

A Qualitative Review of Response from the Theatre MDT of the Intercollegiate Green Theatre Checklist

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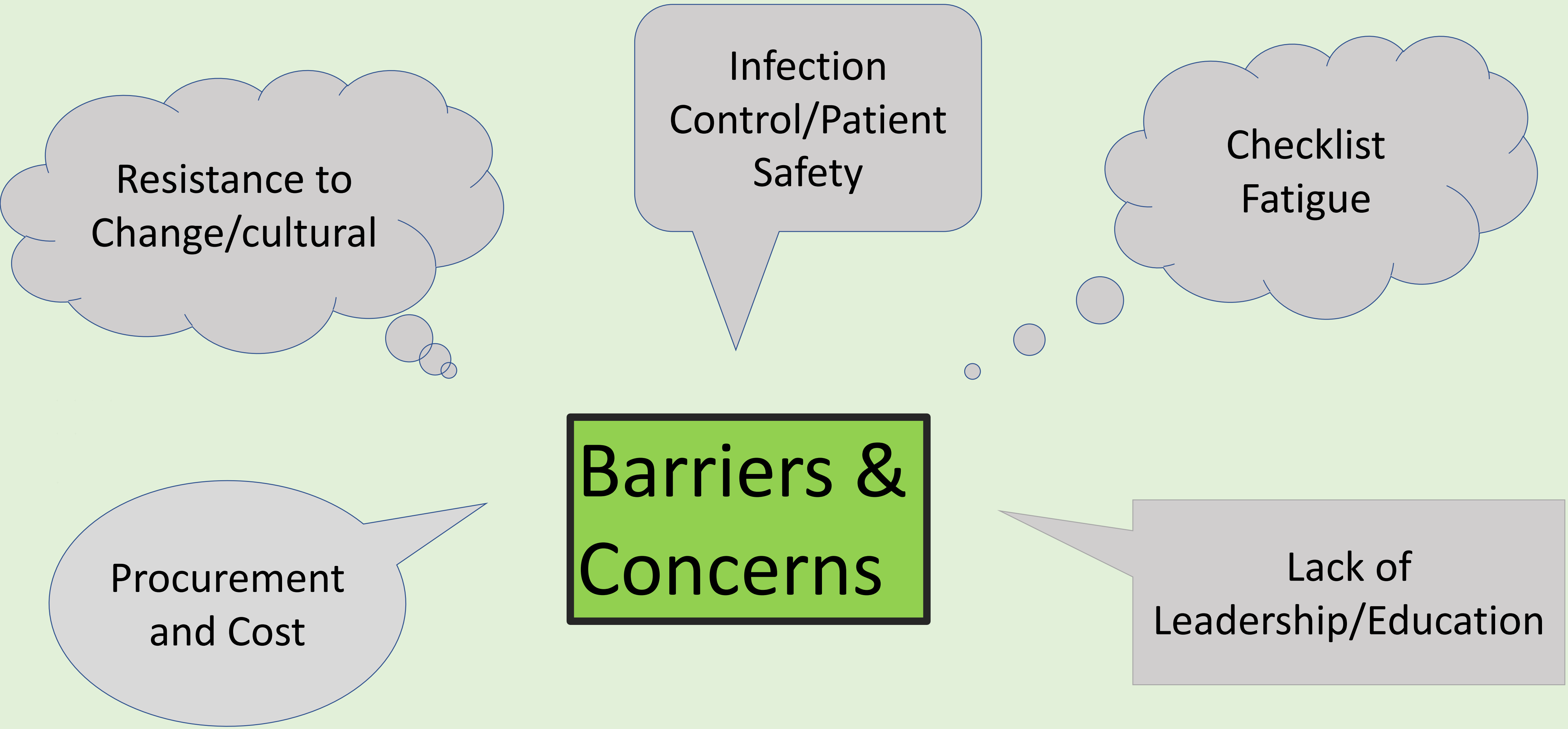
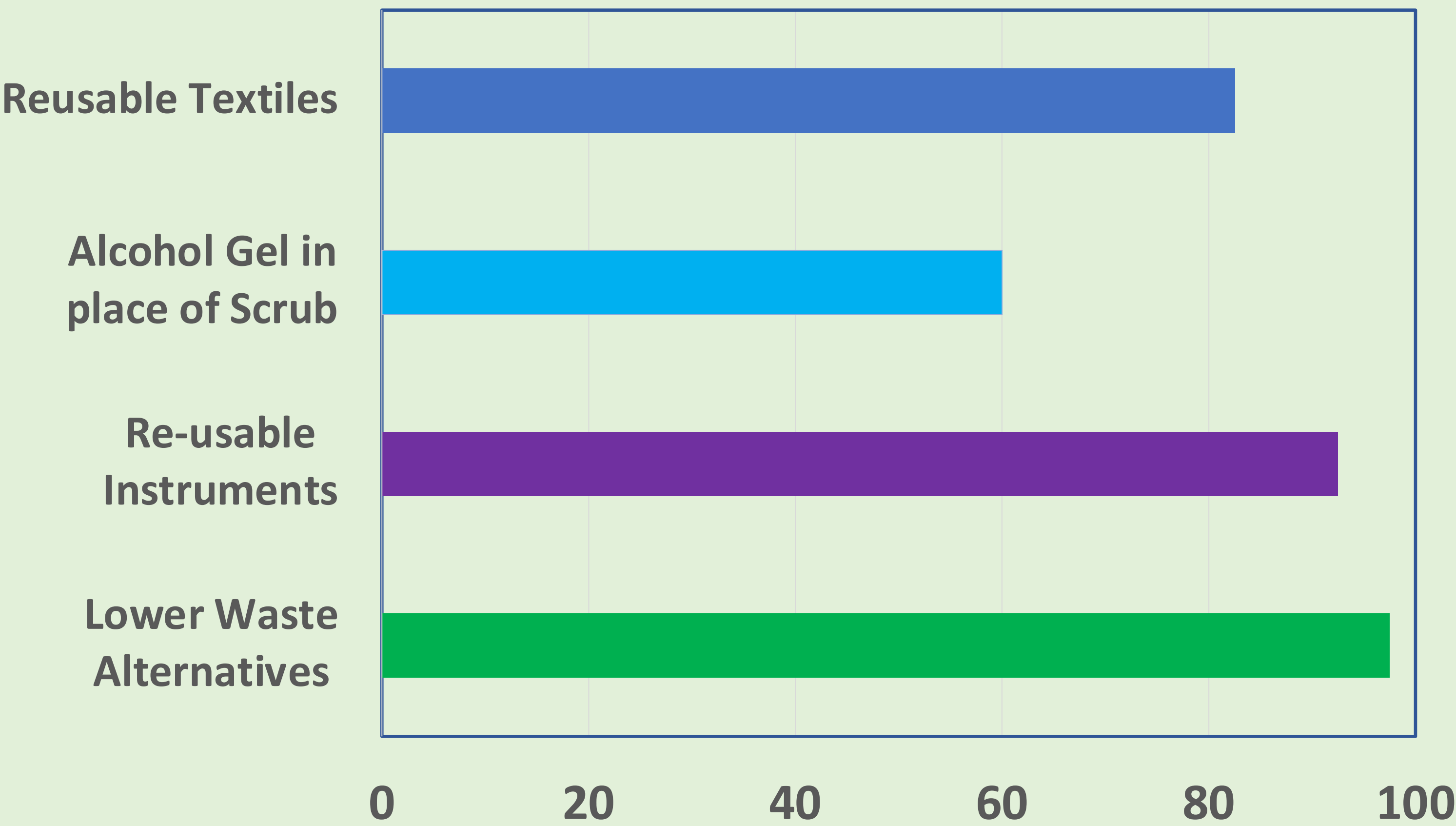
Methods:

