NoDak PHARMACY

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MISC0142-03-07

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Mark Your Calendar

NOVEMBER
November 18-20, 2010
National Alliance of State Pharmacy Association
Fall Symposium
Palm Springs, California
La Quinta Resort and Club

DECEMBER
December 5-9, 2010
ASHP Midyear Clinical Meeting

JANUARY
January 4, 2011
ND 62nd Legislative Assembly Convenes

FEBRUARY
February 8, 2011
Pharmacy Legislative Day/Ice Cream Social

JUNE
June 10-12, 2011
126th NDPhA Annual Convention
Grand Forks, ND

TAKEAWAY™

ENVIRONMENTAL RETURN SYSTEM

North Dakota's Medication Disposal Program

ACCEPTABLE:

Unused or expired medicines prescriptions (Rx) or over-the-counter (OTC), including:

- *pills, tablets, capsules*
- *ointments*
- *creams*
- *lotions*
- *powders*
- *inhalers, nebulizer solutions*
- *liquid medicines ≤ 4 oz.*
  - solutions, suspensions
  - liquids must be wrapped in a paper towel and placed in a sealed plastic bag before being placed in a TakeAway™ container

NOT ACCEPTABLE:

Controlled substances (such as):

- *Adderall, Vicodin, Demerol, Hydrocodone, MS Contin, Ambien*

Any sharps (such as):

- *Syringes, lancets*

Liquids > 4 oz.*

Thermometers*

Home based care (HBC) or durable medical equipment (DME) supplies (such as):

- *Rubbing alcohol, hydrogen peroxide**

*contact local household hazardous waste facility

Products should be left in the packaging the medication was dispensed in. This will provide a means of disposing of the packaging, contain and protect the medication in transit, minimize any exposure and is also one of the requirements of the transporter.

TakeAway™ can oly accept unused medications from patients or patients' caregivers. Inventory from a pharmacy or other healthcare facility is NOT accpetable.

Questions? Check with your pharmacist.

www.nodakpharmacy.com / www.nodakpharmacy.net

WHAT ARE YOU DOING WITH *YOUR UNUSED MEDICATIONS?*

An estimated 250 million pounds of unused medications are improperly disposed of each year, thereby threatening our ecosystems, and overall health.

Take advantage of North Dakota's medication disposal program and truly make a difference.

Ask your pharmacist for details today.

NORTH DAKOTA BOARD OF PHARMACY

NDPhA NORTH DAKOTA PHARMACISTS ASSOCIATION

www.nodakpharmacy.com / www.nodakpharmacy.net

[1]Associated Press 2008, Tons of Drugs Dumped into Wastewater.

TAKEAWAY™

ENVIRONMENTAL RETURN SYSTEM

North Dakota's Medication Disposal Program

TakeAway drug disposal program to protect North Dakotan's and the environment

North Dakota is the second state in the nation to launch *TakeAway*™ a statewide prescription drug disposal program. *TakeAway* Environmental Return System allows consumers to safely dispose of unused or expired medications through the convenience of drop off boxes in their community pharmacies. This program is a collaborative effort with the ND Attorney General's office. The Attorney General has implemented a similar program utilizing local law enforcement offices to take back used prescriptions, including controlled substances. The Attorney General is looking to add additional law enforcement drop sites because of the high demand by the public. Together, the Attorney General, local law enforcement offices and over 230 pharmacies in ND are implementing effective drug disposal programs for the citizens of ND.

"We care about patient safety, curbing prescription drug abuse and protecting our environment," said Michael Schwab, Executive Vice President of the North Dakota Pharmacy Association. "This easy-to-use consumer take back program will reduce contamination in our waterways and help to prevent prescription drug abuse."

TakeAway is a new solution to an old, yet urgent problem. "Every day patients ask their pharmacists what to do with expired drugs," said Howard Anderson, Executive Director for the North Dakota State Board of Pharmacy. "Before *TakeAway,* we did not have an easy or practical solution."

When unused drugs get in the wrong hands, the potential for danger is significant. The Office of National Drug Control reports that prescription drugs are the drug of choice among 12- and 13-year olds, while a third of all new abusers of prescription drugs are between the ages of 12 and 17. People who throw away or flush unused drugs down the drain are also creating dangerous situations by polluting our water supplies and landfills. Plus, prescription medicines thrown in the trash may be picked up by children or pets.

"As members of the community, pharmacists are in a prime position to ensure the safe and proper handling of medications, from dispensing to disposal," said Schwab. "By working together, pharmacists across the state of North Dakota hope to make a difference for the environment and their communities through *TakeAway*."

Visit www.sharpsinc.com/locator to locate a participating pharmacy in your community and please review the list of acceptable and unacceptable items.

Released: June 2010

ND Prescription Drug Repository Program

Free Prescription Drugs and Supplies for North Dakotans!

Medications and supplies available for health conditions including:

- Diabetes medication and supplies
- Respiratory care and inhalers
- Antibiotic medications
- Cardiac and cholesterol
- Gastro-intestinal issues
- And much more

1. Visit www.nodakpharmacy.com
2. Click on Prescription Drug Repository Program
3. Click on Search for Donated Drugs
4. Scroll or type through the list of options and select your choice, then click enter.
5. Once the item is found, click on the highlighted Participant for contact information on how to receive the medication or supply.

If you have questions, ask your local pharmacy or pharmacist for details!

Brand Name Drug Rebate Website!

Prescription Rebates and Coupons are available through a unique web site developed by one of your local ND pharmacists! These REBATES and COUPONS are available to you, the patient, directly from the drug manufactures! Please go to the website listed below to see if any of the medications you are taking are on the list. The list is provided in alphabetical order.

View the following site for details.

http://www.aboutthepatient.net/Prescription-Coupons.html

NDPhA
NORTH DAKOTA PHARMACISTS ASSOCIATION

ND Pharmacists Association
1641 Capitol Way
Bismarck, ND 58501
701-258-4968

ND Drug TakeAway Program

What are you doing with your unused medications?

Did you know your ND pharmacies offer a program and place for you to properly dispose of your unused medications?

An estimated 250 million pounds of unused medications are improperly disposed of each year, threatening our water ways, overall health and other ecosystems.

Your ND pharmacists have partnered and decided to offer a program free of charge to you, the patient, so you can properly dispose of your unused medications. Your local pharmacy has a process in place and has drop off containers located at their pharmacy so you can bring in your medications to be disposed of.

Accepted medications: pills, tablets, caplets, ointments, creams, lotions, powders, inhalers, solutions, and liquid medications

Non-Accepted medications: controlled substances, such as Vicodin, Hydrocodone, Valium, etc... the controlled substances need to be taken to Take Back containers located at local law enforcement agencies.

Ask Your Pharmacist About The Details!

