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Cover: A few miles from where Bob Greenwood was raised in Farley, Iowa, stands the cornfield where they filmed “A Field of Dreams.” That loving evocation of baseball with its enduring Main Street values of tradition, loyalty, and dedication was Greenwood’s theme as he assumed the office of NCPA president for 2010–11.
AS THE PATIENT PROTECTION and Affordable Care Act begins to be implemented, and a new Republican majority in the House discusses potential changes to the law, it is clear that much work remains to be done to reform the nation’s health care system. A debate still continues to be waged on how to best improve quality, while also reducing health care costs.

The message our government affairs team and I will be delivering—and you can, too—is that one way to address this debate is really quite simple: turn to independent community pharmacists. The message is something like this... independent community pharmacists are a group of respected health care professionals with a proven track record of improving health outcomes while reducing system costs. There is strong evidence indicating that these clinically trained experts are in a prime position to help both the public and private sector at a time when patient demand for primary care services is expected to grow exponentially.

Currently, the marketplace is saturated with mega-chain, mail order, and mass merchant pharmacies whose main focus is on the volume of prescription drugs sold. Independent pharmacists attract and retain patients by focusing on providing excellent patient counseling, while offering niche medication and health services that are broadening the traditional role of the pharmacist. In other words, their primary focus is on quality of patient care, not on quantity of goods sold.

The continued proliferation of niche services offered by independents is part of what is attracting patients in search of more personalized care. They include diabetes education and training programs; disease state management programs for smoking cessation, weight management, asthma management, and HIV/AIDS; immunizations; durable medical equipment, including diabetes testing supplies; compounded drugs such as hormone replacement therapy, and home delivery that often is free of charge.

According to the New England Healthcare Institute, the improper use of prescription drugs costs a staggering $290 billion annually. Pharmacists can dramatically reduce that number, if the pharmacist-centric models employed in places like Asheville, N.C., and Spartanburg, S.C., were replicated at the national level.

In sum, there must be more attention paid in public and private programs as well as private–public partnership initiatives (such as accountable care organizations and medical homes) to the true value of community independent pharmacists—highly trained professionals who can play a critical role in providing quality care while reducing overall costs to the system.

As our nation continues to solve the health care reform puzzle, independent community pharmacists may truly be one of the missing pieces.

That’s our message, and it’s a good one. You can help deliver it by contacting your elected representatives and our government affairs department for assistance.  

Kathleen Jaeger  
NCPA Executive Vice President and CEO  

Kathleen Jaeger
Bank Partnership Helps Finance Independent Pharmacy Purchases

NCPA is partnering with Live Oak Bank of Wilmington, N.C., to help keep independent community pharmacies independent. Prospective owners nationwide will be able to more easily apply for the large lump sum payments to purchase independent community pharmacies much like publicly traded chain pharmacies do.

Traditionally, lending institutions treat independent community pharmacies like any other small business and offer financial terms that can be a non-starter for prospective owners. By contrast, Live Oak Bank is a lender that recognizes the pharmacist’s earning power and the value of resalable inventory and prescription files. The bank got its start with financing veterinary practices.

The genesis for the partnership began at the NCPA Annual Convention in New Orleans in 2009. NCPA member and pharmacy owner Eddie Webman brought Live Oak Bank’s CEO and Chairman of the Board James “Chip” Mahan, and Brian Faulk, senior loan officer/owner, to the meeting to discuss how their financial assistance for independent community pharmacies could be taken to the next level. The ensuing year produced the parameters of the partnership with NCPA that was announced at last year’s annual convention in Philadelphia.

NCPA will alert prospective owners of the financing assistance are through the Independent Pharmacy Matching Service, a program and website devoted to bringing independent buyers and sellers together. Also, there is NCPA’s Ownership Workshop sponsored by McKesson, a continuing education program offered three times a year and designed to eliminate all the “guesswork” to become a successful independent community pharmacy owner.

“It has become clear to us that the major chains are interested only in the customer script count, or customer base, and have priced those independent pharmacy acquisitions accordingly,” Mahan said. “Live Oak Bank has been able to work with buyers and sellers to properly identify the appropriate value for the business, resulting in preserving the integrity of the employee base that will allow the independent pharmacy under new ownership to serve their existing customer with the care and attention that the chains simply cannot match. We fully expect to facilitate over $100 million in transactions in 2011.”

Adherence—It Only Takes a Minute

Talking to a patient about suspected medication non-adherence does not have to be an uncomfortable discussion. While you may be unsure of a patient’s reaction to insinuations that they aren’t taking their medications, the clinical and financial consequences of them not adhering to their therapy should outweigh hurt feelings. Explain to your patients that you are concerned that they may not be getting the most from their medication, and that they could be at risk for complications. Being their community pharmacist, you already have an edge because your patients have trust in you and come to you for health advice and guidance. That trust is pretty powerful stuff, and patients are bound to open up to you. You already chat with them about everything from the weather to college football to their grandkids, so hone in on those relationships to talk about the importance of staying on their medications.

It is important to remember that every...
THE AUDIT ADVISOR

MAY FILL AFTER THIS DATE INSTRUCTIONS

Q: What happens if a prescriber writes, “May Fill After This Date” on a prescription order, but the patient needs it before that date?

A: Auditors review everything a prescriber writes on a prescription. Ancillary instructions to not fill a prescription until a specified date are considered the earliest date that prescription can be filled.

Recent audits have recovered payment on prescriptions that were filled before the authorized date. Lacking any further documentation, auditors view this practice of filling a prescription before authorized as a violation.

PAAS advised that prescriptions with directions to not fill the order until a specified date, not be filled until that date. The only way to fill the prescription early is to contact the prescriber with a valid reason, obtain permission, and document a summary of why you called and what the prescriber instructed you to do, including pharmacist initials and date of the call. The safest way to avoid chargebacks is to request a new prescription order.

By Mark Jacobs, RPh, PAAS National, the Pharmacy Audit Assistance Service. For more information call 888-870-7227.

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patient is different, with unique sets of barriers to adherence. The key is this: Don’t assume anything. There is no profile or specific traits of a non-adherent patient, and a patient could be faithfully adherent to their anti-hypertensive but decide to take their osteoporosis medication once in a blue moon. Medication profiles may not necessarily tell the whole story either. These profiles only display what has been dispensed from the pharmacy, and we do not know if any gaps in therapy might be explained by a change in instructions, patient receiving medication samples, or the patient deciding they were ‘feeling better’ and that the medication was no longer needed. But as their medication coach and adherence advocate, you can work with them one-on-one to identify those needs and find a way to address them.

This month brings an excellent opportunity to start the conversation and get your patients on track with their medications. Encourage them to take a pledge and make a New Year’s resolution to improve their health, with you in their corner. Everyone is starting fresh, and so can your business. Utilize some of the tips that have been shared in this column from past months: the ‘My Meds’ form, synchronizing refills, and first fill flagging. Track a couple of these patients throughout the year and use the Adherence Impact Calculator (www.NCPAnet.org/adherencecalculator) to see the difference adherence can make on your bottom line by the time the clock strikes midnight again next January.

How did the calculator work out for you? Do you have an adherence idea, tip, or program that is working in your pharmacy? Let us know by sending an e-mail to adherence@ncpanet.org.

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INDEPENDENT PHARMACY TODAY

Average number of prescriptions dispensed per pharmacy location:
• New—28,813
• Renewed—35,822
• Total—64,635
• Average charge—$58.11

Source: 2010 NCPA Digest, sponsored by Cardinal Health

Independent Pharmacy Cooperative, NCPA Share Vision for More Members, More Assets

NCPA and the Independent Pharmacy Cooperative (IPC) have expanded their collaboration with the goal of increasing NCPA membership and adding resources for government affairs efforts.

Under their new agreement, leaders of IPC and NCPA hope to reach IPC members to generate new NCPA members and increase IPC’s already substantial support for programs such as NCPA’s Legislative/Legal Defense Fund (LDF).

This, in turn, would allow NCPA to more broadly and effectively implement advocacy programs in Washington, D.C., and in state capitals to better support IPC members and other community pharmacies. Those IPC members who are NCPA members and already contributing to the LDF will be urged to contribute to NCPA’s political action committee (PAC).

Continued on page 71
**INSIDE THIRD PARTY**

**YE ON PBMS**
E-mail your recent example of a problem you or a patient has had with a PBM to mike.conlan@ncpanet.org, or fax it to 703-683-3619. We may edit it for length and clarity.

**TOO BIG AND TOO BAD FOR INDEPENDENTS**
“CVS Caremark is too big and controls too many patients. It now has collected a majority of my patients’ information and purchase history so it knows my margins and my market niche. I am not that naïve to think that my competitor CVS and Caremark Specialty Pharmacy won’t get this information and use it against me or direct patients to their pharmacies and specialty operation.

“Also, has anyone thought about addressing free and below cost generics? You can’t give away alcohol to attract customers, so why drugs?”

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**Six Texas Independents Battling on Behalf of Non-CVS Pharmacies**

Suing a multi-billion dollar corporation is not for the faint of heart, or the shallow of pocket, so the six independent pharmacies that are taking CVS Caremark to court welcome additional financial support for their class action lawsuit. NCPA has contributed $10,000 to the American Pharmacies Legal Defense Fund. The six independents that sued CVS Caremark last year in U.S. District court are board members of American Pharmacies, a for-profit, member-owned buying with its headquarters in Corpus Christi, Texas.

The lawsuit alleges that CVS Caremark discloses patients’ individually identifiable medical information received by Caremark from non-CVS network pharmacies to CVS retail and mail order pharmacy businesses. This disclosure and subsequent unauthorized use of such information for financial gain (to market to patients and physicians, and to scout and acquire new pharmacy locations) is a violation of federal criminal law that constitutes a pattern of racketeering under the Racketeer Influenced and Corrupt Organizations (RICO) Act. That is the same statute that federal prosecutors use to pursue drug lords and Mafia dons.

The suit further alleges that the defendants restrict patients’ access to the pharmacy of their choice in violation of Texas’ any willing provider law in that CVS Caremark contracts with plan sponsors to form pharmacy networks that exclude non-CVS retail pharmacies outright and/or provide incentives to discriminate against non-CVS pharmacies.

Contributions to the American Pharmacies Legal Defense Fund can be mailed to 802 N. Caranchahua St., Ste. 1830, Corpus Christi, TX 78401. Credit cards are accepted via www.aprx.org.

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**Medicaid AMP Implementation Process Needs Community Pharmacy Involvement**

NCPA and National Association of Chain Drug Stores representatives met with Federal Medicaid Director Cindy Mann and the Medicaid Pharmacy Team recently to review community pharmacy’s continuing concerns with implementation of the new Average Manufacturer Price pharmacy reimbursement provisions for Medicaid generic drugs.

The provisions took effect on Oct. 1, even though no regulation or guidance has yet to be published by the Centers for Medicare and Medicaid Services. The community pharmacy groups expressed concerns that without a formal rule making process there could be significant variance among manufacturers in the calculation of AMP, and that could affect pharmacy reimbursement under the new Federal Upper Limits for generics.

Community pharmacy will continue to carefully monitor this situation to make sure that the new AMP provisions of the health care reform law are implemented consistent with congressional intent. They include dramatically reducing the earlier AMP cuts as well as advancing medication therapy management and medication adherence involving community pharmacists. 

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www.americaspharmacist.net
Building a Medication Safety Program—Part Two

Increasingly, practice sites are being asked by pharmacy benefit managers and third party payers about the measures employed to promote medication safety. In other words, they are asking what practice sites are doing to implement an organized medication safety program. In the December 2010 America’s Pharmacist, we discussed two components, namely proactive risk assessment and self-assessment, that should be included in an organized medication safety program. This month we finish this discussion and describe additional strategies and tools to include in your medication safety program.

LEARNING FROM EXTERNAL SOURCES
A key component of a medication safety program is to proactively learn from events that have occurred elsewhere. Using the information from this column and the ISMP Medication Safety Alert!® Community/Ambulatory Care Edition is one way to accomplish this. Distribute the information internally to all staff, including pharmacists, pharmacy technicians, students, and clerks. Employ the use of huddles, or quick conferences, with staff to review articles and discuss the potential for the reported errors to occur at your practice site.

Practice sites can also utilize the ISMP Ambulatory Care Action Agenda. Three times a year, selected items from the ISMP Medication Safety Alert!® Community/Ambulatory Care Edition are compiled to promote the implementation of suggested risk-reduction strategies. Each action item includes a brief description of the medication safety problem, recommendations to help prevent errors, and space to document your practice site’s activities. This can be used for internal quality improvement efforts and may serve as documentation for regulatory organizations, such as boards of pharmacy that require continuous quality improvement or quality assurance programs.

INTERNAL ERROR REPORTING
Error-reporting systems represent one of the primary means by which health care providers learn about potential risks, actual errors, and causes of errors to help in their error-prevention efforts. Error reporting is a fundamental component of a safety culture, but persuading health care workers to submit reports is not easy, given the potential disincentives to reporting. First, candid confessions of mistakes may not be perceived as welcome. Even if workers are willing to speak up about errors, they may believe that the extra work to report errors, especially those perceived as minor, is not worth their time. This is particularly true if they feel that no changes will be enacted from reporting. The workforce also may be reluctant to report errors if there is concern that the information will negatively impact them or their colleagues legally, socially, or affect their license and job.

Regardless of potential disincentives to report, some successful internal and external error-reporting systems exist. Their success is related to six attributes. To be effective, the reporting system must be trustworthy, confidential, clear and easy to use, rewarding, credible and useful, and the value of reporting must be stressed with all employees.

EXTERNAL ERROR REPORTING
Reporting errors confidentially to external reporting programs is another important element of a complete medication safety program and demonstrates a practice’s commitment to sharing information on medication errors so that others may learn. Without reporting, such events may go unrecognized, and thus important preventive and epidemiological information would be unavailable. One external reporting program that has been effective in improving medica-
tion safety (www.ismp.org/about/merpimpact.asp) is the ISMP Medication Errors Reporting Program (MERP). The MERP is a confidential national voluntary reporting program that provides expert analysis of the system causes of medication errors and disseminates recommendations for prevention. Also, regulatory agencies and manufacturers are notified when changes are needed in products. To report errors, near-misses, or hazardous conditions to the MERP, please go to: www.ismp.org/MERP.

OTHER TOOLS
Additional tools, such as the ISMP List of Error-Prone Abbreviations, as well as information on medication safety can be found on the ISMP website at www.ismp.org/Tools.

