

GREAT WESTERN HOSPITALS NHS TRUST RECOGNISED AT THE 2021 GREEN APPLE ENVIRONMENT AWARDS

Great Western Hospitals NHS Trust (GWH) is a 400-bed hospital serving a population of 300,000 in Swindon and surrounding areas. In 2018, whilst scanning the market for a safer alternative to their existing sharps management system, they recognised an opportunity to reduce carbon emissions generated from the incineration of plastics by utilising a reusable container system.

THE CHALLENGE

The team at GWH had the objective of improving the safety and compliance of their sharps management system. The Trust had found that the existing single-use plastic container system came with inherent drawbacks that included the requirement for self-assembly by clinical staff and the manual use of temporary closures.

Whilst searching for alternative solutions, the Trust found that potential new partners were able to provide additional benefits with their systems, including the ability to reduce carbon emissions, a benefit which received tremendous backing from board-level stakeholders. Once it was understood that there were additional sustainable benefits available when switching to a new sharps management system, GWH developed their objectives to include the aim of reducing their use of single-use plastics in line with NHS England and NHS Improvement guidance.

The Trust identified that within the clinical resource supply chain, single-use sharps containers were a major source of plastic consumption and disposal. On an annual basis, they were purchasing 17,110 single-use sharps bins, equating to 10.3 tonnes of single-use plastic and the generation of 65.9 tonnes of CO₂e through both the manufacture and subsequent incineration of the containers.

THE SOLUTION

The Trust reviewed alternative sharps disposal options, with a prerequisite that the reusable container system must be safer than their current system and compliant with infection prevention measures.

Following a thorough review of the available alternatives, the Trust appointed Sharpsmart as their waste management partner because of their safety, compliance, and sustainability credentials.

Sharpsmart's containers come fully assembled without need for manual assembly by clinical staff, and the built-in safety tray inhibits hand entry into the container, limiting access to the contained waste, meaning that there is no need for continuous manual locking until the container is full. The containers' inherent safety features would enable the Trust to overcome the current risks posed by the single-use container system.

Alongside the safety features, the reusable containers would instantly reduce the number of single-use plastics that the Trust would be required to purchase for sharps waste disposal, and all contained waste would be treated via a more sustainable route, in turn diverting sharps containers from high temperature incineration.

In late 2018, to help ensure all recognised objectives could be achieved with the new sharps management system, a cross-functional project team was assembled with representatives from Procurement, Infection Prevention and Control, Estates and Facilities, and Clinical leads to support a trial of the new system.

After a successful trial, the reusable container system was fully introduced to the Trust in June 2019, with the Sharpsmart team working closely with the Trust's project team to define the most efficient sharps containment setup for all clinical areas on site, which included the efficient movement of both full and clean containers between clinical areas and the identified waste holds.

To support the safe and efficient movement of waste, Sharpsmart also worked closely with Serco Facilities Management to ensure that the number of containers distributed reflected the agreed schedule and volume of waste generated, which would help to free up vital space in clinical areas.

THE RESULTS

Moving to the reusable containment system has transformed the way that sharps waste is disposed of at GWH, and sharps containers are now a very visible part of the circular economy at the Hospital, which paves the way for future sustainability projects.

Since the introduction of the system, the Trust has significantly reduced their consumption of single-use containers by 30 tonnes (over 50,000 containers) and reduced CO2 emissions associated with sharps container consumption by 148 tonnes. This achievement was recognised by the Green Apple Environmental Awards body.

Caroline Railston-Brown, Sustainability Manager at GWH said: 'The Trust is thrilled to have won Gold at the Green Apple Awards. The reusable sharps containers have helped the Trust save not only plastic waste but also carbon emissions which is a key objective in our new Green Plan'

Throughout the first two years of implementation of this reusable containment system, GWH have realised the following environmental savings:

SINGLE-USE CONTAINERS REMOVED*	CO2 REDUCTION	WASTE DIVERTED FROM HTI**
30 tonnes (over 50,000 containers)	148 tonnes	46.4 tonnes



Left: Stakeholders from Great Western Hospitals NHS Foundation Trust proudly collecting their Green Apple Environment Award, alongside Sharpsmart Ltd Contract Manager, Guy Wing. Right: Sharpsmart container within a clinical setting. Staged photoshoot, 2019.

*removal of polypropylene containers from the sharps waste streams.

**waste 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

