

AB194. SOH21AS246. Theatre and the environmental impact: if you don't measure it can't be managed

Emilie Elizabeth McCormack, David Hopkins, Deirdre Nally

Department of Surgery, Mater Misericordiae University Hospital, Dublin, Ireland

Background: The environmental impact of healthcare is estimated to be 5% of the total global impact and up to 10% in certain countries. The Green Healthcare programme in Ireland has published aims on its website to recycle 70% of the packaging waste and reduce waste sent to landfill by 10% by 2035. Currently the national average of recycled waste from hospitals is 11%

Methods: We commenced a waste analysis project to assess the carbon footprint of our theatres. We measured the amount of waste which could potentially be recycled and performed an economic analysis on this data to calculate projected cost benefit. Pilot analysis split waste into three categories-recyclable, landfill and healthcare risk. Cases included ranged from minor to major complex including robotic procedures.

Results: Waste destined for the incinerator was excluded. Pilot data showed that recyclable waste per case ranged from 400 g to 2 kg, which represents up to 50% of waste that would have otherwise been destined for landfill.

Conclusions: Significant environmental and monetary savings are possible and recycling in theatre has been shown

to be feasible in other hospitals. This does however require engagement from all staff and hospital administration. Further analysis is required to quantify the monetary cost to introduce a recycling programme and to determine optimum pathways for waste disposal in the theatre setting.

Keywords: Cost analysis; environment; recycling; sustainability; theatre

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-21-ab194

Cite this abstract as: McCormack EE, Hopkins D, Nally D. Theatre and the environmental impact: if you don't measure it can't be managed. *Mesentery Peritoneum* 2021;5:AB194.