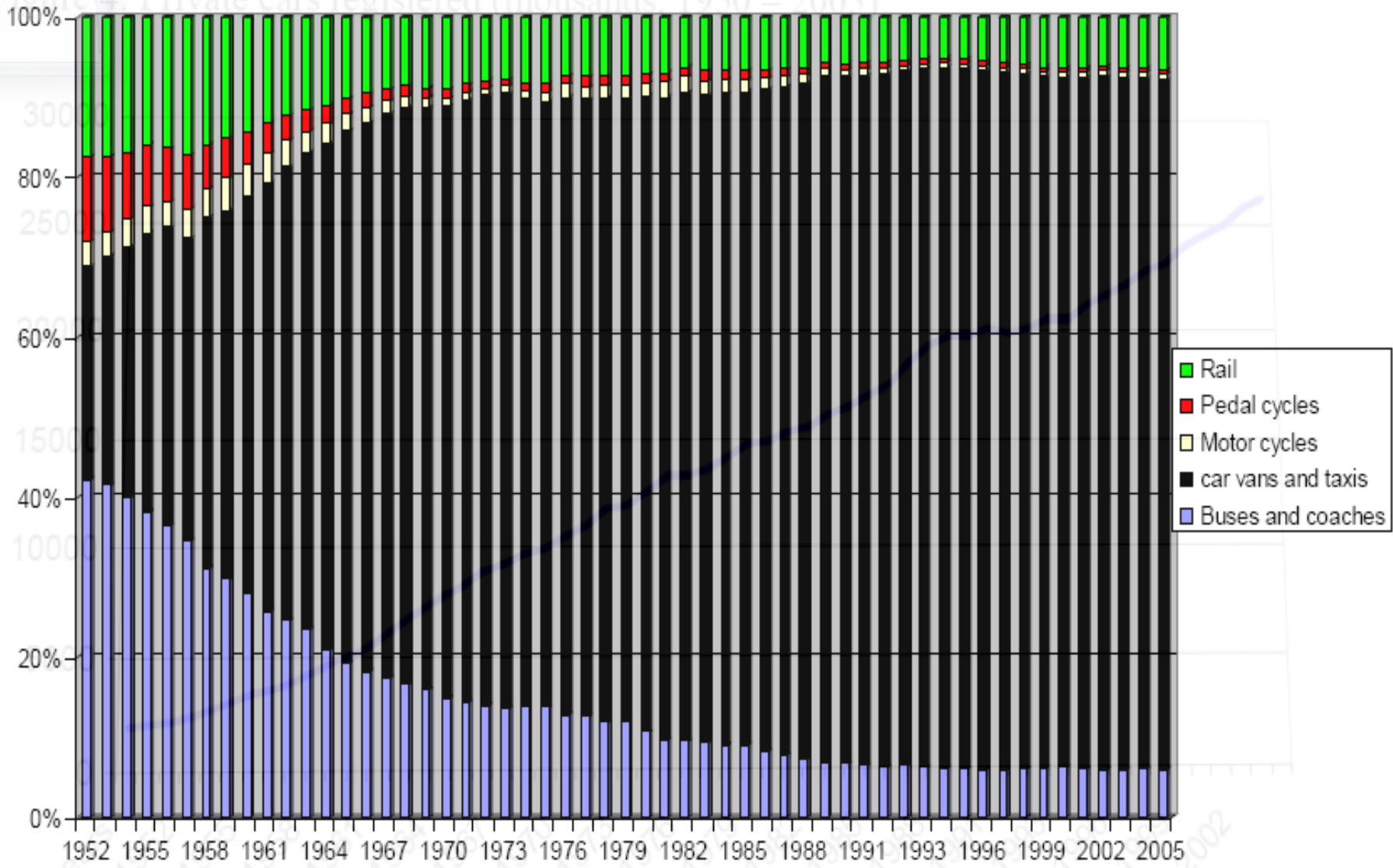
Note: emissions from passenger cars are for UK while BMI data are for England. However it is assumed that the prevalence of overweight and obesity in Scotland and Wales are similar.