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Meeting

Expectations

Surprise announcement kicks off NCPA's 112th Annual Convention and Trade Exposition

By Michael F. Conlan

Photography by Michael DeFilippo
NCPA’S CONVENTION MOTTO, “Meet. Learn. Succeed,” got an unanticipated emphasis on the “meet” as attendees were introduced for the first time to the association’s new executive vice president and CEO, Kathleen Jaeger.

“I am absolutely honored to join NCPA and represent independent community pharmacists and the patients our industry serves,” Jaeger said during a surprise appearance at the First General Session of the 112th Annual Convention and Trade Exposition in Philadelphia. “NCPA has a strong culture of excellence and leadership. I will do my utmost to preserve and protect the solid reputation that NCPA has built.”

Jaeger, daughter of a Massachusetts pharmacy owner, holder of pharmacy and law degrees, and an experienced trade association executive, told the representatives of more than 3,000 independent community pharmacies in the audience that, “We must capitalize on every opportunity to ensure that the care independent community pharmacists provide is the cornerstone of patient-focused health care.

“Our first and foremost objective must be to ensure our patients have access to excellent quality care and pharmacy services in their community. Second, we must continue to demonstrate the tremendous value independent community pharmacists deliver to patients and the overall health care system. Third, we must strengthen the financial stability of independent community pharmacies and drive their economic growth. And, last, but certainly not least, independent community pharmacies must be viewed as part of the reform solution.”

One way to be part of the solution, said Douglas Hoey, RPh, NCPA senior vice president and chief operating officer, is for pharmacists to “own” medication adherence. “In the past year, we have begun working with pharmacy schools and patient advocacy groups to make the case that pharmacists must own this issue,” Hoey
said. “More than 30 million patients will be added to the health care system by 2014 and in the face of a shortage of primary care providers, pharmacists are well positioned. But how can we make the case for expanding our services if pharmacy doesn’t own adherence?”

Hoey, who lead the association after Bruce Roberts’ resignation in June, noted that NCPA had recently launched an Adherence Impact Calculator, an easy-to-use online tool that shows pharmacies how much additional profit they can realize when they increase their adherence efforts. “We’ve brought pharmacists from all over the country to live and online programs so they can share with you business models they have used to increase adherence and build their revenue,” he continued. “We urge you not to wait…. Own adherence starting now and use it as a way to help your patients and your business.”

In his remarks, outgoing NCPA president Joseph H. Harmison reminded his audience that grassroots efforts by NCPA members had paid off in the recently enacted health care reform law. “The most noteworthy provision for community pharmacy … scaled back drastic AMP-based cuts in reimbursement for Medicaid generic drugs,” the Arlington, Texas pharmacy owner said. “Another provision imposed some limited transparency requirements on PBMs operating in Medicare Part D plans and in the new state health insurance exchanges. In addition, most NCPA members were exempted from the Medicare Part B DME accreditation requirement. These provisions are good for our patients, good for us, and good for the health care system.”

Community pharmacist involvement in the health care reform debate and implementation of the law was noted by two former secretaries of Health and Human Services as well as the current one, Kathleen Sebelius, during the Government Affairs Forum included as part of the Second General Session. Donna Shalala, who worked for Bill Clinton, and Michael Leavitt, who served under George W. Bush, participated live. Sebelius appeared in a video.

Five major awards were presented at the two general sessions, honoring the recipients for their contributions to independent community pharmacy:

- Paul Dumouchel of Wellesley Hills, Mass., John W. Dargavel Medal
- Pharmacists Mutual Insurance Companies of Algona, Iowa, Corporate Recognition Award
- Joseph Moose, RPh, of Concord, N.C., National Preceptor of the Year
- William E. Osborn, RPh, of Miami, Okla., Willard B. Simmons Independent Pharmacist of the Year
- Robert C. Bowles, Jr., RPh, of Thomaston, Ga., Prescription Drug Safety Award

(For more on the awards see page 23.)

Other awards went to a team of future pharmacists from Washington State University who won the seventh annual Good Neighbor Pharmacy NCPA Pruitt-Schutte Student Business Plan Competition. Drake University came in second and Auburn University finished third. The competition drew entries from 35 schools and colleges of pharmacy—a record number of submissions. (For more on the competition and other student activities see page 27.)

On the last day of the convention, which was held Oct. 23–27, the NCPA House of Delegates met to approve policy positions submitted by the members and to install the Executive Committee and association officers for 2010–11. The 91 delegates representing 33 states unanimously approved 10 resolutions. Among them were ones addressing the 340B federal drug program, the need for a consistent set of standards for pharmacy benefit managers’ audit of pharmacies, using the nurse-as-agent system in long-term care facilities, and avoiding duplicative accreditation requirements for already regulated pharmacies. (For the complete list of resolutions see page 25.)

The delegates also approved the selections for the association’s new leadership team. Executive Committee: Donnie Calhoun, chair; John Sherrer; Bradley Arthur; Mark Riley; Keith Hodges; and DeAnn Mullins. Officers: President—Robert Greenwood; President-elect—Lonny Wilson; Secretary-Treasurer—David Smith; First Vice President—Bill Osborn; Second Vice President—Brian Caswell; Third Vice President—Michele Belcher; Fourth Vice President—Hugh Chancy; Fifth Vice President—Jeff Carson. (For more on the leadership team see page 21.)

“I am one of you,” said Greenwood, of Waterloo, Iowa, in accepting the selection as president, “a Main Street guy, member of our city council, active in and supportive of many community organizations and activities.” (For more on Greenwood see page 18.)
Meet NCPA’s New President
Robert J. Greenwood

By Michael F. Conlan

JUST A FEW MILES from where Bob Greenwood was raised in the eastern Iowa hamlet of Farley stands the cornfield where they filmed “A Field of Dreams.” That loving evocation of baseball with its enduring Main Street values of tradition, loyalty, and dedication was Greenwood’s theme as he assumed the office of NCPA president for 2010–11.

“Baseball is the one tradition, the one constant that is the fabric that held this nation together through world wars, depression, civil unrest, and terrorist attacks,” he told the House of Delegates. “NCPA, the association born in St. Louis in 1898, also has a great tradition. Community pharmacists practicing on the Main Streets across the country are the nation’s most accessible and trusted health care providers.”

Turning to loyalty and dedication, he recalled the scene from the 1989 movie where a ball player leaves “the field of dreams,” knowing he can never go back if he does, to save a choking child’s life. “Pharmacists do that every day,” Greenwood said, “putting their patients’ interests ahead of theirs when taking contracts that don’t pay the best, don’t cover the cost of doing business. We put patients ahead of profit. We are dedicated and loyal.”

“If it’s good for the patient,” he adds, “it will be good for pharmacy.”

Following those same values has helped Greenwood move from Creighton University’s pharmacy school, to ownership of two pharmacies, to three terms on the Waterloo City Council, and now the NCPA presidency. “I am one of you,” he said to the delegates, “a Main Street guy.”

His father was a Main Street guy, too, a grocer in Farley. His mother was a school teacher, and Bob is one of eight children. After graduating from Creighton he had an interest in a pharmacy with partners, who he eventually wanted to buy out. When they wouldn’t sell, he went to work for a competitor. Five years later he bought a pharmacy on his own in Waterloo, population 65,000, whose largest employer is a John Deere plant that designs and manufactures large row crop and four-wheeled-drive tractors. He also owns a pharmacy in Denver, Iowa. He and his wife, Chery, have three children.

Last year, Greenwood was elected to his third four-year term on the non-partisan Waterloo City Council. He strongly believes that non-partisanship is the best way to accomplish things for the community.

As NCPA president, “I will listen to our members,” he pledged. “Be a liaison to our stakeholders, a collaborator to other national and state associations and schools of pharmacy. I will help the NCPA staff bring its message and programs to Main Street about the great work they do in Washington.

Community pharmacists are the nation’s most accessible and trusted health care providers.

“Medication therapy management and patient adherence will be a priority. I will work to elevate the understanding, utilization, and practice of medication therapy management and patient adherence to make all independent pharmacists experts in both MTM and adherence [and] make it a core competency as described in the 2015 vision for pharmacy practice authored by JCPP (the Joint Commission on Pharmacy Practice).”

Michael F. Conlan is editor of America’s Pharmacist.
A YEAR AGO when I received the great honor of serving as your president, I said my priorities were to increase the number of NCPA members, to increase the amount of contributions to both the Political Action Committee and the Legislative Defense Fund, and to increase grassroots participation.

I also pledged to lead the efforts to dispel the “Myth of Mail Order” and the giant PBMs that perpetrate that gigantic shell game.

Of course, I couldn’t accomplish any of these goals on my own. They demand member involvement in what I call the “3Ts.” The 3Ts stand for time, talent, and treasure — preferably all three, but certainly all of us can contribute at least one.

Come to our meetings. Tell us your ideas. Give to the PAC and LDF. That’s what the 3Ts are about.

I can report to you today that the ranks of NCPA have increased. I want to thank some of the groups that gave us a big boost this year by signing their members up for NCPA membership as a member benefit of their organization:

- CARE Pharmacies
- Independent Pharmacy Buying Group
- Keystone Pharmacy Purchasing Alliance
- The Louisiana Independent Pharmacies Association
- Pharmacy Providers of Oklahoma
- Rx Plus Pharmacies
- Texas AIP

Those sign-ups are real home runs for our association. But we need to hit some singles, too. We all know colleagues who are not NCPA members. The next time you run into them, please ask them to join.

As for the PAC and the LDF, I’m happy to report good news in both areas. The PAC has contributed more than $1.4 million to congressional candidates this two-year election cycle. That’s even more than the record we set two years ago, and phenomenal growth for a non-presidential election year.

Like the PAC, the financials on the LDF are good, too. We raised $1.6 million, which was about $200,000 more than we raised last year. Your LDF contributions allowed us to hire a “mail order czar,” as we said we would last year in New Orleans, to help dispel the “Myth of Mail Order.”

Last year I said I wanted to “kick the bejeebers out of mail order.” I’m not sure I did, but we put down a sound foundation.

I’m stepping down as your president…. But I’m not stepping away from the fight. That’s not the Texas way. That’s not my way. And that’s not the way NCPA has defined itself for 112 years.

So I pledge to you here today, with apologies to Winston Churchill, that NCPA will continue to defend independent community pharmacy against PBM bullies and mail order marauders, whatever the cost may be.

We shall fight in the halls of Congress. We shall fight in the state legislatures. We shall fight in the courts and in government agencies. We shall fight in our pharmacies. We shall never surrender.

If you are ready to stand with us, commit to the 3Ts. I said I wanted to increase grassroots participation, but that’s harder to measure than membership and PAC and LDF contributions. But I know that without it, without your help, we cannot succeed. Get involved.

When you get home, reach out to a colleague. Get them involved. As Bruce Roberts was fond of saying, “Get off the bench and get into the game.”

And please commit to the 3Ts. Then together, as Winston Churchill really said:

“We shall not fail or falter. We shall not weaken or tire. Give us the tools, and we will finish the job.”

The above are excerpts from NCPA President 2009–10 Joseph Harmisons’s remarks. Visit www.ncpanet.org for the complete text.
NCPA’s goal is very clear — to create a business environment in which pharmacy owners can serve their patients, succeed by growing their business and continuing to increase as a political powerhouse in Washington and in state capitals across the country.

One of the ways we are accomplishing this goal is with our grassroots efforts — your grassroots efforts. This year we coordinated more than 50 pharmacy visits with members of Congress in NCPA member pharmacies.

What a difference it makes when a lawmaker can actually step into our world! We tracked 5,000 messages from you to members of Congress. Here’s the part that’s astonishing — only a fraction of pharmacy owners actually lifted a finger to do anything, and most of them are sitting right here in this audience!

We are a sleeping giant! Yes, community pharmacy has reenergized its political presence and now runs with the big dogs. But if we could ever rally the majority of pharmacy owners to get active, we would be THE really big dog.

You are already carrying the load for your colleagues so what more can you do? We need each of you to talk to your colleagues...at state association meetings...at county meetings...at alumni events...at high school football games...when you borrow products from each other.

Earlier this month we launched our new Long-Term Care Division for community pharmacists. This membership is available to NCPA members who are in the long-term care business.

Over the years, independent pharmacists have increased their stake in this area. But their voices are sometimes drowned out. The big chain long-term care providers are not always aligned with independents on proposed legislation and regulations. And the potential impact is very different for a multi-million dollar, publicly traded company than it is for an independent pharmacy. Like they say, “Where you stand on an issue depends on where you sit.” I don’t know many independent pharmacists sitting in corporate board rooms.

NCPA’s new division is focused purely on advocating for independent long-term care pharmacies. Big chains pushing an agenda not in the best interests of independents, need not apply.

My first job at NCPA was assistant director of student affairs, and I visited about 60 pharmacy schools during my first two years.

Candidly, back then we had to ask a few of those schools to stop saying that independent pharmacy was dead — because it wasn’t...it isn’t…and it won’t be, as long as people like you in this room keep caring for your profession and your communities.

Fast forward a decade later and we are seeing the highest interest in pharmacy ownership in at least a generation.

Second General Session
Douglas Hoey

Fast forward a decade later and we are seeing the highest interest in pharmacy ownership in at least a generation.
NCPA’s LEADERSHIP TEAM is committed to the association’s enduring mission since its founding in 1898: to continue the growth and prosperity of independent community pharmacy by representing its professional and proprietary interests in Washington, D.C., and in state capitals across the country. The NCPA executive committee members and officers (pictured above) ratified by the House of Delegates Oct. 27, exemplify the spirit, determination, creativity, diversity, and dedication of independent community pharmacy today, and they passionately share a vision for its future.

As small business owners, they know that independent community pharmacy must constantly innovate and take full advantage of technology to deliver the highest quality care and service to patients. They know that independent community pharmacists must use their business, management, and clinical skills to inspire a renaissance in patient-centered, outcomes-oriented community practice.

can recruit pharmacists. Earlier in your career many of you attended the NCPA Ownership Workshop.

The last few years the workshop has benefitted from the regular sponsorship by McKesson. We are pleased to announce today that McKesson has agreed to a long-term commitment to support the NCPA Ownership Workshop for up to the next 15 years to the impressive tune of potentially $3 million dollars.

There are now 90 NCPA student chapters. We created the amazingly successful Good Neighbor Pharmacy NCPA Pruitt Schutte Business Plan Competition. And we developed networking and educational resources for pharmacist entrepreneurs in every career stage from new graduate to retiree.

