A Breath of Fresh Air: Uncovering Inhaler Waste in Our Hospital

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BACKGROUND

Medication wastage places a financial and environmental strain on the healthcare system. Due to their single patient usage, inhaled medications are common culprits of this wastage.

AIM

The aim of this audit was to assess the number of patients with a wasted Symbicort® 200/6 microgram turbuhaler and/or rapihaler (most frequently dispensed inhaler at Northern Health) and assess factors contributing to wastage.

METHOD

Retrospective audit was completed from 30th April 2024 to 30th April 2025.

Inclusion Criteria:
- Patient > 18 years of age
- Two or more dispensing of Symbicort 200/6 rapihaler and/or turbuhaler
- Accessible Electronic Medical Records (EMR)

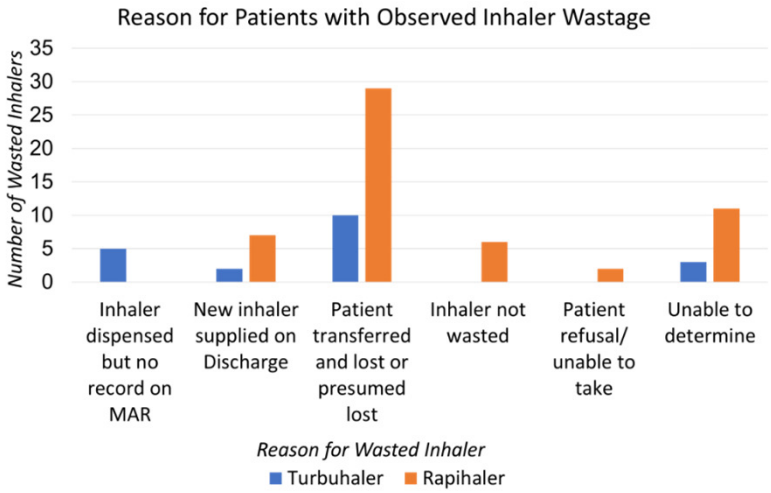
Dispensing data of all instances of double (or more) dispensing of either inhaler extracted. Data then cross referenced with EMR to reason wastage. Inhaler was not considered wasted if multiple dispensings occurred across separate presentations.

RESULTS

Table 1: Number of wasted inhalers, doses and total cost between the Turbuhalers and Rapihalers

	Wasted Inhalers	Wasted Doses	Cost ($)
Turbuhaler n=20	18 (26%)	1778 (24%)	278.82 (22%)
Rapihaler n=55	51 (74%)	5717 (76%)	995.01 (78%)
TOTAL	69	7495	1273.83

Graph 1: Reasons for Observed Inhaler Wastage



DISCUSSION

The leading cause of wasted inhalers was lost inhalers on patient transfer between wards, accounting for 39 patients (59%) (Graph 1).

Potential methods to minimise wastage:

- Standardised procedure such as a checklist for transferring patients
- Pharmacist ensuring inhaler is misplaced or lost in transit before resupplying
- Patient bringing in own supply

Limitations of this study include the retrospective nature of the audit as there may be incomplete or missing medical records

If study is to be repeated, it is recommended to include more inhalers, and review each Northern Health site for further insight. It may be beneficial to monitor closely as to which areas of transfer are more prone to losing an inhaler.

CONCLUSION

This study highlights the need for a standardised process and more effective workflows around medication tracking during patient transfer and discharge. This may help to prevent unnecessary inhaler wastage and reduce both environmental and financial waste within Northern Health.