Understanding sustainability

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Sustainability is a vast topic with many areas to consider and often a lot of complicated jargon, so getting a full picture of what the term really means, and how it works in practice, can be daunting. It is certainly true that the topic can sometimes prove quite challenging, but when explained simply, the basic premise is straightforward.

Sustainability is rapidly becoming one of the biggest considerations of our time, and now sits at the forefront of decisions made in every sector, including healthcare. If we're to ensure a fair and healthy future for everyone, we all need to be aware of what it means to be sustainable.

Sustainability: the basics

In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." However, current human activity, including burning non-renewable fossil fuels like oil, coal and gas, means the climate change is happening rapidly and soon the planet will be unable to support the current generation, never mind the generations of the future. Additionally, humanity currently uses the equivalent of 1.75 Earths to provide the resources we need and to absorb our waste. Therefore, we are living unsustainably.

What is climate change?

'Climate' is the average conditions of the atmosphere – including temperature, rainfall, sunshine and wind speeds – over a period of many years (not to be confused with 'weather', which are average conditions over a shorter period of hours or days).

The climate – these average conditions – is gradually getting warmer. This is known as global warming. Global warming is happening because human activities





are responsible for increasing volumes of greenhouse gases (GHGs) in the atmosphere. These heat-trapping gases include carbon dioxide (CO_2) , methane and nitrous oxide, which are created during everything from manufacturing and agriculture to waste management and transportation.

These gases are naturally trapped within the Earth's atmosphere and are necessary to keep the planet warm and sustain life on Earth. This is called the greenhouse effect. However, human activities mean there are now too many GHGs trapped in the atmosphere, and the planet is getting warmer, which has led to climate change.

What are the consequences of climate change?

The impact of climate change will be felt by everyone around the world. Rising temperatures will lead to extreme weather events such as drought, flooding and wildfires that will threaten lives and livelihoods. Food and energy supplies will be disrupted, healthcare systems will be put under extreme strain, and large populations will be displaced as their homeland becomes inhospitable. Inequality will deepen as the cost of living increases, and the lifestyles we enjoy right now will become untenable.

In August 2021, the IPCC (Intergovernmental Panel on Climate Change) released a report that said this rapid climate change represents a 'code red' for humanity. This is why climate change is often called a climate crisis.

Scientists agree that in order to avoid the worst impacts of climate change, we need to limit the global warming increase to below to 1.5°C.

Global action for sustainability

Mitigating the climate crisis and creating a sustainable planet is a global effort, and governments, non-government organizations (NGOs) and corporations around the world have set targets to help limit global warming. Key initiatives include:

The EU Green Deal

The European Union's (EU) Green Deal is the EU's €1 trillion growth strategy to transition the EU economy to a sustainable economic model. Presented in December 2019, the overarching objective of the EU Green Deal is for the EU to become the first climate neutral continent by 2050, resulting in a cleaner environment, more affordable energy, smarter transport, new jobs and an overall better quality of life.

The Paris Agreement

The Paris Agreement was signed in 2015 by 196 countries during COP21 (the 21st Conference of Parties). This legally-binding international treaty commits governments to limiting global warming to 'well below' 2°C, with every effort made to limit the increase to 1.5°C. The most recent Conference of Parties, COP26, saw the creation of the Glasgow Climate Pact, designed to 'keep 1.5 alive'.

Science Based Targets Initiative (SBTi)

The Science Based Targets Initiative (SBTi) is a collaboration between multiple global organisations, which defines and promotes best practice for emissions reductions in line with climate science. Science based targets show companies and organisations how much and how quickly they need to reduce their greenhouse gas emissions to prevent the worst effects of climate change.

Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are a collection of 17 interlinked global goals designed to be a 'blueprint' to achieve a better, more sustainable future for all. The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by 2030.

The economic case for sustainability

Protecting the planet and ensuring the wellbeing of future generations is undoubtedly the key driver of sustainability, but for business and industry it makes good economic sense, too.

Reduced costs

Businesses that seek to limit their emissions will save money on energy costs. This is particularly relevant as energy costs will only climb higher in the future due to the market volatility caused by climate change. The same is true for businesses that take action on their resource consumption, material use and waste arisings.

Forward-thinking businesses are increasingly subscribing to circular economy principles. Instead of the traditional 'take, make, waste' model of consumption, a circular economy aims to keep materials in use for as long as possible through sharing, reuse, repairing and recycling. This reduces the resources, emissions and costs needed to create new materials, and limits the volume of waste that ends up in landfill.

