

Climate crisis – how medicines optimisation teams can respond

Ms Ravijyot Saggu

Lead clinical pharmacist & CPhO clinical fellow '21/22, NHSEI

Chair UKCPA Respiratory committee



Global warming & climate change – no plan(et) B



Greenhouse gases (GHGs) trap heat

Ref IPCC <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf#table-2-14>

Long lived GHGs

- Water vapour (oxidation of CH₄)
- Methane CH₄
- CO₂ – burning fossil fuels
- Nitrous Oxide (N₂O)
- Halocarbons – Fluorine, bromine, chlorine gases inc Sulphur hexafluoride

Duration in atmosphere

- Short lived (days)
- 12 years
- 20-200 yrs
- 114 years
- <1yr >1000!

MAJOR EMISSIONS

CH₄

N₂O

SF₆

CO₂

CFCs

PFCs

HFCs

SCOPE 1
DIRECT

SCOPE 2
INDIRECT

SCOPE 3
INDIRECT

TRAVEL
OUTSIDE GHGP
SCOPES



NHS CARBON
FOOTPRINT

NHS CARBON
FOOTPRINT PLUS

GreenerNHS ambitions

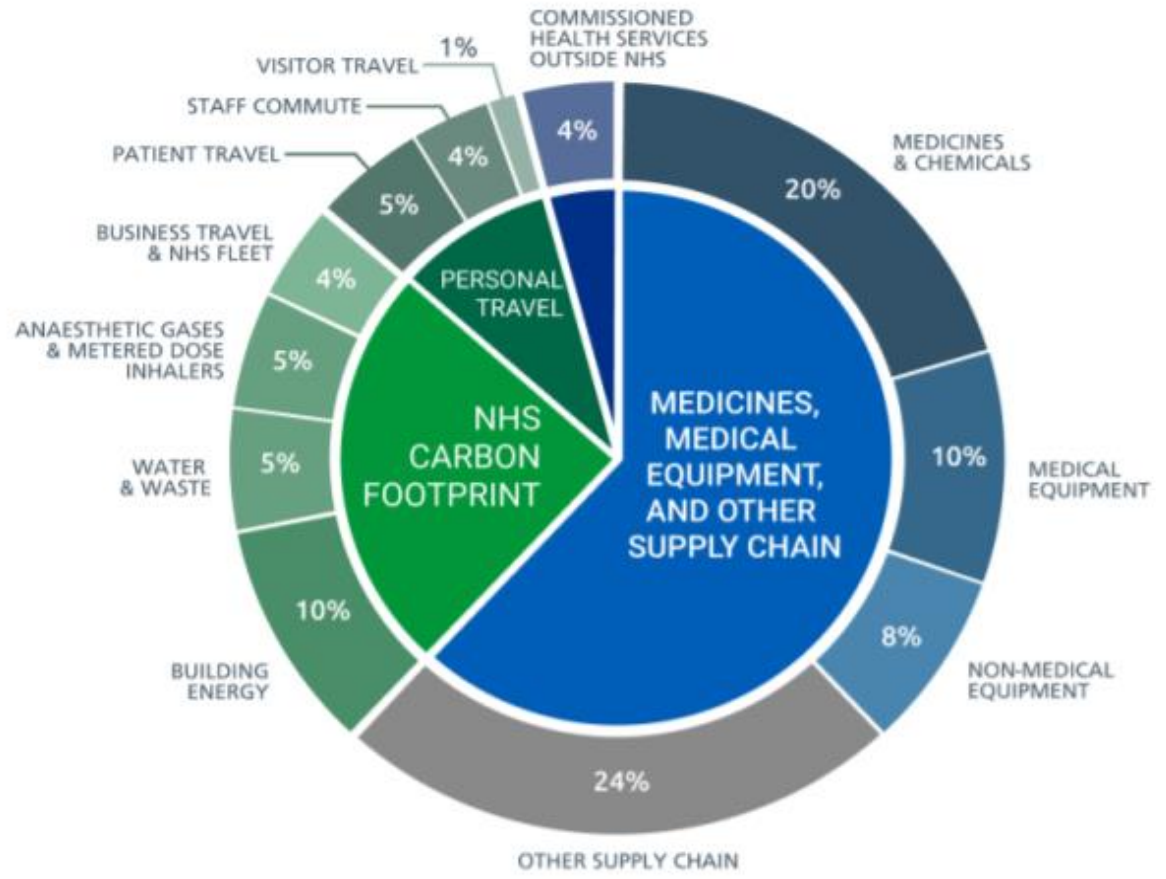
- For the emissions we **control directly** (the NHS Carbon Footprint), we will reach net zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032
- For the emissions we can **influence** (our NHS Carbon Footprint Plus), we will reach net zero by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.

