Implementation of a Waste Reduction Initiative in a Sexual Health Clinic: A Quality Improvement Project

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Introduction

- Sustainability in healthcare is a growing priority, with NHS England committed to achieving net-zero carbon emissions (1).
- Clinical waste disposal is a significant financial and environmental burden (1).
- **This quality improvement project (QIP) aimed to reduce waste, optimise segregation, and assess the feasibility of reusable speculums in a sexual health clinic.**

Methods

- A two-cycle prospective audit was conducted across 20 clinic days at a sexual health service in London.
- In the first cycle, waste weight was measured in black (non-clinical) and orange (clinical) bins.
- An educational intervention, including staff training and updated bin signage, was introduced (figure 1,2).
- The second cycle measured waste post-intervention.
- Waste weight, CO_2 emissions associated with disposal and per annum costs were estimated at a service level.
- Additionally, the financial and environmental impact of reusable speculums was assessed.

Results

- Following intervention, non-clinical waste weight annual projection increased from 0.96 to 1.77 tonnes per year, while clinical waste decreased from 2.4 to 1.74 tonnes per year, indicating potential improved segregation.
- Estimated carbon savings were 67.7%, reducing CO_2 emissions from 4,689kg to 1,515kg per annum.

67.7% CO2 emission reduction

- Financially, clinical waste disposal costs approximately £800 per tonne, leading to an estimated of £520 per annum due to reduced clinical waste volume (2).
- For reusable speculums, a projected carbon reduction of 382kg CO_2 per year.

Figure 1 – Bin signage for non-clinical bins (3).

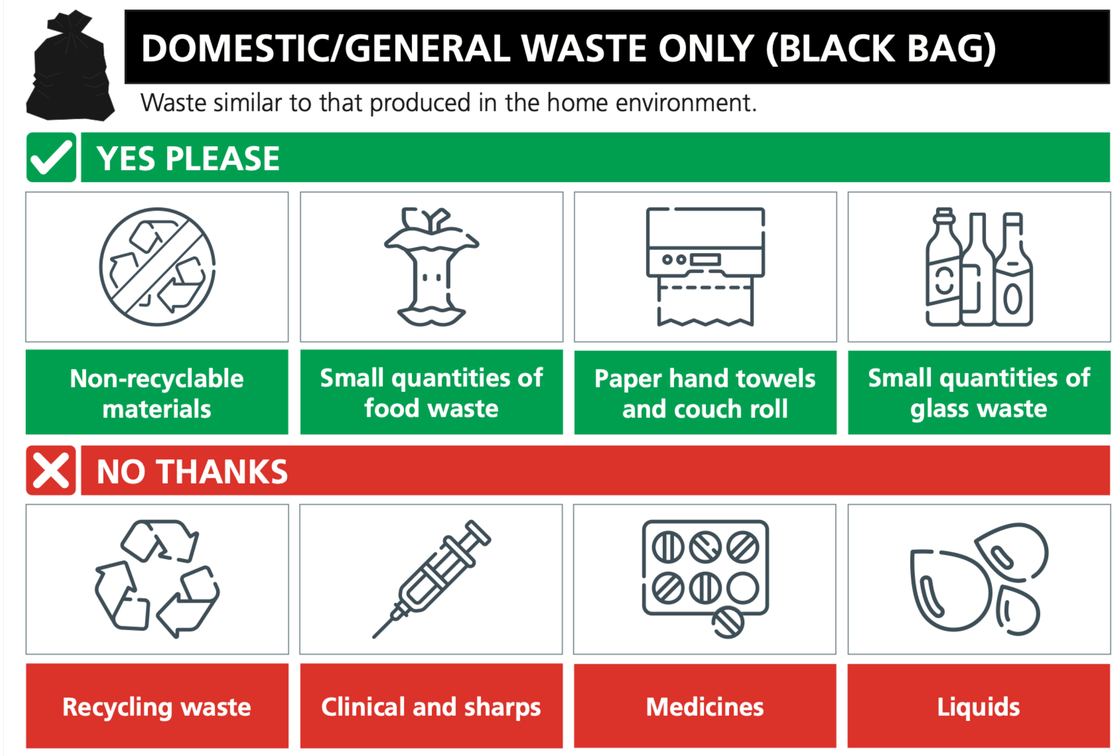
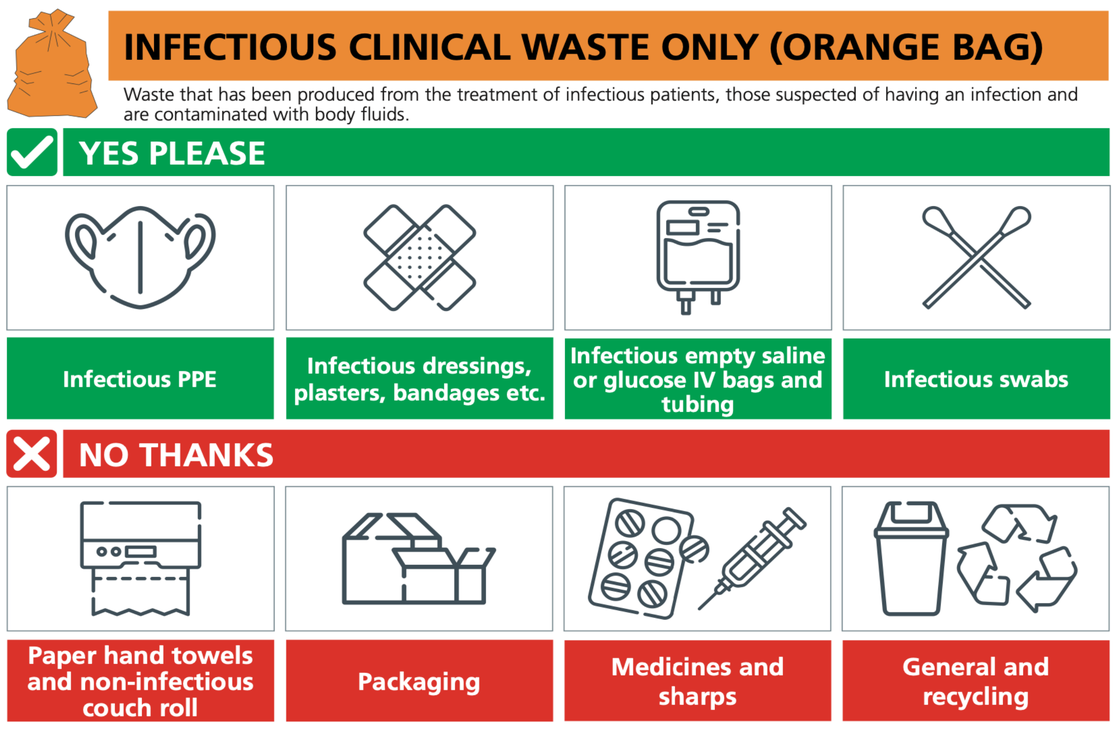


Figure 2 – Bin signage for clinical bins (3).



Conclusion

- This initiative demonstrates that targeted interventions can enhance waste segregation, reduce costs, and improve sustainability in sexual health services.
- While reusable speculums have potential environmental benefits, financial viability depends on sterilisation costs.
- Future work will focus on assessing long-term savings and scaling sustainable practices.

References

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