

Final Report for Grant #98
Issued by the Community Pharmacy Foundation
To the National Community Pharmacists Association
In support of the *Dispose My Meds* patient safety program
March 22, 2011

The issue of unused, unneeded medications is one of growing concern today from a variety of perspectives. It is estimated that more than four billion prescriptions are written annually in the U.S. and up to 40 percent of drugs dispensed outside of hospitals are not taken, generating some 200 million pounds of unused pharmaceuticals each year.

When people stop taking their medicines, or keep them beyond their expiration date, staggering amounts of medication waste can accumulate in home medicine cabinets.

Unused patient medications are a contributor to an increasing number of accidental poisonings. Additionally, the United States has experienced an 80 percent increase in deaths from accidental overdose of narcotics in a recent six-year period.

While initially viewed as a problem centered on misuse and abuse of unneeded medications by teens, other problems associated with unused medications have increasingly been linked to environmental concerns related to water quality and potential contamination of public waterways and drinking water. Studies have found waste pharmaceuticals in the drinking water of more than 50 million Americans, and the U.S. Environmental Protection Agency is now studying these and other contaminants to determine whether regulations are needed.

Over the past 10 years, fragmented efforts have emerged at the local community level to conduct collection programs to properly dispose of medication wastes. As the population continues to age and medication use by the elderly grows, the potential for more medication waste to accumulate increases. Until recently, the FDA and other governmental agencies have advised consumers to either flush unused medications down the toilet, or dispose of them in the garbage that ultimately ends up in a landfill.

The issue has assumed increased importance among environmentalists after a 2002 U.S. Geological Survey found trace amounts of pharmaceuticals in 139 public waterways in 30 states. A related study was conducted by the Associated Press in 2008 which concluded that 40 million Americans were exposed to drinking water contaminated by pharmaceutical wastes. Even though the "science" of these surveys has faced criticism, the findings have rallied environmental activists to press for state and federal legislation to regulate the disposal of medication wastes.

NCPA Program Objectives for Dispose My Meds program

NCPA determined that it was proper and important for community pharmacy to take a leadership position with this issue. By partnering with a variety of responsible third parties, NCPA established that community pharmacy can demonstrate its commitment to public safety and welfare, and build support for its role in society. Objectives of the Dispose My Meds program included tactics that:

1. Demonstrated community pharmacy's commitment to public safety and welfare by providing effective mechanisms for consumers to dispose of unwanted medications.

2. Provided community pharmacies with tools to conduct effective medication take back programs.
3. Communicated community pharmacy's commitment to safe medication disposal to state and federal public policy leaders, working in conjunction with other third parties.
4. Achieved significant public awareness for community pharmacy's medication take back program.

Program Design

Key to the design and implementation of NCPA's Dispose My Meds medication take back was its commitment to demonstrating the effectiveness of a voluntary, private sector approach. Another key component of the Dispose My Meds program was a patient survey that identified reasons why patients discontinue using their medications, along with the dispensing source, product name and quantity of returned medications. This patient feedback on why they discontinued their medication will be useful in pharmacy provided MTM services and medication adherence.

Barriers to potential program success were addressed, including DEA regulations prohibiting the collection of unused controlled substances, and the fact that many state pharmacy practice regulations are silent or vague on pharmacy based collection programs, which did cause some confusion and reluctance to participate among some pharmacy operators. Also, from a pharmacy operational viewpoint, there is concern about disposal program costs associated with collection, storage and shipment of collected medicines, as well as costs to maintain an on-going service.

In preparation for developing and launching the Dispose My Meds Program, NCPA conducted considerable research on the issue, assessed state and national regulatory issues that could impact the program, investigated the outcomes of various one-day type collection programs, and gauged NCPA member interest in participating in a medication disposal program. NCPA also explored several outside vendors providing collection and disposal services with the goal of providing a near turn-key program for participating pharmacies.

The program was managed by two Co-Directors: Carolyn Ha, PharmD and NCPA Associate Director of Management Affairs, and Phillip Schneider, MPA and NCPA Senior Consultant, both under the direction and supervision of Douglas Hoey, RPh, MBA, and NCPA Senior Vice President and Chief Operating Officer. Additionally, Valerie Briggs, MBA, and NCPA Senior Director of External Communications and Marketing Outreach, played a key role in coordinating the many varied facets of the marketing and communications program support.

The Dispose My Meds web site at www.disposemymeds.org was designed and developed by Robert Johnson, NCPA's Associate Director of Interactive Services. The site was extensively reported by the media and accessed by consumers who used the unique zip locator to learn the location of participating pharmacies, as well as obtain other information about proper disposal of medicines. The site also contained the logos and links of supporting organizations, including the Community Pharmacy Foundation.

After thorough analysis and determination of its capabilities, effectiveness and regulatory compliance, NCPA entered into a contractual agreement with Sharps Compliance, Inc. to provide participating community pharmacies disposal collection materials, instructions for use and directions for returning collected medicines to the Sharps licensed disposal facility.