The Carbon Footprint of the NHS

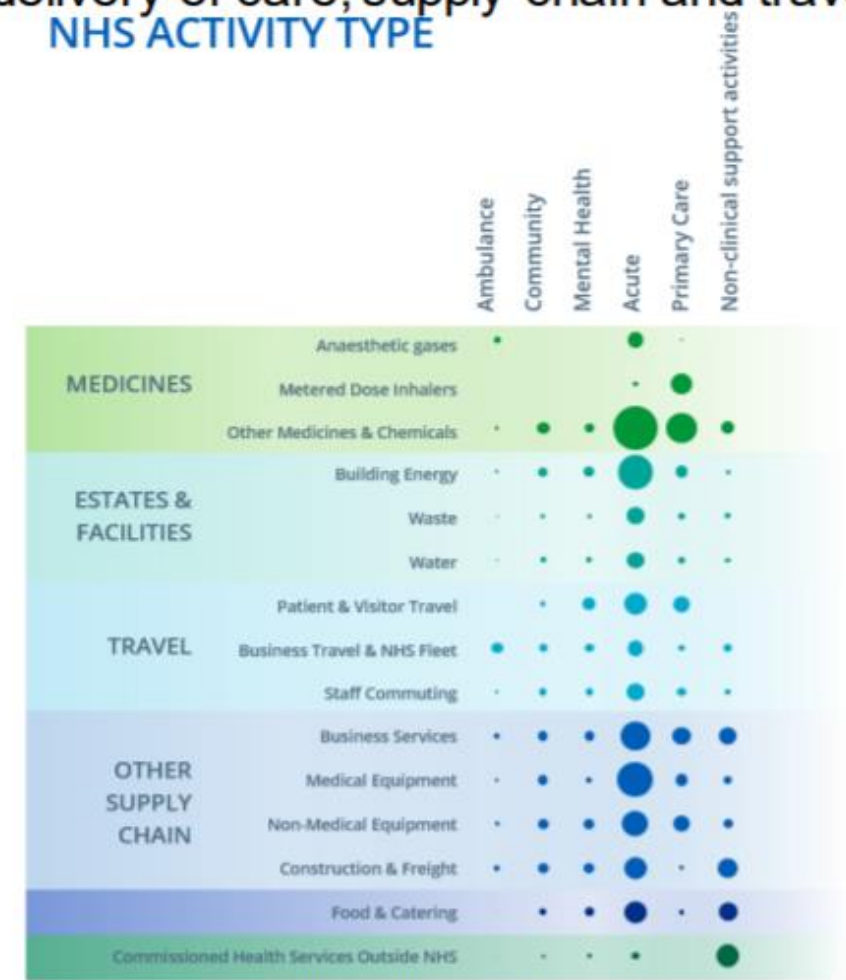
The NHS Carbon Footprint: emissions in the NHS' direct control

The NHS Carbon Footprint Plus : all scopes – delivery of care, supply chain and travel

