

WHAT IS GOOD FOR THE ENVIRONMENT IS GOOD FOR HEALTHCARE

HOW TO CONSIDER GREEN SUSTAINABILITY IN VALUE ASSESSMENTS AND PURCHASING DECISIONS

CAROLIN MILTENBURGER, PHD MILTENBURGER CONSULTING, BERLIN (GERMANY)
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Workshop Panel

- **Prof Mark Sculpher**
 - Professor of Health Economics at York University and Director of the Program on Economic Evaluation and Health Technology Assessment. He is also Deputy Director of the Policy Research Unit in Economic Evaluation of Health and Care Interventions (EEPRU).
- **Jerome Baddley**
 - Head of the NHS Sustainability Development Unit. He was the CEO of the environmental consultancy NetPositive. Over 10 experience with sustainability work
- **Mike Baldwin**
 - Market Access Director at Boehringer Ingelheim
- **Dr. Carolin Miltenburger**
 - Independent consultant, after 25 years in the industry

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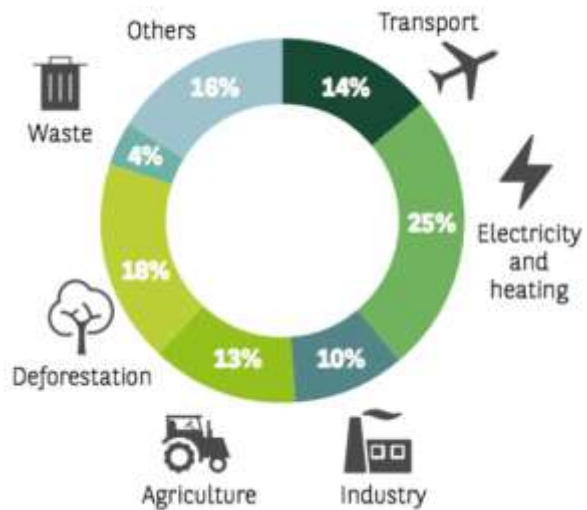
CLIMATE CHANGE HAS A NEGATIVE IMPACT ON THE ENVIRONMENT AND ON HEALTH



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Major drivers of global warming

- energy sector
- agriculture
- transportation



1 = Malik A et al . The carbon footprint of Australian health care. Lancet Planet Health 2018,2: e27-35

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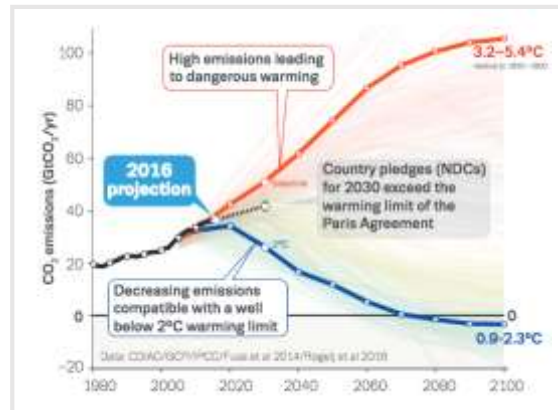
Countries and organizations committed to reduce CO₂ emissions

167 PARTIES SUBMITTED THEIR INTENDED LEVEL OF CO₂ REDUCTION TO THE UNFCC

- The EU intends to reduce their CO₂ emissions (tCO₂e) to ≥40% below 1990 levels by 2030 and by ≥ 80% by 2050

THE NAZCA GLOBAL PLATFORM (LAUNCHED IN 2014) TRACKS COMMITMENTS OF 12,500 ENTITIES

- Cities, Regions, Organizations, Companies and Entire Countries, among them 52 Life Science Companies¹

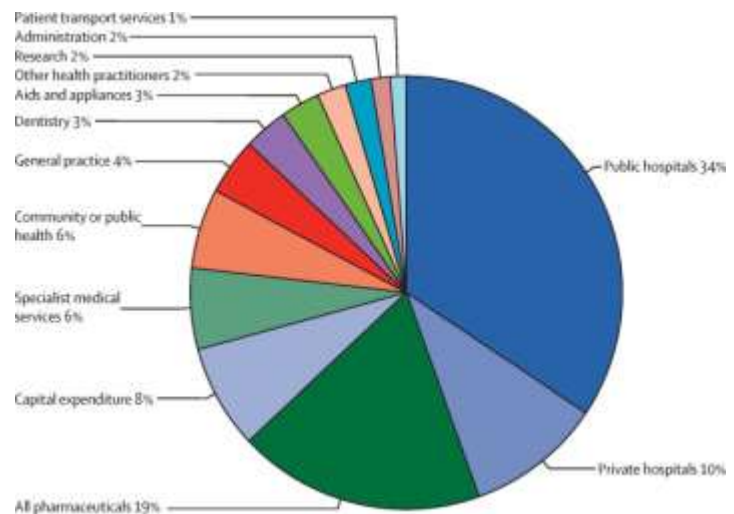


1 = Merck KGa and Bayer from Germany

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The healthcare sector contributes 5-10% to global CO₂ emissions

Main drivers:
-hospitals
-industry
-procurement



1 = Malik A et al . The carbon footprint of Australian health care. Lancet Planet Health 2018;2: e27-35

