



COMPLETED GRANT SYNOPSIS

Dispose My Meds™ National Data Collection Initiative National Community Pharmacists Association (NCPA) Foundation Alexandria, VA

Objectives

Determine and quantify the extent of waste that may come from mail-order provided medicines compared to those medicines provided by community pharmacies and from other healthcare providers.

Methods

Design	<ul style="list-style-type: none"> The data collection period ran over the span of twelve months, from June 2012 – June 2013. A voluntary survey was available at each location participating in the Dispose My Meds™ Program for patients returning their medications. The survey was to be available either orally via pharmacist administration or on paper. For those pharmacies that were unable to enter data, a paper survey was to be mailed to the investigators. A statement regarding consent was placed at the top of the paper survey or given verbally to each participant. The surveys were collected and mailed to the Feik School of Pharmacy (FSOP) investigators quarterly by the participating pharmacies. The data was reviewed quarterly to determine the quantity of surveys received and to examine the preliminary data. No compensation was offered to those taking the survey. Compensation was offered to the pharmacies that input 50 entries or more. Qualifying pharmacies were offered a \$25 voucher toward the purchase of the next medication disposal collection bin.
Study endpoints	<ul style="list-style-type: none"> Source of return by pharmacy type: community pharmacy, mail order, physician samples, other Percentage remaining in bottle – comparison between community pharmacy and mail order

Results

- A total of 6,535 return entries were received, and the majority of medications (71.5%) returned were from a community pharmacy, followed by returns from mail order (16.7%). Physician samples represented less than 5% of the returns, and the remainder of the returns came from other sources not specifically cited or were unknown.
- The returns from community pharmacy ranged from 0.2% to 17.1%.
- The returns from mail order pharmacy ranged from 0.1% to 38.5%.
- The returns from mail order, within its pharmacy type, appeared to have a higher proportion returned with 80% or greater remaining. Nearly 58% of the medications returned from mail order had 80% or more of the medication left, compared to 37% from community pharmacy.
- Additionally, the returns of brand medications were proportionally higher from mail order pharmacy.
- Community pharmacies had a higher percentage of returns on generic medications compared to mail order.

Conclusion

Although all of the disposal locations in the study were conducted at independent pharmacies, for purposes of the study, community pharmacy data included both independent pharmacies as well as chain locations. It could be too early to draw conclusions, but the data points present a good springboard for further study. For example, a general benchmark indicator of adherence is completion of 80% or more of therapy within a given timeframe. Calculations are based on proportion of days covered, or a PDC measure which is currently used to calculate adherence measures in the quality measures for star ratings for plans in Medicare Part D. In this case, the lesser amounts of medication remaining could indicate greater adherence. On the contrary, there appear to be greater amounts being returned from mail order with 80% or more remaining, prompting questions about possible non-adherence which are worth exploring. Greater amounts of medication leftover could also present medication safety issues with accidental poisonings.