NHS ACTIVITY TYPE

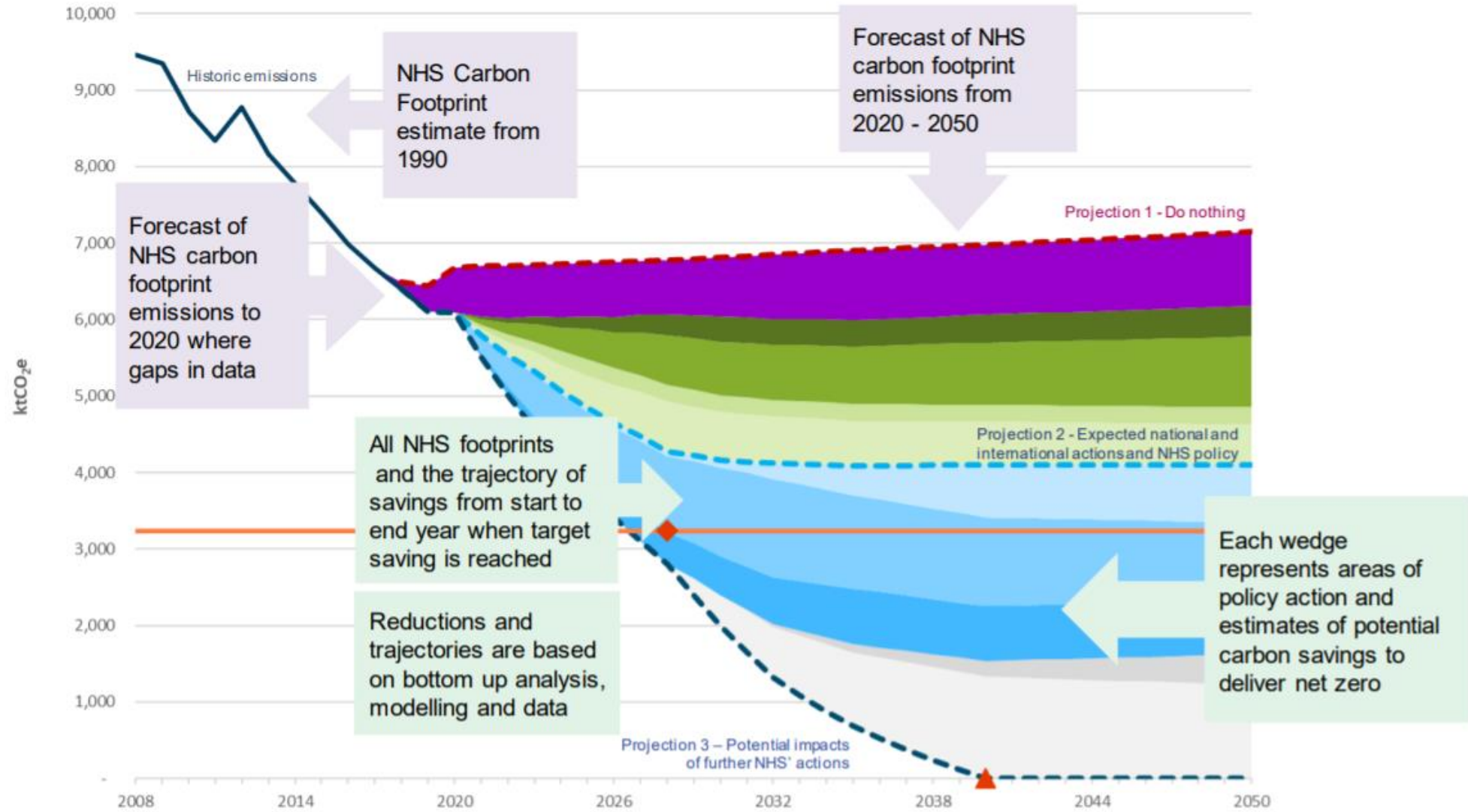


Sources of carbon emissions by proportion



Sources of carbon emissions by activity type and setting of care

NHS modelling of the impact of NHS and others action



NHS Early steps to decarbonise

- Our care
 - Heating & lighting
 - Medicine & supply chain
 - Transport and travel
 - Innovation
 - Hospitals
 - Adaptation efforts
 - Values and governance
-
- International Pharmaceutical Aerosol Consortium (IPAC) is coordinating a consortium of large pharmaceutical companies to develop a programme encouraging return of inhalers to pharmacies for green disposal.

