

How does health care contribute to climate change and what can we do about it?

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Five per cent of greenhouse emissions are due to the health care sector. [1] These emissions have been increasing year on year and contribute climate change and its negative impact on general health of populations. [1, 2] Health care organisations have the challenge, not only to respond to the impacts of climate on populations, but also to work on strategies to minimize their carbon footprint. [3].

Following the Greenhouse Gas Protocol, [4] the health care sector contributes to climate in 3 different scopes:

- Emissions from sources owned directly by the health sector, such as heating systems and medical gases. These account generally for 7%.
- Indirect emissions from generation or purchase of energy, such as electricity (11%).
- Indirect emissions from production and transport of goods and services, such as those related to pharmaceutical and medicinal products (80%). [2, 5]

What can we do as part of the healthcare system?

- . Make sure the companies you work with are working towards sustainability and carbon neutrality
- . Optimise architectural design of buildings (e.g. temperature effective surfaces/white roofs/walls)
- . Turn off the lights and encourage using automatic switches
- . Decrease unnecessary laboratory and imaging studies
- . Use telehealth and virtual meetings, where possible, to reduce unnecessary travelling
- . Develop a green team in your hospital/institution
- . Perform a waste audit
- . Optimise the use and recycling of batteries
- . Move back to reusable supplies
- . Use Personal Protecting Equipment appropriately
- . Make climate change part of your patient discussions
- . Walk/cycle or use public transport to work
- . Bring your own food and drink in reusable containers
- . Have virtual interviews rather than face to face, where this reduces unnecessary travelling
- . Encourage your society to have hybrid meetings, where these decrease carbon footprint
- . Move to a plant-based diet
- . Rationalise/optimize the use of anaesthetic gases and metered dose inhalers (patient education is paramount)
- . Pharmaceutical industry can optimise the sizes of bottles/vials where these are being supplied in bigger volumes for single-patient use, leading to waste. Pre-filled syringes and patient individualized dosing should be preferred
- . Daily Unit Dose Dispensing Systems from Pharmacy Departments should be prioritized, as resulting in avoidable stock waste and better patient safety. [6]

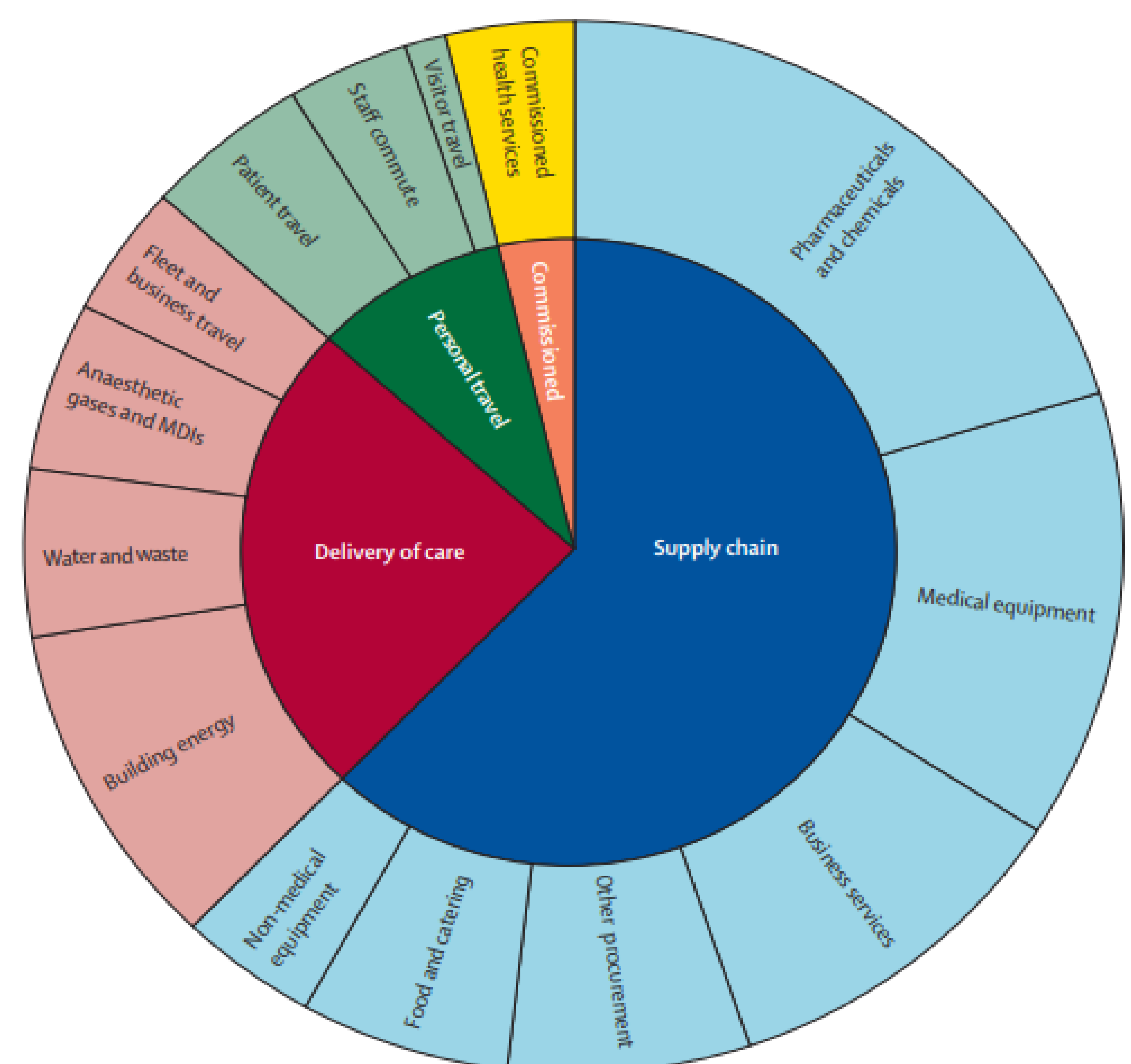


Figure - Contribution of different sectors to the greenhouse gas emissions.
* MDI- Metered Dose Inhaler. [5]

Extra challenges

The particular impact of Climate change on persons with Spinal Cord injuries

- . **Poikilothermia management:** Cooling vests; Stay in the shade; Have in-hand water bottles
- . **Managing outdoors exposure restrictions:** Offer indoors exercise/activities; Adjust times for outdoor activities
- . **Managing dermatological impact due to floods & heat/sun exposure:** Optimise clothing and skin covering; More regular skin checks
- . **Managing compromised access to healthcare:** Telehealth; Monitor own medicines emergency stock levels.
- . **Managing power failures:** Solar chargers for wheelchairs, mobile phones, lighting

ISCoS Special Interest Group Climate and Health is developing a Statement on Climate and Health for Persons with Spinal Cord Injuries. This will contribute to optimize the prevention, management and adaptation to the continued impact of climate change in this population.

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