NCPA consulted with numerous pharmacy organizations, and leadership at state pharmacy associations and state boards of pharmacy to inform them of the program being developed by NCPA. Presentations also were made by NCPA at meetings of NASPA, the NCPA Annual Meeting and to various regional wholesaler and independent purchasing organizations. The objectives of these interactions was to build awareness, understanding and support of the Dispose My Meds initiative, as well as continuing recommendations that participating pharmacy operators to consult with and comply with their respective state regulations.

Program Operations

Dispose My Meds program launch was on April 17, 2010, which was the 40th anniversary of Earth Day and an official activity of the Earth Week 40th Anniversary Program. At this point, over 800 community pharmacies operating in 40 states began participating in the largest ever voluntary community pharmacy-based medication program. NCPA also promoted the program during the October 2010 Pharmacy month and fall clean out the medicine cabinet campaigns, as well as in March 2011 during National Patient Safety Week.

Marketing tools developed by NCPA include in-store items such as posters, counter cards and window cling signs. Additionally, templates were provided for prescription bag stuffers, advertising slicks, customizable generic news releases, zip locator tools and tips on how to gain local media coverage about the community service being provided in their community pharmacy. The Dispose My Meds web site is unique, containing useful public information about the potential for environmental harm from improper disposal of unused medications, as well as facts and information about the potential harm from abuse of unneeded medications. Additionally, a web-based FAQ tutorial was provided to participating pharmacies via the NCPA web site, along with instructions and directions that pharmacies should determine or verify their eligibility under their state practice regulations. Additionally, NCPA conducted three closed web cast Member Forums and Q & A sessions leading up to the program launch.

Program Results

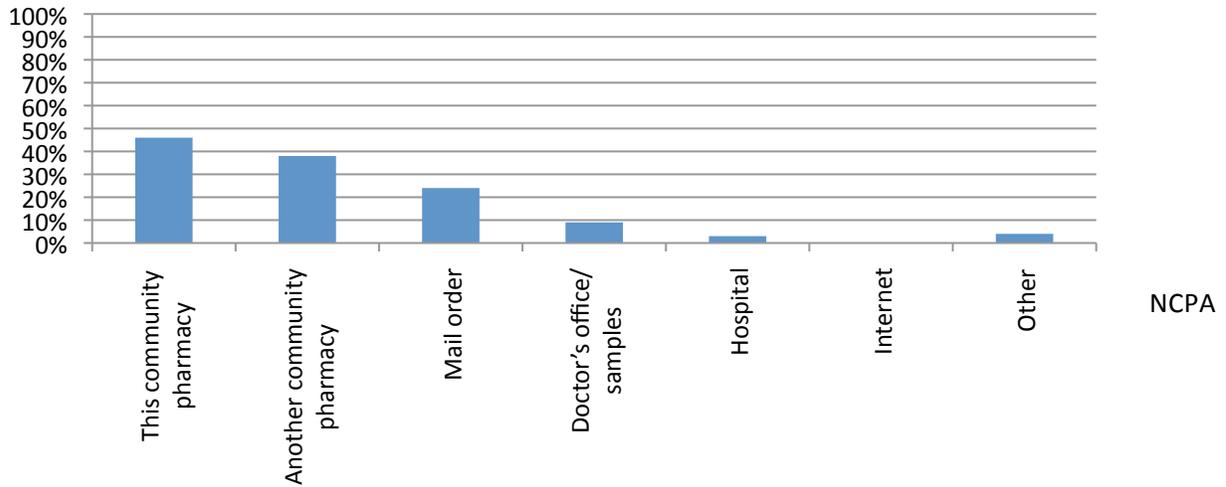
Very significantly, an analysis conducted of consumer use of the Dispose My Meds website indicates that over 90 percent of those accessing the site utilized the zip locator to identify the location of participating pharmacies. This indicates a strong public interest in wanting to do the right thing when it comes to proper disposal of medicines.

Media exposure was extremely extensive, totally over 176 million impressions in print, radio and TV coverage. The Dispose My Meds Program was highlighted in nationally distributed *Parade* Magazine and *Consumer Reports* Magazine.

As of February 15, 2011, over 25,000 pounds of unused medications had been returned to participating pharmacies. This amount is the equivalent in weight of approximately 36 million individual two-pill doses of a typical medicine.

A survey involving over 3,000 patients revealed that of the medicines return approximately 68.7% contained half or more of the amount originally dispensed. Consumers also were asked why they were returning medications and reasons given were: 55% expired, and another 10% made the decision they no longer needed to use the medication. These consumer practices represent significant medication adherence challenges.

Where consumers receive the medications they return



NCPA continues to operate the Dispose My Meds program, and hopes to grow the program to over 2,000 participating pharmacies by year-end 2011. Additional funding will be sought to measure more specifically the type of medicine returned, whether it is brand or generic, its source of dispensing and the quantity of each medication returned by dispensing source, as well as more detail for reasons why the patient discontinued using the medicine.