ND Pharmacy Patient's Bill of Rights

Section 61-04-07-01. Pharmacy Patient's Bill of Rights. ND pharmacists and pharmacies shall provide pharmaceutical care so that the patient has the following rights:

1. To professional care provided in a competent and timely manner in accordance with accepted standards of pharmacy practice.
2. To be treated with dignity, consistent with professional standards, regardless of manner of payment, race, sex, age, nationality, disability, or other discriminatory factors.
3. To pharmaceutical care decisions made in the patient's best interest in cooperation with the patient's physician.
4. To have the pharmacist serve as one of the patient's advocates for appropriate drug therapy and to make reasonable efforts to recommend alternative choices in cooperation with the patient's physician.
5. To have the patient's pharmaceutical records maintained in an accurate and confidential manner and used routinely to maximize the patient's pharmaceutical care.
6. To receive health care information and to review the patient's records upon request.
7. To receive patient counseling, using the methods appropriate to the patient's physical, psychosocial, and intellectual status.
8. To have the patient's prescriptions dispensed and pharmacy services provided at a pharmacy of the patient's choice in an atmosphere that allows for confidential communication.
9. To have the patient's drug therapy monitored for safety and efficacy and to make reasonable efforts to detect and prevent drug allergies, adverse reactions, or contraindications.
10. To monitor the patient's compliance and proper drug use and to institute remedial interventions when necessary.
11. To have the pharmacy patient's bill of rights posted in a prominent place within the pharmacy readily visible to the patient.

General Authority: NDCC 28-32-02, 43-15-10 (12)(14)(18)
Law Implemented: NDCC 28-32-03

Additional Resources

Together Rx

Website: www.togetherrxaccess.com/Tx/jsp/home.jsp
Phone: 1-800-444-4106
Mail: Together Rx Access, LLC
PO Box 9426
Wilmington DE 19809-9944

SHIC

ND State Health Insurance Counseling Program
Website: http://www.nd.gov/ndins/consumer/shic/
Phone: 1-701-328-2440
Toll Free: 1-888-575-6611
E-Mail: ndshic@ndgov
Mail: ND Insurance Department
SHIC
600 E Boulevard Ave
Bismarck ND 58505-0320

ND Prescription Connection

Website: http://www.rxconnectnd.org/
Toll Free: 1-888-575-6611
Mail: ND Insurance Department
Prescription Connection for North Dakota
600 E Boulevard Ave
Bismarck ND 58505-0320

Ask Your Local Pharmacist

NAPT Board of Directors

A Unique Relationship for Learning: Pharmacy Technicians and Pharmacy Students

By Kim Durben

For many students of pharmacy, their first experience behind the counters occurs in their 300 hour P1-P3 required site visit. In this initial look at what it will be like to work in a pharmacy when they graduate, what will be their first impression? "Wow! Very busy, yes! Ringing phones, busy counters, yes! Hard working, engaged people doing tasks, yes!" But what exactly are they doing and who exactly is doing what? Upon first glance, can a newbie in pharmacy distinguish between a pharmacy technician and a pharmacist just by looking? How about by what the individuals are doing?

In the course of their pharmacy exposure, a new student will come to learn the designated duties that are unique to a pharmacy technician, those that are unique to a pharmacist, and those tasks that we all share working in a pharmacy. When students are assigned to shadow pharmacy technicians, it presents a golden opportunity for us to show them the diverse multitude of things we do, we have their ear. WE become their teachers. WE have an opportunity to shape their attitudes. This is the time to show them that a great pharmacy is built on teamwork between the technicians and the pharmacists. That mutual respect for one another and one another's duties makes for a great working environment.

After all, whether we are technicians or pharmacists, what are our goals each day? Delivering efficient, accurate, high-quality pharmaceutical care to our patients and customers. Working together as a team for the benefit of our patients and customers, each of us using our education, training and skills to the best of our ability. Will a pharmacy student be able to tell a technician from a pharmacist by the attitudes and behaviors we display? The answer should be a resounding NO! Remember, we're all in this together, techs and RPh's alike, working toward our common goals.

I believe pharmacy technicians can, and do, offer a very special contribution to the pharmacy student's on-site experience. It is up to us to help them understand the benefits that educated, knowledgeable, competent technicians bring to the practice of pharmacy. The time we have with them now will help shape their outlooks about pharmacy technicians in the future. These students today may be our co-workers tomorrow. Let us, as technicians, show them that great teamwork and mutual respect build great pharmacies and that great pharmacies deliver fantastic care to the people we serve.

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Most important, you'll get a partner committed to promoting your interests so you can focus on providing the personalized care that sets you apart.

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McKESSON
Empowering Healthcare

2010 (Second Quarter)

1985—Twenty-five years ago:

- The Campbell University School of Pharmacy is founded in Buies Creek, NC.
- Pharmacy Directors of Pediatric Hospitals (PDPH) formed in 1985. Name changed to Pediatric Pharmacy Administrative Group (PPAG) in 1987.

1960—Fifty Years Ago:

- Enovid (Searle) was the first combination (norethynodrel with ethynylestradiol 3-methyl ether) oral contraceptive approved by the FDA.
- The 1960 Lilly Digest reported that the average prescription price was $3.19.

1935—Seventy-five Years Ago:

- Property owned by the American Pharmaceutical Association in the District of Columbia where the headquarters was to be erected, was exempted from general taxes as long as it was to be used by the Association.
- The Rockefeller Foundation developed the first vaccine for Yellow Fever, once prevalent in the southern United States. It was tested and released the following year.

1910—One hundred Years Ago:

- The Carnegie Foundation supported Abraham Flexner's study of the state of medical education in the United States and Canada thus changing medical education forever. Pharmacy leaders later approached Flexner to do a similar study. He refused noting that pharmacy was not a profession.
- Sir Edward Albert Sharpey-Schafer hypothesized that diabetes was the consequence of deficit of a pancreatic chemical which he called insulin—11 years before the discovery of Banting and Best.

By: Dennis B. Worthen Lloyd Scholar, Lloyd Library and Museum, Cincinnati, OH

One of a series contributed by the American Institute of the History of Pharmacy, a unique non-profit society dedicated to assuring that the contributions of your profession endure as a part of America's history. Membership offers the satisfaction of helping continue this work on behalf of pharmacy, and brings five or more historical publications to your door each year. To learn more, check out: *www.aihp.org*

2010 (Third Quarter)

1985—Twenty-five years ago:
Seldane approved to market, withdrawn by FDA in 1998 because of potential interactions resulting in serious cardiac side effects.

1960—Fifty Years Ago:
The first voyage of S.S. Hope (Health Opportunities for People Everywhere), a converted Navy hospital ship, left San Francisco bound for Indonesia.

Hundreds of New York pharmacies closed on Sunday June 26 to protest 9 unions plans (including the United Auto Workers) to open a pharmacy chain.

1935—Seventy-five Years Ago:
Senator Millard Tydings introduces a federal fair trade bill to eliminate price cutting with the encouragement of Maryland pharmacy leaders. NARD, APhA, and state associations join the campaign. Passed into law in 1937.

1910—One hundred Years Ago:
New York became the first state to require all pharmacists to possess a pharmacy school diploma as a condition of gaining a state license.

Major Frank Woodbury of the U.S. Army Medical Corps introduces the use of tincture of iodine as a disinfectant.

Salvarsan or "606" or the "magic bullet' was the first organic anti-syphillitic. Discovered by Paul Ehrlich and Sahachiro Hata and marketed by Hoechst AG

By: Dennis B. Worthen Lloyd Scholar, Lloyd Library and Museum, Cincinnati, OH

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Pharmacy Audit Assistance Service

Pharmacy Audit Help

PAAS National® (Pharmacy Audit Assistance Service) has assisted with over 18,000 pharmacy audits, saving pharmacies over $74 million in penalties over the last 16 years. PAAS is an expert third-party audit and contract advice service with over 4000 members in all 50 states.

