



Blog of the Month

Environmentally Sustainable Palliative Care

Dr Sarah Foot

Sustainable healthcare is about our ability to maintain our service into the future¹. The three pillars of sustainable development are environmental, social and economic sustainability. So be assured, this blog post isn't full of economically unsustainable solutions to environmental problems. Sustainable healthcare though, isn't that for young, hippy doctors, working in energy intensive specialities? It's easy to think it's not for me, when my focus is on the patient with life limiting conditions in front of me, or my hospice service which is quite small in the grand scheme of healthcare impact. But please read on; as sustainable healthcare is for every single person involved in healthcare, no matter the speciality.

Why does it matter?

Climate change poses the biggest threat to human health this century². As we exit the COVID pandemic, exhausted, burnt out and jaded, it feels hard to comprehend this even bigger threat. It isn't just the obvious respiratory problems from local air pollution, it's a changing health landscape that we will need to adapt to. Figure 1 shows the wide-ranging impacts on health. Many of the resulting presentations – the fatal asthma attack or the PTSD from migration or severe weather events – won't impact palliative care. However, all physicians are called to "Do No Harm", and if by providing an unsustainable service to our patients today, that will contribute to climate change, and impact their children and grandchildren – how can we say we're doing no harm? Or how can we say this is a fair allocation of resources?



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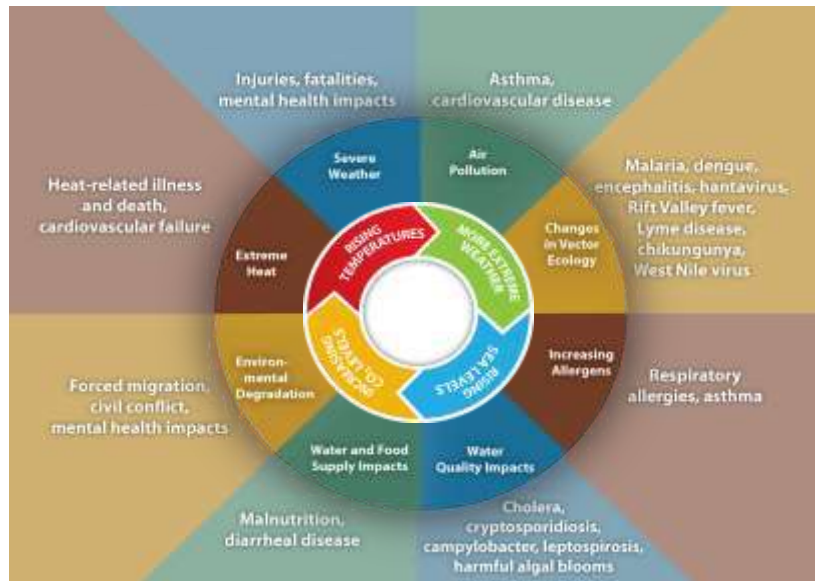


Figure 1- Impact of Climate Change on Human Health³

The Impact of Healthcare⁴

Some not so fun facts about healthcare:

- Around 5% of the UK's car journeys are related to healthcare.
- NHS providers in 2016/17 generated nearly 590,000 tonnes of waste.
- In 2017 the total water use for health and social care was estimated at over 2.23 billion cubic metres.

Obviously, lots of that comes from resource-intensive areas such as dialysis units or operating theatres. However, the graph below (Figure 2) shows 12% from pharmaceuticals, 16% from electricity and fuels, and 3% just from metered dose inhaler usage.