Advocating for your business and creating an environment conducive to success is what NCPA is about. We work very hard not to do those things in a vacuum. As an organization, we will never have “Potomac Fever” and become disconnected. We pledge that to you… plus, we know you’ll speak up if we’re not paying attention.

Leadership Team
Meet NCPA’s Executive Committee and Officers

NCPA’s LEADERSHIP TEAM is committed to the association’s enduring mission since its founding in 1898: to continue the growth and prosperity of independent community pharmacy by representing its professional and proprietary interests in Washington, D.C., and in state capitals across the country. The NCPA executive committee members and officers (pictured above) ratified by the
Officers

President Robert J. Greenwood of Waterloo, Iowa (for a profile of NCPA’s new president, turn to page 18.)

President-elect Lonny Wilson has 30 years of experience in retail community pharmacy and currently owns and operates three pharmacies in eastern Oklahoma County. He is CEO of the buying group PPOk, and a graduate of the Southwestern Oklahoma State University School of Pharmacy.

Secretary Treasurer David Smith is the owner of Means-Lauf Super Drug in Brookville, Pa., and partners with his daughter Stephanie Smith Cooney in Gatti Pharmacy in Indiana, Pa. He is a graduate of the University of Pittsburgh School of Pharmacy.

...independent community pharmacy must constantly innovate and take full advantage of technology to deliver the highest quality care and service to patients.

First Vice President Bill Osborn is president of Osborn Drugs in Miami, Okla. He is a graduate of the University of Oklahoma College of Pharmacy and received his PharmD from Oklahoma University.

Second Vice President Brian Caswell is the owner of Wolkar Drug in Baxter Springs, Kansas, in the far corner that adjoins Oklahoma and Missouri. He is a graduate of the University of Kansas.

Third Vice President Michele Belcher is the owner of Grants Pass Pharmacy in southern Oregon, which offers specialty services such as compounding prescription drugs and hospice care with a variety of facilities. She is a graduate of the Oregon State University College of Pharmacy.

Fourth Vice President Hugh Chancy is co-owner of Chancy Drugs of Adel, Chancy Drugs of Hahira, and Chancy Drugs of Lake Park, all in Georgia. He is also president of the Council of Presidents of the Georgia Pharmacy Association, and a graduate of the University of Georgia College of Pharmacy.

Fifth Vice President Jeff Carson is the owner of Oakdell Pharmacy, which has four locations in the San Antonio area. He is a graduate of the University of Texas.

Executive Committee Members

Chair, Donnie Calhoun is a member of the Alabama Board of Pharmacy and owns Golden Springs Pharmacy in Anniston. He is a graduate of Samford University’s McWhorter School of Pharmacy.

John T. Sherrer is co-owner of Kenmar Pharmacy in Marietta, Ga., and is a partner in nine other Georgia pharmacies. He also owns and operates First Aid of America, an industrial first aid and safety supply company. Sherrer graduated from the Mercer University Southern School of Pharmacy.

Bradley J. Arthur is the co-owner of two full-line independent pharmacies in Buffalo, N.Y. He is a graduate of the University of Florida College of Pharmacy.

Mark Riley is the executive vice president of the Arkansas Pharmacists Association and an authority on pharmacy benefit managers. He owns East End Pharmacy near Little Rock, where he was pharmacist-in-charge for 20 years. Riley earned his bachelor of science in pharmacy and his doctor of pharmacy from the University of Arkansas for Medical Sciences College of Pharmacy.

Keith Hodges is the owner of Gloucester Pharmacy in Virginia’s historic Tidewater region and vice president of Poquoson Pharmacy. He is a graduate of the Medical College of Virginia School of Pharmacy.

DeAnn Mullins is a certified diabetes educator who owns and operates a family of health and wellness businesses in Lynn Haven, Fla., including WeCare Mullins Pharmacy, WeCare Wellness and Medical Supplies, WeCare Diabetes Education Program, and PharmacyCare Solutions. She is a graduate of Samford University's McWhorter School of Pharmacy.

Kathleen Jaeger is NCPA executive vice president and CEO. She earned a pharmacy degree from the University of Rhode Island and a law degree from Catholic University. She specialized in Food and Drug Administration law at two Washington, D.C., law firms, and is former president and CEO of the Generic Pharmaceutical Association.
FIVE MAJOR AWARDS for outstanding contributions to independent pharmacy were presented at the 112th Annual NCPA Convention and Trade Exposition in Philadelphia.

Paul Dumouchel was the recipient of the 2010 John W. Dargavel Medal. The McKesson Corp. sponsored the annual award that honors the individual whose contributions on behalf of independent pharmacy embody the spirit of leadership and accomplishment personified by John W. Dargavel, who was executive secretary of the National Association of Retail Druggists (NARD), now NCPA, from 1933 to 1961. In fact, the NCPA Foundation was established in 1953 to honor Dargavel.

Dumouchel graduated with a BS in pharmacy from the Massachusetts College of Pharmacy in 1954 and purchased Strand Pharmacy in 1958. The company grew to include 14 stores by 1985, when he turned it over to his three children who are also pharmacists—Lucille, Mark, and David.

Dumouchel has always focused on making sure independent community pharmacies were adapting to the new challenges they faced. As president of NARD in 1979, Dumouchel recognized the rapid growth in women entering the pharmacy profession (30 percent in 1980, and now more than 60 percent), and created a task force to address their concerns, such as the challenges they faced in obtaining financing to purchase pharmacies.

William E. Osborn, RPh, of Osborn Drugs in Miami, Okla., was named the 2010 Willard B. Simmons Independent Pharmacist of the Year. The award was sponsored by Upsher Smith Laboratories, Inc. It recognizes an independent pharmacist for exemplary leadership and commitment to independent pharmacy and to their community.
The award is named in honor of Willard B. Simmons, a former NCPA (then the National Association of Retail Druggists) executive secretary and long-time NCPA Foundation trustee, who exemplified these qualities.

Osborn has been the majority owner of Osborn Drugs since 1971. He now owns 23 pharmacies in four states (Oklahoma, Kansas, Arkansas, and Missouri) with 16 partners. Osborn is best known in pharmacy circles as an “enabler” — in the best sense of the word. Through his financial leadership, business advice, and overall support he has helped 13 pharmacists partner with him to become independent store owners.

Robert C. Bowles, Jr., RPh, owner of Big C Pharmacy in Thomaston, Ga., earned the 2010 NCPA Prescription Drug Safety Award. The award, sponsored by Purdue Pharma, L.P., recognizes pharmacists who have reached out in their communities to provide education on the benefits of the correct use of prescription drug products and the hazards associated with their misuse.

Since graduating with a BS in Pharmacy from the University of Georgia in 1970, Bowles has been committed to improving the lives of patients. He hosts two to three free patient education classes each month teaching how to properly manage diabetes and heart disease. Bowles also visits the local senior center on a monthly basis to present educational programs, and consults with each senior to make sure they are adhering to the most effective prescription drug program possible. He also utilizes the "My Dose Alert" technological reminder program to ensure patients are taking their prescription drugs in a timely fashion. Bowles is helping patients safely discard unused prescription drugs through his NCPA "Take Away" disposal program through his pharmacy.

Joseph Moose, RPh, owner of Moose Pharmacy and manager of Moose Professional Pharmacy in Concord, N.C., was named the 2010 NCPA National Preceptor of the Year. The award honors a pharmacist who has made significant contributions to the education of pharmacy students by devoting time, talent, and effort as a preceptor.

After graduating from Campbell University with a Doctor of Pharmacy degree, Moose’s post graduate education and training has seen him become certified in asthma care, hypertension, immunization, diabetes, and medication therapy management (MTM). His professional interests include advancing clinical practice in community pharmacy settings, particularly in the immunization and MTM arena.

He willingly shares his expertise in his role as the primary preceptor for the University of North Carolina Edelman School of Pharmacy Residency Program, as Moose helps future pharmacists get the on-the-job
the NCPA House of Delegates installed new officers and executive committee members and received reports from 12 policy committees. Executive committee member DeAnn Mullins, RPh, reported that the Committee on Resolutions recommended action on 10 resolutions. All were approved unanimously by the 91 delegates representing 33 states.

In the interest of brevity, only the resolutions “resolves” follow. Resolution No. 1 involves routine housekeeping measures and is not included. The complete resolutions with the many “whereas” clauses are available on the NCPA website at www.ncpanet.org.

Pharmacists Mutual Insurance Companies (PMC) of Algona, Iowa, was honored with the 2010 NCPA Corporate Recognition Award. The annual award recognizes a specific company for its support and work on behalf of independent community pharmacies.

PMC (originally known as Druggist Mutual) was founded in 1909 by pharmacist Al Falkenhainer. It was in response to his expense seven years earlier when a fire destroyed his drug store in Titonka, Iowa. The frustrating claims process caused Falkenhainer to build a better insurance company for pharmacists. More than a century later Pharmacists Mutual operates in 49 states.

PMC has also been one of the main sponsors for NCPT’s Ownership Workshop, which are intensive three-day continuing education programs offered three times annually for pharmacists considering pharmacy ownership or desiring additional management skills. In addition, PMC contributes to the NCPA Foundation, which is dedicated to preserving the legacy of independent community pharmacies through low-interest educational loans and scholarships to students.

Resolution No. 2 — 340B Eligibility
BE IT RESOLVED that NCPA supports further refinement to the definition of patients eligible for the 340B program through means testing or other processes. NCPA opposes extension of the program to patients with commercial prescription drug insurance, non-patients of the clinic or hospital, or for profiteering at the expense of taxpayers, pharmacies, pharmaceutical manufacturers, and other affected stakeholders.
Resolution No. 3—PBM Audit Legislation
BE IT RESOLVED, that NCPA supports federal legislation that would create a consistent set of standards for PBM audits of pharmacies, which would prevent abusive practices such as volume-based compensation and extrapolation that have the effect of harming patient care and access and create disproportionate administrative burdens for pharmacies; and

BE IT FURTHER RESOLVED, that NCPA supports federal legislation that would allow pharmacies to correct inadvertent administrative audit errors without penalty.

Resolution No. 4—Nurse as Agent in LTC Facilities
BE IT RESOLVED that NCPA supports the establishment of a new category of Drug Enforcement Administration registration that would allow nurses to act as agents of physicians in the transmittal of controlled substance prescriptions for patients in LTC settings and allow chart orders to serve as valid prescriptions.

BE IT FURTHER RESOLVED that NCPA encourages boards of pharmacy to allow nurses to act as agents of physicians in the transmittal of non-controlled substance prescriptions for patients in LTC setting and allow chart orders to serve as valid prescriptions.

Resolution No. 5—REMS Programs
BE IT RESOLVED that NCPA supports policies that encourage the appropriate use of prescription medications, but opposes the use of registries, restrictive distribution systems, and other REMS approaches that interfere in the practice of medicine or pharmacy or limit the ability of patients to access these medications.

Resolution No. 6—Pharmacy Accreditation
BE IT RESOLVED that NCPA reaffirms its previous position statement opposing any effort by any such entities to unilaterally regulate pharmacists or pharmacies or to provide or require accreditation for community pharmacies; and

BE IT FURTHER RESOLVED that NCPA believes that such accreditation is unnecessary because community pharmacies are currently inspected, regulated, and licensed by their respective state boards of pharmacy, and pharmacists are required to receive ongoing continuing professional education in order to maintain their state licensure. In addition, community pharmacies are also inspected and regulated by numerous federal, state, and local agencies, departments, and commissions.

Resolution No. 7—Electronic Health Records Availability
BE IT RESOLVED that NCPA supports the integration of the community pharmacist in the health care team through the access of EHRs made available through interoperable HIT such as clinical summaries, lab data, diagnosis and prescription information.

Resolution No. 8—Access to Diabetes Supplies
BE IT RESOLVED that NCPA supports the right of all persons with diabetes, including those covered by Medicare, to continue to have convenient access to blood glucose monitoring supplies, therapeutic footwear, and diabetes self management education and training through local community pharmacies.

Resolution No. 9—Medical Marijuana
BE IT RESOLVED that NCPA supports the dispensing of all controlled and legend medications, including any legal prescriptions for marijuana, through state board-licensed community pharmacies in accordance with applicable laws, rules, and regulations.
A TEAM OF PHARMACY STUDENTS from the Washington State University College of Pharmacy won the 2010 Good Neighbor Pharmacy NCPA Pruitt-Schutte Student Business Plan Competition. A team from Drake University College of Pharmacy and Health Sciences came in second, and a team representing Auburn University Harrison School of Pharmacy finished third.

The three finalist teams and advisors made live presentations of their business plans before the competition judges Oct. 23 during NCPA’s 112th Annual Convention and Trade Exposition in Philadelphia.

The first national competition of its kind in the pharmacy profession, the contest is named to honor two great champions of independent community pharmacy, the late Neil Pruitt Sr. and the late H. Joseph Schutte. The goal of the competition is to motivate pharmacy students to create a business model for buying an existing independent community pharmacy or developing a new one. Through this competition, NCPA is better able to prepare tomorrow’s pharmacy entrepreneurs for a successful future. The competition is supported by Good Neighbor Pharmacy, Pharmacists Mutual Companies, and the NCPA Foundation.

The 2010 competition drew entries from 35 schools and colleges of pharmacy—a record number of submissions in the competition’s seven years of existence. Team members from Washington State University were Erik Nelson, Kurt Bowen, Robert Bryan, and Vinh Nguyen. Linda Garrelts MacLean, RPh, CDE, was the team’s advisor. Their chapter received $3,000, and $3,000 was contributed to the school in the dean’s name to promote independent pharmacy. The team members, team advisor, and the dean will also receive complimentary registration, travel, and lodging to NCPA’s 2011 Multiple Locations Conference.

Team members from Drake University were Tori Erxleben, Travis Gau, Kathryn McDonald, and Ryan Nimtz. Renae Chesnut, MBA, EdD, was the team’s advisor. Their chapter received $2,000, and $2,000 was contributed to the school in the dean’s name to promote independent pharmacy.

Team members from Auburn University were Garrett Aikens, Brittney Shippee, Lauren Sofy, and Denise Sutter. Jared Johnson, PharmD, was the team’s advisor. Their chapter received $1,000, and $1,000 was contributed to the school in the dean’s name to promote independent pharmacy.

Other top 10finishers included teams from the University of Arkansas, the University at Buffalo, the University of Colorado, the University of the Incarnate Word, the University of North Carolina, the University of Oklahoma, and the University of Wyoming.

