

# Sustainability: Marginal Gains for a Big Impact



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## Delivering a Net Zero NHS by 2045 – How?

The carbon footprint of a critical care patient is dominated by the energy used for medical equipment, medications and the supply chain, as well as working in aging buildings that are incredibly inefficient. Creating awareness using micro projects to achieve marginal gains are positively impacting, and making a difference.

### Stock Labels

It was noticed staff were taking stock 'just in case'. This is costly and often wasted in deep cleans. Individual items of stock have been labelled with price costs to increase awareness and reduced over stocking of bed spaces

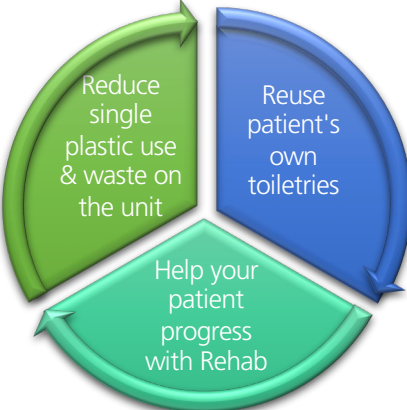


### Tourniquets

Reusable tourniquets are being introduced into critical care upon trial completion by phlebotomy. These will be used for all, except infectious patients, reducing our single use plastic wastage.

### Patient Own Toiletries

Patient relatives and preoperative clinics have been asked to encourage patients to bring in patients own toiletries. This will reduce single use plastic waste of hospital stocks, reduce the cost of toiletries, and encourages rehabilitation of patients with the use of their own home comforts.



### Cool Sticks

Ethyl Chloride, spray is exceptionally carbon heavy & costly. Trialling Cool Stick to test for epidural effectiveness and block could reduce waste, and improve our environmental impact. If successful a dissemination to theatres and the ward areas will have huge benefits.

## Administration Routes

IV paracetamol administration should be used as a last resort if an enteral route is available – This reduces the large amount of single use plastic used in administration. Drug effectiveness is proven more effective over a longer time period for enteral administration. Education over is being rolled out and a cost saving estimated at £1.50 a dose achieved. From this learning, IV pantoprazole is now being advised as a cost saving over IV Omeprazole as our PPI standard.



Educating staff is the main priority in this micro project 'Think before you give'.

### 'Bin Police'

Critical Care have Bin Police - the bin police are staff on duty advising on the correct disposal of waste, and educating where necessary. The Trusts costing sheet, as well as sharps bin disposal education has reduced incorrect wastage significantly when visually inspecting.



## Implications for Practice

From visual auditing and feedback the initial micro projects are being responded to positively. Once these marginal gains are applied to all 3 critical care units consisting of 66 critical care beds, this will start to have a big impact environmentally and financially. Future research into pharmaceutical interventions at the bedside as well as an energy assessments are required to make larger impacts.

### REFERENCES:

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