

Greenhouse gas mitigation of health care systems and its interactions with adaptation in the context of climate change

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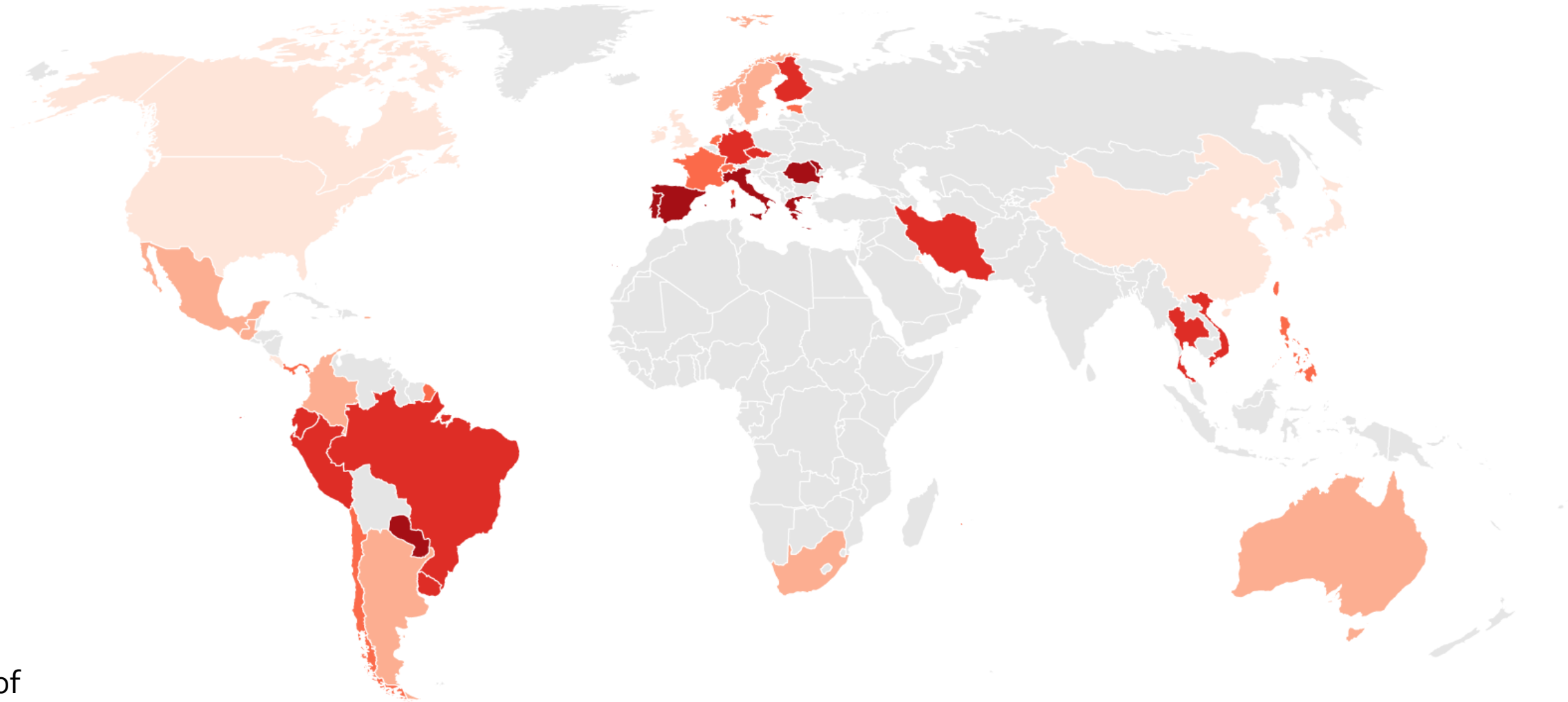
The impact of climate change on health

- Through exposure to meteorological, extreme weather, air quality or other impacts including the perception of climate change
 - Infectious diseases
 - Mortality
 - Respiratory, cardiological, neurological
 - Mental health
 - Pregnancy & childbirth
 - Food security & safety
 - Skin & allergies
 - Occupational health
- Particularly acute for Low- and Middle-Income Settings

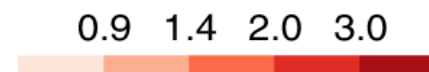
More than 35% of the total heat deaths from 1990-2018 attributed to human-induced climate change using data from 732 sites in 43 countries. No data for much of Africa and Asia

(Vicedo-Cabrera et al Nature Climate Change 2021).

