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JULY/AUGUST 2019 FOR THE PHARMACIST

2019 Chain Market Report

Key findings from our annual survey on where the chains stand with technology. story begins on page 17

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FOR THE PHARMACIST

July | August 2019
The intersection of technology and management.

COVER STORY

2019 Chain Market Report

by Bill Lockwood

It is apparent that technology continues to be the backbone of pharmacy operations, and chain pharmacies continue to install new technology to increase workflow efficiency, better manage inventory, add clinical services, and more. Chain executives share their wish lists of new solutions, their willingness to invest in system upgrades, and their thoughts on where the current system isn't living up to expectations. **story begins on page 17.**

Plus: Survey results available for download at wp.me/p9LtTd-27p

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by Bruce Kneeland
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by Timothy Aungst, Pharm.D., B.C.P.S.
As Bluetooth technology and the internet of things (IoT) make it easier to collect personal data, there is a move to share the data with clinicians. Now the Centers for Medicare & Medicaid Services (CMS) has made drastic changes to remote patient monitoring (RPM) that may shift this mentality.

Pharmacy*Plus*Technology: Online Content

New to www.computertalk.com are guest blogs from subject matter experts and pharmacists using technology to make their pharmacy better. Learn more and share your thoughts. Right now you can access these articles:

Does Your Will-Call Bin Make a Positive Impression?*
by Terry Cater, VP of Business Development & Marketing, PerceptiMed

Reinvent, Revolutionize, Empower: Together*
by Kevin Minassian, President, DataScan Pharmacy System

Real-Time Data — Maximize Your Savings*
by Michael Sosnowik, R.Ph., President, Pharmsaver LLC

Focus on the Customer, Reaching the Patient
An interview with Micro Merchant Systems' CEO Ketan Mehta on the company's award as software company of the year from the American Pharmacy Purchasing Alliance.

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USP <800> affects every pharmacy, no matter what type of practice setting. Now is the time to start preparing. Jeff Hedges, C.D.M.E., president and CEO of R. J. Hedges & Associates, gives an overview of what to expect.

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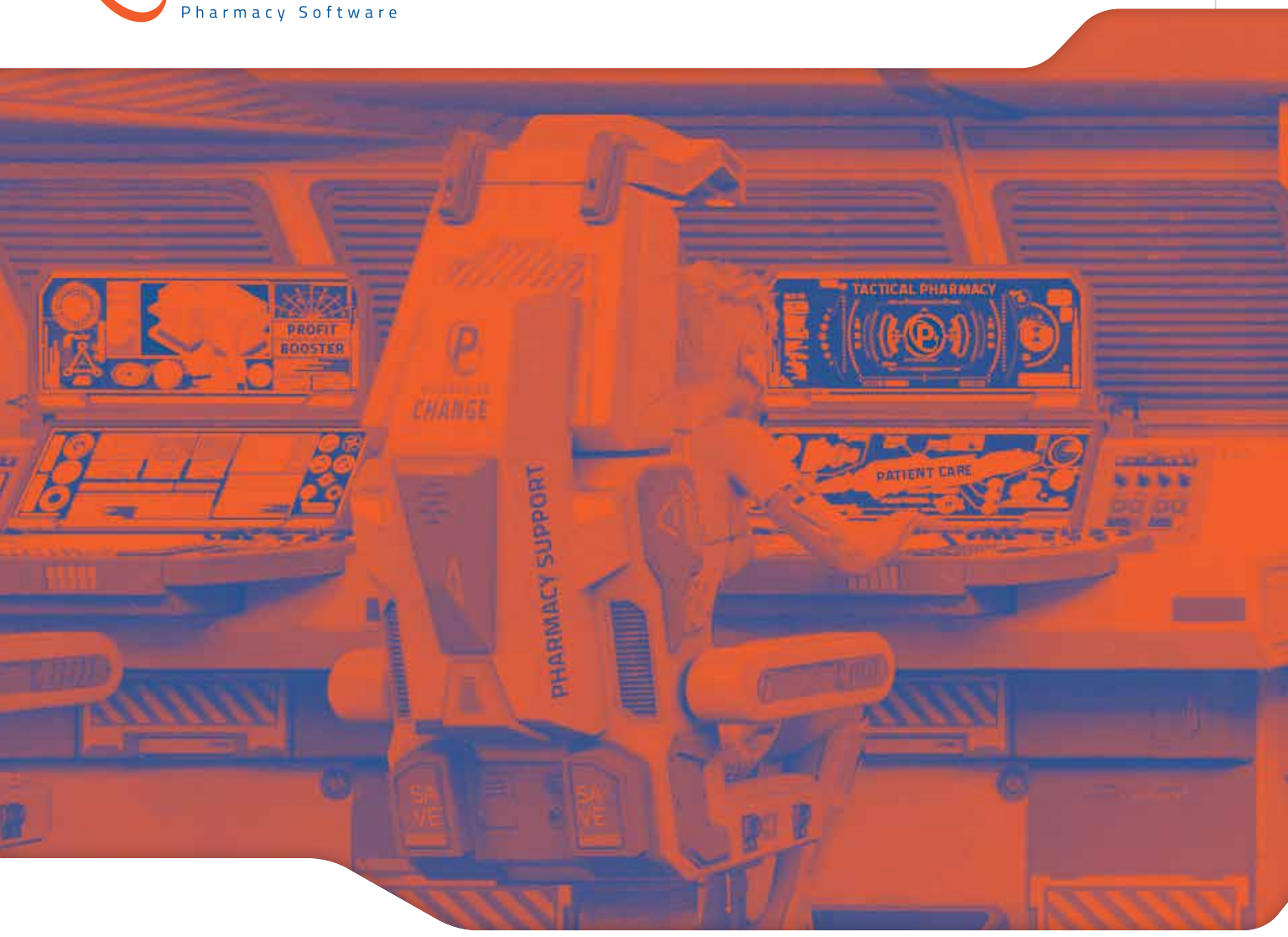

