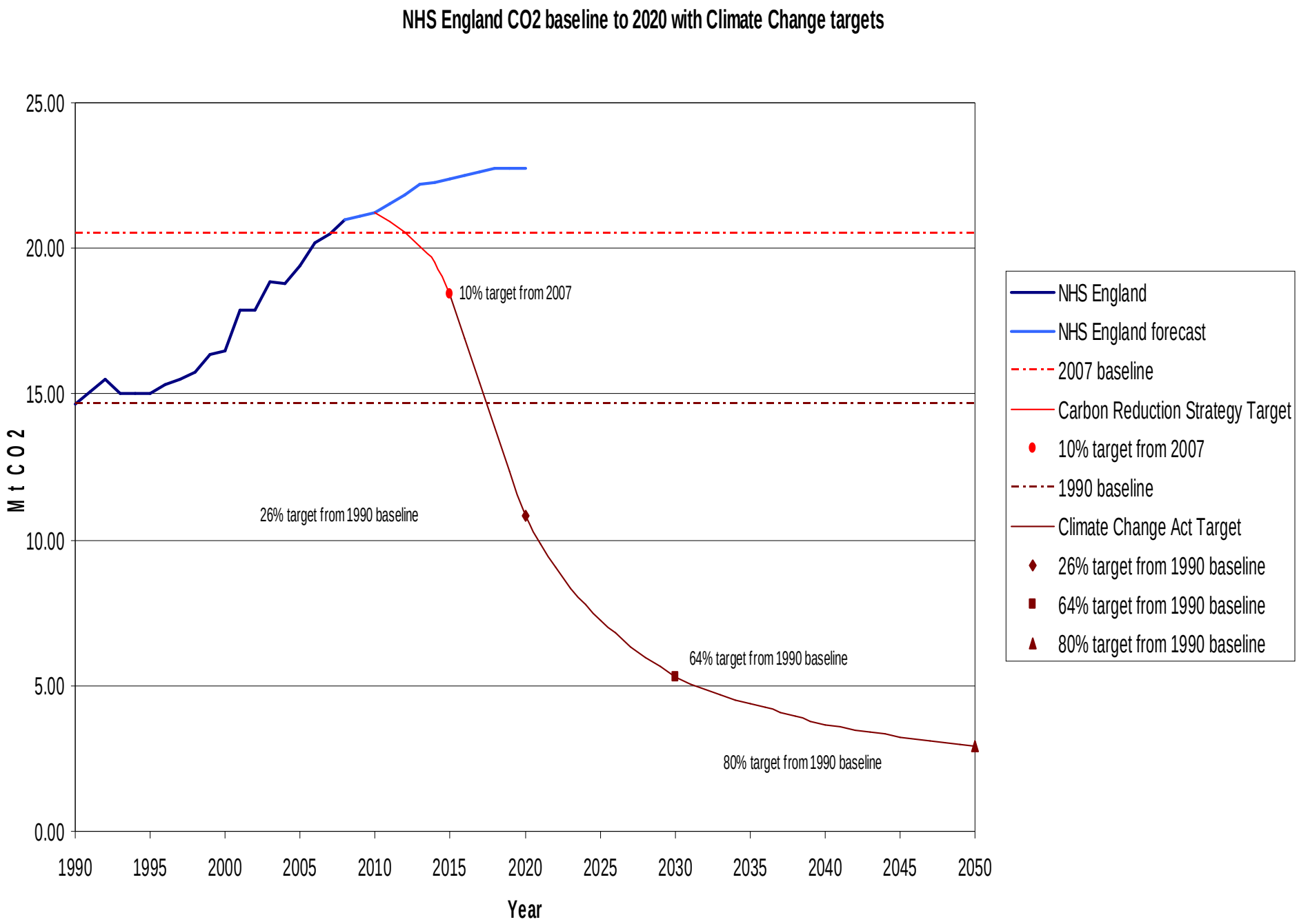
SAVING CARBON…
…IMPROVING CARE?