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Heat-related mortality rate attributed
to human-induced climate change (per 100,000)



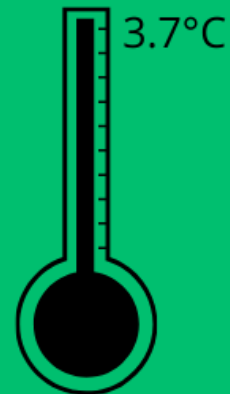
Slide: Prof
Andy Haines

Future risk of mosquito-borne diseases in a hotter world

Global warming, malaria and dengue



Additional people at risk by 2100 due to rising temperatures and population growth:



4.7 billion people*

vs.



2.4 billion people**

Relative to 1970-1999:

*in worst-case scenario where emissions continue to rise at current levels

**in scenario where emissions are reduced the most

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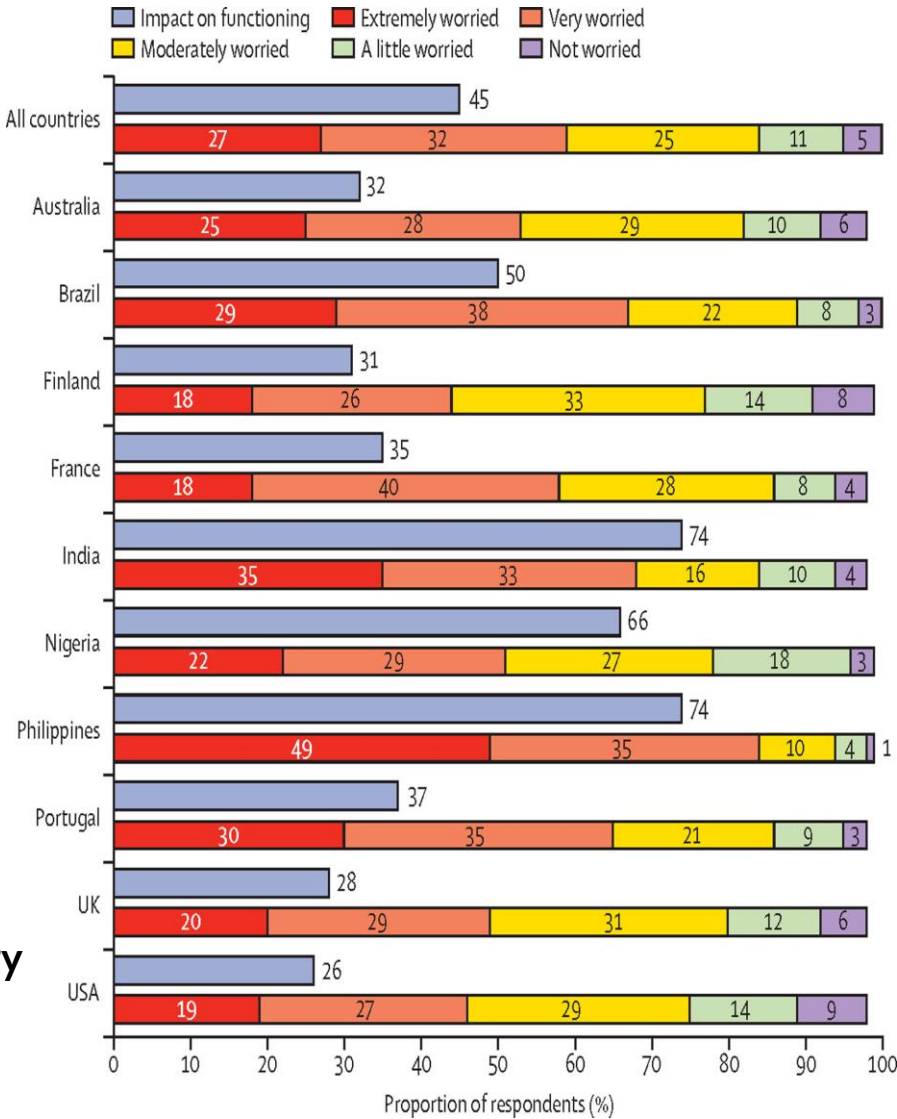
Mental health effects of climate change (e.g. increases in common mental disorders after extreme events, solastalgia and climate anxiety)



