



Priority setting and net zero healthcare

How much health can a tonne of carbon buy?

Summary

Cutting healthcare's carbon footprint involves trade-offs. These should be included when evaluating interventions.

A growing number of countries are committing to developing net zero carbon, sustainable healthcare systems. Delivering this aim while protecting and improving health will require trade-offs. In this article, the authors discuss how priority setting principles can be applied to help allocate resources more fairly and efficiently on the clinical, health system and global level.

For clinicians, there are several low-hanging fruits which could reduce emissions at no financial cost or inconvenience to patients. For example, switching to low-carbon inhalers or anaesthetic gases.

However, other interventions may be harder, especially where these challenge clinical norms and technological developments. For example, robotic surgery has a higher carbon footprint although there is scarce evidence of improved clinical outcomes.

The priority view

A growing number of studies have examined the carbon footprint of different healthcare interventions. Here, the authors analyse the carbon footprint and health gains together in order to explore how much health a tonne of carbon can buy for different surgical interventions.

There is wide variation between interventions, up to 1000x difference between an emergency C-section, and a robot-assisted prostatectomy (which only has a small clinical benefit over key-hole surgery).

BERGEN CENTRE FOR ETHICS AND PRIORITY SETTING (BCEPS)

is inter-disciplinary research centre that aims to understand and promote ethically fair and efficient priority setting in health.

AUTHORS

Anand Bhopal¹
Ole Frithjof Norheim^{1,2}

AFFILIATIONS

¹ Bergen Centre for Ethics and Priority Setting (BCEPS), Department of Global Public Health and Primary Care, University of Bergen, Norway

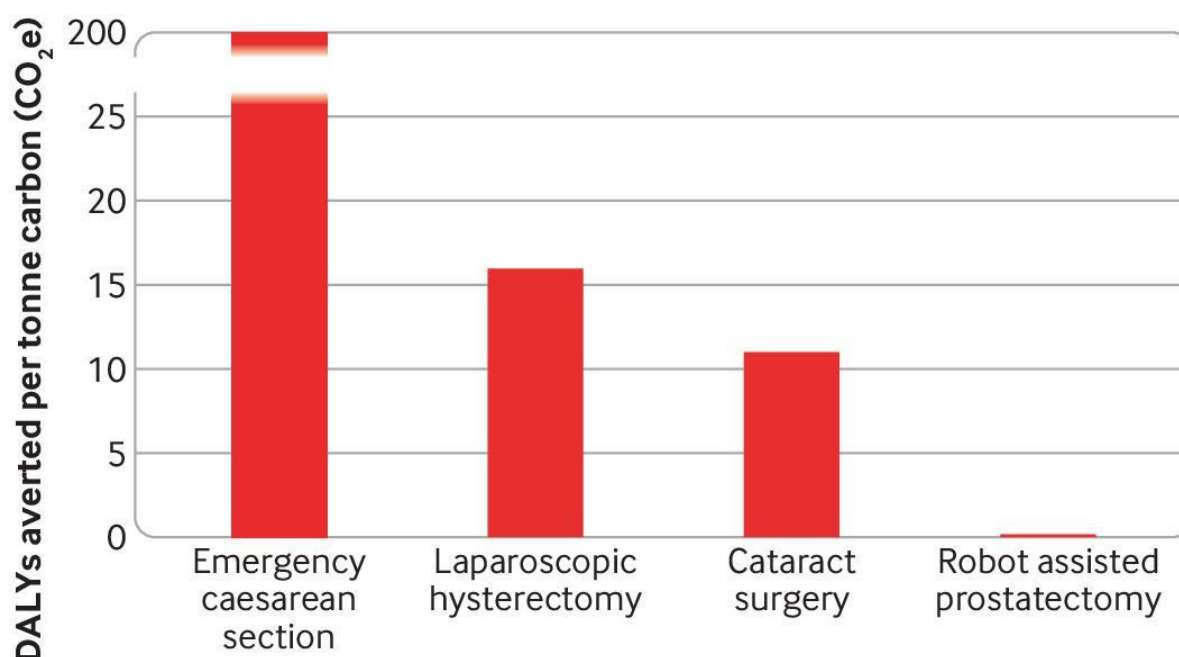
² Harvard TH Chan School of Public Health, Department of Global Health and Population, Boston, MA, USA

LINKED ARTICLE

Bhopal A & Norheim OF. (2021). Priority setting and net zero healthcare: how much health can a tonne of carbon buy? *BMJ*

<https://www.bmj.com/content/375/bmj-2021-067199>

Key findings



How much health can a tonne of carbon buy? Estimated carbon costs and health benefits (disability-adjusted life years, DALYs) for four interventions in high-income countries.

Think global, act local

This study focused on reducing carbon emissions from healthcare systems in high-income countries where per capita emissions are 4x higher than lower-middle income countries and 70x higher than low-income countries. Given low- and middle-income countries are where unmet healthcare needs are highest the authors argue that low- and middle-income countries should not

be locked into highly carbon intensive healthcare, nor should they be required to trade off health for reduced emissions.

Decision makers ultimately have a responsibility to consider opportunity costs when allocating resources. More fully integrating carbon emissions into decision making using established priority setting processes is a vital step on the pathway to net zero healthcare.

Policy implications/recommendations

- The healthcare sector is a major polluter, and it should use mechanisms of priority setting to decrease its climate impact and better protect health.
- Carbon emissions should be considered alongside financial cost and efficacy in prioritising healthcare interventions.
- Assessment of the environmental impacts of different interventions and services can improve our understanding of the carbon cost of healthcare.
- High income countries need to make rapid carbon reductions and facilitate universal healthcare in lower income countries.