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FOR THE PHARMACIST
www.computertalk.com
Volume 39, No. 4
july/august 2019

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ComputerTalk (ISSN 0736-3893) is published bimonthly by ComputerTalk Associates, Inc. Please address all correspondence to ComputerTalk Associates, Inc., 492 Norristown Road, Suite 160, Blue Bell, PA 19422-2339. Phone: 610/825-7686. Fax: 610/825-7641.

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The Digital Era

There was an interesting article published in the *Harvard Business Review* last year (July 11, 2018), authored by Greg Satell. The article is titled "The Industrial Era Ended, and So Will the Digital Era."

In it Satell makes some interesting points. One he makes is that "Today digital technology is all the rage because after decades of development it has become incredibly useful. Still, if you look closely, you can already see the contours of its inevitable descent into the mundane."

He goes on to say that we need to start preparing for a new era of innovation in which different technologies, such as genomics, materials science, and robotics, rise to the fore.

Satell says he sees three main reasons that the digital era is ending. "First is the technology itself. What's driven all the excitement about computers is our ability to cram more and more transistors onto a silicon wafer, a phenomenon we've come to know as Moore's Law. That enabled us to make our technology exponentially more powerful year after year."

He makes another interesting point. "Buy a new laptop or mobile phone today, and it pretty much does the same things as the one you bought five years ago. New technologies, such as smart speakers like Amazon Echo and Google Home, add the convenience of voice interfaces but little else."

On a macro level, he has found that the digital revolution, as he states, "for all its charms, has had a fairly limited economic impact, compared with earlier technologies such as electricity and the internal combustion engine." He says that information technologies make up only about 6% of GDP in advanced economies.

Technology, in my opinion, has made life easier. We have quick access to all sorts of information at our fingertips — we Google it. We have GPS that gives us directions on where we want to go (remember when we had to rely on road maps?) and yardage to the green in golf.

In pharmacy the digital revolution has had a profound impact. Can you imagine still having to submit insurance claims on paper? Not having online alerts on possible drug interactions? And what about robotic dispensing technology? Look at the impact this has had. It is clear to me that computer technology has made it possible for pharmacies to handle the ever-increasing number of prescriptions in an efficient and safe manner.

This year's chain market report shows that pharmacies continue to invest in the latest offerings through upgrades to existing systems and the addition of new interfaces. The digital era has been good to pharmacy. **CT**

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QS/1 has announced the certification of its systems by **Surescripts** for use of the new SCRIPT standard version 2017071. The Centers for Medicare & Medicaid Services (CMS) has adopted this version of the SCRIPT standard in its final rule for Medicare Part D beneficiaries. The new version will be required for all electronically transmitted prescriptions beginning Jan. 1, 2020.

One new feature in version 2017071 is the expanded SIG field to 1,000 characters from 140 characters. Other new data fields added will allow for the communication of important patient information between systems, as well as the ability to change, cancel, or request an electronic prescription.

"QS/1 prides itself on being an innovator," says Kevin Welch, QS/1 president. "As an early adopter for Surescripts, we completed this important work in early May and are excited about deploying our solutions across the country to facilitate a smooth transition."

QS/1 has also announced that it has signed a new agreement with **Ricoh USA, Inc.**, to enhance its end-to-end hardware maintenance support. This will extend its on-site support coverage nationally. The change will increase QS/1's hardware support personnel to nearly 1,000, allowing expedited service for all hardware-related matters, from servers to cables and everything in between. The new agreement can provide same-day, on-site technicians no matter where customers are located in the continental United States.