The judges for the 2010 live competition were Stephen Giroux, RPh, Middleport Family Health Center, NCPA Past-President; Don R. McGuire Jr., RPh, JD, Pharmacists Mutual Insurance Companies; Gerald Shapiro, PD, Uptown Drug Co., NCPA Foundation Board of Trustee; and Ed Webman, RPh, Live Oak Bank.

Ohio Northern Named NCPA Student Chapter of the Year

The Ohio Northern University Raabe College of Pharmacy was named the 2010 NCPA Student Chapter of the Year. The first runner-up was the University of Southern California School of Pharmacy, and second runner-up was the University of Washington School of Pharmacy. The 2010 NCPA Most Improved Chapter winner is the University of Southern Nevada – South Jordan. In addition, 31 pharmacy students were honored as NCPA...
Outstanding Student Chapter Members of the Year after being nominated by their peers and faculty at each of their respective schools. The chapter awards are sponsored by the NCPA Foundation.

The award criteria included commitment to community service, recruiting new members, promoting independent community pharmacy, and advocating legislative action. The chapters are the most integral part of the NCPA Student Outreach Program that was launched 21 years ago, and the Foundation has provided nearly $800,000 to help underwrite the program, which is designed to increase student awareness of pharmacy ownership and the entrepreneurial opportunities in pharmacy. There are now approximately 3,500 student members and 90 chapters in 129 U.S. pharmacy schools.

**Myers Wins Faculty Liaison Award**

Deidre Myers, RPh, faculty liaison for the NCPA student chapter at Ohio Northern University in Ada, Ohio, was recognized as the 2010 NCPA Faculty Liaison of the Year by the NCPA Foundation. The award is sponsored by QS/1.

Myers is a 1983 graduate of the Raabe College of Pharmacy at ONU. For the past 11 years, Myers has been the pharmacology laboratory instructor as well as a pharmacy instructor at ONU, where she is the advisor for the ONU student chapter. The ONU chapter has taken at least 12 students to the NCPA Legislative Conference in Washington, DC, each May for the past five years, and also has taken students to the annual NCPA Convention each October for the last four years. Under Myers’ leadership the chapter was reorganized in 2005 after many years of inactivity. It has since earned many national accolades, including Most Improved Chapter, the Dennis Ludwig Scholarship for Advocacy participation, and second-runner-up for Chapter of the Year. Those efforts culminated in 2010 with the school being named the NCPA Student Chapter of the Year. Four ONU pharmacy students have been awarded an NCPA Foundation Presidential Scholarship, and students have competed four times and been named twice in the top 10 teams in the Good Neighbor Pharmacy NCPA Pruitt-Schutte Student Business Plan Competition.

**Steig Receives 2010 Catalyst Grant Award**

Jayme Steig, PharmD, president of Frontier Pharmacy in West Fargo, N.D., received the 2010 Catalyst Grant Award for Innovative Practice award. The award is sponsored by Purdue Pharma L.P. Conducted over several years, this program will generate a significant body of knowledge and evidence to highlight the effectiveness of pharmacy-provided services and the efficacy of pharmaceuticals when properly used. The selected best practices will be widely communicated to healthcare providers, policy makers, and patient and disease advocacy groups. The NCPA Foundation will team with NCPA’s Management Institute staff to administer this program.
NCPA WOULD LIKE TO THANK the following companies and organizations for their generous support of the 112th Annual NCPA Convention and Trade Exposition and their continuing support of independent community pharmacy.
hen asked about her philosophy as an independent pharmacy owner, Tracie Ezzio, RPh, has a simple yet succinct reply.

“Our job is to help people,” she says. “I don’t want anyone to do without. If patients come in and want their blood pressure taken, they aren’t going to sit in a machine that might not work. Someone here will take the time to do it. If they have a question, we want to be available all of the time.”
It’s a mindset that has served Ezzio well in the three years since she opened Pepperell Family Pharmacy in an old train depot in her adopted hometown of Pepperell, Mass., located just south of Nashua, N.H., and about 45 minutes north of Boston. The business is a family affair, as her daughter Larissa joined her full time after graduating in 2009 with her PharmD from the Massachusetts College of Pharmacy.

Ezzio and her husband moved to Pepperell, a town of some 12,000 residents, about 25 years ago. She raised five children there, and says she has an intense sense of loyalty to the community. A few years ago Ezzio received a call from a woman expressing concern that her 90-year-old homebound mother wasn’t remembering to take her medications. Both the woman and her sister lived out of town and weren’t able to check on their mother. Ezzio learned that the woman lived five minutes away from her, so she offered to stop by every day on her way to the pharmacy and watch her take her morning medications.

“She had a short-term memory, so she didn’t even know my name,” Ezzio says. “We gave her a year of her life in her own home, and she was so happy. She has since moved to an assisted-living facility. We were one of her only local contacts, so we helped her family for about a year until they decided to move her. So I’m not afraid to step out of my normal routine. We were happy to be able to help her.”

**Inspired by Grandfather**

Ezzio was raised in a pharmacy environment. She was born in Freeport, Maine, where her grandfather owned a small corner drugstore.

“My grandfather was an inspiration to me,” she says. “He was born in 1901, and he became a pharmacist when all you had to do was basically study on your own and take a one-year course. He became licensed in the 1940s, when he opened his store across the way from L.L. Bean, and that’s where I grew up, within walking distance. I began working there in junior high, and continued through my senior year in high school.”

Ezzio went to the University of Connecticut and received her pharmacy degree in 1977. She had hoped to take over the family pharmacy in Freeport, but her grandfather was getting older and sold to another independent before he passed away. So she moved with her husband, an electrical engineer, to Portsmouth, R.I., and spent about five years working for a chain pharmacy. Then in the mid-1980s they moved to Pepperell to get a bit closer to Maine.

Ezzio says that in those days, the ratio of women in pharmacy was much smaller, and not as conducive to a work-family balance.

“Back then, it was either full-time, 12-hour days, or nothing,” she says. “It is much more flexible now than it was then.”

After moving to Pepperell, Ezzio met two brothers who became her mentors (Terry and John McNabb), who owned independent pharmacies in Pepperell and in nearby Townsend, Mass. She eventually started working about 30 hours a week for them while raising her children, all the while still hoping to open her own pharmacy. About 10 years ago, John sold his pharmacy in Pepperell, and Ezzio began working full-time for Terry at his pharmacy in Townsend.

By this point, both independents in Pepperell had sold to chains, and local residents were, *to put it politely, not exactly thrilled with the service.*
With her knowledge base and experience enhanced by working for the McNabbs, and with her daughter in pharmacy school, Ezzio became convinced that it was time to branch out on her own. By this point, both independents in Pepperell had sold to chains, and local residents were, to put it politely, not exactly thrilled with the service.

“There was a lot of dissatisfaction,” she says. “Many people who had gone to an independent pharmacy in Pepperell came over to Townsend to the brother, instead of going to a chain. You had a small town with two independent pharmacies, and all of a sudden each one of them sells out to a chain. So you had a lot of people who had excellent service within the town, and all of a sudden things change.”

Ezzio was confident that she was ready to make the jump. Working with the McNabbs, she had gained extensive insights into ownership.

“It’s not as if I was just jumping into this without knowledge of what is involved,” she says. “But I have to be honest, until it happens to you, you never know. You don’t realize how hard it is. Every single day, hour after hour, you are trying to grow a business. It was a rough two years [before her daughter came onboard], but with all that support, you just go out on a limb, believing that you are going to succeed.”

Ezzio was also comforted knowing that her daughter would join her when she graduated. Even when she was in school, Ezzio says her daughter would come home and help out. “She was a huge source of strength,” Ezzio says. When Larissa graduated in September 2009 and started full-time, it created a rare situation within independent pharmacy that isn’t lost on Ezzio: a mother-daughter ownership group. “You don’t see that very often,” Ezzio says with obvious pride.

**The Right Location**

Before Pepperell Pharmacy could open, Ezzio needed to find a location, and that eventually materialized in the form of a 1,100-square-foot train depot built in 1892. To purchase the location and start the business, she was able to borrow on the equity on a fixer-upper house that she had bought with her husband on a small lake in Maine.

“I have to give my original state credit for the funding,” she says. “We made the commitment to have that finance the pharmacy.”

Ezzio also made a concerted effort to build strong relationships with other independent pharmacies in the region. She still feels a kinship with the McNabbs, especially Terry.

“We’ve supported each other,” she says. “Sometimes you look and say, ‘Here I am, all alone, I don’t know how much inventory do I have. Are 10 people going to transfer in with a certain blood pressure medication? Am I prepared?’ But you’re not alone. You help each other out. With the McNabbs, I was attached to them, it was hard to make the break, but [Terry] was very supportive, encouraging and helpful. He’s almost like an older brother, kind of a role model for me.”

Ezzio also credits Northeast Pharmacy, an independent pharmacy membership association, for helping her wade through the minutiae of paperwork.

“They support startups, and do things that one person just can’t do,” she says. “They process the claims, they negotiate with individual independents as a group. They were key for us getting off the ground, and they are still very key now.”

After opening in October 2007, it wasn’t long before Ezzio realized that 1,100 square feet wasn’t going to be enough to adequately provide the type of service she desired, so a plan was put in place to double the size. She says that there was some resistance to the expansion by local historical and environmental conservationists, concerned about altering the integrity of the building and the possible effects on a river located behind the pharmacy. Ezzio worked with the community to address and ease any concerns, and the expansion went forward.

“It wasn’t a square building, it had a slate roof, all of that had to be done in a correct way,” she says. “There were windows more than 100 years old.”

The expansion began in September 2009 and was completed in June of 2010.

“What helped finance my addition [along with the home equity] was the fact that I’m an owner and a pharmacist, so I didn’t hire anyone and multitasked, doing most of the work myself,” Ezzio says. “You can control a lot of costs that way.”
That’s part of managing their medications. So while we don’t have a formal program, we’re constantly doing it.

**Building Trust**

To establish her business, Ezzio says she and the staff worked overtime to gain the trust of patients through high quality care and service.

“Initially we had a surge of people coming over, then it leveled off,” she says. “I think people were holding back, asking, ‘Is she going to stay? Is she going to succeed? Is she going to make it?’ We have small surrounding towns with no independent pharmacies, and people are transferring in for various reasons. It’s tremendously encouraging to me. I think the perception is that I will be here to stay.”

Ezzio says that constantly delivering her message about patient care is essential.

“Some people might be taking 10 medications and thought it would be difficult to transfer,” she says. “I wanted to get the word out that it is easy to transfer, that we take care of everything. You have to keep telling people that. When we expanded we had a grand reopening, with ice cream, pony rides, the works. It was a huge celebration. It was a thank you for supporting us, and reinforcing that message.”

One of the most pleasant surprises of the expanded facility is the success of Pepperell’s front end section.

“It’s kind of exploded, and has been extremely healthy,” Ezzio says. “Some people like coming in and not having to go to aisle 12B and look at 50 vitamin Cs. We have a lot of people who want to come in, get their prescription, grab a vitamin, and maybe a bottle of aspirin.”

Ezzio says her wholesalers have been beneficial in helping her keep her front end organized and allowing her to be competitive with the chains.

“We are very competitive with pricing,” she says. “I think we have the best pricing around, because generic drugs are so reasonable. That has been a huge door opener for people living in these tough economic times. If I didn’t do the volume I did, and wasn’t expanding like I am, I couldn’t do it. I’m not afraid to do that. People are economically worried about the prescriptions they take. ...That’s the world that we live in.”
But Ezzio stresses that the front end has a targeted focus.

“It wasn’t for motor oil and lawn chairs,” she says. “I’ll sell some greeting cards, and a few school supplies. We have a small representative selection [of various items] because I don’t think it’s a bad idea to do that if somebody needs that. We have a large cough and cold area, and large first aid area. But we’re not a department store. We are a pharmacy, there’s no doubt about it from the moment you walk in.”

“We have two or three doctors who have sent us many patients,” she says. “They have been so instrumental to our success…”

**Developing Relationships and Goodwill**

Ezzio says she’s proud of the network Pepperell has developed with local physicians.

“We have two or three doctors who have sent us many patients,” she says. “They have been so instrumental to our success. They can’t directly tell people where they should go, but they say good things about us. The relationship that we have with these local physicians is just amazing.”

Ezzio also insists that patients won’t be denied medications and left on their own because of insurance issues that are no fault of their own.

“We have an amazing technician who will call every insurance plan,” she says. “We don’t say, ‘I’m sorry, your card doesn’t work, you need to pay cash.’ We look at the individual. We see that a person might be going without medication. If we have a legitimate prescription, what do we do? We give them a few. You can do that. We’ll provide a little bit of financial help with someone with a couple pills. They have a legitimate prescription, but something is wrong with the insurance. People don’t forget that type of thing. Don’t get me wrong, obviously you have to use your judgment. But you don’t turn away from people and say, ‘You call the insurance, or you pay me for the whole thing right now,’ when you know their insurance is going to work in a couple of days. I know this town. I know these people. My kids’ teachers come here, so it’s a gesture of goodwill on our part.”

“I just want to go above and beyond,” she says. “I want to be known as that pharmacist who’s available to anyone, to be that pharmacist that they call on anytime. That’s who I am. That’s of the most importance to me. I’ve learned that you don’t have to make a million dollars to be successful, you just have to stay in business. That’s really my goal.”

Chris Linville is managing editor of America’s Pharmacist.
an apple,
An Apple, Daily

iPad applications can make a difference for independent pharmacy

By Tim Davis, PharmD, and Patrick Pugliese

Since its arrival, the iPad has been hailed as a “a magical and revolutionary device” that will change the technology world forever. But for whom? Apple’s advertisements showcase the ease of browsing the web with your fingertips, pinching and swiping your way through photo albums, paging through digital bestsellers, and downloading the latest music and movies instantaneously. I have experienced firsthand iPad’s ingenuity and I can say, in fact, iPad performs these tasks beautifully. Its intuitive user interface surpasses the hype of iPad Mania.
Unfortunately, the iPad’s target market is largely restricted to leisure users. When the iPhone first infiltrated the then BlackBerry-dominated smartphone market in 2007, Apple dedicated a significant amount of time to subsequent software and hardware updates to meet the demands of the business world. Yet, where the iPhone entered an already established marketplace, the iPad is a new entity altogether. Still, just as in the early days of the iPhone, the iPad is becoming pigeonholed as a consumer’s toy. Even though it is fun to play with, the functionality of the iPad is in a class of its own. Consider this, what is keeping the iPad from becoming the most useful tool in your pharmacy? Although there is likely an application that can answer that, the more productive question is—how can the iPad enhance my patient interactions?

