

JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION TRUST RECOGNISED FOR YEARS OF SUSTAINABLE WASTE MANAGEMENT PRACTICES.

Since 2003, James Paget University Hospitals has prevented a total of **401,760 single-use plastic sharps containers** from being manufactured and subsequently disposed of.

THE CHALLENGE

James Paget University Hospitals NHS Foundation Trust (JPUH) recognised an opportunity to reduce their carbon footprint through improvements to their waste management practices. These opportunities included the conversion from single-use plastic to reusable waste containers and the introduction of new waste streams to divert waste to the most sustainable outlets available.

THE SOLUTION

The Sharpsmart reusable sharps containment system was implemented at JPUH in 2003. The Trust was the first of its kind in the UK to take the step towards reusable sharps containers in order to provide a safer, more cost effective and environmentally friendly sharps management and disposal system.

The introduction of the Sharpsmart system has vastly improved the management of waste within JPUH, ensuring a more succinct waste disposal process. The container solution provides real time, point-of-care disposal that in turn enhances staff efficiency and ensures safer disposal whilst also reducing cost and carbon footprint through improved segregation.

The long-standing partnership between Sharpsmart and JPUH has seen many positive changes to the Trust's clinical waste regulations. This has resulted in the rollout of reusable containers and other technologies to be expanded across several other waste streams in order to divert the generated waste away from high-temperature incineration (HTI) and into more sustainable outlets.

In 2017 the Trust converted the pharmaceutical waste stream to reusable containers to prevent the use of single-use packaging. In 2021, they introduced the metals recycling system to divert single-use metal instruments from HTI. The continued expansion of the partnership means that JPUH no longer require any single-use waste container systems and packaging for the following waste streams:

- Non-medicinally contaminated sharps
- Medicinally contaminated sharps
- Cytotoxic or cytostatic sharps/soft waste
- Non-hazardous pharmaceutical waste
- Single-use metal instruments

THE RESULTS

Each reusable container has a 10-year life cycle. This means that whilst the original manufacturing run of 800 Sharpsmart containers for the Trust has since been replaced (in 2011), the total of 1,600 manufactured units provided by Sharpsmart to service James Paget University Hospital has **prevented a total of 401,760 single-use plastic sharps containers from being manufactured and subsequently disposed of.**

Furthermore, the switch from single-use to a reusable system has **eliminated the manufacture of 262 tonnes of polypropylene** required to produce the single-use containers, which has in turn **reduced the Trust's carbon footprint by 1,479.36 tonnes (CO₂e).**

Prior to 2020, all medicinally contaminated sharps disposed of within the reusable containers required treatment through high-temperature disposal at 850°C. This treatment method produces an average of 1,080kg of Co₂e for each tonne of clinical waste processed.

In January 2020, Sharpsmart introduced an innovative 'non-burn waste disposal' technology that diverted 25 tonnes of the Trust's annual sharps waste stream from HTI, **further reducing the Trust's environmental impact by 12.5 tonnes CO₂e per annum.**



Stakeholders from James Paget University Hospitals NHS Foundation Trust proudly collecting their Green Apple Environment Award, alongside Sharpsmart Ltd Contract Manager, Ben Martyn.

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**

