

REDUCE DISPOSABLES ON ABBEY, OTTER AND DART WARDS – HOUSEKEEPING TEAM, 2018

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The housekeeping team carried out 2 projects on Otter ward and have since spread changes to Abbey and Dart wards.

Project 1:

Goal: To replace plastic teaspoons with reusable metal spoons.

Background:

On the 24-bedded ward around 100 plastic spoons are used each day for three meals for patients & hot drinks for patients and staff. The housekeeping team suggested reducing waste by introducing metal spoons.

Approach:

Buy metal teaspoons and stop buying plastic teaspoons.

Results:

The cost of water and electricity used to run the dishwasher, the carbon conversion factors for the materials used to make the spoons and the cost of the waste recycling, together with the weight of the two types of teaspoons was used to calculate environmental and cost benefits of this project.

Cost savings: Over 1 year the cost savings would be £245 for a single ward and has the potential to save £7338 if this change was made successfully on 30 wards. These figures include costs of dishwasher use (energy and water) and a waste of 10% of spoons due to damage. If spoons were retained in the ward, then savings would increase year on year.

Environmental savings:



42 kgCO₂e were saved by this change.

Social savings: demonstrating good stewardship of resources and including environmental impact into decisionmaking about housekeeping in a healthcare setting.

Next steps:

This project has been selected for the concept to be spread to other areas of the hospital.

Project 2:

Goal: to reduce plastics waste from serving orange juice on the ward.

Background: individual portions of orange juice are served in small plastic pots. These are handed out to, on average, 20 patients at lunchtime and at the evening meal.

Approach: instead of buying individual portions of orange juice the ward bought hard plastic tumblers and 1 litre cartons of orange juice.

The cost of water and electricity used to run the dishwasher, the carbon conversion factors for the materials used to make the different packaging and the cost of the waste recycling, together with the weight of the two types of packaging was used to calculate environmental and cost benefits of this project.

Results:

Environmental saving: packaging & plastic use was decreased by this change, which is a very important positive environmental impact. The change in the greenhouse gas emissions due to the switch in carton size was not quantifiable as there are no greenhouse gas emission factors available for tetra packs (1 litre cartons). It is likely that the greenhouse gas emissions to produce the containers would be higher in the case of the small carton compared to the 1 litre cartons. Taking energy and water required for dishwasher cleaning of the tumblers, the measurable annual greenhouse gas emissions for this process were calculated as greater after the change to reusable tumblers. However, the calculation is an approximation as accurate data on energy use for the dishwasher on the ward was not available and it was not possible to include data relating to the change in orange juice cartons, which, ideally we would have liked to use in the comparison and may have outweighed the emissions related to operating the dishwasher.

Cost savings: individual portions of orange juice are expensive in relation to a 1 litre carton. Savings were made despite the ward needing to buy new, reusable plastic tumblers. The savings year on year will increase if the tumblers are retained on the ward. The switch saved £1029/year/ward with the potential to save £30,876 if the change was successfully spread to 30 other wards.

Social: foil lids of the individual portions of orange juice can be difficult to open, especially for elderly patients so changing to tumblers may have made it easier for patients to drink orange juice. Drinking from a tumbler is also easier and a more pleasant experience than drinking from a plastic pot.