Overview of the Project

In 2016, ISS identified the need to establish and create a vision for ‘Healthcare Waste Excellence’ for the NHS - a systematic, clear, robust programme to deliver environmental excellence as well as financial sustainability and efficiency. We saw there were a number of challenges common to all healthcare sites which our integrated waste management model could address. Consequently, we developed the ‘ISS Excellence in Healthcare Waste Management Programme’, which has now been implemented at two of our largest healthcare sites, resulting in the transformation of their waste management services.

This submission explains the development and delivery of the Programme and how Queen Elizabeth Hospital has successfully put it into practice. At QEH, since November 2017, the Programme has; introduced recycling, achieved a rate of 37% of domestic waste, and reduced general waste collections by 62%.

Creating a model of Healthcare Waste Excellence

Inspired by the drive for Excellence, ISS Waste had a vision of a healthcare site with the optimal make-up of waste, delivering the best possible financial and environmental performance, and of course full compliance.

Using knowledge, data and insights from extensive waste management experience across the UK healthcare industry, we established best-in-class metrics for; number of waste streams, price per tonne per waste stream, and the split between waste streams. We called this the ‘Frankenstein’ model as it takes the best elements of different sites to create a composite picture. It provides an ambitious visual scenario to strive for, underpinning the Programme.

The Programme consists of three key stages, operating in a cycle to ensure continual progress;
1. Define Excellence;
   • Stakeholder engagement - A partnership is established with the Trust and stakeholders are engaged ensuring the programme is designed with specific on-site needs at its core.
   • Benchmark and target setting - The ‘Frankenstein’ model is tailored and applied according to requirements. A breakdown of waste streams is established as a benchmark and a glide path is created to map the path to the ideal, with associated cost savings.
2. Deliver excellence;
   - Healthcare Specific Waste Training - Comprehensive three-tier healthcare specific waste training educating and upskilling ISS and hospital staff. The Chartered Institute of Waste Management accredited training covers best practice segregation, health and safety, storage of waste and legal compliance. It is cascaded by Waste Champions to ensure maximum knowledge dispersion.
   - Healthcare Waste Excellence Pack – A complete package of materials to implement world-class waste management effectively and consistently in a healthcare environment, including specialist audit sheets, posters, labels and signage.

3. Drive Excellence;
   - Reporting and Auditing – Underpinned by the world-class ISS Waste Manager system, transparency enables sites to track progress against benchmarks, revise where appropriate and continue to drive performance forward. Weekly, monthly and annual waste audits are carried out to provide a full picture of progress.
   - Best Practice Working Group – All hospital sites are invited to actively take part in the Working Group to share solutions, best practice and provide friendly competition, driving improvements

**Economic, Health and Carbon Impact of the project**

The Programme was designed to achieve the objectives of; financial savings, non-compliance risk mitigation, improved environmental performance and engaged stakeholders. QEH has achieved all these objectives within the first three months of the programme which also derive beneficial economic, health and carbon impacts.

**Economic Impact**

The programme, mobilised at QEH in November 2017, achieved an impressive 25% reduction in waste disposal costs, by month three, and greater savings are forecast. A key element of the programme is correct waste segregation – training, signage, posters, labels and the appropriate infrastructure result in vastly improved levels of waste segregation. Accurate segregation of clinical, infectious, offensive, recycling and general waste enables all waste to be disposed of in a safe, compliant manner. This, not only minimises the environmental impact of the waste disposal, but also results in economic savings. Cost per tonne of disposal by waste stream is lower for non-hazardous waste than hazardous and lower for recycling than general waste.

Since mobilisation, recycling increased from 0% to 37% of domestic waste and hazardous waste was reduced from 50% to 34% of total waste, both of which significantly contribute to the overall cost reduction above.
Clinical Area Waste and Disposal Hold Contamination audits are regularly undertaken to ensure reduced contamination in order to eliminate fines from incidences of contamination again having a financial as well as environmental benefit.

**Health Impact**
Healthcare specific waste management training educates all staff who handle waste on segregation, health and safety, storage of waste and legal compliance. The Healthcare Excellence Pack provides all the materials needed to implement best practice waste management. This ensures a standardised and thorough approach, consistent with the training received and reinforced by information posters, signage and labels. Compliance with HTM 07-01 is at the core of the Programme, reflected in the content of training and communication materials, with minimisation of infection risk and therefore patient health being key outcomes. Economic savings on waste management achieved by the Programme can be diverted to fund enhanced patient care and therefore further contribute to better health outcomes.

**Carbon Impact**
The Programme aims for maximum efficiency of resources, including optimisation of bins and compactors avoiding unnecessary collections. In the first three months of the Programme general waste collections have been reduced by 62% (from 13 to 5 per month) and Healthcare waste collections have been reduced by 37% (from 14 to 9 per week).

The ISS Waste Manager system enables management of all services providing a direct channel of communication between onsite staff and waste contractors. This means services can be optimised, amended or cancelled and further reduces surplus collections. A reduction in collections results in less waste vehicle journeys and therefore a reduction in associated carbon emissions.

**Partners, supporters involved in the Project**

**Future plans for the project**

**Contact:** Helen Cook, Content Development Manager