PAAS offers toll-free assistance to pharmacies involved in an audit, and provides one-on-one consultation directly to you before and after each audit. In 2009, pharmacies utilizing PAAS for audits experienced a 78% lower chargeback over pharmacies who risk an audit on their own. Additional member benefits include a PAAS Membership Manual, a Third-Party Monthly Newsletter to keep you and your staff informed on the latest audit tactics and how to prevent audit charge-backs, valuable forms and reference tools, third party contact information to get you past the help-desk and much more.

PAAS members include independent single-store pharmacies, multi-store pharmacies and small chains throughout the United States. Most of these members find the services provided to be worthwhile, as renewals run consistently over 90%. For more information on PAAS National® please contact them toll-free at 888-870-PAAS (7227) **or visit their website at** www.paasnational.com**. If you are concerned about pharmacy audits, contact PAAS. They can help!**

Member Service: PAAS National® (Pharmacy Audit Assistance Service)

In an effort to help our members remain successful we would like to remind you of the services of PAAS National®. They offer expert third-party audit assistance, contract advice, and can answer your filing and billing questions. The year 2009 had a 20% increase in audits over 2008, with 1 in 8 pharmacies having an audit over $10,000.

PAAS has been around for the past 16 years working to assist pharmacies like yours in dealing with PBM audit tactics as well as understanding and negotiating better contract terms. They have saved their members $74 million in unjust audit charge-backs and have experience in over 18,000 audits.

Other benefits offered include a monthly newsletter, *Third Party Newsline,* filled with tips and member benefit information to help you avoid audit trouble. PAAS also has a variety of forms for your use and benefit such as signature log postcards, day supply charts for insulin, inhalers and eye drops, patient affidavit and press release templates, HIPAA, NOPP, electronic third-party evaluation templates and much more.

PAAS National® uses a one-on-one approach to provide you and your pharmacy a plan for fighting shrinking profits and helping to improve your outlook for the future. For more information on PAAS National®, visit their website at www.paasnational.com, or call (888) 870-7227.

PAAS National, Inc.

Expert Third-Party Contract and Audit Advice

160 Business Park Circle
Stoughton, WI 53589

608-873-1342

Fax: 608-873-4009

USP's Role in Patient Safety
ACPE # **0047-0000-10-002-H01-P**
1 CE Hours (0.1 CEU), Expires 09/01/2013

This continuing education monograph is adapted from the United States Pharmacopeial Convention (USP) series of white papers prepared by the Council of the Convention (CoC) titled "Focus On: Future Directions for USP." The learning objectives and assessment questions were developed by National Alliance of State Pharmacy Association's (NASPA) Continuing Education Advisory Panel. No financial support was received for this activity. This activity may appear in other state pharmacy association journals.

Council of the Convention Section on the Quality of Patient Care

Rita Munley Gallagher, Ph.D., R.N., Section Chair (American Nurses Association)

Thomas R. Clark, R.Ph., M.H.S. (American Society of Consultant Pharmacists)

Charles W. Maas, M.D., M.P.H. (California Medical Association)

Stephen P. Spielberg, M.D. (Association of American Medical Colleges)

Goals:

The goals of this lesson are to review and be aware the current methods used by various organizations to increase patient safety and those future potential opportunities for USP to be involved in patient safety.

Objectives:

At the conclusion of this lesson, successful participants should be able to:

1. Describe current methods to increase patient safety
2. Describe future patient safety opportunities for USP

INTRODUCTION

For the last four decades, the United States Pharmacopeial Convention (USP) has relied on spontaneous reporting information to support creation of safe medication use and quality of care standards in the *United States Pharmacopeia (USP)* and allied reports. For the most part, these are standards and supporting information that speak to how practitioners within healthcare systems should adjust their processes and practices to promote safe medication use. At times, USP product standards call for the adjustment of labels and labeling to reduce the likelihood of error.[1]

As a volunteer-driven, practitioner-based, standards-setting organization, USP provides an important and unique pathway for practitioners to set standards they use in daily life. USP is not itself a regulatory body and does not enforce its standards; however, conformity assessment bodies may recognize USP standards in ways that enhance their value, impact, and at times make them mandatory. Irrespective of their voluntary or mandatory character, standards provide a safe harbor for practitioners and support optimum health care outcomes.

While beyond the scope of this white paper, USP acknowledges—and has always supported—the remarkable work of academia, the Institute of Medicine (IOM), highly involved standards- and conformity-assessment organizations (many of whom are Convention members), and many others who have worked tirelessly to develop information and provide evidence-based approaches to promote patient safety, safe medication use, and optimal quality care. Much of this effort culminated in the seminal reports of the IOM beginning in 1999 and follow-on activities in the IOM and elsewhere.

The Council of the Convention Section on the Quality of Patient Care presents this white paper as a means of reviewing USP's prior efforts in this area and to encourage the Convention to consider future patient safety opportunities for USP.

[1] For the most part, USP does not provide clinical practice standards, which are the responsibility of practitioner associations, state practice boards, and other certifying bodies.

USP'S LABELING AND NOMENCLATURE RESPONSIBILITIES IN LAW

In the United States, under the Federal Food, Drug, and Cosmetic Act (FDCA), the *United States Pharmacopeia* (*USP*) and *National Formulary* (*NF*) are recognized as official compendia. A drug with a name recognized in *USP-NF* must comply with compendial identity standards or risk being deemed adulterated, misbranded, or both. Drugs must also comply with compendial standards for strength, quality, and purity, unless they are labeled to show all respects in which the drug differs. These Federal requirements arise under the adulterated drugs provision of the FDCA at §501(b) as well as the misbranding provisions at §502. The role of nomenclature is particularly important, since the link to drugs "recognized in an official compendium" at §501(b) arises in the statutory provision that addresses the designation of drugs by "established names" at §502(e).

As explained in 21 CFR §299.4, the Food and Drug Administration (FDA) has statutory authority to designate "official" or "established names," yet it rarely does so. Instead, while continuing to review *proprietary* (brand) names as part of the drug approval process, FDA defers to USP's Nomenclature Expert Committee in the Council of Experts and to the U.S. Adopted Names (USAN) Council, in which USP plays a key role, to provide *established/nonproprietary* drug product and drug substance names. Accordingly, the term "established name" means an article recognized in *USP-NF* (see FDCA §502(e)(3)), and drugs with such names must meet *USP-NF* standards for identity as well as (unless labeled otherwise) strength, quality, and purity.

The FDA has extensive authority regarding the labeling of drugs, ranging from the package insert, dispensing, and containers, to advertising and promotional materials. The FDCA provides that a drug with a name recognized in an official compendium—including *USP* or *NF*—will be considered misbranded unless it is packaged and labeled as prescribed therein (FDCA §502(g)). Monograph requirements for packaging and labeling are noted in the *USP-NF* General Notices at 4.10 and are reflected in various monographs and General Chapters.