**Mirixa and iPad**
Platforms such as the Mirixa Corp. have been helping pharmacists identify patients in need of medication therapy interventions since 2006. The Mirixa platform enables pharmacists to receive compensation for services, while providing a standardized system for the provision and documentation of medication therapy management. The interactions are conducted face-to-face or over the phone, and all of the information is documented in Mirixa’s web-based interface. Because the iPad is first and foremost a web-enabled device, its construction allows the pharmacist to get out from behind the counter and remove the impersonal barrier of the computer locality. With the iPad, I have the Mirixa platform readily available, along with the patient’s
medication history and all necessary references in one device. Its portability allows me to meet the patient at any location in the pharmacy. In fact, it allows me to effectively travel outside the pharmacy into long-term care facilities, homes, or wherever the patient would like to meet.

Using the onscreen keyboard, I can quickly log into the platform and select the profile for the patient in progress. From there I can easily work my way through reviewing allergies, current medications, past medical history, and medication therapy problems. Without the hindrance of any barriers, interaction with the patient evolves from a systematic process to a productive conversation. Overall, the website renders beautifully on the iPad’s built-in Safari browser without any compromise in page load time. Additionally, all images and formatting are preserved and appear just as they would on a traditional computer. Although the iPad’s screen presents the page in a size that is natively very readable, its touch screen technology allows me to zoom in and out with my fingers on various areas of the page and magnify as necessary. This is a function that I found particularly useful throughout the interview process, especially when entering information into the patient’s medication list using the selection of Mirixa’s preset Sig codes.

The iPad’s form also allows me to effectively adapt to the patient’s needs during interviews. I can easily move if we need to change locations or examine different OTC medications or other areas within the pharmacy. If there is a point that needs clarification or a question that I cannot answer, I do not have to interrupt our session to pull out reference material and page through books. Instead, I quickly access the very same extensive drug or other health-related information right on the device. What’s even more amazing is that I can then pass the iPad to the patient as I would a magazine for them to review. Even for those who don’t enjoy the sensitivity of a touch screen keyboard, peripherals such as the Pogo Sketch stylus make documenting the intervention on the device quick and easy, all while eliminating the need to transcribe any information that may have been physically written down during the interaction.

**Third-Party Applications**

There are several other third-party applications of use in addition to the online Mirixa client that are not necessarily centered around pharmacy. For instance, GoodReader is an application that allows me to download information or handouts, which I can then e-mail directly to the patient. Every note in an app allows me to instantly share images, voice memos, or notes from the interaction with all pharmacy staff. PDF annotation apps, such as iAnnotate, give me the ability to “write” on digital documents and highlight information for the patient.

At this point, you may be asking “Is there anything the iPad cannot do?” The answer is yes. “Will the iPad replace my need to use a computer?” Not yet. In fact, at the end of a consultation I must still log into a computer to print out any documents if there is no way to e-mail the patient. Considering the device is only a few months old, however, I can already see its value in the way it has improved the quality of my patient interactions. The iPad is the first device that allows me to get out from behind the counter and really communicate with patients in a way that is both personal and professional.

Still, the iPad is not the end. 2010 was touted the “Year of the Tablet.” Competing devices from a variety of manufacturers will inevitably flood the market. The iPad may not be for you, but there may be another device in the coming months that is. Our field is one of many that directly benefit from technological advances to better serve our patients. Can you imagine, for a moment, your job without the computer? The computer as we know it has evolved, and as the commercial says, “There is no wrong way to use it.” I can say that iPad has enhanced the quality of my patient services; what can it do for you?

Timothy Davis, PharmD, is owner of Beaver Health Mart Pharmacy in Beaver, Pa. Davis was 2010 chair of NCPA’s Innovation and Technology Committee. Patrick Pugliese is a 2011 PharmD candidate from the University of Pittsburgh.
During the NCPA convention in Philadelphia in October, the NCPA Technology and Innovation Committee displayed a new, web-based resource which is available to improve pharmacist and vendor communication. The resource, which is now launched in version 1.0, is intended to be used for the identification, selection, and evaluation of pharmacy technology. The resource begins with a technology self-assessment instrument that pharmacists can use to determine what resources they own compared with a comprehensive listing of pharmacy technologies available in the marketplace. Early feedback indicates that even the most tech savvy pharmacists are impressed with how many resources are available to make their operations more efficient and effective.

NCPA launches Internet-based technology resource for pharmacists and vendors

By Bill G. Felkey and Brent I. Fox

During the NCPA Convention  
In Philadelphia in October, the NCPA Technology and Innovation Committee displayed a new, web-based resource which is available to improve pharmacist and vendor communication. The resource, which is now launched in version 1.0, is intended to be used for the identification, selection, and evaluation of pharmacy technology. The resource begins with a technology self-assessment instrument that pharmacists can use to determine what resources they own compared with a comprehensive listing of pharmacy technologies available in the marketplace. Early feedback indicates that even the most tech savvy pharmacists are impressed with how many resources are available to make their operations more efficient and effective.

By Bill G. Felkey and Brent I. Fox
Web Connected

Pharmacy technology vendors are being asked to complete the assessment tool to help communicate the technology coverage of their product lines and to give information on which features of the technologies are currently available, not available, or in development. Another feature of the site provides suggested questions that pharmacists should ask vendors before purchasing any featured product. These are provided in each of six initial pharmacy technology categories covered in the 1.0 launch. Numerous other technology vendors and vendor categories are scheduled to be included in the resource when it is expanded in the next two revisions during 2011.

Because the potential categories of pharmacy technology were so extensive, the committee decided to choose an initial set of seven categories for development in phase 1 of the project. The categories are pharmacy management systems, workflow technology, point of sale tools, integrated voice response applications, automation and robotics, long-term care and assisted living, and a miscellaneous "catch all" category which ultimately, was not included in the 1.0 launch. An extensive set of questions that pharmacists can use for due diligence during the product selection process were generated.

The initial set of questions for each category were designed to help pharmacists determine product functionality for areas or features that they may not have normally considered. For example, suggested questions drill down into the ability of a POS system to handle lottery tickets, employee discounts, and other special circumstances such as dual-tender transactions. The articles we have generated for ComputerTalk and America’s Pharmacist are supplied in an archive section.

Thus far, responses from both pharmacists and vendors to the new website have been positive. The technology resource was developed using the input of NCPA's membership, the vendor community, and the prolific pharmacy technology users on the Innovation and Technology Committee. As the project is viewed by the entire pharmacy technology marketplace and audience, it should get additional direction for enhancement.

The URL for the resource is http://rxtechnologyresource.com, and there are many interesting layers to explore even in the initial launch. By clicking on the Evaluation Tool tab, the interactive self-assessment tool mentioned previously is made available to the site visitor. This tool asks for demographic information to include the number of years the pharmacy practice has been in place, prescription volume, and the brand (and operating system) of the installed pharmacy management system. Once a pharmacist completes the assessment tool, if/then logic is used to develop and present targeted recommendations for additional technology to be considered for adoption in the practice.

Recommendations Vary

Certain technology recommendations vary according to the maturity of the pharmacy practice. The logic was developed by the committee to assist pharmacists in determining what core technology should be in place from the beginning and throughout the maturity of the practice. Thus, the recommendations will be different for the start of a new practice versus one that is between one and five years old, or more than five years old. At the end of the assessment, pharmacists are also supplied with a list of associated vendors with their contact information for each of the suggested technologies generated by the tool. Additionally, users of the tool are presented with buyer specific resources such as ComputerTalk’s annual buyer’s guide edition of the publication.
Committee members have generated narrative case studies for visitors to the site. These case studies are intended to help visitors understand the rationale that tech-savvy pharmacists used for sequencing the adoption of their practice technology. Suggestions range from initial purchases, special services application integration, and multi-store hosting interfaces. These narratives complement a comparative feature of the site where pharmacists learn how their adoption of technology compares with pharmacists from similar settings through graphical reports. In this way, visitors learn not only what technology to consider, but why a particular technology should be made a purchase priority. Reports such as the summary results of an ongoing series of technology focused surveys can be found on the new site as well.

Vendor Appeal
The next step of the enhancement of the new resource is to make an appeal to all pharmacy technology vendors to have them self-report the coverage of their product line within the technology assessment categories. Vendors should also be encouraged to list features and benefits offered by their individual products. These types of reports will eventually be connected to published feedback reports to vendors in various market segments where pharmacist survey results and other communication on the site could potentially help drive the prioritization of vendor product development efforts.

Along with the categories already mentioned, vendors who are supplying resources include those that focus on patient safety, specialty service areas, data security systems, pharmacy security and surveillance, website services, delivery technology, decision support, patient education, and telecommunication technologies are all welcome to participate. Future work of the committee will address these and other areas. This resource has already drawn attention from pharmacists who want a Spanish version of the tool created, and from vendors who are eager to tell the advantages offered by their applications. We believe that your use of the site, and the feedback you subsequently provide, will only help improve its value to the profession.

We recommend that you visit the resource immediately to get a flavor for what is there and what is to come. As always we welcome your comments, questions, and suggestions. We will forward any ideas we receive to the NCPA staff and the Technology and Innovation Committee. Our e-mail addresses are felkebg@auburn.edu and foxbren@auburn.edu.

Bill G. Felkey is professor emeritus, and Brent I. Fox is assistant professor of Pharmacy Care Systems at Auburn University’s Harrison School of Pharmacy.
2011 State Pharmacy Association Meetings
## 2011 STATE PHARMACY ASSOCIATION MEETINGS

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<th>Association</th>
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<td>Alabama Pharmacy Association</td>
<td>Feb. 17–21</td>
<td>Cozumel, Mexico (Midyear Meeting)</td>
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<td></td>
<td>June 19–22</td>
<td>Sandestin Golf &amp; Beach Resort, Destin, Fla.</td>
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<tr>
<td>Alaska Pharmacists Association</td>
<td>Feb. 18–20</td>
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<td>Arizona Pharmacy Alliance</td>
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<td>Arkansas Pharmacists Association</td>
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<td>June 9–11</td>
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<tr>
<td>Connecticut Pharmacists Association</td>
<td>(In conjunction with the New England Pharmacists Convention—Tentatively Sept 15–16)</td>
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<tr>
<td>Delaware Pharmacists Society</td>
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<tr>
<td>Florida Pharmacy Association</td>
<td>June 22–26</td>
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<td>June 18–22</td>
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<td>Hawaii Pharmacists Association</td>
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<td>Indiana Pharmacists Alliance</td>
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<td>Kansas Pharmacists Association</td>
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<td>Focus groups (Midyear Meeting)</td>
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<td>Sept. 15–18</td>
<td>Wichita Hyatt, Wichita, Kan.</td>
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<td>Kentucky Pharmacists Association</td>
<td>June 9–11</td>
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<td>Louisiana Pharmacists Association</td>
<td>July 14–16</td>
<td>Shreveport Convention Center, Shreveport, La.</td>
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<tr>
<td>Maine Pharmacy Association</td>
<td>May 13–15 (Spring Convention) Sept. 9–11 (Fall Conference)</td>
<td>Hilton Garden Inn, Freeport, Maine</td>
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<td>Hollywood Slots, Bangor, Maine</td>
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<td>Maryland Pharmacists Association</td>
<td>Jan. 30</td>
<td>Linthicum Heights, Md. (Midyear Meeting)</td>
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<td>June 11–14</td>
<td>Clairon Resort Fontainebleau, Ocean City, Md.</td>
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<tr>
<td>Massachusetts Pharmacists Association</td>
<td>(In conjunction with the New England Pharmacists Convention—Tentatively Sept 15-16)</td>
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<tr>
<td>Michigan Pharmacists Association</td>
<td>Feb. 25–27</td>
<td>Detroit Marriott</td>
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<td>Minnesota Pharmacists Association</td>
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<td>Maddens, Brainer, Minn.</td>
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<td>Mississippi Pharmacists Association</td>
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<tr>
<td>Missouri Pharmacists Association</td>
<td>June 9–12</td>
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<td>Montana Pharmacy Association</td>
<td>Jan. 14–16</td>
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<tr>
<td>Nebraska Pharmacists Association</td>
<td>June 10–11</td>
<td>Lincoln, Neb.</td>
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<tr>
<td>New Hampshire Pharmacists Association</td>
<td>No annual meeting (CE Meetings scheduled for June 26, Sept. 18, and <em>Last Chance CE</em> Dec. 4)</td>
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<tr>
<td>New Jersey Pharmacists Association</td>
<td>Oct. 21–23</td>
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<tr>
<td>New Mexico Pharmacists Association</td>
<td>Jan. 29–30</td>
<td>Marriott Pyramid Hotel—Albuquerque, N.M. (Midyear Mtg)</td>
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<td></td>
<td>June 25–26</td>
<td>Embassy Suites Hotel—Albuquerque, N.M.</td>
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<td></td>
<td>June 26–29</td>
<td>Lake George N.Y.</td>
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<tbody>
<tr>
<td>North Dakota Pharmacists Association</td>
<td>June 10–12</td>
<td>Grand Forks, N.D.</td>
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<tr>
<td>Ohio Pharmacists Association</td>
<td>April 8–10</td>
<td>Columbus, Ohio</td>
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<tr>
<td>Oklahoma Pharmacists Association</td>
<td>June 9–12</td>
<td>Branson, Mo.</td>
</tr>
<tr>
<td>Oregon State Pharmacy Association</td>
<td>Sept. 16–18</td>
<td>Salem, Ore.</td>
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<tr>
<td>Rhode Island Pharmacists Association</td>
<td>(in conjunction with the New England Pharmacists Convention—Tentatively Sept 15–16)</td>
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<tr>
<td>South Carolina Pharmacy Association</td>
<td>June 24–26</td>
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<tr>
<td>South Dakota Pharmacy Association</td>
<td>June 3–5</td>
<td>Sioux Falls, S.D.</td>
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<tr>
<td>Tennessee Pharmacists Association</td>
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<td>Texas Pharmacy Association</td>
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<td>Fort Worth, Texas</td>
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<tr>
<td>Utah Pharmacists Association</td>
<td>March 31–April 2</td>
<td>St. George, Utah</td>
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<tr>
<td>Virginia Pharmacists Association</td>
<td>July 31–Aug. 3</td>
<td>Virginia Beach, Va.</td>
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<tr>
<td>Pharmacy Society of Wisconsin</td>
<td>Aug. 25–27</td>
<td>La Crosse, Wis.</td>
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*Information current as of Dec. 2, 2010*
Innovations in Pain Management: New Drug Developments, Targets, and Strategies for Safe and Effective Analgesia

By Michele Matthews, PharmD

Upon successful completion of this continuing education activity, the pharmacist should be able to:
1. Describe the socioeconomic burden of pain and identify issues with current analgesic therapies.
2. Discuss new drug developments for pain management and provide education to patients who are prescribed these therapies.
3. Describe the abuse-deterrent and tamper-resistant strategies for the new formulations of opioid analgesics.
4. Identify novel drug targets for pain management, including the role of the endocannabinoid system.
5. Discuss the role of pharmacogenomics that may assist with choosing personalized medicine for patients with pain.

