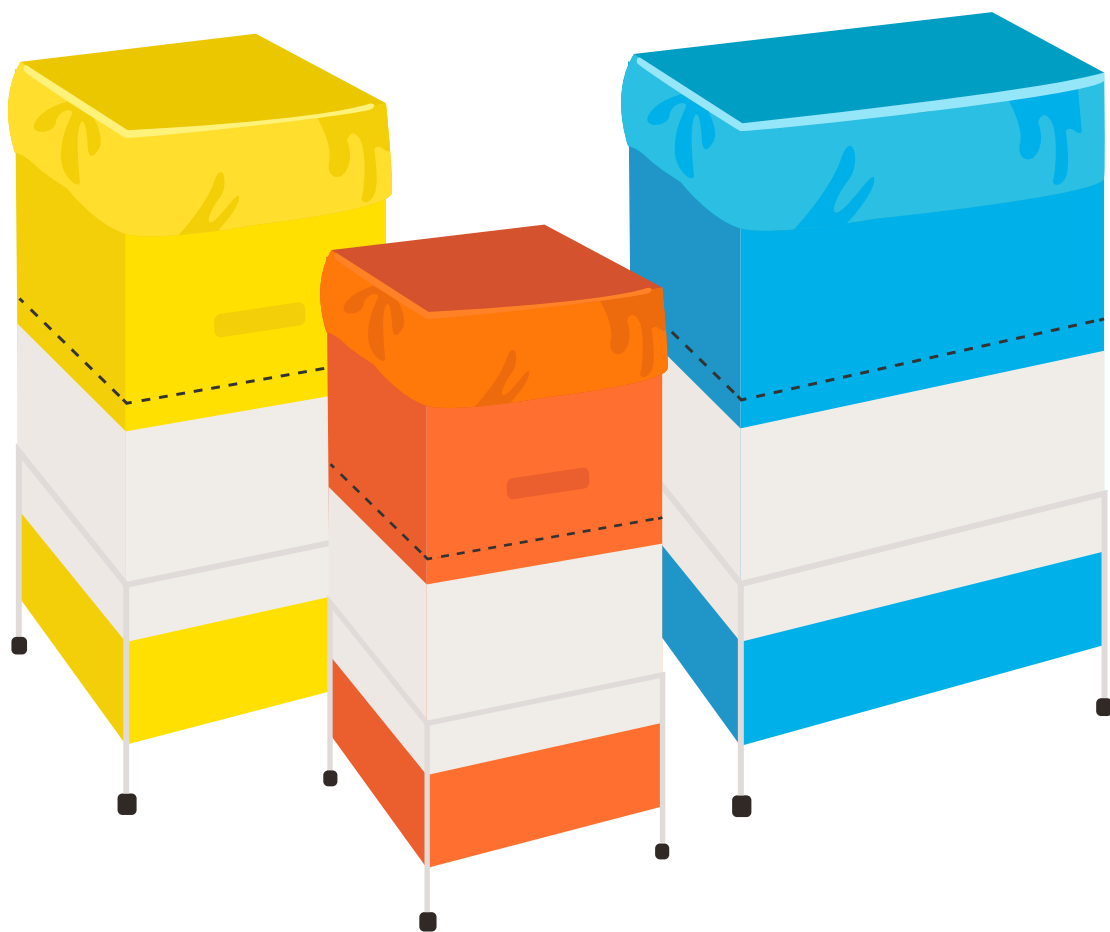


# Clinical Waste Disposal:

## Reducing Single Use Plastic within the NHS



The environmental, legal and financial benefits of the switch to a clearly identifiable non-hazardous pharmaceutical waste stream have been appreciated by the Trust for a number of years now. We were able to switch from rigid plastic to rigid board-based containment for this waste stream which has helped our Trust address the requirement to improve our environmental performance, generate savings whilst continuing to move towards fulfilling our sustainability objectives.



Jason Mitchell, Waste Manager

## The challenge

Prior to this implementation several years ago, Newcastle Upon Tyne Hospitals NHS Foundation Trust did not have a fully defined process in place for segregating some elements of healthcare waste. Non-hazardous pharmaceutical waste was disposed of in the same bins as hazardous waste. As the disposal for hazardous waste is more expensive, their costs were being impacted. This practice was also non-compliant with HTM Guidance.

Following an internal review, the trust introduced blue-lidded plastic bins to allow pharmaceutical waste to be disposed of separately to other waste streams. With an increased focus on sustainability, they began looking at ways to reduce single use plastics; adopting board-based rigid containers for pharmaceutical waste. It was also apparent at the time that board-based alternatives were cheaper to purchase than plastic containers.