CURRENT ACTIVITIES

1. THE USP NOMENCLATURE EXPERT COMMITTEE

USP's Nomenclature Expert Committee establishes nonproprietary names for drug substances, drug products, excipients, biologics, dietary supplements, and medical devices for humans and animals. It also promotes uniformity and consistency among the official titles in the *USP* and *NF*. The Committee is concerned with nomenclature for dosage form monographs and other aspects of the language used in the prescription, dispensing, sale, or manufacture of drugs. The Committee works in a collaborative fashion with the USAN Council, and USP has committed to using the USAN as the title of a drug monograph for that substance. The Committee's authority to develop official nonproprietary names is identified in section 502(e) of the FDCA. The section indicates that a drug is misbranded if its label does not include the "established name" of the drug and each ingredient. It further specifies that the established name of a drug or ingredient is the official title used for the drug or ingredient in an official compendium such as *USP* or *NF*, as long as the FDA has not designated an official name in accordance with section 508 of the FDCA. In early 2006, a federal appeals court decision confirmed that the nonproprietary names assigned by the USP Nomenclature Expert Committee take precedence over the names informally approved by the FDA during regulatory review. Taken together, the public-private partnerships created through Congressional authority have provided U.S. practitioners with coherent non-propriety drug substance and product names, and these good naming conventions promote safe medication use and quality of care.

2. SAFE MEDICATION USE EXPERT COMMITTEE

The Safe Medication Use Expert Committee (SMU EC) began its work in the 2000-2005 cycle and continued in the 2005-2010 cycle. The nineteen members of the 2005-2010 SMU EC were drawn from the professions of medicine, nursing, and pharmacy, and include representatives from academia, research, government, and consumer interest. In this cycle, the SMU EC has reviewed and analyzed medication error reports submitted to USP, and from those, the Committee established recommendations for revision and development of standards in *USP–NF* and made recommendations to the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) discussed later in this white paper. It also developed guidelines, recommendations, a General Chapter, and publications related to safe medication practices and patient safety. The SMU EC's members provided support to USP's two reporting programs—MEDMARX® and the Medication Error Reporting (MER) Program. The SMU EC's focus has been on policy-level priorities for the safe use of medications and patient safety initiatives. Examples of initiatives appear below:

- Total Dose per Total Volume — The SMU EC developed crosscutting support for a requirement to change labeling to indicate total dose per total volume for parenteral packages of 100mL or less. The recommendation was based on errors in which health professionals mistakenly administered the entire vial content in error—published in *Pharmacopeial Forum (PF)* 31(4) [July-Aug 2005]: Strength and Total Volume for Single –and Multiple-Dose Injectable Drug Products.
- Neuromuscular Blocking Agents — An article, "Improving the safety of neuromuscular blocking agents: A statement from the USP Safe Medication Use Expert Committee" was published in the *American Journal of Health-System Pharmacists*, Vol 63, Jan 15, 2006. The work stimulated a new policy statement from the American Society of Health-System Pharmacists (ASHP) on the use of neuromuscular blocking agents. The publication of this article followed the standard instituted by USP that required the warning, "Warning – Paralyzing Agent," on the closures of neuromuscular blocking agents.
- Patient Safety Stakeholder Forum — A cross-disciplinary Patient Safety Stakeholder Forum was convened on October 11, 2006 to discern the need for the creation of a new USP publication: "Safe Medication Practices Compendium." This forum was followed by a USP white paper, "Exploring a Strategic Proposal for the Concept of a Compendium of Safe Medication Practices." It was eventually concluded that additional exploration was needed to develop such a compendium.
- "Error Avoidance Recommendations for Tubing Misconnections When Using a Luer-Tip Connector: A Statement by the USP Safe Medication Use Expert Committee" was published in the *Joint Commission Journal on Quality and Patient Safety*. May 2008. Volume 34, Number 5: pp. 293-296.
- Physical Environments that Promote Safe Medication Use — General Chapter <1066> *Physical Environments that Promote Safe Medication Use* was created to provide safe medication use standards for all health care settings.
- Guidelines or Standards for Computerized Prescription Order Entry and Other Technologies — The SMU EC is working with Dr. Andrew C. Seger and Dr. Gordon Schiff from Brigham and Women's Hospital on an analysis of computerized prescription order entry (CPOE) errors from the MEDMARX® database to develop guidelines/standards.
- "High Alert Drugs by Location" is being drafted by the Medication Error Data Analysis Advisory Panel of the SMU EC.
- Health Literacy and Prescription Container Labeling —The Health Literacy and Prescription Container Labeling Advisory Panel of the SMU EC is working on recommendations for the development of standards regarding simplifying language; using explicit text to describe dosage/intervals, including purpose for use; organizing the label in a patient centered manner; improving readability; and including supplemental information.
- Standardized Intravenous Concentrations — The SMU EC completed analysis of a Standard Intravenous (IV) Concentrations survey of health system pharmacy directors in order to determine the standard drip and flush concentrations being used in their respective facilities for the treatment of neonates, pediatrics, and adults. The goal is to standardize product concentrations to help decrease medication errors. The SMU EC will recommend standard concentrations for ten High Alert Drugs as a follow-up to an IV SMU survey (and an IV Summit held at USP) and publish an article identifying standard IV concentrations for ten High Alert Drugs by patient type.
- Tall-Man Lettering — The SMU EC will publish an article based, in part, on a research survey titled "Tall Man"/ Enhanced Lettering for Medication Name Differentiation. The survey on Tall Man Lettering was conducted in an effort to better understand the current landscape regarding use of and experience with enhanced lettering as a safety tool. Based on the survey results, the USP Nomenclature Expert Committee will consider the advisability of developing standards. A significant number of responses (1,788) were received from pharmacists (60%), nurses (16%), and physicians (16%), with the remainder coming from pharmacy technicians, nurse practitioners, and other healthcare providers. Cooperation in disseminating the survey was obtained primarily from the American Society of Consultant Pharmacists, the ASHP, the Institute for Safe Medication Practices (ISMP), the Joint Commission, and the National Alliance of State Pharmacy Associations.
- Harmonization with WHO Label Standards for Vincristine and Other Vinca Alkaloids — Three component changes were recommended to reduce the chance of vincristine (and other vinca alkaloids) being administered by the intrathecal route (which is universally fatal). Through a reworded cautionary statement, the recommendation would change to overwrap alert labeling and add a cautionary statement on the cap and ferrule of the vial. (This proposal is currently under consideration by the Nomenclature Expert Committee.)

3. THE NATIONAL COORDINATING COUNCIL FOR MEDICATION ERROR REPORTING AND PREVENTION

USP serves as the Secretariat for the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP/The Council), an independent body comprised of numerous national organizations. The Council was formed in 1995 through the efforts of its member associations and agencies to focus on ways to enhance patient safety through a coordinated approach and a systems-based perspective.

An interdisciplinary group of 15 organizations and agencies held its first meeting in July 1995. In the past 14 years, the Council has grown to 26 member organizations and two individual members. The five goals that continue to direct the Council's activities are:

- Stimulate the development and use of reporting and evaluation systems by individual health care organizations;
- Stimulate reporting to a national system for review, analysis, and development of recommendations to reduce and ultimately prevent medication errors;
- Examine and evaluate the causes of medication errors;
- Increase awareness of medication errors and methods of prevention throughout the health care system; and
- Recommend strategies for system modifications, practice standards and guidelines, and changes in packaging and labeling.