PrescQIPP - Partnership with NHSEI

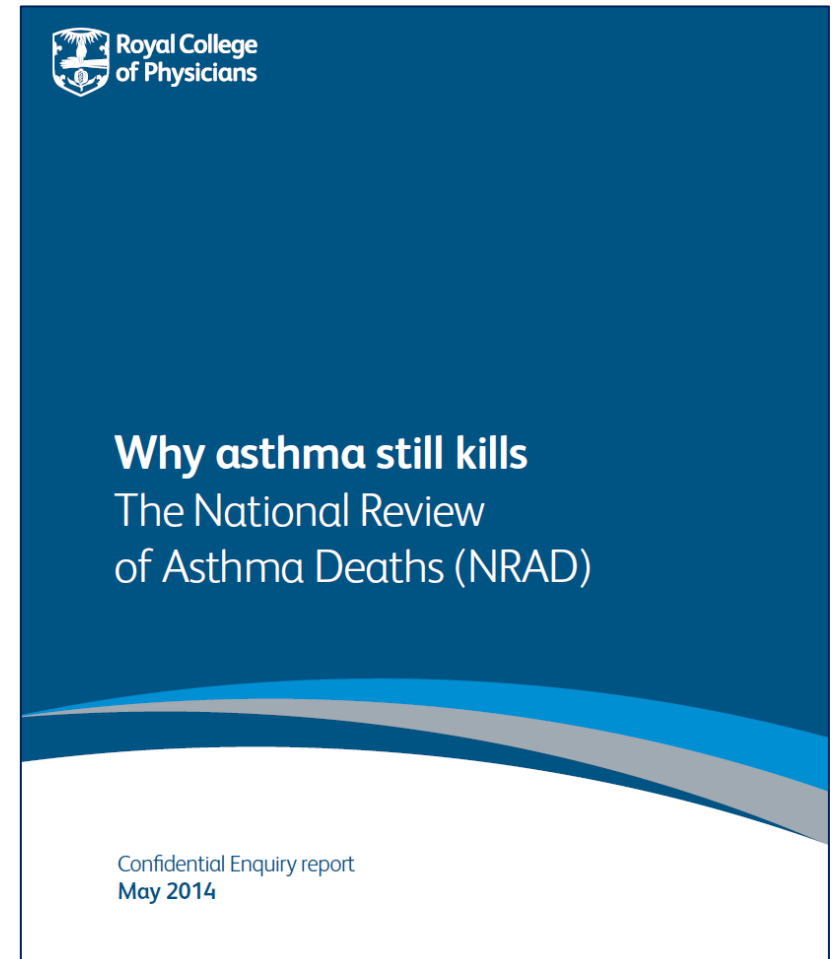
- Resources published on PrescQIPP website – bulletin 295 & briefing:
 - ✓ Inhaler carbon impact data
 - ✓ Audit tools
 - ✓ GP system searches
 - ✓ Advice for HCP doc
 - ✓ Inh technique, pt leaflets
 - ✓ Leaflets, posters & logos e.g. returning inhalers

Carbon impact medicines...

- Medicines account for 25% of emissions within the NHS.
- A small number of medicines account for a large portion of the emissions, and there is already a significant focus on two such groups – **anaesthetic gases (2% of emissions) and inhalers (3% of emissions)**
- **significantly increasing the use of DPIs, which may be clinically equivalent for many pts but significantly lower carbon emissions**
- **increasing frequency of the greener disposal of used inhalers**
- **supporting the innovation in & use of lower carbon propellants & alternatives**

