



# Greener Operations Priority Setting Partnership

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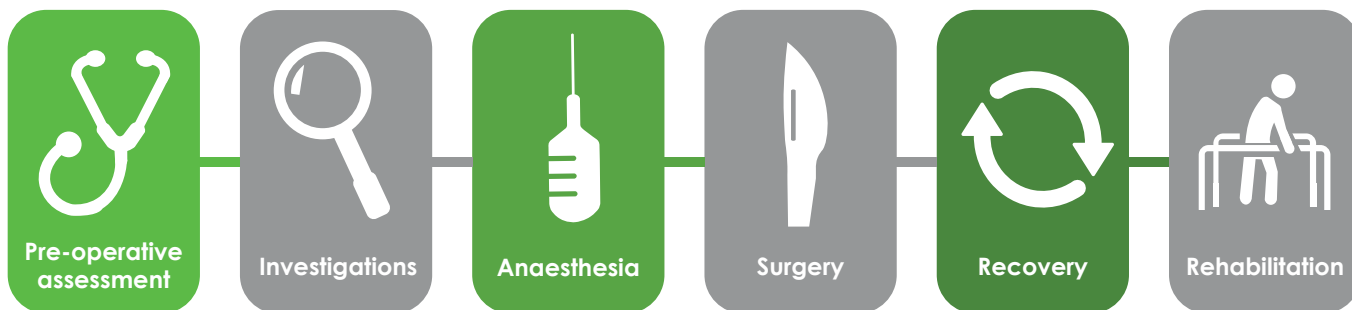
## Why does healthcare need to be 'greener'?

Healthcare is a major industry which creates a lot of pollution. If the global healthcare sector were a country, it would be the fifth-largest on the planet in terms of carbon footprint. Climate change and environmental damage cause disease and can worsen medical conditions, further increasing the need for healthcare. Making healthcare more environmentally sustainable (or 'greener') will help to limit climate change and reduce the need for healthcare in the future.



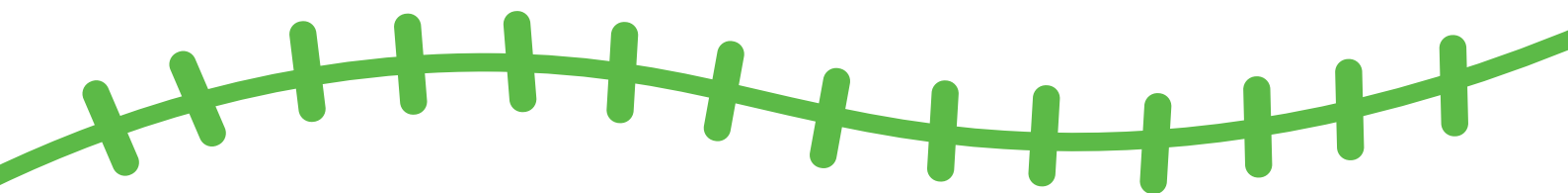
## Why are operations a priority area?

Care surrounding operations or surgical procedures (including pre-operative assessment, investigations, anaesthesia, surgery, recovery and rehabilitation) has a particularly large effect on the environment due to the high requirement for energy, medicines and other resources. There has been a lot of recent interest from researchers about reducing the carbon footprint of surgery however this is a new topic and much remains un-investigated.



## What is the Greener Operations Priority Setting Partnership?

Our 'Greener Operations' project aimed to produce a 'Top 10' list of the questions or areas that people wanted researchers to investigate, to help reduce the environmental impact of operations. To do this we joined with the James Lind Alliance, a not-for profit organisation experienced in running projects known as 'Priority Setting Partnerships' (PSPs). Often, research topics are decided by those with a personal or financial incentive connected to the research, such as medical manufacturers and professional researchers, which can lead to important research topics being overlooked. To avoid this, the PSP process takes great care to listen and include the views of all participants in the healthcare process including patients, their relatives, carers and all types of healthcare professional. The project was funded by the Manchester Foundation Trust Charity.



**Greener Operations**



**Manchester Foundation  
Trust Charity**



**James  
Lind  
Alliance**

Priority Setting Partnerships

## How was Greener Operations done?

To develop the Greener Operations Top 10, we ran online surveys and talked with patients, carers, members of the public and healthcare workers. In our first survey, people were invited to suggest questions and ideas in a 'blank space' format. Almost 2,000 suggestions were made at this stage, those which were not relevant to the project were left out and the remaining 1,600 submissions were combined to form 60 'representative' questions. Scientific databases were then examined to make sure none of the representative questions had been answered already. The 60 questions were then entered into another survey where people were invited to select their personal top 10 priorities. The top 25 questions from this stage were then discussed at a final face-to-face meeting of volunteers including patients, carers, members of the public and healthcare professionals, who agreed on the Top 10 research priorities.



## What are the Top 10 research priorities?

- 1** How can more sustainable reusable equipment safely be used during and around the time of an operation?
- 2** How can healthcare organisations more sustainably procure (obtain) medicines, equipment and items used during and around the time of an operation?
- 3** How can healthcare professionals who deliver care during and around the time of an operation be encouraged to adopt sustainable actions in practice?
- 4** Can more efficient use of operating theatres and associated practices reduce the environmental impact of operations?
- 5** How can the amount of waste generated during and around the time of an operation be minimised?
- 6** How do we measure and compare the short-term and long-term environmental impacts of surgical and non-surgical treatments for the same condition?
- 7** What is the environmental impact of different anaesthetic techniques (e.g., different types of general, regional and local anaesthesia) used for the same operation?
- 8** How should the environmental impact of an operation be weighed against its clinical outcomes and financial costs?
- 9** How can environmental sustainability be incorporated into the organisational management of operating theatres?
- 10** What are the most sustainable form of effective infection prevention and control used around the time of operation (e.g., PPE, drapes, clean air ventilation)?

These priorities will be used to help develop future research questions, and allocate funding for research projects.

For further information visit:

[www.jla.nihr.ac.uk/priority-setting-partnerships/greener-operations-sustainable-perioperative-practice/](http://www.jla.nihr.ac.uk/priority-setting-partnerships/greener-operations-sustainable-perioperative-practice/)