Council Accomplishments—1995 to Present:

- Defined a "medication error" and encouraged all stakeholders to use this definition to provide a uniform basis for medication error reporting and analysis.
- Developed a medication error taxonomy, index and algorithm for categorizing medication errors
- Issued a statement on calculating medication error rates
- Promulgated recommendations for:
  - Prescribing
  - Labeling and packaging
  - Dispensing
  - Administration
  - Verbal medication orders
  - Standard bar codes on medication packages and containers
  - Reducing medication errors in non-health care settings
  - Reducing at-risk behaviors
  - Bar coding labels to reduce medication errors
  - Promoting safe use of drug suffixes
  - Avoiding medication errors with drug samples

The Council has had national and international impact through its multidisciplinary conferences on bar coding, drug nomenclature, and suffix use. Continuing activities and other accomplishments include:

1) Developing and disseminating standardized definitions for terms such as *adverse drug event*, *adverse drug reaction*, *harm*, *preventable event*;
2) Establishing a dedicated Web site for organizations, government, and practitioners to reference The Council's recommendations and other information;
3) Developing a solid oral dosage forms article for broad dissemination;
4) Endorsing the ISMP *Safety Self-Assessment for Community/Ambulatory Pharmacy*;
5) Establishing consumer information links to The Council's Web site;
6) Developing and disseminating a white paper on the use of bar codes;
7) Signing on to a set of *General Principles* supporting legislation to uphold, as privileged, information submitted to error reporting programs (These *General Principles* were incorporated into the Patient Safety and Quality Improvement Act of 2005 that was signed into law on July 29, 2005.);
8) Recognition with the 2007 American Pharmacists Association Foundation Pinnacle Award; and
9) Receipt of the 2008 Eisenberg Award.

In the coming years, The Council will continue to focus on key issues impacting the safe use of medications. With the help of new and enthusiastic member associations and agencies, The Council will address medication reconciliation as well as geriatric and long-term care issues. The members of The Council are recognized at www.nccmerp.org.

1. DRUG PRODUCT PROBLEM REPORTING PROGRAM

Because of concern with the quality of drug products on the market, in 1971, the USP and the FDA co-founded the Drug Product Problem Reporting Program (DPPR). This was a national program in which health professionals voluntarily reported problems and defects experienced with drug products marketed in the United States. Often, product problems or defects had to do with inadequate packaging or labeling that could lead to errors or confusion on the part of health professionals. Other problems such as inclusion of foreign matter, suspected contamination, questionable potency, and "bioinequivalence" based on observed therapeutic response were also reported among the more than 100,000 observations gathered in DPPR. USP terminated the DPPR contract with the FDA in 1987, but continued a USP Drug Reporting Program until August 2000.

2. MEDICAL DEVICE AND LABORATORY PRODUCT PROBLEM REPORTING PROGRAM

Together with the DPPR Program, USP operated the Medical Device and Laboratory Product Problem Reporting Program (PRP) under contract with the FDA Center for Devices and Radiological Health (CDRH). In this program, USP collected reports on defective medical devices and shared that information with both CDRH and the manufacturers involved in incidents. This program had a major impact on the use of breast implants, dental implants, and marijuana testing kits. It was the precursor to the FDA's MedWatch program. This contract with the FDA was terminated in September 1995.

3. VETERINARY REPORTING PROGRAM

In 1994, USP established a Veterinary Reporting Program (VRP) to assist the FDA's Center for Veterinary Medicine (CVM), the Environmental Protection Agency, and the Department of Agriculture in obtaining information about adverse events with veterinary products. Reports were shared with the appropriate government agency and with the manufacturers of the products involved in the reports. The program was terminated in April 2003.

4. MEDICATION ERROR REPORTING PROGRAM

In 1991, USP established its first Medication Error Reporting Program (MER) in conjunction with the ISMP. MER was designed to obtain spontaneous reports both for the medicine itself and the system in which the medicine was prescribed, dispensed, administered, and used. Between 1991 and 2008, MER received more than 6,000 voluntary reports of actual and potential medication errors. MER identified errors in various health care delivery environments, including hospitals, nursing homes, physicians' offices, pharmacies, emergency response vehicles, and home care. The reports documented that errors are multi-disciplinary and multi-factorial and that they may be made by experienced as well as inexperienced health professionals, support personnel, interns, students, and even patients and their caregivers. Medication errors can and regularly do occur anywhere along the continuum from prescribing to transcribing to dispensing and administration. The causes of errors may be attributed to human error, to product names or designs, and to the medication handling and delivery systems in which the products are used and in which individuals operate and interact. USP submitted MER reports to the FDA as a MedWatch partner, including adverse drug reactions that came to MER but were not evaluated. MER reports were also shared with the relevant manufacturers.

Examples of important changes USP made to its standards as a result of MER reports appear below:

- Potassium Chloride — Reported deaths due to the accidental misadministration of concentrated Potassium Chloride Injection led to: 1) changing the official USP name to Potassium Chloride for Injection Concentrate to give more prominence to the need to dilute the product prior to use; 2) requiring that labels bear a boxed warning with the words "Concentrate: Must be Diluted Before Use;" 3) requiring that the cap must be black in color (the use of black caps is restricted to this drug product only); and 4) requiring that the cap must be imprinted in a contrasting color with the words "Must be Diluted."
- Vincristine Sulfate — Reported deaths due to confusion and the resultant injection of the anticancer drug, Vincristine Sulfate for Injection, directly into the spine instead of the vein resulted in changes in the requirements for packaging by pharmacies and manufacturers preparing ready-to-use doses. Each dose, whether prepared by the manufacturer or the pharmacist, must now be wrapped in a covering labeled "FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES" and that covering may not be removed until the moment of injection.

- Amrinone/Amiodarone — Reported deaths due to the confusion of similar names Amrinone and Amiodarone led USP and the USAN Council to change the nonproprietary name and official title of Amrinone to Inamrinone.
- Neuromuscular Blocking Agents — Reported deaths due to the inadvertent mix-up of neuromuscular blocking agents (which paralyze the respiratory system) with other drugs led to recommended changes in standards for labeling and packaging of the therapeutic class of neuromuscular blocking agent products.

5. MEDMARX®

MEDMARX® was developed by USP in 1998 as an Internet-accessible, anonymous reporting program that enables hospitals to voluntarily report, track, and trend data, incorporating nationally standardized data elements (i.e., definitions and taxonomy). These standardized elements were drawn from the work of the MER Program, the FDA, NCC MERP, and the ASHP. MEDMARX® is structured to support an interdisciplinary, systems-approach to medication error reduction and fosters a non-punitive environment for reporting. USP created MEDMARX® with the intent to broaden the model to include other health care settings, e.g. long-term and ambulatory care settings, and to include other types of reporting such as medical error and adverse drug reactions.

Hospitals are encouraged to use MEDMARX® as part of their internal quality improvement processes, thereby extending their "peer-review" to other hospitals in the program. Hospitals can review errors entered by other institutions in "real time" and also see any reported action taken by another institution in response to an error in an effort to avoid similar errors in the future.

This feature affords institutions the opportunity to examine errors in a proactive manner. For example, the institution can review the error profile of a drug or class of drugs to determine if certain risk prevention measures or training programs should be established within the institution before a product is added to the institution's formulary. If the error profile is significantly serious, a determination may be made not to stock the drug. MEDMARX® supports the performance improvement standards of the Joint Commission, which requires institutions to look outward at the experiences of others in order to reduce risk.