Tapping into the CBD Opportunity

These days, you would be hard-pressed to go a few days without hearing about cannabidiol, or "CBD." In the past few years, the market has expanded exponentially, with recent analysis from BDS Analytics and Arcview Market Research predicting that CBD sales in the United States will surpass $20 billion by 2022.

This growth, driven by increasing consumer interest, is great news for pharmacies, as CBD is providing a unique opportunity to diversify their revenue sources and drive business growth. Plus, given their clinical backgrounds and proximity to the community, pharmacists are uniquely placed to take the lead in this emerging space that many of their patients may not fully understand.

CBD is the non-psychoactive part of the cannabis plant and, according to the Harvard Health Blog, may be used to help with anxiety, inflammation, pain management, and insomnia. Many pharmacies have already dipped their toes in the CBD waters, but recent actions show that more people are buying into the idea of CBD as a worthy investment. For instance, when the Agricultural Improvement Act of 2018 (the 2018 farm bill) removed hemp-derived CBD from the schedule of controlled substances under the Controlled Substances Act, not all states were on board. However, one state, Alabama, recently passed new legislation effectively allowing pharmacies to carry CBD products with no more than 0.3% THC (tetrahydrocannabinol). On the chain pharmacy front, recent news reports have noted plans by Walgreens and CVS to carry topical products containing hemp-derived CBD in select states.

As pharmacies increasingly look for ways to strengthen their businesses, CBD presents an over-the-counter revenue stream that helps pharmacy owners improve their bottom line without worrying about high DIR (direct and indirect remuneration) fees or reimbursements.

From this perspective, it is proving to be well worth the investment.

— Matt Johnson, Pharm.D., CEO, Amplicare

OmniSYS has acquired automated pricing solution provider **Rx-Net**. Rx-Net developed and markets ProfitMax, which is a single-interface, multilocation prescription price management solution for retail pharmacies. By taking into account customer-specific pricing goals, third-party reimbursements, and a combination of market-based data sources, ProfitMax automatically helps set and adjust a pharmacy's usual and customary pricing in order to maximize reimbursement, while maintaining competitive and profitable prices for cash-paying customers. "Cash pricing is one of a limited number of variables that a pharmacy can control, and it represents a significant opportunity for growth in the pharmacy space," says John King, OmniSYS CEO.

Also acquired by OmniSYS is **STRAND Clinical Technologies**. STRAND helps retail pharmacists launch and support clinical services. Their intervention, documentation, and education platform supports pharmacies across the country in providing preventative care services and engaging patients with chronic diseases. The platform also supports clinical billing, education, and eCare plans.

Integra has also announced support of the new SCRIPT standard and began incorporating the changes in its PrimeCare pharmacy management system. Final changes and updates will be released well in advance of the Jan. 1, 2020, effective date.

VIP Pharmacy Systems has completed the rollout of the 7.0 release of the VIP pharmacy management software. This release includes the conversion to the Medi-Span suite of clinical database products. With this, VIP users will have access to a more robust set of clinical features designed to improve therapy management and decrease fill errors. Users will also benefit from a wider array of adherence tools, as well as more specific DIR (direct and indirect remuneration) and GER (generic effective rate) fee warnings.

"In today's independent pharmacy industry, our users are having to regularly update what services they provide and how best to deliver those services, all while maintaining the level of attentive care and familiarity that they have built their reputations on. VIP is no different. We are constantly adapting our software features to meet the current landscape," says Kenton Summers, VIP Systems VP.

The Community Pharmacy Foundation and **CPESN USA** are aiming to transform community-based pharmacies through a new program, "Flip the Pharmacy." The "flip" comes from a movement away from point-in-time, prescription-level care processes and business models to longitudinal and patient-level care processes and business models. The current environment is ripe for a nationwide practice transformation effort to sustain community-based pharmacy. This can be accomplished through the creation of economically viable, scalable, and sustainable care and business processes among clinically integrated networks. These networks can contract with payers, purchases, and partners of high-value, reliable, and repeatable services across thousands of pharmacies. Flip the Pharmacy will award qualified practice transformation teams with funding and other resources to act as locally based community pharmacy practice transformation efforts.

Smith Drug Company has entered into a nonexclusive agreement to distribute the **PerceptiMed** scripClip will-call system. The agreement calls for Smith Drug to train its field sales and customer support personnel to help pharmacies take advantage of the customer service and patient safety feature of scripClip.

Saul Factor, R.Ph., president of Smith Drug Company, sees scripClip as a "great addition to our portfolio of products that help our customers thrive."