Figure 4: Private cars registered (thousands, 1950 – 2005)



Source: DfT, Transport Statistics GB 2006

Figure 5: Passenger transport by mode (bpkm/percentage, 1952 – 2005)



Source: DTI, 2006 Note that pedestrian journeys are not recorded on this graph

Source: DfT, Transport Statistics GB 2006

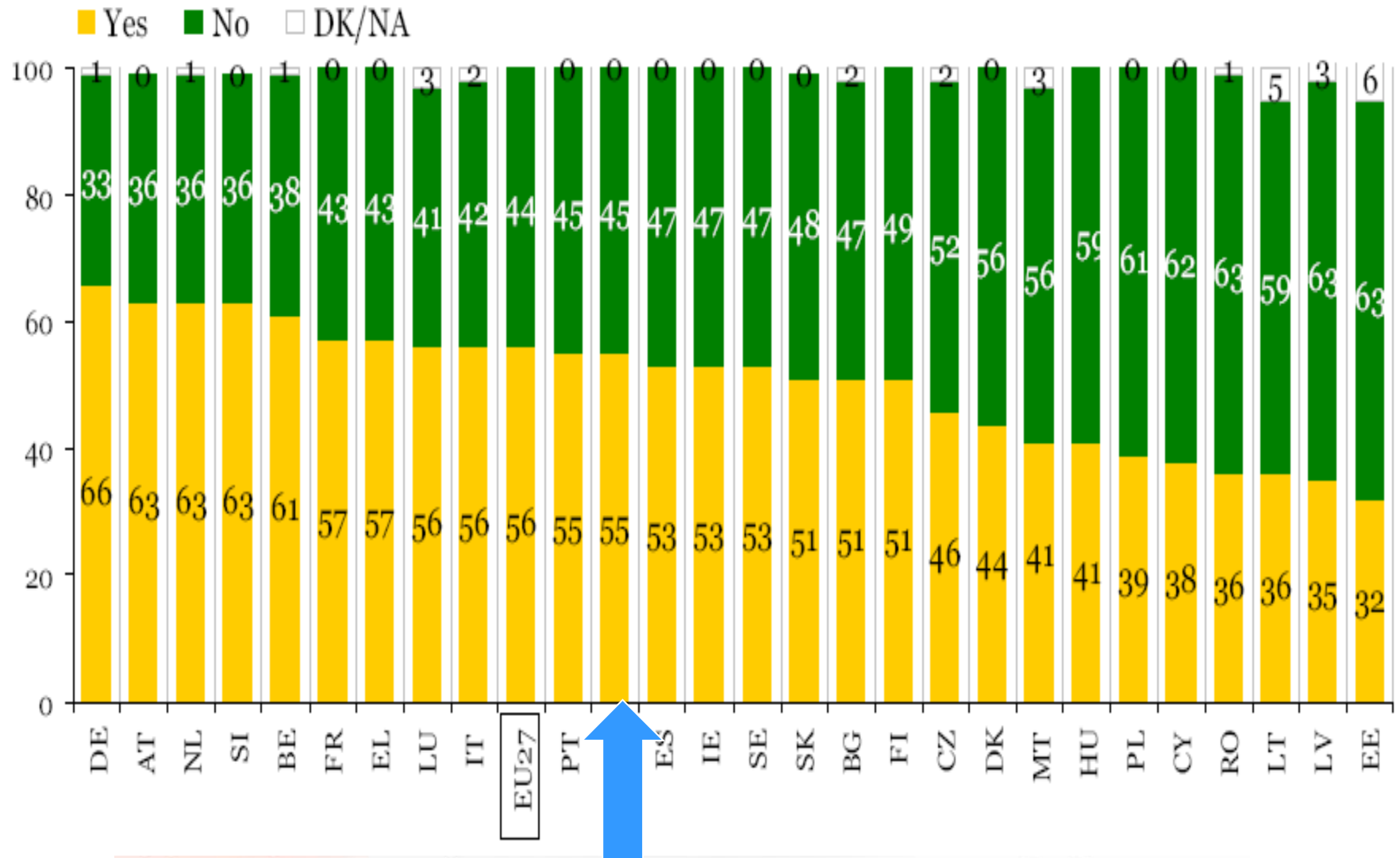
The cost to society of inactivity is estimated to be around £8.3 billion per year –

- £5.4 billion from sickness absence
- £1 billion from premature mortality
- £1.7 billion in direct health care costs to the NHS

10 per cent increase in adult physical activity could save 6,000 lives and £500 million each year.