(Photo by Pedro Paulo Xerente for the Fundação Nacional do Índio, Brazil)



https://www.who.int/health-topics/floods#tab=tab_1



RACGP (Image: David Mariuz)

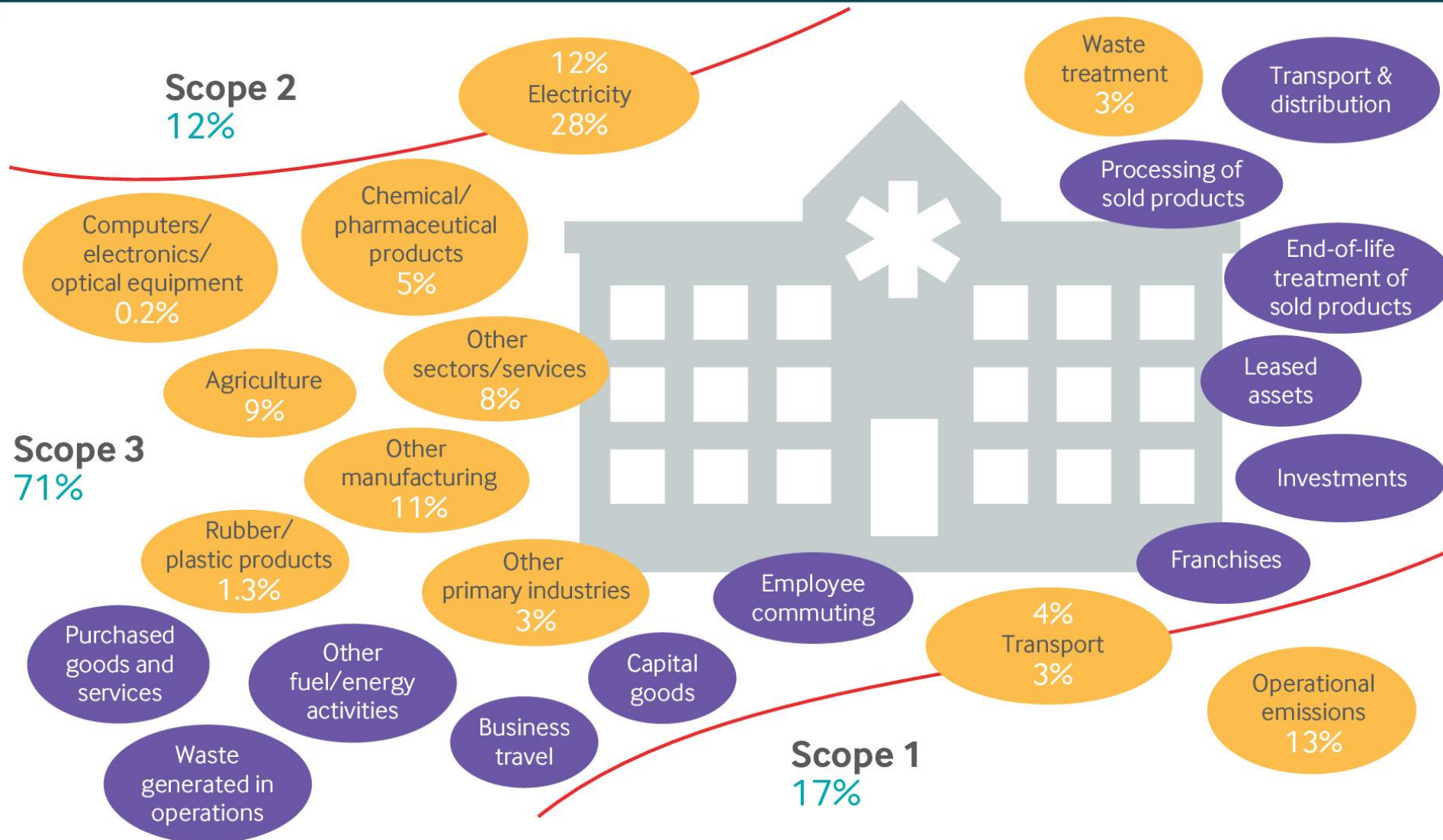
Climate anxiety in children and young people

