

Reducing unnecessary waste from laceration repair in the Pediatric Emergency Department: a waste audit and provider survey



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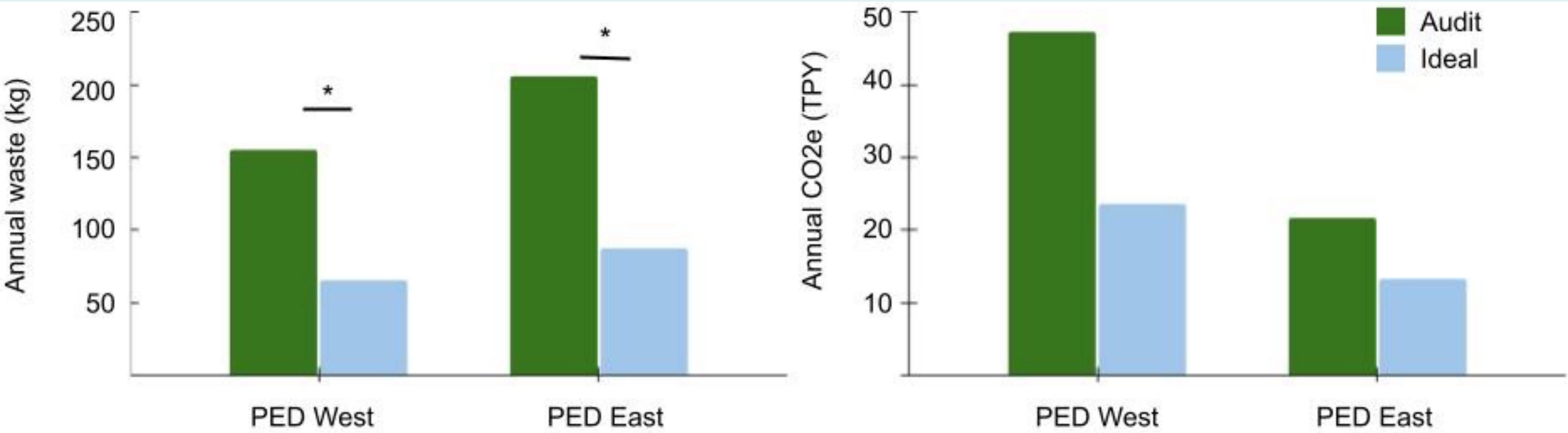
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BACKGROUND

1. In the US, healthcare systems are the second-largest landfill waste contributor
2. Laceration repairs are one of the most common procedures conducted in the Pediatric Emergency Department and have potential to produce large amounts of waste

METHODS

1. Waste audit of 20 laceration repairs
2. 73 clinicians surveyed querying materials essential for laceration repair
3. Annual waste (kg) and CO₂e from audit and ideal practice were compared



RESULTS

1. 4 items (scissors, forceps, needle driver, gauze) are considered essential to perform laceration repair by > 80% of clinicians
2. The largest contributor of waste is from unused materials (36% of total waste)
3. We estimate PED East produces more waste (kg) than PED West (206 kg vs. 155 kg), but PED East generates more CO₂e (47.3 TPY of CO₂e vs. 21.7 TPY of CO₂e)

By changing ordering practices for **laceration repair supplies** we can **reduce waste** by 58% (kg) and CO₂ emissions by 38-50%



DISCUSSION

Two main potential areas of waste and CO₂e reduction:

1. Eliminate materials identified as not essential by clinicians
2. Evaluate hospital system waste management operations to reduce CO₂e

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