Doing anything to save fuel: walked or cycled more



Taking the temperature

Towards an NHS response to global warming



NHS organisational change

The NHS employs more than 1.3 million people, with huge collective potential to cut carbon emissions through changes in behaviour at home and in the workplace.



NHS must reduce energy use by 15 per cent by 2010 which would save about £50 million in England alone

Total UK emissions are about 750 million tonnes CO₂

The total NHS CO₂ production is 3.4 million tonnes of CO₂

NHS uses 40 million tonnes of water which produces about 11,500 tonnes of CO₂ per year – low flush loos!



Waste

NHS produces 1 % of all UK domestic waste

The average printer cartridge is responsible for around 2.5 kg of CO₂ in its manufacture. All NHS printer cartridges = 30,000 tonnes of CO₂.

Recycling all the NHS paper could save up to 42,000 tonnes of CO₂ = 17,000 cars off the road.

Putting a paper towel in a clinical waste bag costs £1 to manage compared to 15p in a domestic bin.



Transport

- 5 per cent of all the UK's emissions from road transport are attributable to NHS-related journeys.
- Air quality
- Noise pollution
- Accidents



Buildings



The Plowright Surgery building in Swaffham uses only a third of the energy compared to a target set by the DH for new build.

The building has been specifically designed to maximise passive heating and cooling and construction materials were selected for their low embodied energy.

Action for organisations

1. Undertake a carbon audit/aim to be carbon neutral
2. Ambitious recycling target
3. Reduce water consumption
4. Procure local, environmentally-sound products
5. Minimise car use
6. Increase biodiversity
7. New buildings and refurbishments
8. Health Impact Assessment /Integrated Appraisal
9. Become a good corporate citizen, www.corporatecitizen.nhs.uk
10. Work in partnership with others



NICE

Primary care practitioners should –

Identify inactive adults and advise them to aim for 30 minutes of moderate activity on 5 days of the week (or more).



GMC

- States that GPs must not impose their religious or other beliefs on patients. Letter to Robin Stott.

My interpretation

- Climate change may be a motivator to help a patient improve their health
- GPs can't exhort their patients to change behaviour to benefit climate change



Lead by example

- 1960s Doctors gave up smoking
- 1980s Doctors campaigned against nuclear war
- 1990s Doctors reduced alcohol consumption
- 2000s Doctors reduce their carbon footprint?



Power of Eleven – William Bird

Over a year walking 11 minutes a day instead of driving will –

- Reduce weight by 11 ‘handfuls’ of fat
- Avoid producing 11 stone of Carbon (ie your average weight)



Modal shift

Reverting to the walking patterns of 1975

- would save 5.7 per cent of car CO₂ emissions
- 4 million tonnes out of 72 million tonnes



Modal shift

If all car drivers (> 26m people) walked
as much as people with no car –

Would save 15% of car emissions

= 11 million tonnes of CO₂



Crisis = 'krisis' = *a time to choose*

Be the change you want to see in the world - Gandhi

Each action may only be a drop in the ocean – but the ocean is made up of drops



Postscript

- BMJ Climate and Health Council
- RCGP Roadmap 'Low carbon Healthcare'
- www.lowcarbonlife.net
- www.goldenfuels.co.uk
- www.nhsconfed.org
- www.activetravel.org.uk
- www.corporatecitizen.nhs.uk
- www.carboncounter.org
- <http://coinet.org.uk/>
- www.cyclox.org.uk

