St Barnabas

Charity no.1053814

Identifying

the scale of medicine destruction in a hospice Inpatient Unit

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Problem identified

20% of the NHS carbon footprint plus is due to medicines waste.[1]

The majority of medicines destroyed in the Inpatient Unit are those brought in by patients rather than stock items.

This waste goes for incineration with energy recovery rather than recycling.

If a large proportion of the waste is tablets in blister packs, could this waste be redirected to blister pack recycling schemes?



How did we quantify waste?

Medicine for Destruction Records between July – October 2024 were reviewed and data collected on the formulation and quantity of medications destroyed.

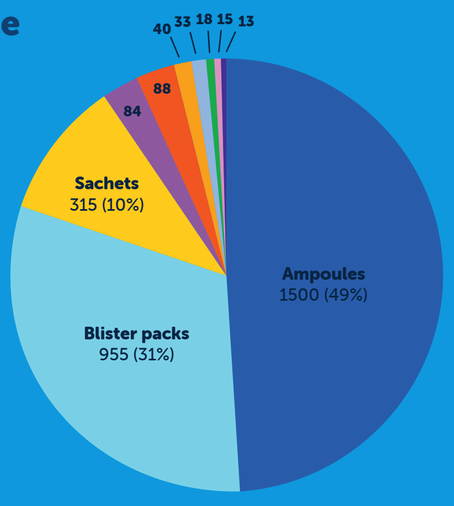
As the records only showed the number of tablets destroyed, the BNF and Google images were used to cross-reference and calculate blister packs destroyed.

Results

Medicines waste in the IPU

A total of 3061 items were destroyed in 4 months †

† 9 further entries were excluded as quantities were not recorded

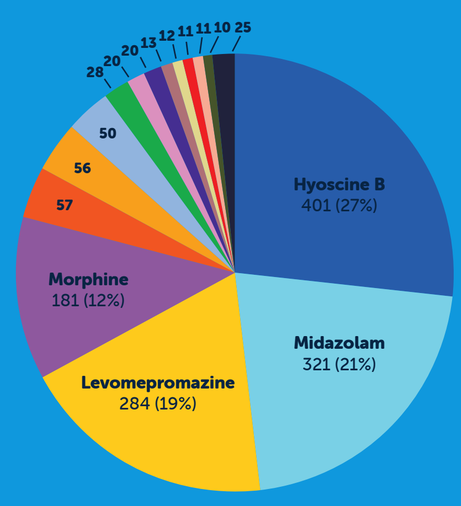


Key

- Bottles
- Patches
- Nebules
- Syringes
- Inhalers
- Tubes
- Other

Ampoules

The quantity of ampoules wasted was higher than blister packs, with these formulations together making 80% of the total waste.



Key

- Water for injection
- Haloperidol
- Octreotide
- Dexamethasone
- Saline
- Adrenaline
- Alfentanil
- Insulin
- Metoclopramide
- Oxycodone
- Midazolam crisis
- Other



Limitations

Tablet quantity was recorded rather than blister packs, so waste could vary between manufacturers. The lowest possible total was always used. Blister packs discarded through medicine administration to inpatients weren't included, as they aren't recorded as medicine destruction. These results are therefore likely to be an underestimate of total blister pack waste.

Outcomes

Waste streams used by the unit were reviewed to reduce the impact of clinical waste, including medicine waste, on our carbon footprint.

Discussion is ongoing regarding procurement of blister pack recycling boxes following these initial changes.

A further project has been proposed to investigate avoidability of ampoule waste at IPU level.

References

* St Barnabas Hospice Inpatient Unit, Lincoln

1) Delivering a Net Zero National Health Service (2022)

Have a question?

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every day matters