Greater investment and business opportunities

As sustainability becomes an increasing global focus, more and more investment, partnership and purchasing decisions will depend on a company's green credentials. Investors want to see evidence of a company ensuring its long-term success through sustainable activities, while other organisations throughout the value chain will increasingly choose to do business with companies whose values align with their own. As such, embedding sustainability into operations makes a business more attractive to growth propositions.

Competitive advantage

Consumers are becoming increasingly aware of the climate crisis and are now seeking out brands and companies with demonstrable sustainability commitments. Price is no longer the most important driver of consumer behaviour – companies need to have 'green appeal'.

How companies communicate sustainability

As consumers increasingly favor environmentally-friendly options, more and more companies are making sustainability part of their branding. This might include launching 'green' product ranges, or making public commitments to targets around carbon reduction. In many cases, these efforts are valid.

Some companies, however, are guilty of greenwashing. This is a form of marketing spin in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims and policies are more environmentally-friendly than they actually are. Because sustainability is such a vast topic, it can sometimes be difficult to determine which claims are legitimate and which are exaggerated.

For example, a company might claim that its product is responsible for 'zero emissions', when in fact it does create emissions, but the company then offsets these emissions by investing in tree-planting initiatives. Or a company might release a line of plastic-free products and claim that they are 'more eco-friendly' than the existing version, when in fact more energy (and therefore more emissions) is being used to manufacture the item without plastic.

Consumers need to be vigilant in the face of green claims from companies, and certainly never take anything at face value. The European Commission is currently working on legislation that will require companies to substantiate their environmental claims, which will make greenwashing easier to spot.

In the meantime, consumers can take the following actions:

- Read the small print bold declarations are often accompanied by easily missed disclaimers
- Approach companies on social media to ask for evidence of their claims and publicly hold them to account
- Read the company's annual sustainability report do their claims match up with their data?

Sustainability in healthcare

The world's healthcare systems account for 4% of global ${\rm CO_2}$ emissions, more than aviation or shipping.

There are a number of particular challenges in this area. Chiefly, that hospitals and healthcare facilities are very energy intensive, and that protective equipment and medical devices are often single-use. Finding solutions to these issues is complex, and efforts to reduce energy consumption and the volume of disposables are often constrained by the need to maintain effective operations and manage infection control.

However, the purchasing power of healthcare systems is significant, and we are seeing an increasing tendency towards the sustainable purchasing business case. More medical manufacturers, for example, are conducting Life Cycle Assessments (LCAs) on their products. This is an analysis of the environmental impact of a product from its very inception right through to its disposal.

Environmental Product Declarations (EPDs) are also

becoming more common, especially as tenders within the EU increasingly include requirements for environmental credentials. An EPD is an independently verified and registered document that communicates transparent and comparable information about the LCA of a product in a recognised and credible way.

The interdependence between healthcare and sustainability

As demonstrated by the UN's SDGs, climate change and global healthcare are closely related, and this provides a unique opportunity to act in a way that will both mitigate climate change and have a positive impact on human health. For example:

- Reducing CO₂ emissions and climate pollutants from fossil fuels would prevent millions of deaths from respiratory disease.
- Reducing meat consumption will be a major part of driving down CO₂ emissions. Eating less meat and more fruit and vegetables would also result in reductions in heart disease, obesity and cancer.
- Mitigating climate change will reduce the risk of events such as heatwaves and flooding, which can exacerbate the spread of infectious diseases.

The way forward

Sustainability is a critical priority for everyone, and the consequences of climate change are very sobering. However, our global fate is not yet sealed. Alongside national targets and government commitments there is a rich industry of innovation, exploring solutions and technologies that will help to limit the global temperature rise.

There are also many communities of activists and individuals taking steps to live more sustainable lifestyles, which is something everyone can do. Whether it's using the car less frequently, reducing your meat consumption, switching to a green energy provider or using fewer plastic products, everyone's efforts add up to change and send an important message to those in charge that climate action is needed urgently.

Learning more

The information given here is intended to provide a brief overview of the topic of sustainability and its place in the healthcare sector. There is much, much more to learn. Below are links to useful starting points, as well as references to different matters mentioned throughout this article.

Useful links

What is climate change? – United Nations
The science behind climate change – Met Office
Why is sustainable living important? – WFF
What is sustainable development? – Sustainability Guide
What can businesses do to be more sustainable? – UN
Global Compact

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