Sustainable & Green Strategies

Simona Agger Ganassi
From a Polluting Healthcare Sector to Environmentally Conscious Healthcare Systems: Actions, Strategies, Actors to Make it Possible

Cale Lawlor, Alessandro Gallina, Cristina Pricop et al.
Health Systems Decarbonisation: The Essential Shift

Teja Kikelj Mermal
International Solutions Reduce Healthcare’s Damaging Environmental Impact

Will Clark
Why Climate-Smart Healthcare Must Be a Priority

John Nosta
The Signal-to-Noise Ratio in Medicine: Leveraging Artificial Intelligence to Elevate Care and Job Satisfaction

Henrique Martins, Anderson Carmo, Laurens Asamoah
Towards the European Electronic Health Record Exchange Format: XpanDH Project Support and Risks of a Delayed Regulation on the EHDS
Leveraging Digital Technology to Make Healthcare Sustainable

Insights on making healthcare and hospitals more sustainable and strategies to make them more efficient and capable of leveraging digital technology to pursue these goals.

key points

- Globally, the healthcare sector is responsible for 5% emissions. If healthcare was a country, it would be the fifth largest emitter.
- ECHAlliance - The Global Health Connector is a membership organisation that works to connect, convene, amplify, and accelerate digital health stakeholders. We recognise that one of the key topics to work on globally is sustainable healthcare.
- One of its many endeavours is the Green Health initiative, which brings together stakeholders to work towards decarbonising health systems.
- The goal of sustainability can be realised through the use of digital technology and Artificial Intelligence.

Introduction

In the race to net zero, healthcare is working on greenhouse effects and making attempts on a very high level. Globally, the healthcare sector is responsible for 5% of emissions, more than aviation. If healthcare was a country, it would be the fifth largest emitter. Emissions from the healthcare industry are comparable to emissions from some 500 coal plants. However, while coal power plants can be closed down, it is impossible to shut down hospitals.

So, how can healthcare/hospitals be more sustainable? How can they become more efficient, and how can digital technology be used for this endeavour? ECHAlliance - The Global Health Connector is a membership organisation that works to connect, convene, amplify, and accelerate this process. We are able to provide our members and partners with a platform to meet, share and learn from each other about how to decarbonise the healthcare system, build more climate-resilient healthcare facilities or develop the green skills of healthcare professionals.

Sustainability for Healthcare: Digital Tools

Digital technology and Artificial Intelligence (AI) in healthcare are being applied on a much broader scale than before. The technology can be used to improve patient care in a sustainable fashion.

Sustainability is a broad term. What healthcare systems need to focus on is action. Hospitals and hospital leaders need to act as soon as possible with different measures that include looking at and thinking about buildings, energy, and waste and evaluating the supply chain, where most healthcare emissions come from. Healthcare leaders need to be more aware of the
choices they make and the effects of those choices on the carbon footprint.

**Achieving Net-Zero Health Systems: What’s Working and What’s Not?**

The U.K. health system was the world’s first health system that aimed to build net zero requirements into legislation. One of the key things within this legislation and now within the policy to the net zero agenda is that every organisation that supplies the NHS must have a carbon reduction fund. However, after legislation comes policy, procedure, and, more importantly, change in culture and behaviour.

The fact that the net zero initiative is integrated into the policies is excellent progress. In terms of funding, more resources are being allocated specifically for net zero efforts. It is important to consider the broader landscape of government involvement. There’s a responsibility to decarbonise the supply chain, which amounts to approximately 70% of greenhouse gas emissions.

Carbon quantification is very difficult, yet it does not need to be that complicated. Some interventions can help companies with carbon quantification through machine learning and AI. The urgency of net zero is a huge challenge, but there are many other pressing challenges in the healthcare system, whether in the U.K., Europe, or elsewhere. The goal is to ensure the net zero is centre stage by showing healthcare leaders how to look for efficiencies. Most healthcare organisations have a healthcare pathway model that is effective and efficient for the patient. But net zero is a complex topic as it covers many areas, from patient pathways to energy infrastructure. Yet there are also several solutions. In this new digital era, it is imperative to utilise these solutions to protect the planet.

**Conflict of Interest**
None.

Sustainability is a broad term. What healthcare systems need to focus on is action.