

# Embedding Sustainability in Wales's Sole Dental Hospital and School

## Crafting the Narrative for Change

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### Background:

Healthcare is a significant contributor to carbon emissions. NHS Dentistry accounts for approximately 3% of the NHS's total carbon footprint. Despite growing interest in sustainability across both Dental School and Dental Hospital, collaborative leadership and strategic direction was required. Recognising the urgency of the climate crisis, the need for systemic change, and alignment with national policies, both institutions appointed Sustainability Leads to collaborate on this urgent agenda.

### Approach:

Using core sustainability principles in conjunction with the Bevan Commission's WASTES typology (Figure 1), the Joint Sustainability Working Group mapped and planned projects in areas of waste and process inefficiencies. Students, NHS dental trainees, clinical and non-clinical staff undertook these projects.

Sustainability was introduced as a core educational theme in the new dental curriculum, enabling introduction at undergraduate level.

Raising awareness and engagement with planned projects- outcomes were disseminated through the inaugural Sustainability in Dentistry (SID) talks.

### Aims and Objectives:

- Establish a Joint Sustainability Working Group.
- Support and promote projects aimed at reducing waste and driving sustainable change.
- Identify cost savings and reduction in carbon emissions associated with change.
- Embed sustainability across all levels of dental education.
- Raise awareness-build a culture of sustainable behaviour.

### Impact:

Evaluation of dental theatres focused on training dental nurses as scrub nurses. In one year, this change is expected to prevent **75 patient cancellations**, saving **56 hours** of theatre time and **£43,290** in costs.

The Decontamination Team (DSDU) improved protocol by eliminating a layer of paper wrapping, resulting in annual cost savings of **£1,670.50** and a reduction in carbon emissions of **1,761.17 kg CO<sub>2</sub>** (Figure 2).

SID talks drew an audience of 30 attendees, with positive feedback: **"Presentations were very relevant and informative"**.

### Outcomes:

- Established a Joint Sustainability Roadmap.
- Completed 15 projects- improving service delivery, patient care, reduction of waste whilst meeting students' and trainees' educational requirements.
- Introduced *Sustainability* through undergraduate and staff activities.
- Raised awareness through completed projects, local activities and forums.



Figure 2: Results of the DSDU Team project.

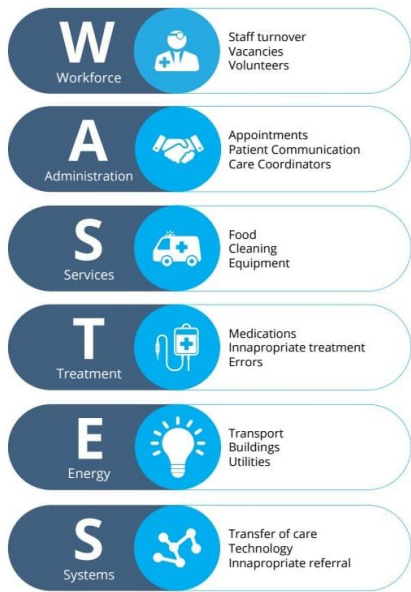


Figure 1: Bevan Commission WASTES typology.

### Key Conclusions:

- Co-leadership and engagement with stakeholders are crucial for implementing this agenda in both clinical services and dental education.
- The Bevan Commission WASTES typology provides an excellent foundational framework for identifying areas of change.
- Not all projects yield the same cost savings or carbon emissions but contribute to integrating quality improvement practice into dental education.
- Sustainable healthcare is firmly on the map within the Dental Hospital.

### Next Steps:

- Increase patient awareness- waiting room displays and online communications.
- Expand on educational Integration.
- Complete unfinished projects whilst continuing to promote and share project outcomes.

**'Good dental care doesn't have to cost the Earth'**