USP transferred its reporting programs, MEDMARX® and MER, to Quantros and ISMP, respectively, in 2008. USP will continue to use data from these and other programs to enhance its standards-setting activities to promote patient safety and safe medication use. In the interest of public health and to assist practitioners and patients, USP has posted eight annual reports on its Web site free of charge, ensuring full access to this clinically important information.

FUTURE OPPORTUNITIES

1. NOMENCLATURE, SAFETY, AND LABELING EXPERT COMMITTEE FOR THE 2010-2015 CYCLE

In the next cycle, a new expert committee—Nomenclature, Safety, and Labeling Expert Committee—will combine the work of the Nomenclature and Safe Medication Use Expert Committees from the 2005-2010 cycle. This new Expert Committee will build on the work of its predecessors by continuing to develop guidelines, recommendations, General Chapters, and publications related to safe medication practices and patient safety, as well as by linking these efforts to drug naming and the labeling of medications. Via Expert Panels, specific standards-setting activities can be addressed on a broad range of safe medication use and quality of care standards.

2. INSTITUTE OF MEDICINE

In 2007, the IOM published *Preventing Medication Errors*, a report by its Committee on Identifying and Preventing Medication Errors. The report called on USP to work with the FDA and others in several areas related to drug naming, labeling, and packaging. The IOM posited that there are many ways that basic information about a specific drug is communicated to providers and patients and identified some of the more obvious problems:

- Brand names and generic names that look or sound alike
- Different formulations of the same brand or generic drug
- Multiple abbreviations to represent the same concept
- Confusing word derivatives, abbreviations, and symbols
- Unclear dose concentration/strength designations

- Cluttered labeling—small fonts, poor typefaces, no background contrast, overemphasis on company logos
- Inadequate prominence of warnings and reminders
- Lack of standardized terminology

The proposed IOM action plan focused on two overarching principles: 1) product naming, labeling, and packaging should be designed for the end user—the provider in the clinical environment and/or the consumer; and 2) safety should always take precedence over commercial interests. In addition, Recommendation #4 of the IOM report included USP in a list of organizations that should work together to address labeling, packaging, and the distribution of free samples.

CONCLUSION

Based on its nomenclature and labeling recognition in the FDCA and exhortations from the community, the need for USP's involvement in standards to promote safe medication use and quality care is as strong as ever—and may increase in an era of health care crisis and reform. One of USP's greatest strengths lies in its ability to convene a broad and diverse group of stakeholders around issues common to all, and USP can leverage this role by helping to advance standards related to medication safety that are beyond the scope of a single health profession or professional organization. For many years, USP has devoted substantial resources and energy to its safe medication use and quality of care standards-setting activities, but has struggled to find a sustainable financial and public health model for these activities. Convention Delegates must now ask: What is the appropriate role for USP in setting standards related to medication/patient safety, and how will this role be financially supported? The Council of the Convention Section on the Quality of Patient Care calls on the Convention membership to articulate ways in which a standards-setting body such as USP can continue its work based on USP's historical contributions, unique capabilities, and current and possible future positions in law.

ABOUT USP and NASPA

The United States Pharmacopeia (USP) is an official public standards–setting authority for all prescription and over–the–counter medicines and other health care products manufactured or sold in the United States. USP also sets widely recognized standards for food ingredients and dietary supplements. USP sets standards for the quality, purity, strength, and consistency of these products–critical to the public health. USP's standards are recognized and used in more than 130 countries around the globe. These standards have helped to ensure public health throughout the world for close to 200 years. More information can be found at www.USP.org

The National Alliance of State Pharmacy Associations (NASPA) promotes leadership, sharing, learning, and policy exchange among state pharmacy associations and pharmacy leaders nationwide, and provides education and advocacy to support pharmacists, patients, and communities working together to improve public health. NASPA was founded in 1927 as the National Council of State Pharmacy Association Executives (NCSPAE). More information can be found at www.naspa.us

Continuing Education Quiz:

1. An article with an "established name" must meet USP-NF standards for which of the following

a. Identity b. Strength c. Quality d. All of the above

2. Which of the following works in collaboration with the USAN Council?

a. USP Nomenclature Expert Committee

b. Safe Medication Use Expert Committee

c. National Coordinating Council for Medication Error Reporting and Prevention

d. None of the above

3. Which of the following does USP serve as the Secretariat for?

a. USP Nomenclature Expert Committee

b. Safe Medication Use Expert Committee

c. National Coordinating Council for Medication Error Reporting and Prevention

d. None of the above

4. Which of the following developed guidelines, recommendations, a General Chapter, and publications related to safe medication practices and patient safety?

a. USP Nomenclature Expert Committee

b. Safe Medication Use Expert Committee

c. National Coordinating Council for Medication Error Reporting and Prevention

d. None of the above

5. How many members does the 2005-2010 Safe Medication Use Expert Committee have?

a. 16 b. 17 c. 18 d. 19

6. Studies on which of the following were conducted in an effort to better understand the current landscape regarding use of an experience with enhanced lettering as a safety tool?

a. Tall Man Lettering

b. Harmonization

c. Health Literacy and Prescription Container Labeling

d. Standardized Intravenous Concentrations

7. Changes were recommended to reduce the chance of vincristine and other vinca alkaloids from being administered incorrectly. The correct route of administration is:

a. intravenous b. intrathecal

c. intramuscular d. intracranial

8. Which of the following is true regarding the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP/The Council)?

a. They defined a "medication error" and encouraged all stakeholders to use the definition

b. The first group had 26 member organizations and 2 individual members

c. The council examines medication errors but does not evaluate causes of those errors

d. All of the above are true

Continued on next page

USP's Role in Setting Enforceable Quality Standards for Medicines

ACPE # 0047-000-10-001-H04-P

The College of Pharmacy, Nursing and Allied Science, North Dakota State University, is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. To receive 1.0 hours (0.10 CEUS) of continuing education credit, complete the following and mail with $10.00 to:

Continuing Pharmacy Education Office
NDSU Dept 2660 - P.O. Box 6050
Fargo ND 58108-6050

Name _____

Social Security Number (SSN) XXX-XX- ___ ___ ___ ___

Address _____

City _____

State _____ Zip _____

Your SSN will be used to maintain a permanent record of the courses you have taken. Your SSN will be kept confidential and will be used ONLY to identify you at NDSU.

CE Assessment Answers

PASSING SCORE IS 70% OR ABOVE

Please circle your answers (one answer per question)

1.	A	B	C	D	**7.**	A	B	C	D
2.	A	B	C	D	**8.**	A	B	C	D
3.	A	B	C	D	**9.**	A	B	C	D
4.	A	B	C	D	**10.**	A	B	C	D
5.	A	B	C	D	**11.**	A	B	C	D
6.	A	B	C	D	**12.**	A	B	C	D

Program Evaluation – Must be completed for credit

Today's Date _____
Program Expiration Date: 02/01/2013

Please rate the following items on a scale from 1 (poor) to 4 (excellent).

