

Achieving sustainability safely

Prioritising the safety of patients in a sustainable way



The NHS was the first healthcare organisation worldwide to set an ambitious net zero greenhouse gas emissions target by 2040. It aims to achieve this via an 80% reduction in emissions controlled by the NHS (the NHS Carbon Footprint) between 2028

and 2032, followed by a further 80% reduction of emissions they can influence (the NHS Carbon Footprint Plus) between 2036 and 2039. All of these targets can only be realised with the support of NHS suppliers. The message is clear to all of the NHS's partner organisations - we must accelerate our sustainability efforts to support the health service.

At Mölnlycke, we are aligned with the NHS and have been driving our own decarbonisation agenda for many years. We are committed to net zero by 2050 at the latest, in line with the NHS targets for indirect emissions. In addition, we are launching increasing numbers of innovative sustainable solutions to support the NHS's agenda.

The importance of emissions reduction for healthcare

Estimates suggest that the NHS in England is responsible for 4-5% of the nation's greenhouse gas emissions (NHS England 2020). Emissions have both direct and indirect health consequences. Air pollution is considered to be the biggest environmental threat to health in the UK with up to 36,000 deaths a year attributed to long term exposure (PHE 2019). More indirectly, climate change as a result of greenhouse gas emissions increases the occurrence of extreme weather, heat stress, and illnesses previously only found in tropical regions (WHO 2021).

The connection between patient safety and sustainability

Delivering care to patients currently consumes non-renewable resources and creates greenhouse gas emissions, every patient interaction has a carbon footprint. Consistently achieving optimal patient outcomes can get patients well sooner, eliminating the need for further care. Conversely, patient safety issues can create complications, which increase requirements for care. Healthcare providers are therefore helping to reduce their emissions by getting patient care right the first time.

Creating a net zero NHS will require solutions that account for both the immediate and measurable carbon footprint reduction and protect optimal patient outcomes. At Mölnlycke we have responded to this challenge with the introduction of BARRIER® ISCC certified single-use surgical drapes to our portfolio and are expanding this range into staff clothing in 2023. Our innovation replaces fossil-based plastic with renewable bio-based polymers, which measurably reduces the carbon footprint of each single-use item (Ramboll comparative). Crucially, the performance is identical to Mölnlycke's previous fossil-based drapes, ensuring infection control is not compromised and therefore optimal healthcare outcomes are protected. This is one example of several where Mölnlycke are investing in circular solutions – using

renewable, recycled and recyclable materials, to deliver the same value while consuming less resource.

The role of value-based procurement in reducing emissions

Prioritising patient safety is the number one concern for any health system, and all procurement decisions should be made with this core value. It is well established that better value can be delivered by a higher-quality, higher unit price item, if it can demonstrate measurable improvements in health outcomes compared to a standard item (Gerecke et al 2020). This is because it can prevent the need for further care, reducing overall costs of treating that patient.

To create a net zero NHS, emissions must also be considered. Similarly then, a higher quality, higher unit emissions item may be the better procurement choice, but only if it can demonstrate measurable improvements in health outcomes, such as preventing complications. Prevention of poor outcomes that result in further treatment can save both cost and greenhouse gas emissions, and therefore should be a priority for value-based procurement.

With this in mind, selection of single-use or reusable devices is not as obvious as it may initially appear. Reusable devices, for example drapes and gowns, can have a lower per-use carbon footprint as their manufacture footprint is spread over the number of uses. Laundering reusable drapes and gowns reduces their ability to prevent the transmission of microorganisms, as a result of abrasion and damage during wear and laundering of the fabric (Sovani 2017). This could lead to higher infection rates and therefore increase cost and environmental impact, while adding pressure to an already strained NHS workforce. Furthermore, we must consider the full impact of a reusable drape or gown's life-cycle, repeated rounds of transport and laundry both generate their own emissions.

By contrast, a single-use drape or gown may initially appear to have a higher carbon footprint, but this can encompass the full life cycle from manufacture, transport, use and disposal in a single figure. In addition, single-use products meet a guaranteed performance standard for their use (ES 2019), so there is no degradation and increase of infection risk over time. As shown with BARRIER® ISCC certified single-use surgical drapes, measurable carbon footprint reductions can also be

achieved compared to former products (Ramboll comparative).

This is just one example of how the decisions we make now will impact the NHS's long-term emissions output: NHS England has noted through its plan that it wants to, 'Continuously improve with an increasing level of ambition'. Procurement teams must consider these ambitions along with a measurable outcome when evaluating cost and value.

A move towards the world's first net zero health service

The NHS is serious about meeting its commitment to become the world's first net zero health service. To do so, the NHS and suppliers must work in partnership to ensure that prevention and patient safety remains at the core of all procurement decisions. It is crucial that clinical and procurement teams consider value in terms of safety, cost and environmental impact in order to future-proof the system – the true objective of the sustainability agenda. ■

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