Caring Nature (Climate Neutral Initiatives For Growing Health and Care Unmet Requirements): Waste Management in Health Care

Laura Lorenzon, Daniele Gui, Pasquale Mari, David Korn, Sabina Magalini

Correspondence: Dr L. Nicholson, Department of Anaesthetics, Glangwili Hospital, Wales, luke.nicholson@doctors.org.uk

Background: Each operating room (OR) has the potential to produce up to 2300 kg of waste per year. A recent study from UK, USA, and Canada documented that ORs were found to be up to six times more energy-consuming than other hospital departments, but in addition, they generate several types of waste and by-products, each requiring a different disposal.

Aims: This abstract describes the CARING NATURE initiative, which is funded project within the HORIZON-RLTH-2023-CARE-04 call (Grant Agreement No. 101101322). The 36-months project will start in January 2024. The aim of the project is to provide the evidence needed to change the life-cycle of waste produced in the OR.

Methods: 1) We will provide an accurate measure of the total amount of waste produced in the OR, by prospectively monitoring activities for a 2-weeks period. 2) We will produce operational guidelines, based on three levels of interventions: a) Reuse; b) Rethink; c) Reduce. 3) We will produce an organization model based on a new tool to discard products and implement their recycling. 4) We will provide the blueprint of reusable products, by scrutinizing the market of surgical devices and testing/comparing potential devices to those currently used. 5) Finally, we will disseminate a training package for all healthcare workers working in the OR focused on the management of hospital waste.

Conclusions: This EU-funded project will add knowledge to support rapid implementation of better waste management in the OR using new tools, promote re-use, limit overuse, and disseminate guidelines.