

The Rotherham NHS Foundation Trust – Case Study covering the implementation of Sharpsmart containers within the Trust and the recent introduction of Clinismart reviewing change of practice, reduction in waste costs, carbon footprint and increased segregation. Author: June Cadman Waste Management and Environmental Services Officer



Introduction:

Sharpsmart containers were introduced to the Trust in July 2011 and provide a more health and safety, cost effective and environmentally friendly system.

Pharmaceutical Containers:

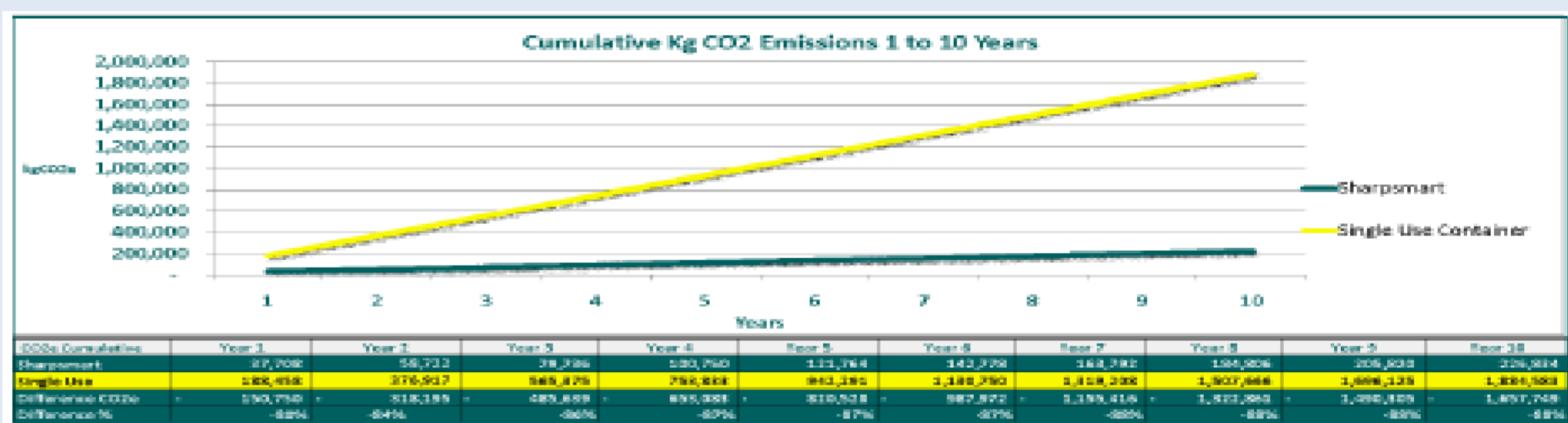
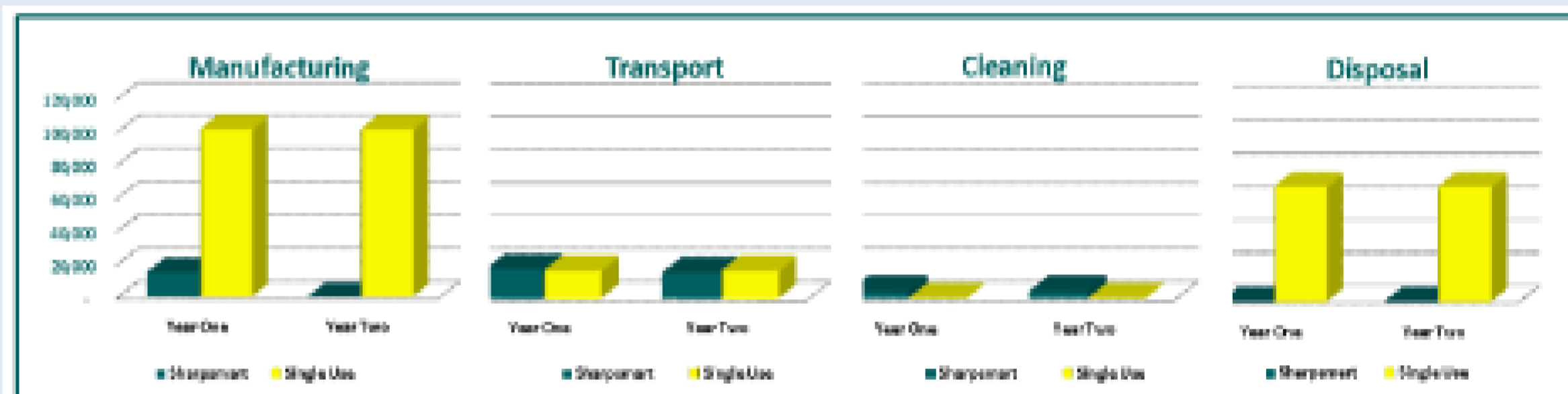
In December 2012 the Trust implemented a further Sharpsmart system, for the blue lidded pharmaceutical waste. This meant the replacement of the old POM's bins with the reusable Sharpsmart bins.