To successfully implement this new approach to clinical waste disposal, the Trust needed buy in from key stakeholders. There was a lack of awareness about the benefits of segregating pharmaceutical waste from its current method. Questions were raised regarding the quality and durability that board-based waste bins could provide when compared to plastic.

## What were our objectives?

- Raise awareness of the effective benefits when using board based clinical waste disposal streams, across key hospital departments
- Reduce the utilisation of single-use plastics when disposing of medical waste
- Generate savings on pharmaceutical waste disposal
- Successfully implement a segmented approach to waste disposal in line with Trust policy within 6 months of completing a successful product trial.

## What is the process

- 1 Recognising the need to implement a more structured approach to waste segregation to reduce plastic usage in the waste process and to generate savings.
- 2 Procurement and Waste Management worked together to identify opportunities and then engaged with stakeholders from across the Trust to increase awareness and adoption of waste segregation.
- 3 Implemented a board-based blue non-hazardous pharmaceutical waste stream.
- 4 Identified that board based bins offered a cost effective alternative - The specific products were selected due to in part the inclusion of an absorbent pad within the bin, allowing for medicinal waste to be added.
- 5 Implemented to 'friendly' wards and departments including Pharmacy Stores, Clinical Research, specialist wards
- 6 Full implementation across 200 wards was achieved in a matter of weeks. Very straightforward roll-out



## What are the overall benefits?



Upon completion of the trial 6 months implementation was anticipated however up take was very quick, and this was actually achieved within a matter of weeks.



Jason Mitchell, Waste Manager

- Board-based waste bins were successfully introduced in to 200 hospital wards across the Trust.
- Based on current waste costs for the Trust 20% savings are achieved by having a separate channel for pharmaceutical waste disposal.
- 29% of consumables saving were delivered by moving from plastic to board-based waste bins at the time of the trial.
- There was a reduction in inventory usage due to the flat pack option available with board-based bins.
- At the time of the trial an estimated 46% reduction in carbon emissions was achieved due to board-based bins being 96% more renewable than plastic.

A point to note is that there have been recent developments in the healthcare waste industry, particularly around incineration outlets which, has led to a reassessment of pharmaceutical waste disposal. As it is non-hazardous, the understanding is that it can be disposed of in permitted municipal incineration plants instead of specialist healthcare waste incinerators; providing it is clearly identified and appropriately labelled. For the most part, this will bring cost savings and be completely compliant if the receiving site is permitted for 18 01 09 waste.



The blue pharmaceutical waste stream was very easy to introduce once ward and department managers understood the need for a compliant and cost-effective system for waste containment and disposal. Introducing board-based containers can be the standard for this system in any hospital.



Jason Mitchell, Waste Manager

## Useful insights

- Board-based clinical waste disposal should be considered when looking at the reduction of single-use plastics.
- Implementing the change in a small number of departments before rolling out on a larger scale will enable any issues to be addressed early on.
- Issues will need to be considered around, security of open containers, movement by porters and on-site storage prior to disposal.
- Pharmaceutical waste does not have to be consigned to a clinical waste incinerator if an alternative permitted municipal waste recovery facility is available which can save a significant amount of money.
- As board-based bins can't be wiped clean, it may be that they aren't be suitable for all trust departments. Ensure that key stakeholders are identified and engaged with from the outset so that requirements can be captured.
- Most suppliers provide Floor stands to accompany board-based bins; preventing the bin from splitting if the base becomes wet. This can be caused when floors are frequently mopped.



## What is the NHS long term plan?

The NHS Long Term Plan was published in January 2019. It outlines some key commitments to help the NHS be a low carbon institution and lead by example in sustainable development. These commitments include:

- reducing carbon emissions,
- improving air quality
- reduction of single use plastics
- improving efficiency and adopting new innovations to reduce waste, water and carbon.

Despite a 27% increase in activity, the carbon footprint of health and social care has reduced by 19% since 2007. This still leaves a significant challenge to deliver the Climate Change Act target; the target of which is 34% by 2020 and 51% by 2025. The NHS as an organisation has a huge carbon footprint. A large percentage of which is from the procurement of goods and services. Waste is a contributor to that carbon footprint. In addition, the plan responds to the global concern over single use plastics. Any activity which reduces plastic and reduces waste will be helping the NHS to deliver on its carbon reduction commitment. This will help make the NHS an anchor institution in sustainable development.

## Contact us

If you are interested in exploring the benefits of product switching, NHS Supply Chain can support by:

- Facilitating supplier discussions
- Outlining the products available via the online catalogue
- Providing dedicated Account Management support

Please contact **Alastair Clay** for further information:

### **Alastair Clay**

Buyer - Clinical Waste Containers and Sharps Pads and Associated Products

[alastair.clay@supplychain.nhs.uk](mailto:alastair.clay@supplychain.nhs.uk)