1. Overall quality of the article
1 2 3 4

2. Relevance to pharmacy practice
1 2 3 4

3. Value of the content
1 2 3 4

Please answer each question, marking whether you agree or disagree

4. The program met the stated learning objectives:

Agree ☐ Disagree ☐

Continued on next page

Impact of the Activity

5. The information presented (check all that apply):

- ☐ Reinforced my current practice/treatment habits
- ☐ Will improve my practice/patient outcomes
- ☐ Provided new ideas or information I expect to use
- ☐ Adds to my knowledge

6. Will the information presented cause you to make any changes in how you do your job?

☐ Yes ☐ No

7. How committed are you to making these changes?

(Not committed) 1 2 3 4 (Very committed)

8. Do you feel future activities on this subject matter are necessary and/or important?

☐ Yes ☐ No

Follow-Up

As part of our ongoing quality-improvement effort, we would like to be able to contact you in the event we conduct a follow-up survey to assess the impact of our educational interventions on professional practice. Are you willing to participate in such a survey? ☐ Yes ☐ No

This lesson is a knowledge-based CE activity and is targeted to pharmacists. This program has been approved for **1.0** contact hours of continuing education credit (**0.10 CEU**). To receive continuing education credit, please provide the following information: [insert your information]

A statement of credit will be mailed to those participating within 4-6 weeks of the program. Satisfactory completion will be assessed by completion of a program evaluation and an evaluation of learning.

Continued from page 17

9. Which program was operated under contract with the FDA Center for Devices and Radiological Health (CDRH)

a. Drug Product Problem Reporting Program

b. Medical Device and Laboratory Product Problem Reporting Program

c. Veterinary Reporting Program

d. Medication Error Reporting Program

10. Between 1991 and 2008, Medication Error Reporting Program (MER) received how many voluntary reports of actual and potential medication errors?

a. Over 3,000 b. Over 4,000

c. Over 5,000 d. Over 6,000

11. Which is NOT true regarding MEDMARX®

a. It was developed by USP in 1998 as an Internet-accessible reporting program

b. Standardized elements were drawn from the MER program, FDA, NCC MERP, and ASHP

c. It enables community pharmacies to voluntarily report, track ,and trend data incorporating nationally standardized data elements

d. USP transferred its reporting programs, MEDMARX® and MER, to Quantros and ISMP, respectively in 2008.

12. The proposed IOM action plan focused on which of the follow principles?

a. Product Naming b. Product Labeling

c. Safety d. All of the above

Continued from page 17

Confidential Compounding Adverse Drug Events Reporting Program (C-ADER)

provided by the Alliance for Patient Medication Safety (APMS)
~ Patient Safety Organization*

- **Federal protection for adverse drug event reports**
- **Easy-to-use, simple, web-based program**
- **Specifically designed for compounding pharmacists**
- **APMS will provide program support with safe practice and workflow process recommendations**
- **Active program - weekly reporting reminders**
- **Data-driven quality assurance**

Brought to you by NASPA and IACP

C-ADER Program

C-ADER weekly reporting – Part One

- Report your total number of compounded prescriptions and the number of adverse events.
- Receive automated reminders to help stay current.
- Receive de-identified and aggregated trend data to access compounding performance.

C-ADER reporting – Part Two

- Report details of all adverse events related to compounded prescriptions with an emphasis on reporting serious adverse events that affect patient care.
- Maintain an easily retrievable detailed and updatable documentation of adverse event.
- Reported data will be protected from legal discovery.
- Report of serious adverse event to APMS does not remove any state mandated reporting requirements. (Note: Pharmacies are responsible for compliance with all mandatory reporting requirements.)
- Secure electronic data storage assures reports are never lost, misfiled or mishandled.
- Security features assure that your data is not visible to unauthorized users.
- Pharmacies can promote the fact that they participate in AMPS so their patients know their pharmacy aims to be among the safest in the nation.

Compounding Pharmacies Promote Culture of Safety

Tracking adverse drug events potentially associated with compounded prescriptions, analyzing patterns, and sharing results and conclusions within the compounding community will provide added assurances for quality and safety.

While serious adverse events potentially associated with compounded prescriptions are rare, there is significant movement to mandate reporting of serious adverse events related to compounded prescriptions. We believe reporting to a PSO, a confidential reporting system, will promote an optimal culture of safety.

To sign up your pharmacy for C-ADER or to learn more about Patient Safety Organizations and the Alliance for Patient Medication Safety go to:

http://medicationsafety.org

and click on the CADER graphic or call

Toll free (866) 365-7472

**The Patient Safety and Quality Improvement Act of 2005 authorized the creation of Patient Safety Organizations*

Pharmacy Quality Commitment™(PQC) – Compounding

APMS also offers a continuous quality improvement program developed specifically for compounding pharmacies to help improve operations in the pharmacy. The program strives to reduce medication errors by offering structures and methods for improvement and a feedback system. For more information go to www.medicationsafety.org or www.pqc.net.

Guatemala Medical Mission 2010

When was the last time you counted pills on a counting tray perched on a school desk, wrote out labels for lice treatment in Spanish, or got a big bear hug from a child for whom you provided medication consultation? For two NDSU fourth year professional pharmacy students, the answer to that question would be "just a few weeks ago!"

Two pharmacy students, Kinsey Oakland and Nicole Barnett, along with two NDSU pharmacy faculty members, Elizabeth Skoy and Amy Werremeyer, participated in a medical mission to Guatemala June 27th thru July 7, 2010. This group served as the pharmacy team among a larger group of healthcare professionals traveling to rural and urban communities of the Central American country.

The medical mission was part of an elective Advanced Practice Pharmacy Experience (APPE) for the students, who are just beginning their fourth professional (P4) year of pharmacy school. The five-week rotation consisted of pre-travel learning and preparation, an eleven-day travel experience to Guatemala, and post-travel reflection and evaluation. Learning and preparation prior to travel included formulary overview, review of common disease states present in Guatemala, Guatemalan culture, current events and daily Spanish lessons.

The medical team included physicians, a nurse practitioner, a medical student, nurses, dental assistants, linguists, and general helpers from around the United States and Canada. A local doctor and dentist also participated among the comprehensive medical team. The trip included six days of outreach clinics, during which 738 patients were seen by the interdisciplinary team. For these patients, 2,800 prescriptions were filled, 34 teeth were extracted, and 36 referrals were made for follow-up care and testing. In addition, over 700 fluoride treatments were performed for patients under the age of 12.

For the past three years NDSU pharmacy students, faculty, and staff have volunteered to package the medication that is distributed in Guatemala for this annual medical mission. Volunteers took responsibility to, count, label, sort and inventory the provided medications. Medications packaged at NDSU and dispensed in Guatemala included antibiotics, analgesics and anti-inflammatories, cough and cold products, topicals, antidiabetics, antihypertensives, and injectables.

The patients, the majority of whom speak either Spanish or Mam (a traditional Mayan language) began their visit through the make-shift clinics at a registration desk. Personal information was recorded including age, allergies, chronic disease states, and chief complaint. Families went through the clinic process together. They were seen by providers and received a physical examination, along with any necessary written prescriptions. The pharmacy team evaluated the prescribed medication regimens, filled the orders, and counseled the patients on the medications they received. In addition to the prescribed medications, all patients were provided with antihelmintic medication, and vitamins. Since pharmacists were not present on previous trips, the team relied on general helpers and nurses to carry out the pharmacists' duties in previous years. The presence of pharmacists on the team this year was a welcomed change and made for a more comprehensive interdisciplinary team, helping to allow for the provision of optimal patient care.