Drivers

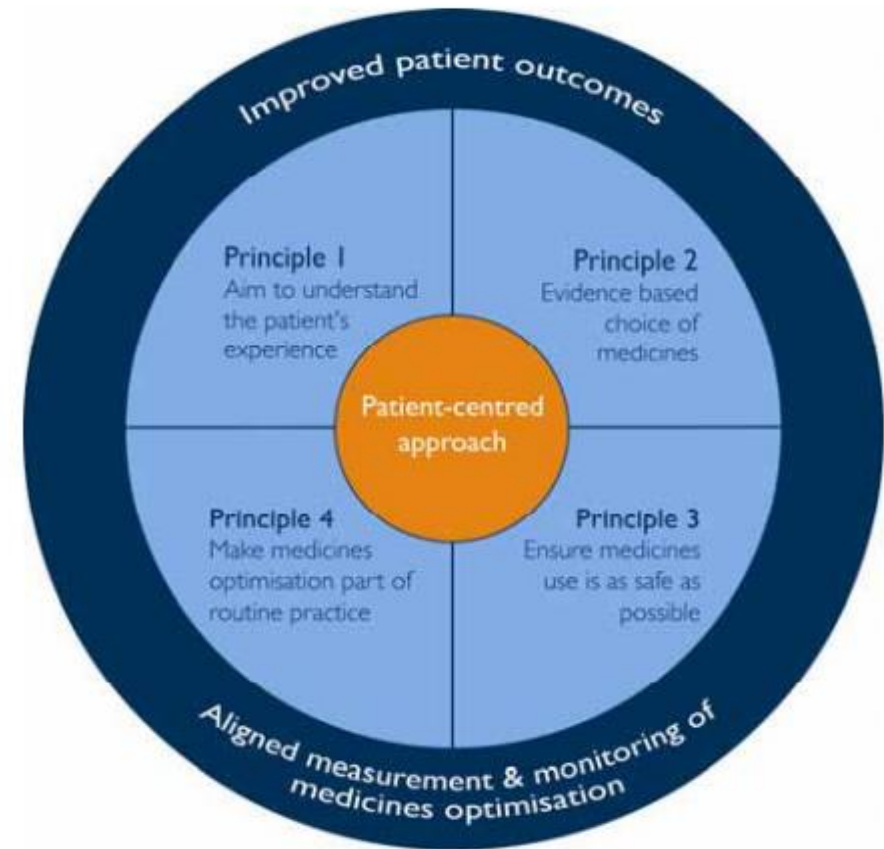
- Climate emergency declarations/Climate change Act
- Carbon net zero report Oct '20
- NHS Long term plan - health inequalities
- WHO air quality standards
- National report on asthma deaths 2014
- BLF-AUK figures – poor asthma outcomes
- The Marmot review 10 years on
- Impact & investment fund (IIF)
- Pharmacy quality scheme (PQS)
- Integrated Pharmacy Meds Optimisation (IPMO)



Medicines optimisation...

- Focuses on patients & outcomes rather than processes & systems (pt journey)
- Opportunity to reduce preventable harm
- **About ensuring the right choice of medicine for the right pt at the right time**

“a person centred approach to safe & effective meds use, to ensure people obtain the best possible outcomes from their medicines” NICE 2015



Crisis (opportunity!) Everyone's business

- Quality care – holistic & adherence, disease control
- **Inhalers - Not rote MDI switches but consider DPIs & clinical appropriateness**
- Understand (audit) local area practice
- Formulary alignment
- Raise awareness, connect & collaborate
- Staff/Patient education + review
- Disposal – use, care & how long inhaler lasts
- Pharmacy sustainability strategy?
- What's happening locally? Departmental sessions?



shutterstock.com · 1755422126

Leadership & shared purpose

- Board level oversight & strategies – ICS & IPMO
- Utilise knowledge, skills, expertise
- Don't duplicate efforts
- Inclusivity – vulnerable groups, CYP – identify pitfalls?
- Comms & training
- Access and supply
- System support partners, prescribers
- Smoking cessation pathways, inhalers, better care
- Divest from fossil fuel use

In your current role...

- The scale of the problem & carbon impact? Modelling?
- Implications of device changes? Who & how? Shared decision making
- **Green inhalers**
- Consider information provision – patients in clinics/hosp before appt/at discharge
- Education & awareness inc return/recycle
- Leadership & champions
- LEANer processes & ‘waste’
- Top down & bottom up – ICS level
- Stakeholder collaboration & engagement

Get involved – we are a sum of our parts...

- If no alternative use lower vol HFA134 MDIs in preference
- Cars & travel – better options, less journeys
- Avoid ‘idling’
- Healthier living and being – activity & diet
- Reuse bottles etc – less plastic
- Conserve green spaces
- More ‘plant forward’ diets
- Health & wellbeing practitioners



Resources (not exhaustive)

- Patient decision aids – NICE
- PrescQIPP resources
- BTS QI toolkit – underway
- Greener practice website – inc inhaler prescribing guide
- Greener practice + Health foundation – toolkit underway
- Greener NHS website – recently launched resource toolkit ‘healthier planet and people’, case studies
- Campaign resource centre PHE
- Susqi.org
- Pharmacy Declares website
- Carbon literacy <https://carbonliteracy.com/trainer-consultant/the-carbon-literacy-resources-library/>

Questions and comments?

- Ravijyot.saggu@nhs.net
- Twitter @RavijyotSaggu