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- CO2 Tax (e.g. Finland)
- National Action Plans
- Green Procurement
- Sustainability Strategies
- Organisations
 - CleanMed Europe
 - SDU NHS (UK)
 - Expertise Centre (NL)
 - CSPM (UK)
- Reporting
 - Health Check (NHS)
 - Carbon Disclosure Project
 - Dow Jones Sustainability Index
 - WBCSD
- CO2e Mapping
 - Skane Region (SE)

CSPM = Coalition for Sustainable Pharmaceuticals and Medical Devices; WBCSD = World Business Council for Sustainable Development
https://noharm-europe.org/sites/default/files/documents-files/4746/HCWHEurope_Climate_Report_Dec2016.pdf

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... but *sustainability* is currently not considered in national / regional pricing and reimbursement processes for drugs or devices



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And there are no established methods how to quantify the value of environmental impact or carbon footprint

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Method

ENVIRONMENTAL IMPACT ASSESSMENT OF A HEALTH TECHNOLOGY: A SCOPING REVIEW

John Pedersen
CAMH, Ottawa
johnp@camh.ca

Erica De Angelis
David Reynolds
CAMH, Ottawa
Helen Sweeney-Burkman
Ottawa, Kingston Office for Health Technology Assessment

Introduction: The Health Technology Expert Review Panel is an advisory body to Canadian Agency for Drugs and Technologies in Health (CADTH) that develops recommendations on health technology assessments (HTAs) for existing health technologies using a deliberative framework. The framework spans several domains, including the environmental impact of the health technology (EIA). Our research objective was to identify articles on frameworks, methods or case studies on the environmental impact assessment of health technologies.

Methods: A literature search in major databases and a focused grey literature search was conducted. The main search concepts were EIA and environmental impact/sustainability. Eligible articles were those that described a conceptual framework or methods used to conduct an environmental assessment of health technologies, and case studies on the application of an environmental assessment.

Results: From the 1,713 citations identified, 184 articles were included. Two articles presented a framework to incorporate environmental assessment in HTAs. Other approaches described weight of evidence profiles and comparative and integrative environmental impact assessment. Central themes derived include transparency and reproducibility, integration of components in a framework or of evidence into a single outcome, data availability to ensure the accuracy of findings, and consistency with the approach used.

Conclusions: Each framework and methods presented have different but related to the objectives, health economics, or engineering processes. Our descriptions suggested transparency, reproducibility, and the integration of components or of evidence into a single outcome as their main strengths. Our review is an initial step of a larger initiative by CADTH to develop the methods and process to address the environmental impact question in HTAs.

Keywords: Scoping review, Environmental impact, Health technology assessment

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The ecological impact of products and services can be quantified through Life Cycle Assessment

TRACKING CARBON EMISSIONS AT EACH STEP OF THE VALUE CHAIN



... but there is no consensus how to quantify the societal value of a better carbon footprint or waste reduction

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Why are we here ?

- Healthcare sector is part of the problem
 - Global contribution of 5-10% of the total green-house gas emissions (GHGE)
- There is a sense of urgency
 - Many countries failing to meet their carbon reduction commitments to the UN
- Providers, but not payers starting to consider carbon footprint
 - National healthcare payers do not recognize ecological benefits of health technologies when making funding and purchasing decisions
- The issues are
 - Low awareness with all stakeholders
 - No incentives for a better product carbon footprint
 - Should sustainability be included in societal perspective of economic analyses ?
 - How to quantify the value of a better carbon footprint (carbon intensity¹, SCC)?

1 = eg. Marsh K et al 2016, 2017

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Thesis: Efforts to reduce CO2e by more eco-friendly technologies should be incentivized by decision making in healthcare

- Value Assessment should consider ecological impact
- Life cycle analyses on ecological impact should be done routinely
- Consensus on methodologies and use of PCF data needed

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Live Content Slide

When playing as a slideshow, this slide will display live content

Poll: Have you ever seen carbon footprint data of a healthcare product?

Live Content Slide

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Poll: Should value assessment frameworks include the product carbon footprint?

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**Poll: What may be the impact of a better
carbon footprint on price and
reimbursement ?**

Questions to the Audience

What may be the impact of the added value on price and reimbursement, use ?

Short term the impact should be on "preferred product". Once a scenario with ecological data can be presented at societal level it should have an impact on price. (NL)

Should be included in the pricing submission highlighting that it is cost-neutral but an additional benefit. Reward should be through market share. Physicians are an important stakeholder. (FR)

Should be reflected in preferred choice, e.g. tiered scheme or fully reimbursed product (SE)

NICE currently only considers costs, outcomes and wider economic benefits (e.g. productivity). The question is which trade offs will be made. Climate vs health ? Which products to displace. Who should bear the costs of waste / eco burden? Consumers pay for plastic bags but here manufacturers should pay (UK)

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Questions to the audience

- How much does the healthcare sector globally contribute to CO2e?
 - Don't know
 - 1%
 - 5 %
 - 10%
- Have you seen data on the carbon footprint of a health technology, a drug or device
 - No
 - Yes
 - Not sure

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Questions to the audience

- Should sustainability, i.e. carbon footprint be systematically included in value assessment frameworks for pricing and reimbursement?
 - Yes
 - No
- What may be the impact of a better carbon footprint on price and reimbursement ?
 - None
 - Should be reflected in the price
 - Should be reflected in preferred choice, e.g. tiered scheme or fully reimbursed product