

AN INNOVATION CASE STUDY



CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD OPERATING THEATRES RECYCLING

PROJECT DURATION: 6 months (start date 01/01/2021)

PARTNERS: Veolia Environmental Services, Innotech, Cwm Taf Morgannwg University Health Board and Cardiff University.

PROJECT AIM: To change staff behaviour by demonstrating the impact of improved recycling behaviour.



Industrial and health board partners involved in this project

OVERVIEW

The NHS produces up to 600,000 tonnes of waste each year, and around 85% of this waste is categorized as non-hazardous. Although much of this waste is recyclable, a significant amount is still incinerated or sent to landfills.

Cwm Taf Morgannwg University Health Board (CTMUHB) produces over 2,000 tonnes of waste annually, with operating theatres and pathology laboratories being the areas that produce the greatest quantities. A significant part of this waste is the packaging of consumable products that are routinely used on a single-patient basis.

Whilst healthcare waste must be categorized, segregated and processed according to the appropriate waste management stream, practices around waste management and the communication of relevant practices could be enhanced. For example, diverting specific waste from incineration and landfills into recycling, saves money and reduce carbon.



The amount of single-use plastic items required to intubate one patient in the operating theatre (image courtesy of CTMUHB)

This collaborative project between Cardiff University academics, Veolia Environmental Services, Innotech and CTMUHB seeks to explore pathways for the generation of new products from the waste traditionally sent to landfills, whilst facilitating improved staff behaviours towards recycling in a clinical environment.

Accelerate is supporting the delivery of this project through Cardiff University's experience in rigorous data collection, evaluation and project management. This will work alongside the health board's provision of clinical environments and the staff input required to implement new protocols and training. Industrial partners will contribute valuable expertise in waste management streams and recycling advances, and together this partnership will work towards the advancement of more sustainable practices within NHS Wales.



EXPECTED OUTCOMES

- New recycling bin protocols that meet appropriate clinical standards
- Behaviour change around staff recycling practices
- Enhanced processes for managing waste
- Improved communication around appropriate recycling processes
- Cost savings through increased recycling
- Results from an academic evaluation
- Procurement changes to facilitate the purchase of more recyclable products
- Case studies and peer-reviewed publications
- Seeding of future work



FUTURE IMPACT

- A reduced carbon footprint for the health board
- Opportunities for further collaboration between project partners
- A scalable model to be rolled out across NHS Wales, delivering cost savings, staff engagement, improved waste management and greener procurement practices
- A significant contribution to helping to deliver 'A Healthier Wales' and 'A Sustainable Wales'

For further information contact: Accelerate@cardiff.ac.uk