Hickman et al Lancet Planetary Health 2021

Slide: Prof Andy Haines



Health care impact on climate change



Many components of scope 3 are “unmeasured” and are not fully captured in the 71% of total emissions. These are depicted in purple.

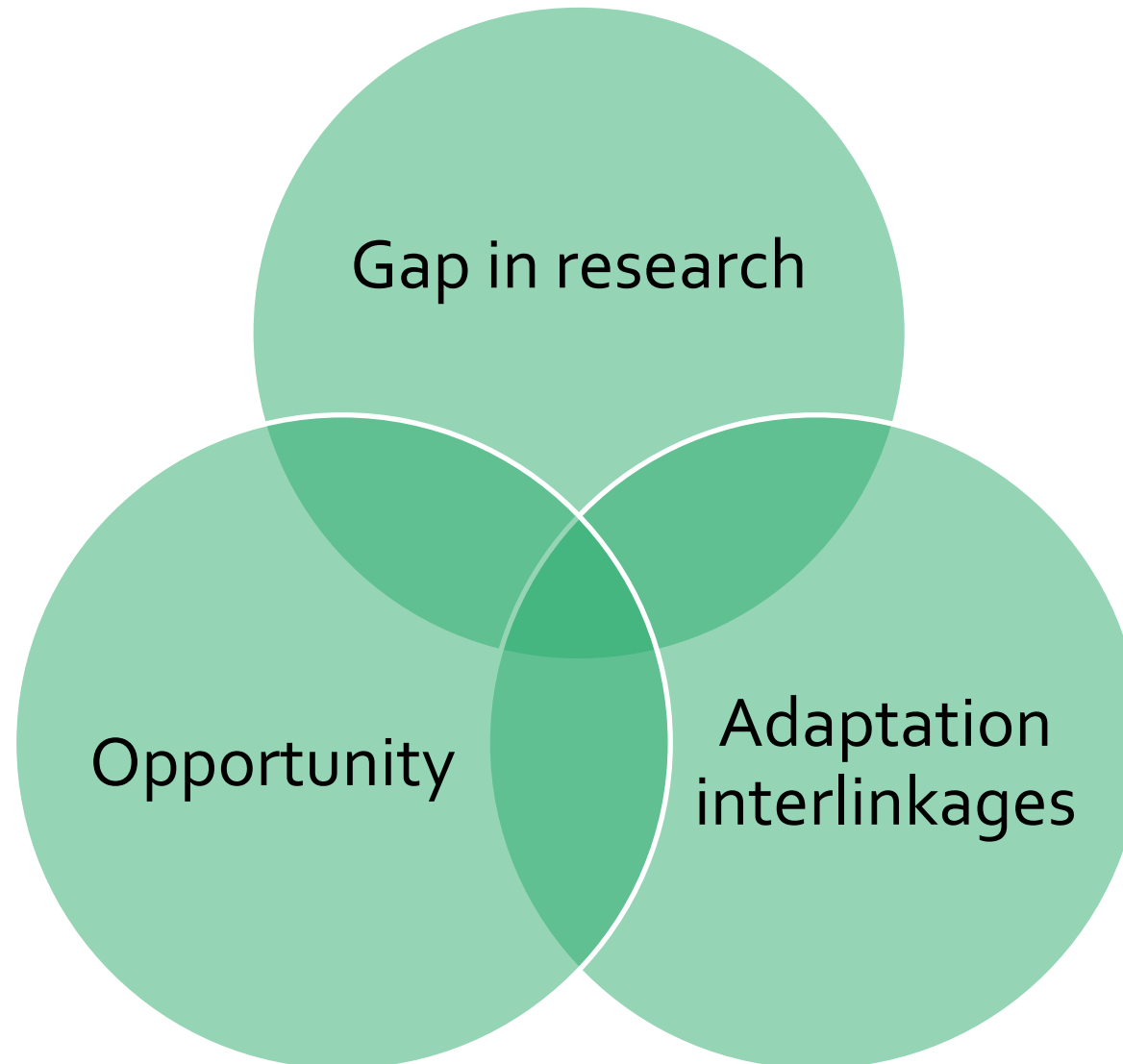
Source: Salas R N, Maibach E, Pencheon D, Watts N, Frumkin H. A pathway to net zero emissions for healthcare BMJ 2020; 371 :m3785 doi:10.1136/bmj.m3785