Dr Frances Mortimer

THE CAMPAIGN FOR
GREENER HEALTHCARE

A programme of Knowledge into Action

Registered charity No. 1123566. Summertown Pavilion, Middle Way, Oxford OX2 7LG


NHS England CO2 baseline to 2020 with Climate Change targets
25.00
20.00
15.00
10.00
5.00
0.00
M t C O 2
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
Year
10% target from 2007
26% target from 1990 baseline
64% target from 1990 baseline
80% target from 1990 baseline
NHS England
NHS England forecast
2007 baseline
Carbon Reduction Strategy Target
10% target from 2007
1990 baseline
Climate Change Act Target
26% target from 1990 baseline
64% target from 1990 baseline
80% target from 1990 baseline

LESS OF THE SAME IS NOT THE ANSWER!

Clinical transformation

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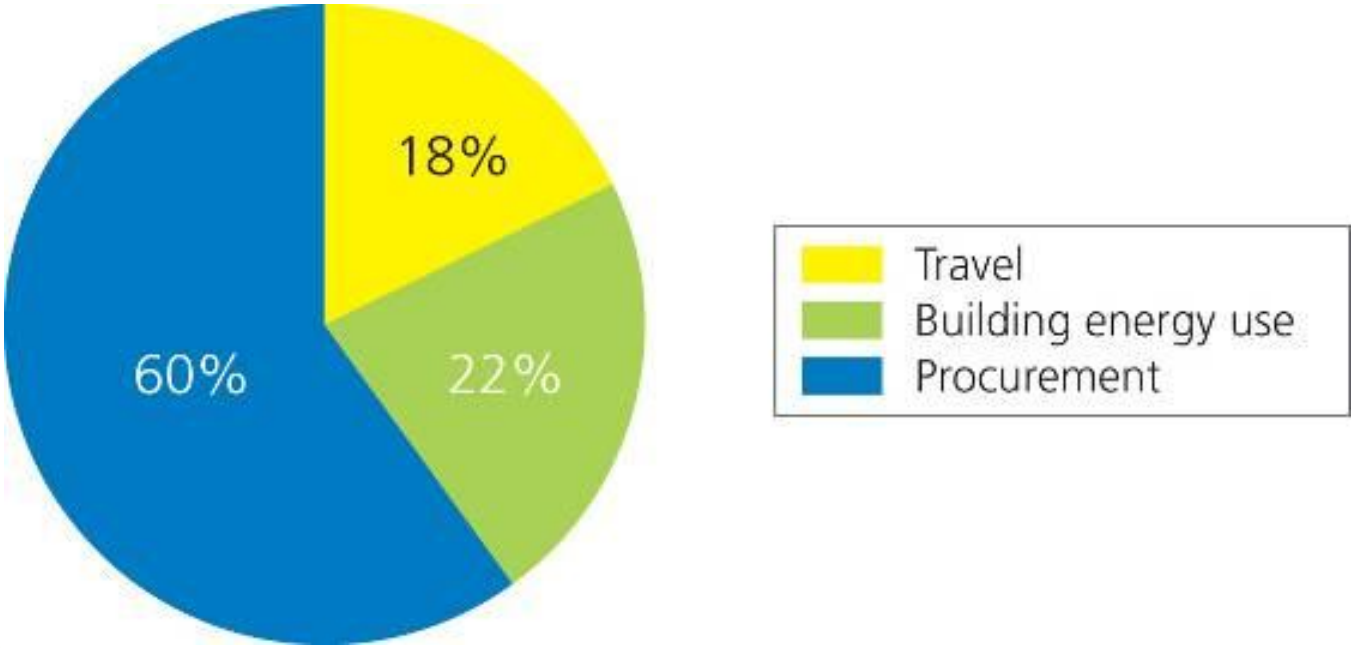
CARBON FOOTPRINT
NHS ENGLAND



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Sustainable Development Unit
transforming healthcare for a sustainable future

HIGH CARBON CARE

- How many patients attend for appointments without knowing why they are there?
- How often are tests repeated because doctors don't know about earlier results?
- How many drugs are continued when no longer needed?
- How often do patients come on separate days to see separate teams – for related problems?

HIGH CARBON CARE (2)

- Are hi-tech interventions most likely to be chosen, even where alternatives exist?
- Do we treat patients and families – or kidneys, hearts and rashes?