INTRODUCTION

According to the International Association for the Study of Pain, pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. However, any standardized definition does not fully appreciate the subjective nature of pain and its associated physical, emotional, and behavioral elements. The impact of pain is far-reaching; pain affects more Americans than heart disease, diabetes, and cancer combined, with an estimated 80 million people suffering from pain in the United States each year. Approximately 68 million of these cases are classified as chronic pain secondary to low back pain, arthritis, or headache. The cost of chronic pain is staggering, resulting in more than $100 billion each year from the combination of work absenteeism along with direct medical costs. Therefore, proper pain assessment and management is becoming an important health issue with forthcoming changes in the health care system and realization of the actual risks to the patient associated with some analgesics.

Pain is categorized based on factors including severity, duration, and quality. Pain can be classified as acute (lasting less than one month) or chronic (lasting greater than six months) and can arise from nociceptive and/or neuropathic origins. Nociceptive pain is experienced in the presence of an injury or trauma and can be described using terms such as sharp, dull, or achy. This type of pain can be localized or diffuse; examples of nociceptive pain include osteoarthritis and pancreatitis. Neuropathic pain, defined as pain initiated or caused by a lesion or dysfunction within the nervous system, is commonly described as one or more of the following: burning, shooting, or electrical shock-like pain that may not be easily localizable to a single point. Diabetic peripheral neuropathy and postherpetic neuralgia are classic examples of neuropathic pain. A detailed patient history and pain assessment are the guiding factors in choosing appropriate analgesic therapies for both acute and chronic pain, regardless of severity.
The pharmacology of pain management involves the modulation of the ascending and descending pathways within the pain process along with inhibition of the release of excitatory neurotransmitters and/or other substances that sensitize the nervous system to noxious stimuli. When the body experiences an injury or trauma, action potentials are generated from the site of damage and are transmitted from the peripheral nervous system to the central nervous system (CNS) via the spinal cord. Simultaneously, chemical mediators and neurotransmitters that sensitize neurons and enhance the pain process are released. Once the pain impulses have reached the higher centers of the CNS, a modulatory response is initiated within the descending pathway to inhibit pain impulses from being processed and ultimately preventing pain perception. The receptors involved in pain modulation include opioid receptors, alpha-2 adrenergic receptors, voltage-gated calcium channels, and NMDA receptors. Chemical mediators that sensitize neurons to pain include substance P, prostaglandins, bradykinin, and glutamate. Neurotransmitters that facilitate pain modulation include norepinephrine, serotonin, and GABA.

The various processes involved in pain perception allows for the targeting of different areas within the pain pathway with the use of pharmacological agents. Drugs used to treat pain are categorized as nonopioid, opioid, and adjuvant analgesics. Nonopioid analgesics include acetaminophen and non-steroidal anti-inflammatory drugs (NSAIDs) and are commonly prescribed as monotherapy for mild to moderate pain or in combination with opioids for moderate to severe pain. Opioids analgesics are the mainstay of therapy for moderately severe to severe pain and are used in combination with nonopioid and adjuvant analgesics in the setting of chronic pain. They are involved in CNS-mediated mechanism of analgesia through their interaction with opioid receptors in the brain and spinal cord. Adjuvant analgesics, including antidepressants and anticonvulsants, can be used for any severity of chronic pain in combination with nonopioid and/or opioid analgesics.

The current arsenal in the management of both acute and chronic pain is limited. Even with several therapeutic options available, there remains a need for innovative therapies based on the individualistic response to analgesics and the ever-growing understanding of pain and its processing. Additionally, the pharmacogenomics of pain are becoming increasingly understood and may explain these differences in patient response to therapy. The risk for dependency or abuse associated with opioid analgesics have also lead to opioid product formulations that may deter abuse and resist tampering. In tandem, the Food and Drug Administration (FDA) has developed a long-acting and extended-release opioid class Risk Evaluation and Mitigation Strategies (REMS) to further address such risks. This article will review new drugs, formulations, and strategies to address the challenges in pain management and will highlight the evolving science behind achieving effective analgesia.

**NEW DRUGS OR FORMULATIONS**

**Nonopioid and Adjuvant Analgesics**

**Intravenous Ibuprofen (Caldolor)**

Nonsteroidal anti-inflammatory drugs have been utilized for acute pain management, fever, and inflammation since aspirin was discovered in the 1800s. The approval of COX-2 inhibitors for use in the U.S. market in 1999 with celecoxib provided optimism for retaining the analgesic efficacy associated with nonselective NSAIDs, while avoiding gastrointestinal and renal toxicity. The subsequent withdrawal of multiple COX-2 inhibitors from the market due to cardiovascular events led to widespread re-evaluation of the risks associated with both selective and nonselective NSAIDs. A scientific statement from the American Heart Association established criteria to delineate patients at risk for NSAID-induced cardiovascular events and highlighted the need for improved drug safety regulations. Even though these agents play a significant role in pain management, the development of new NSAIDs or formulations may be received with caution. Consequently, the approval of intravenous (IV) ibuprofen (Caldolor) revisits the role of parenteral NSAIDs after years of experience with ketorolac tromethamine.

Approved by the FDA in June 2009, IV ibuprofen is indicated for the management of mild to moderate acute pain, moderate to severe acute pain as an adjunct to opioid analgesics, and reduction of fever in adults. In a multicenter, randomized, double-blind, placebo-controlled trial, 406 patients who were undergoing elective
orthopedic or abdominal surgeries were randomized to IV ibuprofen 400 mg, IV ibuprofen 800 mg, or placebo every six hours in combination with morphine via patient-controlled analgesia (PCA) pumps for the management of postoperative pain. Twenty-four hours after surgery, patients in the IV ibuprofen 800 mg required significantly less morphine compared to the placebo group (P=0.030). The most common treatment-emergent adverse effects were nausea, vomiting, and constipation, all of which occurred at a much lower rate compared to the placebo group. A multi-center, randomized, double-blind, placebo-controlled trial evaluated the efficacy and safety of IV ibuprofen for the treatment of fever from any cause. One hundred twenty patients were randomized to IV ibuprofen 100 mg, 200 mg, 400 mg, or placebo administered every four hours for a total of six doses. After four hours of therapy, the proportion of patients achieving a temperature of 101°F or lower was 61 percent for IV ibuprofen 100 mg (P=0.0264), 70 percent for 200 mg (P=0.0043), and 77 percent for 400 mg (P=0.0005) compared to 32 percent in the placebo group. This study also evaluated the effects of IV ibuprofen in critically ill versus non-critically ill patients and found that non-critically ill patients experienced a slightly more rapid reduction in temperature after administration of a 400 mg dose. In addition, the 400 mg dose was effective in both lowering and maintaining temperatures to normothermic range over the 24-hour period. The incidence of adverse effects was similar between all groups, with the exception of bacteremia with IV ibuprofen 100 mg (13%; n=4) compared to 0 percent placebo (0%; P=0.045).

The evidence regarding the use of IV ibuprofen for acute pain suggests that it can be used as an alternative to other analgesics or adjunctively to reduce opioid requirements in the postoperative setting. To date, there are no studies comparing the efficacy and safety of IV ibuprofen to ketorolac. Additionally, the use of IV ibuprofen has been limited to five days in clinical trials and is the same duration of therapy restriction that applies to the use of ketorolac. Patients receiving IV ibuprofen should be well hydrated and have no history of hypersensitivity to ibuprofen, other NSAIDs or aspirin. IV ibuprofen is contraindicated in the coronary-artery bypass graft (CABG) post-operative setting. The cost of IV ibuprofen will also likely play a significant role in formulary decision-making ($9.19 for 400 mg, $13.13 for 800 mg; per dose).

**Milnacipran (Savella)**

An improved understanding of pain processing has led to focusing on the modulation of neurotransmitters that assist with preventing pain perception. Norepinephrine (NE) reuptake inhibition within the descending pain pathway of the central nervous system (CNS) has been proposed to suppress pain impulse transmission that is likely to be dependent upon patient-specific plasticity. Serotonin and NE reuptake inhibitors (SNRIs) such as duloxetine are beneficial for the treatment of both pain and associated depression. However, serotonin (5-HT) has been proposed to increase inflammation and hyperalgesia (such as exaggerated pain response), particularly in the presence of nerve injury. Milnacipran (Savella) selectively inhibits NE and 5-HT reuptake in a 3:1 ratio and is approved for the management of fibromyalgia. It is theorized that this specificity for NE over 5-HT may provide enhanced analgesia while minimizing adverse effects including 5-HT syndrome and hyperalgesia. Milnacipran has been studied in more than 2,000 patients with fibromyalgia, and when compared to placebo for up to 27 weeks, its use was associated with greater improvements in a composite endpoint that included pain, physical function, and patient global assessment. Milnacipran requires titration throughout the first week of therapy to a final recommended dose of 50 mg by mouth twice daily. To facilitate titration, it is supplied as a blister-pack for the first four weeks of therapy. Milnacipran carries a black box warning for suicidal ideation, thinking and behavior in children, adolescents and young adults. The most common adverse effects associated with milnacipran include nausea, headache, palpitations, and dry mouth, and it should be used cautiously in patients on other serotonergic drugs or those with seizure disorders; concomitant use with a MAOI is contraindicated. Discontinuation of milnacipran should be done gradually when possible to avoid withdrawal symptoms. Comparative efficacy studies involving milnacipran and other drugs for the treatment of fibromyalgia (such as duloxetine, pregabalin) are unavailable.
Opioid Analgesics

Extended-release Hydromorphone (Exalgo)

Hydromorphone is a hydrogenated, semi-synthetic ketone of morphine that is used in the management of moderate to severe pain. As a derivative of morphine, it is expected that hydromorphone is an effective alternative to morphine. Hydromorphone is available as an oral formulation, but the short elimination half-life of this drug requires frequent repeated dosing (every four to six hours) to gain effective around-the-clock pain control. The need for frequent dosing may lead to issues with adherence and consequently may reduce treatment outcomes and may negatively impact quality of life. Studies have shown that long-acting opioids can improve pain management and reduce opioid-related side effects in comparison to immediate-release (IR) formulations.

Exalgo is indicated for once daily administration for the management of moderate to severe pain in opioid tolerant patients. This long-acting formulation provides lower and longer sustained peaks than IR hydromorphone, as well as higher trough concentrations. This pharmacokinetic profile provides an easier dosing schedule, shows potential to lower medication abuse, and can eliminate the wearing off effect caused by low trough drug levels that may exist in patients using IR hydromorphone. Extended-release hydromorphone provides another option for patients with chronic cancer or noncancer pain who require long-acting opioid formulations. By reducing the number of pills needed on a daily basis, health care providers can improve patient adherence, enhance pain management, and decrease the likelihood of medication errors. Extended-release hydromorphone should be used cautiously in patients with hepatic and renal impairment, two to four-fold increases in plasma levels have been observed in these populations; consider a product which permits greater dosing flexibility. The cost and prescription coverage for Exalgo remains unknown at this time. Therefore, Exalgo provides little advantage over other currently available long-acting opioid preparations, and its use should be reserved for patients who cannot tolerate or do not have adequate analgesia with other long-acting opioid preparations. Additional studies that address comparative efficacy to other long-acting opioids and pharmacoeconomic analyses are warranted. There is a black box warning on this product flagging its potential for abuse, misuse, addiction and criminal diversion and limits its use to opioid tolerant patients. The warning also calls attention to the extended-release delivery system which is defeated if the tablet is broken, chewed, crushed or dissolved and can lead to a potentially fatal dose of hydromorphone. Exalgo should not be used with or within 14 days of discontinuing MAOI therapy.

Fentanyl Buccal Film (Onsolis)

The lipophilic nature of fentanyl has allowed it to be developed into multiple formulations for administration through various routes. Fentanyl buccal soluble film (FBSF, Onsolis) is FDA-approved for the treatment of breakthrough pain in patients with cancer, age 18 and older, who are managed on long-acting opioid therapy. It utilizes BioErodible MucoAdhesive (BEMA) technology and dissolves within 15 to 30 minutes. In a randomized, double-blind, placebo-controlled trial, 80 opioid-tolerant patients with chronic cancer pain were randomized to FBSF or placebo. After 30 minutes, significantly more patients in the FBSF group reported greater reductions in pain compared to placebo; this improvement in pain was detectable within 15 minutes after administration and was sustained for up to one hour. The most common adverse effects associated with FBSF include nausea, vomiting, and constipation and carries the same risks for respiratory depression, hypotension, and addiction as with other opioid analgesics. The recommended starting dose for FBSF is 200 mcg, and the dose can be increased as needed by applying additional films, up to 800 mcg. The FDA-approved dosing is no more than one film be used per episode, separated by at least two hours, no more than four doses per day. Available dosages are 200 mcg, 400 mcg, 600 mcg, 800 mcg, and 1,200 mcg. Plasma concentrations of FBSF and other fentanyl products may be increased with the co-administration of cytochrome P 450 (CYP) 3A4 isoenzyme inhibitors, and concomitant use should be avoided due to the risk of increased drug plasma concentrations. The addition of FBSF provides another option for patients suffering from breakthrough pain. However, its efficacy in comparison to other transmucosal fentanyl preparations is unknown. Onsolis is contraindicated in opioid non-tolerant patients, patients with acute or post-operative
pain (includes migraine and other headache pain, emergency department use) and known hypersensitivity to fentanyl. Onsolis carries a black box warning for abuse potential, patient selection and calls out potential for respiratory depression when used with a CYP3A4 inhibitor. Onsolis is available only through a restricted distribution program, called FOCUS that requires patient, prescriber and pharmacy enrollment.