First, do no harm

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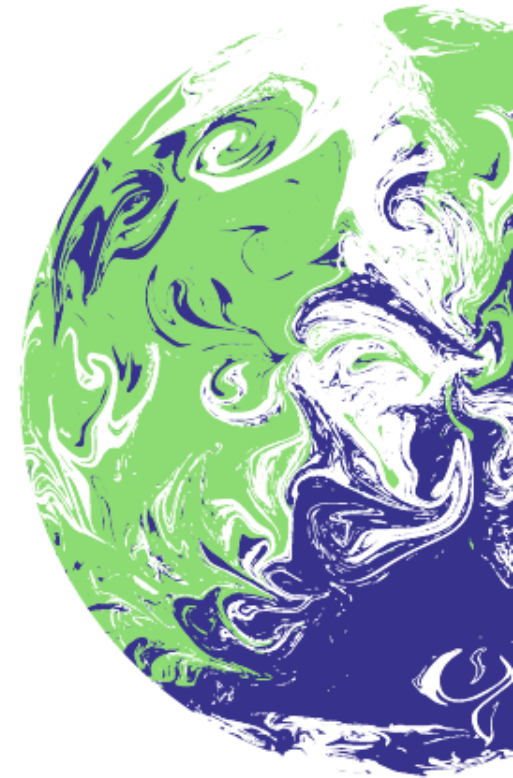


Low- and Middle-Income Setting



Recent developments

- UNFCCC COP26 Health Commitments
- 2022 World Health Day
- G7 Leader's Communique
- Call WHO for a healthy and sustainable COVID-19 recovery
- COP28: thematic day



Net zero healthcare

Strategies for sustainable healthcare during the climate emergency

The climate emergency is forcing the medical community to think beyond care for individual patients - expanding our duty of care to protecting the Earth's natural systems on which intergenerational health and wellbeing depend. This graphic presents twelve strategies out of more than 100 presented in two papers published in *The BMJ* for the COP26 climate conference in 2021. It uses the metaphor of a stylised town to visualise what these changes could look like. Such changes are now needed in towns and cities across the world.

4 Battery power

Use battery power to expand electricity supply from renewable sources and reduce the need for fossil fueled generators

