

BEDFORD HOSPITAL REDUCED THEIR CARBON FOOTPRINT, LEAVING A LASTING IMPRESSION FOR THE NEXT 10 YEARS

Bedford Hospital (BH), part of Bedfordshire Hospitals NHS Foundation Trust set themselves the objective of finding a safer and compliant alternative to their existing sharps management and disposal system that also met the 'Aseptic Non Touch Technique' (ANTT) requirements to help prevent infections in their healthcare setting. The hospital also found that they were able to make significant reductions to their carbon footprint through the implementation of alternative systems, and so set themselves additional targets to achieve.

THE CHALLENGE

In 2019, BH's Infection Prevention and Control (IPC) team were looking to improve the management and disposal of the sharps waste stream to support Clinical teams whilst also following the ANTT technique during patient procedures. The team were previously using a single-use plastic container system which came with a number of drawbacks that put end users and patients at risk.

Alongside the required improvements in safety and compliance, the IPC team, along with other Trust stakeholders, were also looking for a solution that would provide sustainable benefits, helping the Trust to reduce their carbon emissions.

Bedford Hospital identified the need for multiple stakeholders to be involved in the project to ensure a smooth implementation process and that all relevant teams significantly benefited from the new system. The project team contained stakeholders from Environmental Sustainability, Waste Management, Procurement, and Facilities Management alongside the Infection Prevention and Control team.

THE SOLUTION

After it became apparent that the move from single-use plastic containers to a reusable system would provide benefits to all stakeholders and would enable the Trust to make significant improvements in the areas of safety, compliant clinical practice, and sustainability, the hospital approached Sharpsmart in August 2018 to help achieve their identified objectives. Alongside this, stakeholders also recognised that they would see significant cost reductions in relation to the management and disposal of sharps waste.

Sharpsmart worked closely with the identified project team and other hospital stakeholders across a three-month trial period to ensure that all frontline teams and end users of the system approved of its implementation and were happy that there would not be any negative impacts on patient care.

The Sharpsmart team also wanted to ensure that the site's Materials Management team had the capacity to actively keep up with the replenishment and efficient movement of containers, ensuring that new containers were delivered to clinical areas in a timely manner so as to not disrupt or negatively impact the new process and patient care.

Following a successful trial, the reusable containment system was fully introduced to Bedford Hospital in June 2019, providing all Clinical teams with a safer sharps management and disposal system in line with ANTT requirements. Not only did the system provide the sought-after improvements in safety and compliant clinical practice, but the teams quickly saw both the cost and environmental benefits. The fully managed process enabled the hospital to reduce waste disposal costs and enhance staffing and time efficiencies whilst also reducing its carbon footprint.

THE RESULTS

Following the successful implementation of the Sharpsmart reusable container system, the hospital have reduced their carbon footprint by 58 tonnes per year and have also diverted 10.2 tonnes of plastic from high-temperature incineration.

This has accumulated to the removal of over 20,500 kilos of disposable polypropylene containers (single-use containers) from the sharps waste stream, all of which would have been destined for incineration, thus preventing 116 tonnes of CO₂e.

Due to the inherent durability of the system, with each container having a life span of at least 10 years, no further Sharpsmart containers will be required to be manufactured for the hospital until the year 2029. This will mean that a further 464 tonnes of CO₂e will be prevented, giving Bedford Hospital a full life cycle reduction of 580 tonnes of CO₂e.

SINGLE-USE CONTAINERS REMOVED*	CO ₂ REDUCTION	PLASTIC DIVERTED FROM HTI**
20,500 kilos	116 tonnes	10.2 tonnes



Left: Stakeholders from Bedford Hospital, part of Bedfordshire Hospitals NHS Foundation Trust, proudly collecting their Green Apple Environment Award, alongside Sharpsmart Ltd Contract Manager, Ben Martyn. Right: Needle being disposed of into a reusable Sharpsmart container. Staged photoshoot, 2019.

*removal of polypropylene containers from the sharps waste streams.

**plastic diverted from high-temperature incineration.

If you would like to find out how Sharpsmart can help you to reduce your sites carbon footprint, please contact the Sharpsmart team on 01388 810310 or email customerservice@sharpsmart.co.uk

