Utilisation of the Sustainability Index for Disposables in Cataract Surgery (SIDICS) to measure the sustainability and CO_2e emissions of a NHS Cataract Pack

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Purpose

- To evaluate the sustainability and carbon footprint of cataract packs using the SIDICS tool, developed by ESCRS

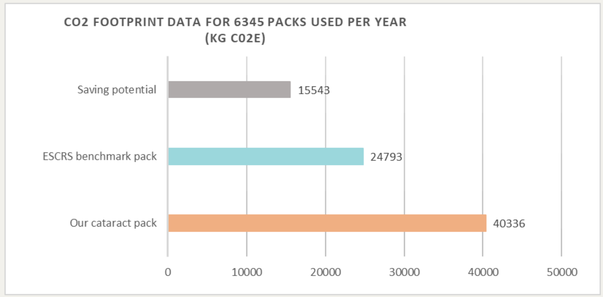
Methods

- Consumables (gloves, gowns and items used in the cataract pack) recorded for 22 cataracts surgeries between 19/08/24 – 30/08/24.
- Annual procurement data for cataract packs (2023) obtained from the hospital's internal database.
- Data input into SIDICS, a tool developed by ESCRS.
- Sustainability performance and CO2e emissions were evaluated and compared against the ESCRS benchmark.

SIDICS

Results

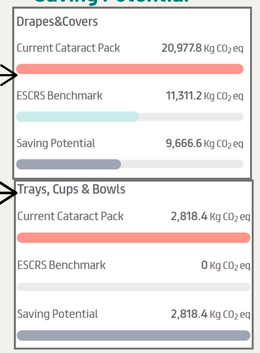
- Unused items- 1x18G needle, and 2 cannulae

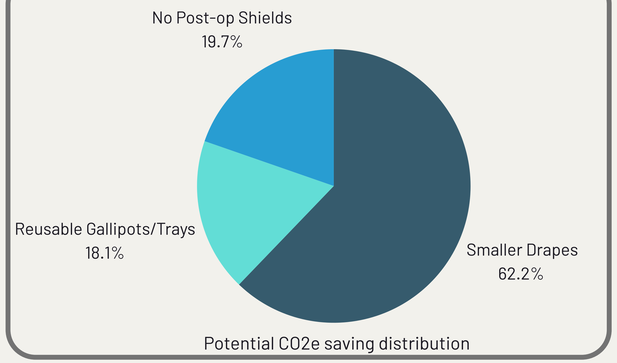


Cataract pack contents

Drape trolley cover 112 x 112cm
1 x drape ophthalmic 140x140cm with 9x11cm pouch &wick
1 x A polyware kidney dish 800ml
cardboard tray half shallow
1 A polyware bowl 500ml
2 x polyware gallipot 120ml
1 eye shield
1 dressing eye pad 5.3x6.6cm
2 x syringe 3 ml
1 x BEC needle 18G
2 x syringe 5ml
1 x 25G cannula ophthalmic hydrodissector
5 x swab non-woven 10x10cm
1 x syringe 1ml
1 x 23G cannula ophthalmic viscoelastic

Saving Potential





Conclusion

This study highlights the high carbon footprint of standard cataract packs and identifies key opportunities to reduce emissions.
Using the SIDICS tool, we estimate an **annual CO_2e saving of 15,543 kg CO2e** through smaller drapes, reusable components, and reduced waste.

Recommendations

- Use smaller facial covers (100 × 120 cm)
- Reduce backtable cover size (100 × 140 cm)
- Replace plastic eye shields with fleece pads
- Switch to reusable gowns and reuseable containers