1 Clean energy transition

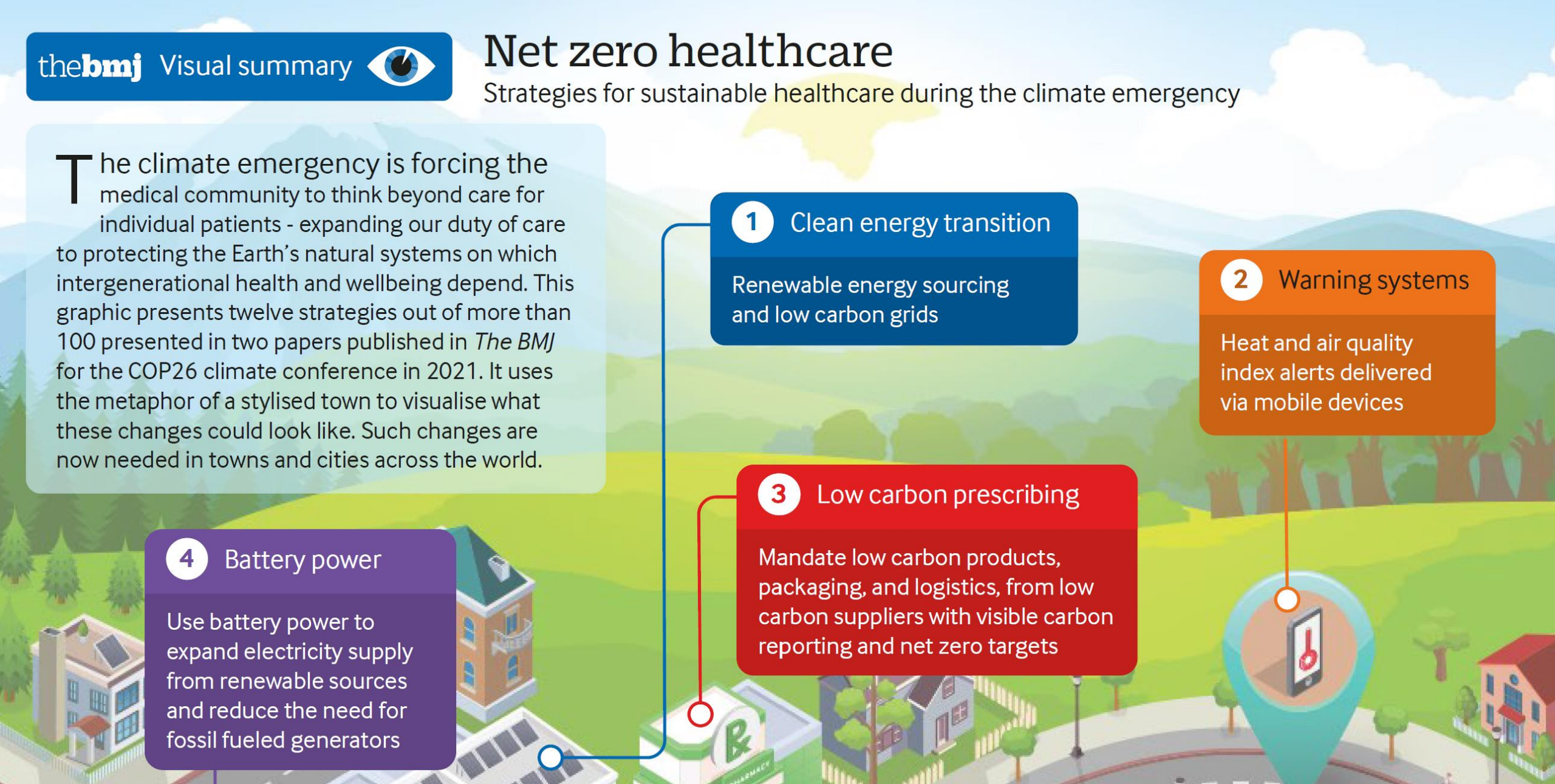
Renewable energy sourcing and low carbon grids

3 Low carbon prescribing

Mandate low carbon products, packaging, and logistics, from low carbon suppliers with visible carbon reporting and net zero targets

2 Warning systems

Heat and air quality index alerts delivered via mobile devices



5 Distributed health care

Offer multidisciplinary consultations, co-locate providers and allied health staff to minimise patient travel

6 Device reprocessing

Implement medical device reprocessing programmes, keeping materials in use at highest value

7 Primary health shift

Shift from hospital-centric care to community-based health promotion and disease prevention

8 Encourage active transport

Provide safe cycling and pedestrian infrastructure, and encourage patients and staff to use it

10 Efficient energy use

Use of systems such as LED lighting and lighting controls

11 Encourage healthy eating

Provide healthy plant-based diet options, reusable containers, and minimise waste

9 Telehealth

9 Telehealth

Optimise video conferencing and accelerate shift to telehealth

minimise waste

12 Move to electric vehicles

Electrify vehicle fleet, and improve support structures for electric vehicles such as charging points

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- Scope 3: NHS & US

- Momentum
- Need for evidence based guidance
- Interlinkages mitigation and adaptation

The time is now.

Thank you for your attention!

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