- Across 2 sites of an acute NHS Foundation Trust (between December 2022 and March 2023), we delivered an educational presentation on *The Green Theatre Checklist: Aims, Utilisation and Impact* to all members of the theatre MDT
- Participants were asked to complete a questionnaire to evaluate its potential impact, efficacy and barriers to its implementation.
- An Analysis of the questionnaire results was made as well as the focus group discussion

Introduction: Most healthcare professionals support the climate change movement; the challenge lies in making visible and measurable changes and adapting currently embedded practices. The “*Green Theatre Checklist*” provides the ideal platform for structured change that can be incorporated into the daily routines in theatre. Launched in November 2022, it is yet to be seen how the intercollegiate checklist could be utilised and how we can measure its outcomes.

Aim: To review and assess responses to the new *RCS Green Theatre Checklist* including ideas on how its implementation could be optimised and any barriers to overcome. This included all the members of the theatre MDT.

A Chart to show the Percentage Respondents in Support of Sustainable Initiatives



Conclusions:

- There is consistent support amongst theatre staff to make their environment more sustainable
- Barriers lie in the perceived infection control risks as well as some practical and procurement limitations
- Education on the evidence behind the recommendations is needed as well as involvement of infection control teams
- Support is needed for staff in implementation of the recommendations with a dedicated group involving clinical staff and financial decision-makers

THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH Royal College of Surgeons of England ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW		
 Intercollegiate Green Theatre Checklist Compendium of Evidence Below are a list of recommendations to reduce the environmental impact of operating theatres. All the relevant guidance and published evidence has been included in the Compendium of evidence, accessed via the QR code:		
Anaesthesia		
1	Consider local/regional anaesthesia where appropriate (with targeted O ₂ delivery only if necessary)	☐
2	Use TIVA whenever possible with high fresh gas flows (5-6 L) and, if appropriate, a low O ₂ concentration	☐
3	Limit Nitrous Oxide (N ₂ O) to specific cases only and if using: ▶ check N ₂ O pipes for leaks or consider decommissioning the manifold and switching to cylinders at point of use; ▶ introduce N ₂ O crackers for patient-controlled delivery.	☐
4	If using inhalational anaesthesia: ▶ use lowest global warming potential (sevoflurane better than isoflurane better than desflurane); ▶ consider removing desflurane from formulary; ▶ use low-flow target controlled anaesthetic machines; ▶ consider Volatile Capture Technology.	☐
5	Switch to reusable equipment (e.g. laryngoscopes, underbody heaters, slide sheets, trays)	☐
6	Minimise drug waste ("Don't open it unless you need it", pre-empt propofol use)	☐
Preparing for Surgery		
7	Switch to reusable textiles, including theatre hats, sterile gowns, patient drapes, and trolley covers	☐
8	Reduce water and energy consumption: ▶ rub don't scrub: after first water scrub of day, you can use alcohol rub for subsequent cases; ▶ install automatic or pedal-controlled water taps.	☐
9	Avoid clinically unnecessary interventions (e.g. antibiotics, catheterisation, histological examinations)	☐
Intraoperative Equipment		
10	REVIEW & RATIONALISE: ▶ surgeon preference lists for each operation - separate essential vs. optional items to have ready on side; ▶ single-use surgical packs - what can be reusable and added to instrument sets? what is surplus? (request suppliers remove these); ▶ instrument sets - open only what and when needed, integrate supplementary items into sets, and consolidate sets only if it allows smaller/fewer sets (please see guidance).	☐
11	REDUCE: avoid all unnecessary equipment (eg swabs, single-use gloves), "Don't open it unless you need it"	☐
12	REUSE: opt for reusables, hybrid, or remanufactured equipment instead of single-use (e.g. diathermy, gallipots, kidney-dishes, light handles, quivers, staplers, energy devices)	☐
13	REPLACE: switch to low carbon alternatives (e.g. skin sutures vs. clips, loose prep in gallipots)	☐
After the Operation		
14	RECYCLE or use lowest carbon appropriate waste streams as appropriate: ▶ use domestic or recycling waste streams for all packaging; ▶ use non-infectious offensive waste (yellow/black tiger), unless clear risk of infection; ▶ ensure only appropriate contents in sharps bins (sharp/drugs); ▶ arrange metals/battery collection where possible.	☐
15	REPAIR: ensure damaged reusable equipment is repaired, encourage active maintenance	☐
16	POWER OFF: lights, computers, ventilation, AGSS, temperature control when theatre empty	☐
DISCLAIMER: These suggestions are based upon current evidence and broadly generalisable, however, specific environmental impacts will depend upon local infrastructure and individual Trusts' implementation strategies.		