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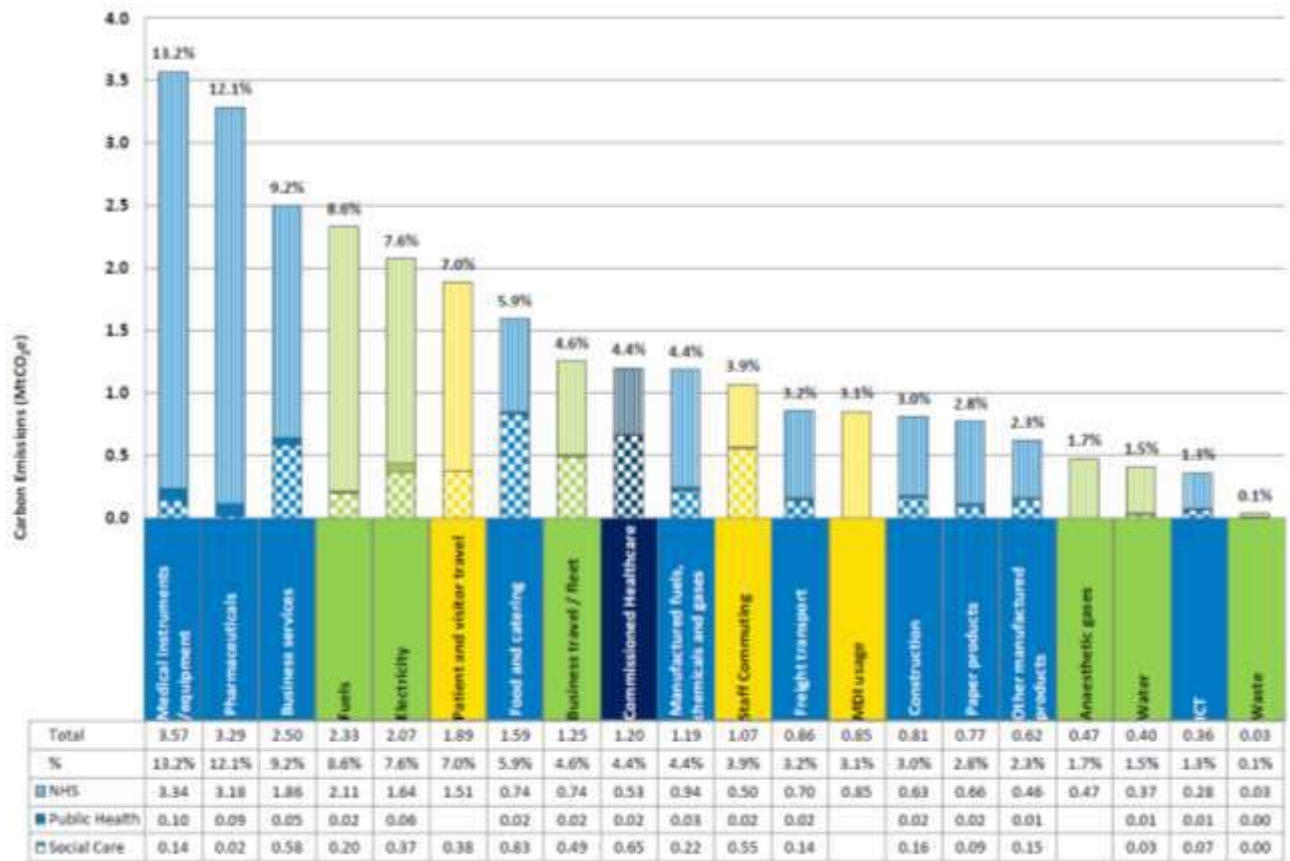


Figure 2 - Health and Social Care detailed breakdown of carbon emissions 2017⁴

Fortunately, the NHS has become the first healthcare system in the world to commit to becoming carbon net zero by 2040, with an 80% reduction in emissions by 2030⁵. We can't leave the work just up to managers to invest in electric vehicles or solar energy. The graph above shows that the carbon footprint comes from multiple different sources. As clinicians we are the experts in patient care; we are perfectly positioned to contribute to reduction in carbon footprint whilst ensuring patient care doesn't suffer.



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What are the solutions?

Whilst this isn't the place for a long list of specifics on how to make palliative care more sustainable, we can identify changes to care that improve outcomes for patients whilst considering the environmental, social and financial impacts (Figure 3). The SusQI framework helps incorporate these considerations into every quality improvement project we do.

$$\text{Value} = \frac{\text{Outcomes for patients and populations}}{\text{Environmental + social + financial impacts (the 'triple bottom line')}}$$

Figure 3 - Sustainable value in healthcare¹

What might this look like in palliative care? An example is advance care planning; it improves outcomes for patients but also reduces inappropriate treatments and hospital attendances. This saves carbon on patient travel, saves both time and energy for both the patient and a relative on travel and saves the hospital money with resource use. Advance care planning has huge scope for adding sustainable value to healthcare. By educating others involved with patient care the impact can become even wider.

Or de-prescribing: just the simple act of discussing with patients which medications they use, and which are filling up cupboards can have a huge impact. I've previously worked for ambulance services and I have many memories of shoeboxes and kitchen cupboards stuffed full of repeat medications patients didn't want to admit they no longer take. At the recent Palliative Care Congress there were two sessions dedicated to antibiotic use and de-prescribing. I think the take-home message is that there isn't a one-size-fits-all solution, but that doesn't mean we can't consider these issues when caring for patients.



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There are other ways to reduce healthcare's impact. Maybe some of your community team can swap to electric bikes, or members of a team can share a ride to work? Waste streams can be assessed: can we reduce waste from single use plastic or compost food waste from the staff room? Maybe we can consider where we source our hospice menu from, or reduce the offering of carbon-heavy ingredients such as beef?

There are many different solutions that simply require a fresh look at the systems we have in place. In my current trust we have a staff "Green" group – supporting staff in sustainable projects such as swapping single use facemasks to reusable or having a sustainable voice in the design of our new hospital building. Could your hospital, hospice or university have a green group – connecting, educating and encouraging sustainable healthcare?

How about wider than our own scope of healthcare? Doctors have a trusted voice in the public arena. In my hospital area doctors have been campaigning against a new road tunnel under the Thames. New road connections will lead to increased air pollution, negatively impacting the population. Instead, we need better walking, cycling and public transport links.

Conclusion

Sustainable palliative care isn't instead of or in addition to the care we already provide. It's not to the detriment of the patient in front of us, rather it's about considering the best care for them in the context of the best care for the community we work in. Every decision we make has an impact on others. How does our care now impact our patients of the future?

Further information

www.sustainablehealthcare.org.uk - find resources and courses on delivering sustainable healthcare.



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References

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