

10 years to green the NHS and the health sector



How do you feel about the words “climate emergency”? Clearly, we are in a terrible mess and in danger of reaching points of no return for several planetary boundaries.¹ Although some organisations are feeling great about signing up to targets for Carbon Zero by 2040, the Intergovernmental Panel on Climate Change is clear that the aim should be for 2030.² That is only 10 years away, which is very scary. Eco-anxiety is a rational response to this crisis, but with shared recognition of the problem comes hope for meaningful action. It is amazing to be going to meetings now in which the climate emergency is widely accepted, to discuss plans on how to get to net zero.

Everyone can now start to be honest about the scale of the changes needed and the pace at which they must happen. Until now, it has felt as though a game is being played to engage as many people as possible by encouraging everyone that every little helps. This is not a lie, but it is also not the whole truth. It is vital that everyone engages and makes changes to their own lifestyles, but that alone will not be sufficient, and discussing whether to buy soy or oat milk can distract people from bigger issues. Much more needs to be done, and very quickly, to retain a chance of regenerating the planet as a healthy place for humans and the rest of life on earth.³ For this to happen, substantial organisational and government action and resources are needed, quickly (panel).

The UK National Health Service (NHS) has now set up a campaign titled For a Greener NHS, and it is starting to make a net zero plan. 10 years are left to make considerable changes to how people live in the world, so what needs to be done? And what can all health professionals do to help this happen? First, health professionals must speak out. As widely respected members of society, you must use your voice to call for immediate political and institutional action on the climate emergency and demand that resources match promises and targets.

Second, sustainable health-care systems must be developed that provide health care for patients today without compromising health and care provision in the future. In order to know what is sustainable, researchers and policy makers must analyse in detail the full resource use—or triple bottom line—of all actions to inform

prioritisation. The three elements of the triple bottom line are environmental, social, and financial. Financial resource use can already be measured well with the currency of money. Measuring social or environmental resources lags behind, but many people are working on these challenges, and carbon equivalent emissions can be used as a proxy for one urgent aspect of the environmental element. The Centre for Sustainable Healthcare’s four principles of sustainable clinical practice are prevention, patient empowerment and selfcare, lean systems, and low carbon alternatives.⁴ These principles help us to prioritise resource use within health care and direct us toward upstream spending, including preventive care and low carbon interventions. We are working via curriculum change and sustainable quality improvement^{5,6} to use these principles to transform specialties.

Third, system change is needed. Programmes that engage individuals are crucial, but some central shifts are also required. If a health system needed suddenly to operate in Chinese to understand evidence, clinical guidelines, and the rules, would individual managers and clinicians be asked to learn Mandarin? Or would central parts of the system be translated? A system change would mean agreeing ways to measure carbon and thread these throughout research, evidence reviews, quality-adjusted life years, and budgets. Currently, millions of pounds are being spent on interventions that appear to have little value to patients, whether they are measured in terms of additional life-years or quality of life. Making system changes would mean questioning the allocation of resources across the whole health system, including public health, with better information presented in ways that can allow discussions about what we all want to prioritise.

For more on the **Centre for Sustainable Healthcare** see <https://sustainablehealthcare.org.uk/>

For more on **For a Greener NHS** see <https://www.england.nhs.uk/greenernhs/>

Panel: Key points

- The health-care system needs to be changed radically within 10 years around the world
- In an emergency, people have to behave differently and act swiftly
- Some system-wide changes should be made centrally
- People working on sustainable health care know what some of these changes are; now they need to be resourced
- Further resources are required to discover other necessary changes that are not yet known

Some of what is needed to help change health care is already known and is simple and within the direct control of individuals and organisations. First, individuals and organisations in the health-care sector can immediately remove investments from fossil fuel companies. Second, we can switch energy suppliers to those that use renewable energy, and third, we can minimise flying. Finally, health-care organisations can use their huge purchasing power to require these three factors from suppliers of the goods that they purchase, including medical devices and pharmaceuticals. None of these initiatives have any effect on health care.

Other changes are more complex and concern the health system and the care it provides. Resources must be shifted to focus on and fund prevention and better public health, using existing evidence. A programme of teams led by health-care professionals on sustainability, equity, and value must be established to determine how carbon emissions can be reduced to net zero by 2030. In addition, resource use must be measured in a detailed way in health care. This challenge includes working with research funders, industry, and other providers and users of evidence—such as Cochrane, the UK Health Technology Assessments, and the UK National Institute for Health and Care Excellence—to include carbon from the start of the process, rather than retrofitting an understanding of where carbon is in the system. A centrally coordinated carbon footprinting system could be set up for service line accounting using Patient Level Information Costing Systems within the NHS. The UK medical community must determine how much ill health can be prevented with upstream interventions that are already known and how much health care is low value, and it must match carbon to service lines throughout the NHS. Until these initiatives are achieved, how much carbon can be cut from the system will remain unknown. They must therefore be done as quickly as possible, before working on the rest of the footprint to get to net zero.

It must also be remembered that this is just for the UK—a small archipelago with only 67 million people. The UK medical community must work with others globally to achieve the big shifts above within 10 years. Furthermore, this outline is only for health care, and there must be scope to learn from other sectors that are trying to do the same. There will be similar problems to solve across sectors, such as measurement, behaviour change, regulation, and governance. Groups should be convened

to focus on these factors immediately and to give them sufficient resources; these initiatives cannot be adequately designed or implemented by expert volunteers in their spare time. It must also be acknowledged that, alongside efforts to mitigate the worst effects of climate change and other effects on our environment, such as biodiversity loss, soil degradation, and water scarcity, we will have to cope with what is already happening. Physical and mental health effects of the climate emergency are already taking their toll, and the most vulnerable who find it hard to adapt must be helped.

Let's take the first year of our 10 years to develop a great plan backed by adequate resources. The Centre for Sustainable Healthcare has been working in this area for 12 years, alongside several other organisations including the NHS Sustainable Development Unit, the UK Health Alliance on Climate Change, and the *Lancet* Countdown. We have started strategic workstreams and have experience in making changes in practice with teams on the ground. We will work with other organisations to support the NHS to get to zero carbon as soon as possible, as we have started to do in some specialties.⁷ Let's start to behave as though we were in a climate emergency and our future is at stake. We are, and it is. Taking action now is the best way to alleviate the sense of powerlessness that can come with eco-anxiety. It is also the best way to keep safe.

I declare no competing interests.

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For the NHS Sustainable Development Unit see <https://www.sduhealth.org.uk/>

For the UK Health Alliance on Climate Change see <http://www.ukhealthalliance.org/>

For the *Lancet* Countdown see <http://www.lancetcountdown.org/>