Topical Agents

**Capsaicin 8 Percent Topical Patch (Qutenza)**

Postherpetic neuralgia (PHN) is a form of neuropathic pain that occurs after an outbreak of herpes zoster (shingles). Pain associated with PHN can last for months after the infection has cleared and can be associated with significant depression, anxiety, and disruption of sleep patterns. The incorporation of the herpes zoster (Zostavax) vaccine into the Center for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP) adult immunization guidelines will likely decrease the incidence of shingles. However, in those patients who develop PHN, pain management can be difficult. A mainstay of PHN management is topical capsaicin but often, patients are not compliant with the frequent and persistent application required to achieve analgesia. A topical patch of 8 percent capsaicin (Qutenza) has been developed for the management of neuropathic pain associated with PHN. Qutenza produces its analgesic effects by interacting with transient receptor potential vanilloid 1 receptors (TRPV1). The initial activation of these receptors produces a burning sensation due to their pro-nociceptive effects; however, over time and after continuous activation, their activity decreases and results in desensitization or analgesia. Qutenza is applied to the affected area, pretreated with a local anesthetic, under physician supervision, or by health care professionals under close physician supervision, for 60 minutes and can be reapplied no more often than every three months. Evidence from an intention-to-treat analysis suggested that the analgesic effect of Qutenza can last for up to 12 weeks. Qutenza can be used as an adjunct to other analgesics commonly used for PHN (such as pregabalin). However, cost of therapy ($675 for one patch) and need for application by a trained provider may limit its use.

**Diclofenac**

The use of compounded topical NSAIDs has been common practice for many years for the treatment of localized pain. Several commercial preparations of topical NSAIDs have recently been approved, all of which contain diclofenac. The first preparation on the market was diclofenac epolamine 1.3 percent topical patch (Flector) which is approved for acute mild to moderate pain due to minor strains, sprains, or contusions. Each patch contains 180 mg of diclofenac epolamine and should be applied to the affected area twice a day. The patch should not be applied to irritated or broken skin. In October 2007, diclofenac sodium 1 percent gel (Voltaren Gel) was approved for the treatment of osteoarthritis of the upper and lower extremities. The recommended dosage is 2 grams for each elbow, hand, or wrist and 4 grams for each knee, ankle, or foot, applied four times daily. The gel is applied using the included dosing card and can be used for gel application. The maximum daily dose is 32 grams over all affected joints. An additional diclofenac preparation was approved in November 2009 which contains diclofenac sodium 1 percent as a topical solution (Pennsaid) for the treatment of the signs and symptoms of knee osteoarthritis. The recommended dose is 40 drops applied to each affected knee four times daily, and the patient should be educated on applying 10 drops at a time, either into the hand or directly onto the knee, and the dose should be spread around the knee before the next 10 drops are applied. Patients should also be instructed to wait at least 30 minutes after the application before bathing. Additionally, patients should be educated about systemic adverse effects associated with NSAIDs, particularly with long-term use. These include increased risk of serious cardiac thrombotic events, MI and stroke and serious gastrointestinal adverse events. In post-marketing reports, the FDA identified cases of diclofenac-induced hepatotoxicity with the use of Voltaren Gel; therefore, it is recommended that when using any topical diclofenac preparations, liver functions tests be assessed after four to eight weeks of therapy and periodically thereafter. No diclofenac preparation should be used in the peri-operative setting of coronary artery bypass graft (CABG) surgery.
Multimodal Analgesics

Tapentadol (Nucynta)

Approved in 2009, tapentadol is a centrally-acting analgesic that inhibits the reuptake of NE and acts as an agonist at the mu-opioid receptor. Tapentadol is FDA-approved for the relief of moderate to severe acute pain in patients age 18 and older and has been studied in postsurgical models of pain as well as in patients with end-stage osteoarthritis who experienced acute exacerbations of pain. In clinical trials, tapentadol was shown to be noninferior to oxycodone 10 mg when given at doses between 50–75 mg every four to six hours and had a lower incidence of gastrointestinal adverse effects (such as nausea and vomiting). The maximum recommended dose per day is 600 mg. However, on the first day of therapy, patients can take one additional dose one hour after the initial dose, for a total daily dose of 700 mg. It is proposed that tapentadol lacks 5-HT reuptake inhibition; patients who were on stable doses of selective serotonin reuptake inhibitors (SSRIs) for at least 28 days were included in clinical studies on tapentadol, and no occurrences of 5-HT syndrome were identified. Tapentadol has also been studied in combination with SNRIs in a 90-day tolerability trial, and incidences of 5-HT syndrome or noradrenergic hyperactivity were not reported. However, the manufacturer includes precautions specifically about the potential risk of 5-HT syndrome in its prescribing information based on preclinical studies, and use of MAOI within 14 days is contraindicated. Tapentadol is a scheduled II substance, and a detailed patient history should be conducted to assess the risk of misuse and abuse for this medication. An extended-release formulation of tapentadol is currently being studied, along with the use of this drug for chronic pain syndromes.

NEW STRATEGIES

New Uses for Old Drugs

Vitamin D

The role of vitamin D in pain management is unclear, and the evidence to support its use in chronic pain is poor. It is known that hypocalcemia due to vitamin D deficiency induces the secretion of parathyroid hormone, which stimulates the breakdown of bone to enhance the release of calcium. This breakdown of bony surfaces may lead to characteristic complaints of dull and persistent musculoskeletal aches and pains. Indications of defective bone mineralization may include muscle weakness, fatigue, poor appetite and paresthesias. While vitamin D is well-tolerated and inexpensive, dosing of this fat-soluble vitamin for pain is not clearly defined. Some of the most aggressive regimens of vitamin D range from 5,000 IU/day to 50,000 IU/day for limited periods of time.

Researchers have found that daily supplementation of less than 800 IU was no better than placebo in the evaluation of muscle strength. Based on available evidence, an appropriate initial vitamin D dose would be a compromise between a dose greater than 800 IU/day and the more aggressive dosing regimens entailing 5,000 IU/day. This dose should be titrated based on tolerability and response. Patients should be advised that individual responses to this vitamin may vary. Some patients may notice improvements in their pain symptoms within a few weeks, while others may not see results for nine months or longer. The long-term use of vitamin D, when used at doses higher than those recommended for deficiency, have not yet been fully investigated.

Opioid Antagonists

Opioid antagonists have been used to reverse the toxic effects of opioids by displacing them from their respective receptors. Animal studies have demonstrated that low doses of naltrexone may stimulate the up-regulation of mu-opioid receptors in areas of the brain that control nociceptive responses, and may “reset” existing receptors to minimize opioid tolerance. Naloxone was originally synthesized in 1960. Its short duration of action made it useful for the reversal of opioid toxicity. Naltrexone was developed soon after, offering the advantage of good oral bioavailability, a longer duration of action, and twice the potency of naloxone. The proposed dosing for pain management, in combination with opioid agonists, is at a much lower dose than what is recommended for addiction therapy and opioid overdose. Gan et al reported a study using two small doses of naloxone together with intravenous morphine in 60 patients in a post-anesthesia care unit. From this study, they concluded that naloxone significantly reduced opioid-related adverse effects and reduced post-operative opioid requirements for pain control. Other trials and case reports
support the safety and efficacy of low-dose or ultra-low-dose opioid antagonists for the management of pain in opioid-tolerant patients. In summary, opioid antagonists offer promising new indications that extend beyond their role in opioid reversal and addition.

NEW STRATEGIES
Abuse-Deterrent and Tamper-Resistant Opioid Formulations
The misuse, abuse, and diversion of opioids pose significant challenges for health care professionals who must evaluate the appropriate use of opioids and their potential abuse. The abuse of prescription drugs is a growing public health concern that has gained the attention of several pharmaceutical companies who have reformulated many commonly used opioids to prevent drug abuse. The ideal dosage form would resist tampering by any method while still offering therapeutic effectiveness.

Embeda
Embeda (King Pharmaceuticals) is extended-release morphine sulfate with sequestered naltrexone that was approved for marketing in 2009 and is formulated as pellets contained in a capsule. Each pellet contains a sequestered naltrexone core surrounded by morphine. When ingested orally, morphine is absorbed but the naltrexone core remains intact, and no or little naltrexone is released. However, when this formulation is crushed, the euphoric effects of morphine are blunted because naltrexone is released with morphine. In clinical trials, most patients who received Embeda had negligible levels of naltrexone and those who had detectable levels had no increase in pain. Under tampering conditions, this drug releases levels of naltrexone that are similar to those achieved with immediate-release naltrexone.

Remoxy
Remoxy is an extended-release formulation of oxycodone awaiting FDA Approval. The formulation contains oxycodone in a highly viscous liquid formulation matrix and is intended to resist abuse by crushing or by dissolution in common liquids. This formulation is proposed to prevent oxycodone “dumping” from the capsule when it is ingested with alcohol, common solvents, or aqueous buffers across a wide range of pH, rendering oxycodone extraction difficult. Remoxy has not been studied in head-to-head trials with other extended-release opioids; therefore, it is unknown if the formulation sustains or reduces the efficacy of oxycodone and if the tamper-resistant mechanism contributes to tolerability issues. The manufacturer is targeting to resubmit a new drug application (NDA) for Remoxy after gathering additional stability data.

OxyContin Reformulation
A reformulation of OxyContin was approved for marketing in April 2010 and will utilize a polymer that makes the tablets difficult to break or crush. When introduced to a liquid, the formulation transforms into a viscous gel that resists extraction of oxycodone for injection. The manufacturer will be required to conduct post-marketing studies on the extent of misuse and abuse of the new formulation and will have a REMS that requires a medication guide to be dispensed with the medication, along with required prescriber education on the use of opioids for pain.

Opioid REMS
Due to the risks associated with opioid analgesics, the FDA has requested the inclusion of long-acting and extended-release opioid class REMS proposals with the submission of any new drug application. This is to ensure that the benefits of any new opioid or formulation outweigh its risks, with the ultimate goal of reducing opioid abuse and diversion. Certain opioid analgesics will be required to have REMS. These include all long-acting formulations and methadone when used for pain. The REMS for these drugs will include the use of medication guides and implementation of elements to ensure the safe use of these drugs. Example elements include requiring prescriber training and certification on the proper use of opioids, and requiring pharmacies to become certified before the dispensing of opioids.

NOVEL DRUG TARGETS
Cannabinoid Receptors
The use of Cannabis for medical purposes has increased with the passing of legislature in 14 states that allows the legalized use of medical marijuana. Delta-9-tetrahydrocannabinol (THC), the primary component of marijuana, is
responsible for its therapeutic, psychoactive, and adverse effects. The concerns with the use of marijuana have surrounded finding an appropriate delivery form. Smoking is the most efficient route of administration, but comes with dangers. Growing research has focused on an improved understanding of the endocannabinoid system to identify cannabinoid receptors, leading to the development of synthetic compounds to interact with this system. The first cannabinoid receptor, CB1, was identified in the 1990s and involves the modulation of several neurotransmitters such as dopamine and 5-HT. The activation of the CB1 receptor may be responsible for some of the therapeutic effects of marijuana but is also associated with impaired cognition and altered motor function. The CB2 receptor was subsequently discovered and is not as well-distributed throughout the body like CB1. Commercially-available cannabinoids such as dronabinol have been studied as analgesics, but their use is limited by their adverse effects at therapeutic doses. Ongoing research on the endocannabinoid system shows promise for the development of drugs that can interact with this system while minimizing the unfavorable effects of cannabinoids.

PHARMACOGENOMICS OF PAIN
There are many factors that play a role in the undertreatment of pain. Among the more common reasons, adverse effects and fear of addiction remain significant concerns for both providers and patients. The subjective nature of pain complicates its treatment, and the use of therapeutic agents may be used ultra-cautiously, leading to inadequate pain management. The pharmacogenomics of pain may provide an improved understanding of a patient’s individual risks associated specifically with the use of opioids. Because the CYP 450 system plays a role in opioid metabolism, variants of enzymes involved in the degradation of opioids (CYP2D6 and CYP2C19) have been linked to their efficacy and toxicity. Additionally, the mu-opioid receptor and its subtypes also play a role in the therapeutic and adverse effects of these agents. Therefore, these biomarkers have been identified as having relevance in determining a patient’s risk of adverse effects or toxicity and the potential for opioids to produce effective analgesia.

With regard to the CYP2D6 isoenzyme, patients may be poor, intermediate, extensive, or ultra-rapid metabolizers. About 8 percent of Caucasians and 2 percent of African Americans are considered to be CYP2D6 poor metabolizers, which could correlate to supratherapeutic concentrations of opioids as well as an inability to convert drugs into their active metabolites (such as codeine into morphine). Identifying CYP2D6 metabolizer status may assist with therapeutic decision-making when considering opioid analgesics for pain. Using the mu1 opioid receptor (OPRM1) as a biomarker, variances in alleles may be identified to possibly assess opioid dose requirements. The cost and practicality of such tests remains unknown, but the idea of personalized medicine has the potential to improve the safe and effective use of opioids for pain.

SUMMARY
There are significant challenges associated with the management of both acute and chronic pain. The development of new drugs, targets, and strategies are the first steps towards the safe and effective use of analgesics. Several new medications have been introduced to the market within the past few years, and while promising, their role in pain management continues to be unknown. However, the individualistic nature of pain warrants the need for several therapeutic options to ensure an appropriate analgesic regimen for each patient. Emerging science behind new drug targets and the pharmacogenomics of pain will undoubtedly show promise in the future of pain management and the role of personalized medicine. As pharmacists, it is important to recognize the current challenges associated with pain management and to be a resource for other clinicians as analgesic options are considered. Finally, our accessibility as health care providers puts us in position to serve as patient advocates to address barriers associated with inappropriate treatment or undertreatment of pain.

Michele Matthews, PharmD, is an assistant professor of pharmacy practice at the Massachusetts College of Pharmacy and Health Sciences. Matthews also practices as a clinical pharmacy specialist in pain management and certified pain educator (CPE) at the Brigham and Women’s Pain Management Center in Boston.
CONTINUING EDUCATION QUIZ
Select the correct answer.