As a result this has meant there has been a reduction of 3 tonnes sent for incineration. Again there is no necessity for the continuous purchase of blue lidded pharmaceutical bins. Jointly this has given a cost saving to the Trust of 25%. Carbon footprint has been reduced by 90%



CO2 Reduction:

Introducing the Sharpsmart system has ensured a succinct sustainably managed process that services each area on a real time basis, reducing costs and enhancing staff efficiency time, ensuring a safer system of disposal whilst protecting the environment by reducing carbon footprint by 10.9 tonnes per year and diverting 13 tonnes of plastic from incineration and 1.3 tonnes of cardboard per annum. It has given a reduction in costs of 10.54%, and needlestick injuries when using the bins has fallen from 93 to 12 per annum. There has been a 91 % reduction in total carbon created from the previous process of disposal. The containers that are used have a 10 year life cycle; this will ensure that there will be no requirement to purchase containers over this period, giving a total reduction in carbon footprint of 109.00 tonnes. As the containers are recyclable, it has meant a reduction from 30,017 to 6,296 per year.



CO2e Cumulative	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sharpsmart	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Single Use	1,000,000	2,000,000	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000,000	10,000,000
Difference %	-90%	-90%	-90%	-90%	-90%	-90%	-90%	-90%	-90%	-90%

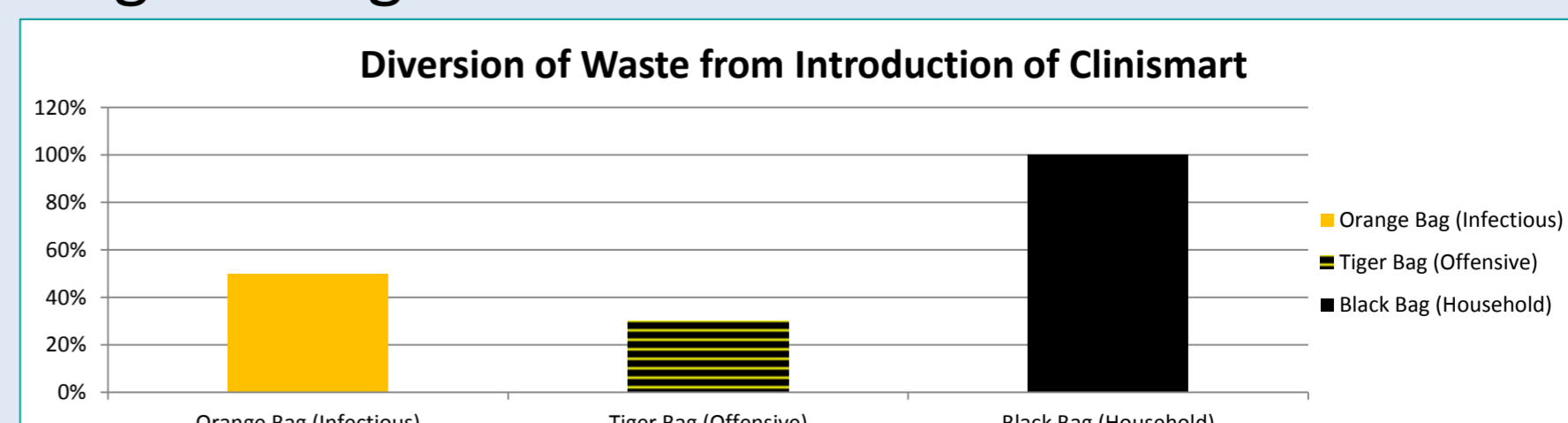


Clinismart:

In December 2012, the Sharpsmart Clinismart Bag to Bed system was trialled within 2 wards of the hospital. All clinical waste bins were removed from the Ward areas, leaving only black bag waste bins in ward areas. Bag dispensers are placed on the ward are usually next to the Danicentres. These dispensers contain small tiger stripe/orange bags.

When a clinician visits the patient, they collect their gloves and aprons and collect the appropriate colour bag depending on the assessment of the patient. All waste used at the bedside, excluding packaging waste is placed in the bag including aprons and then the bag is tied and taken directly to the sluice area. This removes all offensive and infectious waste immediately from the ward area, reducing the chance of infections spreading. During the trial of the two areas, it was found that the orange bag waste was reduced by 50%, offensive by 30%, and black bag increased by 100% and bag use in general is down by 25%. This system has now been implemented in most areas in the hospital, the main advantages being:-

- Improved patient experience
- Better Waste Segregation
- Reduction in orange/offensive bag waste stream
- More compliance to waste legislation
- Reduction in waste, reduction in costs, increased sustainability



Summary: All three systems have ensured that the hospital maintains a sustainable system for processing its clinical waste stream and ensures present and future reduction of carbon footprint.