



REDUCING WASTE IN PHARMACY, 2020

TEAM MEMBERS: Michelle Kirkland (Medicines Management & Accredited Technician) and Katie Kendall (Pharmacy Technician).

Aims:

- 1) To reduce the number of unusable dose units generated in pharmacy and issued to wards.
- 2) To increase the reusing of medicines on the ward by promptly reallocating suitable dose units that have been returned to pharmacy to other wards.

Background:

'Dose units' are incomplete sets of medications, often strips of medicines. These can be wasted if strips of low value foil-wrapped medicines have been cut in such a way that the date of expiry is not visible when issued to the wards; when they are returned to pharmacy these are wasted due to the lack of expiry date (methods of salvaging higher value medicines are already in place but the team thought that that significant savings could still be made if lower value medicines could be reused).

Those dose units that do have a visible expiry dates can be reused but were often not promptly re-shelved so risked going out of date and being wasted.

Goal 1: To reduce the number of unusable dose units generated in pharmacy and issued to wards.

Baseline: A spot check on a single day of the medicines returned to pharmacy was carried out to see 1) how many dose units were wasted due to lack of expiry date 2) the amount of medicines that could be reused and returned to the wards if processed rapidly (i.e. ward stock items). There was a waste of 2.4 kg in a single spot check on one day due to dose units not having expiry dates on them. If this were representative of a typical weekday, this would equate to 624 kgCO₂e and £14,717 wasted per year.

Change introduced: Dispensary pharmacists were asked at a departmental meeting to supplying whole strips of drugs rather than odd dose units.

Potential savings: If by cutting the dose units differently this waste could be reduced by 30%, then the savings would be a total of £4,415 over 1 year.

The carbon footprint of the medicines wasted due to lack of expiry date on dose units plus disposal was 2,929 kgCO₂e over 1 year. If 30% of this waste was prevented we could save 879 kgCO₂e a year.



Goal 2: To increase the reusing of medicines on the ward by promptly reallocating suitable dose units that have been returned to pharmacy to other wards.

At baseline, the cost of medicines returned to pharmacy that could be redistributed to the ward came to £45 per day.

Change introduced: Medicines that were ward stock that were returned to pharmacy were immediately returned to pharmacy stores rather than being shelved on the 'returns shelves' in main pharmacy, as they were more likely to be quickly returned to the wards from pharmacy stores.

Results: If redistributing 70% of medications, we would save £8,267 and 1,353kgCO₂e per year. This is excluding disposal.

Social impacts

A cultural change within the department and staff development was observed.

"I liked being involved with the Green Ward competition, could see the value of more sustainable healthcare." DM (Senior Assistant Technical Officer):

"I have learnt a lot...and am keen to carry on with the work to make changes for the better". Katie Kendall (Pharmacy Pre-registration Technician):

We plan to amend the standard operating procedure (SOP) to make sure that only whole dose units that have an expiry date are issued to wards.