1. What is the estimated yearly cost of chronic pain in the United States?
   a. $10 million
   b. $100 million
   c. $10 billion
   d. $100 billion

2. Which one of the following neurotransmitters may produce analgesia when its reuptake is inhibited?
   a. Serotonin
   b. Dopamine
   c. Epinephrine
   d. Norepinephrine

3. Which one of the following may be used as an adjuvant to opioid therapy to manage post-operative pain as an adjunct to opioid analgesics?
   a. Ibuprofen IV following renal transplant
   b. Ibuprofen IV following totally knee arthroplasty
   c. Ketoprofen IV for a patient with a history of GI bleed on oral NSAIDs
   d. Ketorolac IV following single coronary bypass

4. Which one of the following drugs was recently approved for the management of fibromyalgia?
   a. Savella
   b. Qutenza
   c. Caldolor
   d. Acurox

5. Which one of the following is TRUE of Exalgo?
   a. It is the first twice daily formulation of hydromorphone.
   b. Ambulatory patients should be monitored for orthostatic hypotension.
   c. No dose is adjustment needed for patients with moderate hepatic impairment.
   d. No dose adjustment is needed for patients with moderate renal impairment

6. Which one of the following formulations utilizes BioErodible MucoAdhesive (BEMA) technology?
   a. Pennsaid
   b. Exalgo
   c. Onsolis
   d. Nucynta

7. J.T. is a 64-year-old oncology patient who is stable on fentanyl transdermal patches 50 mcg/hr. Which regimen would be advised to manage breakthrough pain?
   a. Onsolis 200 mcg PRN no more than QID
   b. Onsolis 200 mcg QID PRN, space doses by two hours
   c. Onsolis 200 mcg no more than four films QID PRN breakthrough pain
   d. Onsolis 200 mcg 1–2 films q1hour prn breakthrough pain

8. Which one of the following statements about Qutenza is FALSE?
   a. It is a high potency capsaicin formulation that needs to be applied under the supervision of a trained clinician.
   b. It can be reapplied every three months and used adjunctively with other analgesics.
   c. Its mechanism of action is related to its activity at TRPV1 receptors.
   d. It is indicated for the treatment of the signs and symptoms of osteoarthritis.

9. Which one of the following statements is true of Qutenza?
   a. The Qutenza patch is applied by a health care professional and removed by the patient.
   b. The Qutenza patch may be cut to fit the treatment area.
   c. Local anesthetic use is contraindicated in conjunction with Qutenza patch application.
   d. The Qutenza patch is applied by a health care professional once monthly for 60 minutes.

10. Which one of the following is TRUE of a topical formulation of diclofenac?
    a. Local application avoids GI adverse effects
    b. Formulations include patch, gel and ointment
    c. Liver function tests are recommended at four to eight weeks and periodically thereafter
    d. Pennsaid should be washed off after 30 minutes to avoid local irritation.
11. Which one of the following is a multimodal analgesic that inhibits the reuptake of norepinephrine and acts as an opioid agonist?
   a. Dronabinol
   b. Duloxetine
   c. Milnacipran
   d. Tapentadol

12. Which one of the following statements with regard to Nucynta is TRUE?
   a. It is an extended-release formulation approved for the treatment of postherpetic neuralgia.
   b. It was found to be noninferior to oxycodone 10 mg when given at dosages between 50 to 75 mg.
   c. It was not studied in combination with selective serotonin reuptake inhibitors (SSRIs) or serotonin norepinephrine reuptake inhibitors (SNRIs).
   d. It is a scheduled III controlled substance.

13. Which one of the following statements with regard to the use of vitamin D for pain is FALSE?
   a. The recommended dose for the treatment of chronic pain is 400 IU/day.
   b. Response to therapy will vary between patients.
   c. Its long-term use for chronic pain has not been evaluated.
   d. It may be effective for the treatment of symptoms associated with impaired bone mineralization.

14. Which one of the following therapeutic classes is being considered for use in pain management as an adjunct to opioid analgesics to “reset” opioid receptors and minimize opioid tolerance?
   a. Anticonvulsants
   b. Beta-blockers
   c. NSAIDs
   d. Opioid antagonists

15. Which one of the following is an abuse-deterrent opioid preparation that is formulated as extended-release morphine with sequestered naltrexone?
   a. Embeda
   b. Exalgo
   c. Remoxy
   d. Onsolis

16. Which one of the following statements with regard to the investigational drug, Remoxy is TRUE?
   a. It is a tamper-resistant formulation of immediate-release hydromorphone.
   b. It is a tamper-resistant formulation of extended-release oxycodone.
   c. It is easily dissolvable in common solvents.
   d. It is co-formulated with disulfiram.

17. Which one of the following long-acting opioid analgesics is conducting post-marketing studies on its reformulation which attempts to curb abuse and diversion?
   a. Duragesic
   b. MS Contin
   c. Opana ER
   d. OxyContin

18. Which one of the following receptors may produce analgesia but also unfavorable adverse effects including impaired cognition and altered motor function?
   a. Alpha-2 adrenergic receptor
   b. Cannabinoid receptor
   c. TRPV1 receptor
   d. Vanilloid receptor

19. Which one of the following opioid receptors may contribute determining individual opioid dose requirements?
   a. Delta receptor
   b. Kappa receptor
   c. Mu receptor
   d. Sigma receptor

20. Which one of the following patient factors may explain supratherapeutic concentrations of opioid analgesics such as morphine?
   a. Being a CYP2D6 ultra-rapid metabolizer
   b. Being a CYP2D6 poor metabolizer
   c. Being of Asian decent
   d. Being of Hispanic decent
21. Which one of the following biomarkers may assist in choosing personalized opioid regimens in the future?
   a. CYP1A2
   b. TRPV1
   c. OPRM1
   d. CB1

22. Which is the correct drug-receptor pairing?
   a. Milnacipran/COX-2
   b. Diclofenac/Vanilloid receptor
   c. Tapentadol/TRPV1 receptor
   d. Naltrexone/Mu receptor
EVERY PHARMACY WILL be subjected to post-payment audits by governmental agencies and commercial payers. If an audit goes badly, then the pharmacy will be required to repay money. By conducting self-audits, the pharmacy can discover and solve problems that will be discovered in a third-party audit.

There are many benefits to self-audits. These benefits include helping the pharmacy identify potential risk areas and allowing problems to be corrected before they can get out of control, helping to avoid overpayments and recoupment’s, improving compliance, reducing stress (in comparison to third-party audits), increasing efficiency and improving documentation.

An effective self-audit process will become as much a part of the daily, weekly, or monthly tasks as filing or working denials. An effective self-audit procedure takes place periodically. The exact period does not matter, but it should happen at defined time intervals. An effective self-audit will eventually cover all areas of exposure. Whether the audits are monthly, quarterly, or annually, they should address all risk areas for the pharmacy. One way to ensure that all risk areas are audited is to develop checklists both for the audit topics and the specific areas addressed in each audit. An effective self-audit will hold individuals accountable. This should be both for the performance of the audits and for implementing any changes that result from the audits. The timely and thorough completion of any assigned audits should be a key element of

job descriptions and performance reviews for individual staff members. For an effective self-audit, proper documentation of the audit must be maintained. This includes not only the plan of audits to be performed, but also the specifics of each audit.

For effective self-audits, pharmacies should cover the following:

- Ensure that the actual drugs dispensed match what was billed.
- Verify if the drug was dispensed and billed as the physician ordered it, and determine if the correct number of days were supplied.
- Check to see if the signature log is well maintained and in chronological order. (It is a good idea to cross check the logs with prescriptions filled to determine accuracy.)
- Use DAW codes correctly. The improper use of DAW codes is the number one reason for recoupments. Denials often cannot be appealed.
- Determine if the pharmacy is correctly transmitting its usual and customary prices.
- In cases where a pharmacist has exercised his professional judgment, such as early refills, unusual quantities or any deviation from normal standards, contemporaneous documentation is a must. Review the files to ensure the documentation exists.
- Review the results of third-party payee audits. These will often pinpoint any problems in the pharmacy’s documentation.
- Upon hiring new individuals, and at least once per year thereafter, verify that employees do not appear on the Office of Inspector General’s list of excluded individuals.
- Test employees to verify their knowledge of correct pharmacy procedures.

Jeffrey S. Baird, Esq. of Brown & Fortunato in Amarillo, Texas can be reached at (806) 345-6320 or jbaird@bf-law.com.
I RECENTLY LOST AN UNCLE TO heart failure who had been enduring a long battle with lung cancer. I traveled approximately 800 miles, one way, to pay my last respects and to offer support and encouragement to my uncle’s widow and other family members. Needless to say, it was a long and tiring trip both physically and emotionally.

The day before the funeral services were to begin, my aunt needed a few medical supplies. My father and I volunteered to go pick up the needed supplies. As visitors to the area and being unfamiliar with the geography, my aunt suggested that we go to the closest and easiest store to find to get what she needed in a hurry.

As bad luck would have it, the first two options we encountered were chain pharmacy operations. Under normal circumstances, my father and I both shop for our health care needs at an independent pharmacy. These were not normal circumstances, so we braved the challenge.

The first location we shopped was the one on the right side of the road with the quickest access for the route we traveled. You know, convenient. With the ease of entry, we gave this location a chance to satisfy our needs while making a sale on a handful of profitable front end items. The sale never happened.

As we entered the 10,000-square-foot operation, we were greeted by nobody. In fact, there was no one within sight to do so. The front checkout area was left unattended and gave us the unnerving suspicion of something being wrong. As we searched for what we needed we came across empty shelves (except for a layer of dust) and still nobody with any desire to help us in our time of need. After no less than 10 minutes of searching and still zero customer service, we found two of the three items we needed. At this time, we both came to our breaking point and decided to leave without buying anything. This business did not deserve the sale and we knew there was another “option” across the street.

So we put the items back and left. And as you could assume by now, no one said “thanks for shopping” or “please come back to see us” or “did you need assistance in finding something” or anything at all! It became apparent to us immediately as to why there were no other shoppers at this location.

So we drove across the highway and entered option No. 2. To our satisfaction we did see an employee of the establishment manning his work station at the front entrance as we entered the premises. To our surprise, this less than welcoming individual turned his back to us as we walked in the store. Once again, we were on our own to find what we needed in a timely manner.

Unable to do so, we approached the pharmacist at the rear of the facility and asked if she could direct us to the over-the-counter items we needed. She did so in a professional manner, but expressed her apologies for not being able to locate the front end manager and/or clerk for more timely service. Her apologetic attitude confirmed our impression already formed of the operation’s lack of customer service.

Let these factual stories serve as a reminder to all independently owned pharmacies to never take anyone for granted that comes through your pharmacy doors. Always welcome them by name if possible, and if you don’t know them by name, find out. Let them know that you are there to serve them in their time of need and let them know how much you appreciate their business time and time again. Being appreciated never gets old.
As the president of a company dedicated to independent pharmacists, I have an obvious bias against those operations that fail to meet the quality of service standards set by the best health care providers across the land. Of course, this standard of excellence in customer service is what separates the best pharmacies from the mass merchants, chains, and deep discounters. Independent pharmacies that recognize the importance of making their customers feel as special as they should feel will continue to increase the gap in quality care that exists in the marketplace today.

If you own or work at an independent pharmacy, please share this article with co-workers and/or staff members so that it may serve as a friendly reminder to call customers by their name, thank them for their business and ask them to come back to see you. They will appreciate it and your business depends on it. 

Andy Oaks is the president of Retail Pharmacy Management Services, Inc. Contact Oaks at 800-662-9035 or andy@rpms.us, or visit www.rpms.biz.

“IPC is proud to support the NCPA Legislative/Legal Defense Fund for the benefit of the IPC membership and community pharmacy nationwide,” said IPC President and CEO Don Anderson. “We know the IPC Government Affairs effort is making a significant impact. As the largest buying group for independent pharmacy and an industry leader, it is our continued mission to support legislative advocacy. Our partnership with NCPA allows us to collectively expand the influence for positive outcomes for patients and independent pharmacy.”

Over the past 25 years, IPC has evolved into the nation’s largest group purchasing organization for independent pharmacies. Located in Sun Prairie, Wis., IPC represents 3,300 primary and 3,000 affiliate pharmacy members nationwide whose purchases exceed $8 billion.

OTC Expiration Dates Largely Ignored: Study

Nearly 40 percent of U.S. households have at least one bottle of expired over-the-counter medication in the home, according to a survey by Walgreens, and more than half of those polled said they would knowingly take the medication after the expiration date.

“Though most parents tend to check expiration dates more frequently,” Walgreens found, “more than a third said they have given their children medication that had expired in the previous six months. In addition, when consumers dispose of medication, more than 60 percent of those surveyed said they dispose of medications in the household garbage.”

For information on NCPA’s Dispose My Meds program, visit www.ncpanet.org. The Walgreens study was based on a nationwide sample of OTC purchasers over age 18 and included an online survey with 500 people.
Community Pharmacy Congressional Advocates

By Michael F. Conlan

Three years ago, NCPA asked a handful of committed lawmakers to establish a forum for discussing community pharmacy issues. Today, the Congressional Community Pharmacy Coalition is officially recognized by the House of Representatives as a Congressional Member Organization permitted to form in order to pursue common legislative objectives.

The coalition’s primary objective is to preserve patient access to community pharmacies by restoring fairness and pragmatism to a health care system that often devalues these small business owners who frequently work in underserved rural communities and urban neighborhoods.

“Preserving patient access to America’s most accessible health care professionals” is the coalition’s motto. As the 112th Congress opens this month, NCPA will be looking to add to the ranks of Pharmacy Champions. We would like to have at least one member from every state. If your representative is not listed, please ask them to join.

Below is a list the coalition’s members returning members from the last Congress by state.

Alabama: Robert Aderholt (R), Mike Rogers (R)
Arkansas: Rodney Alexander (R), John Boozman (R)*, Mike Ross (D)
California: Linda Sanchez (D)
Connecticut: Joe Courtney (D)
Georgia: John Barrow (D)
Kansas: Lynn Jenkins (R), Jerry Moran (R)*
Kentucky: Geoff Davis (R)
Michigan: Peter Hoekstra (R)
Minnesota: Tim Walz (D)
Missouri: Roy Blunt (R)*, Jo Ann Emerson (R)
Nebraska: Jeff Fortenberry (R)
New Jersey: Frank LoBiondo (R)
New York: Maurice Hinchey (D), Christopher Lee (R), Nita Lowey (D), Carolyn McCarthy (D), Anthony Weiner (D)
North Carolina: Virginia Foxx (R), Walter Jones (R), Mike McIntyre (D), David Price (D)
Oregon: Greg Walden (R)
Pennsylvania: Jim Gerlach (R), Tim Holden (D)
Texas: Lloyd Doggett (D), Eddie Bernice Johnson (D), Ciro Rodriguez (D), Peter Sessions (R)
Virginia: Bob Goodlatte (R)
Washington: Cathy McMorris Rodgers (R)

* Boozman, Moran, and Blunt were elected in November to the Senate. Moran was the coalition’s co-chair. 

Michael F. Conlan is editor of America’s Pharmacist.