



NATIONAL RETURN AND DISPOSAL OF UNWANTED MEDICINES PROJECT AUDIT 2016

The National Return and Disposal of Unwanted Medicines Project Audit 2016 was conducted by Griffith University and funded by RUM and Australian Government Department of Health.

The research consisted of two stages, and was conducted from June to October 2016. The first stage involved an audit of a sample of returned medicines containers from all Australian states and territories. The second stage involved a two-step general population audit that consisted of a survey to assess awareness of the NatRUM scheme, and the risks associated with the improper disposal of unwanted medicines and accumulation of medicines, and structured interviews with higher medication uses to identify perceptions and behaviours surrounding the disposal of unwanted medicines.

Stage One: RUM bin audit

The RUM bin audit aimed to collect data on the type and amount of medicines returned and to identify the proportion of total waste that was subsidised by the Pharmaceutical Benefits Scheme (PBS). In total, representative samples of 423 RUM bins from all Australian states/territories were collected.

The specific objectives included identifying:

- The quantity and types of medicines returned to pharmacies throughout Australia
- The proportion of the total waste that was PBS-subsidised, and where possible, the dispensed category of the returned medicines (i.e. concession, general, Safety-Net, etc.).

Key results (see full report for comprehensive audit results)

- Top 5 items returned to pharmacy were Paracetamol tablets, Salbutamol inhaler, Glyceryl trinitrate spray, Cephalexin capsules and Aspirin 100mg tablets
- Ten of the most frequently found items were in the Top 20 PBS medicines dispensed in 2015
- All of top 20 items found in RUM bins were mostly low cost – generally under \$5 per PBS pack
- Returned content breakdown;
 - Schedule 4 (54.6%)
 - Schedule 3 (4.4%)
 - Schedule 2 (9.5%)
 - Schedule 8 (1.4%)
 - Complementary medicines (3.9%)
 - Dose administration aids (14.2%)

Return Unwanted Medicines



Key insights

- Pharmacists are using RUM bins appropriately – only a small proportion of total contents was inappropriate. However, ongoing education for pharmacists and pharmacy staff is still important to ensure continued success
- The contents of the RUM bins, in terms of the highest frequency items, suggest that results are broadly reflective of comparable PBS dispensing statistics, a similar finding to the first (2013) audit. For this reason, more frequent and targeted audit activities for the RUM project may be justified given the expense and complexity of a full national audit
- Large volumes of high-cost PBS-listed items were not found, giving some reassurance that costly, subsidised medicines are not readily discarded by consumers using RUM bins. This finding does not exclude the possibility that such items are disposed of by less appropriate means or are being kept at home

Stage Two: General population audit (online survey and telephone interviews)

The aim of the 2016 General Population audit was to ascertain awareness amongst a representative sample of the general population regarding appropriate practices for the disposal of unwanted medicines and of the NatRUM scheme, and to identify what people currently do with their unwanted medicines.

The General Population survey was a 10-minute online questionnaire that explored awareness of the NatRUM program and aimed to identify what, if any, people currently do with their unwanted medicines. Additionally, a sub-sample of the general population survey respondents who took five or more medicines (including complementary, alternative and/or over-the-counter medicines) participated in a 15-minute telephone interview about the unwanted or 'when required' medicines they had at home.

The specific objectives of this stage were to:

- Audit awareness amongst the general population of appropriate practices for disposal of unwanted medicines
- Collect data on the quantity of unwanted medicines and storage and disposal practices in the households of a subset of the general population who experience higher medication burden

Key results (see full report for comprehensive audit results)

- The majority of respondents (over 80%) did not know how to dispose of expired or unwanted medicines safely and appropriately and were completely unaware of the RUM initiative
 - **After learning about the scheme, 92% of people said they would use it**
- Around 60% of General Population Survey respondents reported that they had unwanted medicines in their homes. Of those with unwanted medicines:
 - 77% were prescription medicines

Return Unwanted Medicines

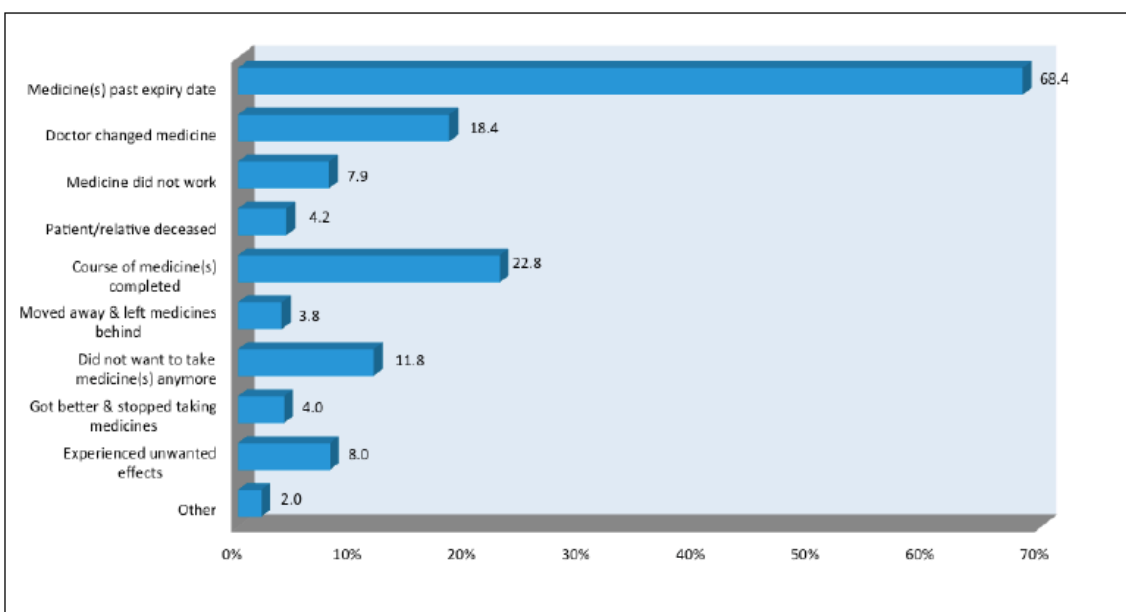


- 28% were unused prescription medicines
 - Almost 40% of them were expired
 - If the unwanted medicines were non-prescription medicines, 70% were opened and 34% were expired
 - Complementary medicines: 60% were used, while the unused or didn't know if used were 20% each
 - 28% of the prescription unwanted medicines had been discontinued without discussing or consulting an HCP
- The primary reason (75%) for respondents keeping unwanted medicines was *in case they needed them again* but 20% did not know how to dispose of these medicines safely
 - The primary concern for people who had unwanted medicines at home was that unsafe storage could lead to unintended poisoning (e.g. children)
 - The majority of survey respondents (65%) said they disposed of their unwanted medicines with the usual household garbage; followed by poured down the drain or toilet (23.3%)
 - Less than a quarter (23%) of those interviewed actually disposed of their unwanted medicines by returning them to a community pharmacy
 - 59% of households surveyed has disposed of unwanted medicines within last 12 months (compared to 26% in ABS 2012 data)
 - A total of 1424 currently unwanted or 'when required' medicines were stored in various locations in the home;
 - Multiple storage locations were used to support/improve medication adherence, although this perhaps inadvertently also contributed to duplication of medicines, including unwanted medicines;

Return Unwanted Medicines



Figure 4.1: Reasons for disposal of medicine(s)*



*Respondents could select more than one answer.

-Ends-