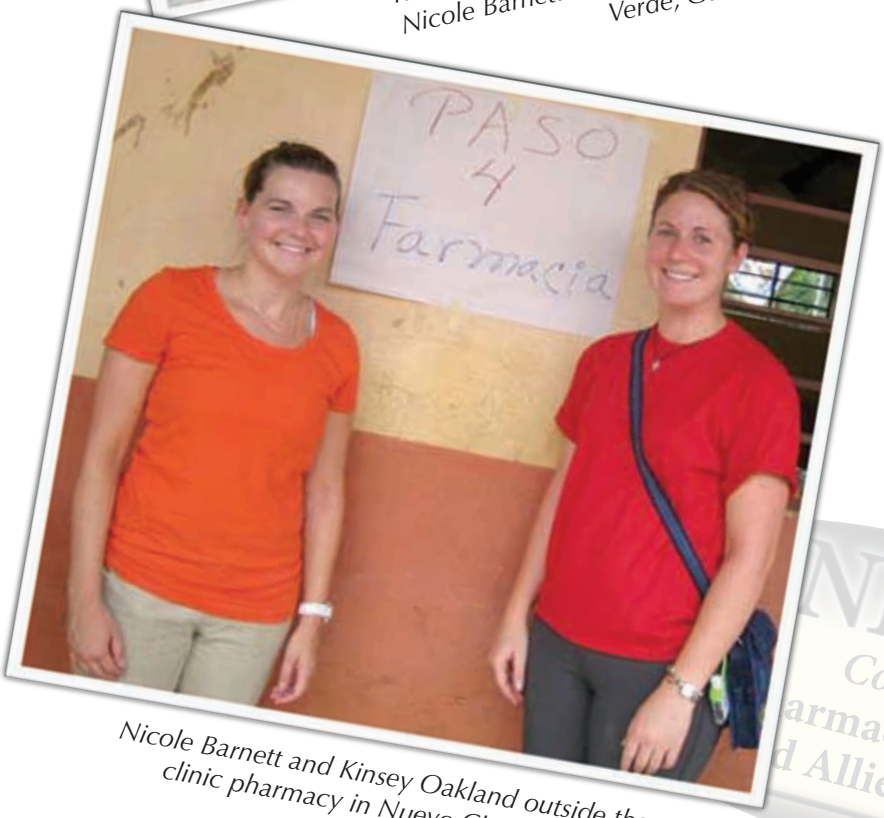
The representatives from NDSU agreed that the experience was rewarding and provided a rich learning environment. The group learned that although healthcare and physician visits are often affordable for many Guatemalans, medications are not. Therefore the provision of medications as a part of this mission trip was of vital importance. The students indicated that they felt their cultural awareness and communication skills with patients were greatly

improved as a result of their experience abroad. Students felt the skills obtained would carry with them throughout their future Advanced Pharmacy Practice Experiences and professional practice.

The NDSU College of Pharmacy, Nursing, and Allied Sciences hopes to continue to offer this medical mission experience as a learning opportunity for its students in future years and may expand to offer similar experiences in other areas of the globe.

Nicole Barnett preparing a liquid medication for dispensing in Chile Verde, Guatemala

Kinsey Oakland, Elizabeth Skoy, Amy Werremeyer and Nicole Barnett in the mission clinic pharmacy in Chile Verde, Guatemala



Nicole Barnett and Kinsey Oakland outside the mission clinic pharmacy in Nuevo Chuatuj, Guatemala

Kinsey Oakland counsels a patient about her new medication in Xela, Guatemala

North Dakota Rexall Club

NDSU College of Pharmacy Student Scholarships

Back row: Brent Klinkhammer, Matthew Perkins, Molly Irsfeld, Jill Anstadt, Nicholas Becher; Middle row: Brooke Melicher, Haylee Preabt, Michelle Carson, Megan Adelman, Bill Grosz - Presenter; Front row: Megan Born, Nicole Herman, Katie Montag, Rupa Patel, Jill Ihry. NDSU Scholarship Program, September 16, 2010.

In 2010, the ND Rexall Club met and approved fifteen $1,000 student scholarships. All recipients were present during the NDSU Scholarship program, except Suzette Reisenauer of Dickinson. She was on a rotation in Colorado. Twelve of the fifteen scholarships were from the great state of ND. Through this year's contribution, a total of $430,550 has been given to the NDSU College of Pharmacy Scholarship Program. We thank everyone who has made a donation to the ND Rexall Club these many years.

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NDSU College of Pharmacy/ ASP Representative

Remembering John F. Schuld, Co K

NORTHERN SOLOMONS 1943-1944

By Sue Palmer, his daughter

I wish I could tell you more about my father's military service. He did not discuss it much with the family members. He attended almost every reunion of the 164th Association until his death in 1987. I truly believe that attending all those reunions and spending time with his fellow soldiers was the therapy he needed to deal with the horrors of war and live a normal life after his military service. I know he was a member of the North Dakota National Guard and was activated for WWII.

He lied about his age to join the Guard when he was only 17 which would have been sometime in 1938 or early 1939. This little fib caused some problems getting social security when he turned 65 and a death certificate when he died in 1987. His birth certificate burned when the capitol building in Bismarck, North Dakota, was destroyed by fire so his military papers were used to establish his age, etc. He mentioned that he fought on **Guadalcanal**. I seem to remember talk of a stateside stationing at Fort Polk. He talked very fondly of his R&R on the beautiful **Fiji** Islands. He wanted to return there and had planned to travel with the 164 Infantry members who traveled there for a reunion tour but he died before he could take the trip.

After my mother died last November I found the photo album and other 164 Infantry information in some boxes at her home. I believe most of the pictures were taken stateside. I had just watched a History Channel documentary on the Pacific theater battles during WWII, specifically Guadalcanal. I wanted to see if my father's infantry group was in any of the areas mentioned in that documentary so I researched the 164th Infantry on the internet. I found the archival record and photo journal that had been assembled by 164 members and their spouses and family members [Dickinson Library Co K Site, see photo lower right]. It was wonderful to see some other photos of my father and I wondered if any of the members were still living and if they still gathered for their reunions. I then noticed a posting about the 164th final reunion and then saw your response indicating that the infantry was planning a reunion in Valley City this September. That is where I found your email address.

I will send you the photos this week. You may keep them if you wish. We kept the photos of my father but I will scan those soon and send those to you under separate cover. My brother will look through a few boxes that are left from the family home as I think I remember some discharge papers and medals, insignia, etc., that you may like to have for your archives

I am happy to hear that the survivors still meet and that you gather to remember and honor your service. The photos are not the greatest quality but may still be of interest to your members. Good luck with the upcoming reunion and please extend my gratitude to your surviving members for their brave service to our country. We owe all of you who served so bravely during WWII a huge debt of gratitude. I hope you all enjoy your reunion

Sue Palmer 4111 W Delmar St., Broken Arrow, OK 74012
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Co K's Durwood Goodale & Tim Sullivan on Bougainville as they finish their wash. They said that it was so hot and humid that the clothes never really dried and had to be worn wet while serving on Bougainville 1944.
From http://www.dickinsonlibrary.org/
Contact Josh_calbre@und.nodak.edu

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