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Waste Audit in the Pain Procedure Suites to Evaluate Current Practices and Potential Improvements in Sustainability

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Introduction

Climate change has a significant negative impact on human health. However, despite its goals to protect and promote health, the healthcare sector plays a considerable role in exacerbating the climate crisis as one of the largest generators of waste and greenhouse gas (GHG). A significant portion of these GHG emissions is coming from the manufacturing, disposal, and transportation of medical devices and equipment. Efforts have been made to quantify the amount of waste produced in different clinical settings, but currently, no audits have been completed in the field of pain medicine.

Materials and Methods

The purpose of this study is to conduct a waste audit at the UCSD pain medicine suites to measure the amounts and types of waste produced, and identify potential areas for intervention. Two 5-day waste audits of 3 pain procedure suites at UC San Diego Health were conducted. Waste from each day was collected and sorted based on the following categories: sterile blue wrap, cleaning supplies, medication supplies, packaging, personal protected equipment, procedure related equipment, recycling, unused materials, used drapes, used gauze, used kit supplies, sterile glove packaging paper, and other trash. Weights of the total daily waste and each category of waste were measured, recorded, and averaged. Sharp and medical waste were not recorded.

Results/Case Report

Two 5-day waste audits found that the pain medicine suites produced 13.60kg of waste per day (excluding pharmaceutical and sharp waste). Overall, packaging was the highest contributor of total waste at 21.9%, making it a prime target for waste reduction intervention.

Discussion

The audit provided valuable insight into waste production in pain medicine, identified a systematic approach to waste management, and laid down a foundation for sustainable practices.

References

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Disclosures

No

Tables / Images