HIGH CARBON CARE

Activity ≠ outcome

RISK-BENEFIT: CAN REFERRAL TO SEE A SPECIALIST CAUSE **HARM**?

- Health risks?
  - infection, side effects, complications of invasive tests
- Psychosocial factors?
  - perception of condition, stress
  - time off work
- Environmental impacts?
  - energy, transport - carbon emissions
  - production of material resources: needles, forms, gloves
  - pollution from waste disposal
- Waste of NHS resources?

SAVING CARBON, IMPROVING CARE

What would Toyota do?

1. Identify (patient) value
2. Streamline delivery

1. IDENTIFY VALUE

NHS structure

- Primary Care
- Secondary Care
- Tertiary Care

Clinical system

- Prevention
- Screening
- Diagnosis
- Long term care
- Emergency care
- End of life care

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2. STREAMLINE DELIVERY

1. Skills
   - e.g. clinical decision making

CLINICAL DECISIONS

Patient with high cholesterol…

- Statin deficiency?

CLINICAL DECISIONS

Depressed patient…

- Anti-depressants?
- Exercise?
- Green gym / “ecotherapy”?

CarbonAddict

Medical management of Carbon Dependence Syndrome

Carbon Dependence
Presentation
Diagnosis
Management
Medical & Surgical
Psychological
Social: Housing
Social: Lifestyle
Social: Environment
Prognosis
References and Resources
Scientific Debate
Contributors to Field

Medical & Surgical Management

A medical or surgical approach to carbon detoxification presents a dilemma in the light of recent evidence on the carbon impact of drugs and equipment.

A carbon footprint of the NHS in England, published in 2008, has revealed that despite routine overheating of hospitals and health centres, and the accepted practice of keeping all lights and equipment "to the ready", direct energy use accounts for only 22% of NHS carbon emissions. [1]

Another 22% (or 4 million tonnes of CO2) comes from the production and supply of pharmaceuticals, with a similar proportion from purchase of medical equipment and dressings, etc.

Medical Interventions

From the above, it is evident that where a patient is unsuccessful in reducing other high-carbon behaviours, medications will actually lead to an overall increase in carbon consumption. (A similar problem can occur with use of nicotine replacement in treatment of cigarette addiction.)

A useful intervention here is the **Medication List Review**. This is an innovative technique, whereby all Medications currently being used by the patient are noted down in a List, and their therapeutic value Reviewed before deciding whether to continue them.

A related intervention is the **Clinic List Review**. Here, the list of patients expected in clinic is reviewed and opportunities sought to save them a (carbon-fuelled) journey. Options include running one-stop clinics, or offering telephone consultations.

2. STREAMLINE DELIVERY

1. Skills
   - e.g. clinical decision making
   - knowledge, technical skills, leadership, etc
2. Technology
   - e.g. information systems,
   - drug preparations
3. Systems & process
   - e.g. referral criteria
   - one-stop clinics

SAVING CARBON, IMPROVING CARE

The Campaign for Greener Healthcare

- Green specialty programmes

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GREEN NEPHROLOGY SUMMIT
FEBRUARY 2009

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GREEN NEPRHOLOGY FELLOWSHIP

- One-year fellowship for specialist trainee, funded by NHS Kidney Care - to start Sep 2009
- Professional development in:
  - Sustainability, leadership, systems improvement
- Work with partner renal units, regional networks to identify and pilot best practice
- Outputs:
  - Renal pathways, carbon footprint of kidney care, publications, renal toolkit, training recommendations

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The Campaign for Greener Healthcare

- Green specialty programmes
- Ward-level planning ("climate change toolkit")
- Medical education
- Commissioning

You / your Trust

- Engage with clinicians!
- Get in touch

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SAVING CARBON, IMPROVING…

- Care quality
  - Patient-centred care
  - Integration of services
- Collaboration in clinical teams
  - Develop a common vision and work together
- Health in society
  - Focus on prevention & determinants of health
  - Safeguard a healthy environment
- NHS finances

Transforming healthcare for a sustainable future

www.greenerhealthcare.org

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