PerceptiMed launched scripClip in 2016 to ensure the right medication is given to the right patient every time. It uses wireless radio frequency technology and offers both a fixed-handle system and a clip option for use with existing bags.

PEOPLE IN THE NEWS

PerceptiMed announced the company has appointed **Frank Starn** as CEO.

Frank Starn

Citing the success the company is having with its scripClip system, Dr. Rod Markin, PerceptiMed chairman, said the time had come for the company to bring on a CEO with a proven track record of success and with the industry knowledge and relationships to accelerate the company's growth.

Starn served for 12 years in senior management positions with McKesson Corporation, the nation's largest supplier of pharmaceuticals and related technology to pharmacies of all types. Starn was most recently senior vice president and COO of McKesson's U.S. Pharmaceuticals Distribution Group. Prior to those roles, he served as president of global sourcing, as well as senior vice president and CFO of the U.S. pharmaceuticals group. Prior to McKesson, Starn served as a senior executive at Whirlpool Corporation in the United States, China, and Europe.

Starn will assume his duties immediately. Bob Curry, the outgoing CEO, who has 32 years of healthcare venture capital investing experience, will continue to serve on the board. Markin said PerceptiMed is excited to have Starn join the company and looks forward to PerceptiMed's continued rapid growth.

Retail Management Solutions has announced the addition of three new support technicians. **Kennedy Roseberry, Phoenix Taylor,** and **Mary Marburger** are the latest employees to join the company. **CT**

A Tribute to George Pennebaker

George has been writing his column for us for 34 years, and is finally calling it quits. We are going to miss having George, with his informative, on-point columns we've featured over the years. He was well read and received numerous letters from those who agreed with what he had to say.

George has enjoyed an accomplished career in pharmacy. In addition, George and his brother developed a pharmacy management system back in the day that many California pharmacists used.

What you may not know is that George was one of the architects of Medi-Cal.

He sums up his career in his final column (see page 24).

We wish him well in his retirement.

— Bill Lockwood, Publisher

Road Trip: Part I

by Bruce Kneeland
Community Pharmacy Specialist

I JUST DROVE 3,992 MILES and visited nine remarkable pharmacies in Arizona, Utah, Idaho, Montana, and Calgary, Canada. The good news is that what I saw proves community pharmacies can find practical, professional, and profitable ways to grow. The route I drove was inspired by U.S. Route 89, often called America's most scenic highway as it goes by the Grand Canyon and through Zion, Yellowstone, and Glacier national parks.

MELROSE PHARMACY, Phoenix, Arizona

Teresa Dickinson, R.Ph., opened Melrose Pharmacy in a densely populated and ethnically diverse Phoenix neighborhood in 2005. The pharmacy motif features classic wooden shelfing, an open ceiling with exposed wooden beams, and an old-fashioned refrigerated soda case. It all works together to create a 1950s' feeling of nostalgia.

Melrose Pharmacy is a people-friendly pharmacy with a focus on technology. Above, from left, the RxSafe system; Teresa Dickinson in her pharmacy.

But when it comes to the pharmacy, everything is cutting-edge. The pharmacy features an RxSafe and an EyeCon pill counter. Dickinson's Vow phone system supports text messaging to improve adherence. To further help with adherence, she has a Parata PASS. Home delivery and an active compounding lab round out the pharmacy's offerings.

But to focus on the technology and look of the pharmacy would be to miss the point. Dickinson runs a people-friendly pharmacy and devotes a lot of time to supporting the community. In 2016 she was named the 2016 Greater Phoenix Chamber of Commerce Entrepreneur of the Year. She has served as a Luminary for the Arizona Chapter of CPESN, and just completed a three-year term as president of Pharmacists United for Truth and Transparency (PUTT).

Perhaps the single most impressive thing Dickinson does is to provide several enhanced care services and charge patients a fee for participating. As part of her compounding services, she does female hormone counseling; to support that service, she offers a saliva test program. She enrolls patients in the 13-week TAKE CHARGE weight loss program that assists patients in weight loss by providing accountability, suggestions for proper meal planning, and lifestyle education. To support these programs she has a professional counseling room adjacent to the pharmacy.

She also uses the services of GRX Marketing. This pharmacy marketing agency worked with her to create a comprehensive marketing plan that includes helping define her core message. They produce, print, and send out the brochures, flyers, and other marketing materials she needs. Dickinson says all these things have proven useful in helping patients understand the value of her enhanced services.

Dickinson says, "In my opinion, one thing more pharmacy owners ought to do is hire a marketing professional or work with an agency." This is especially important for pharmacists looking to charge out of pocket for the services they provide.

CHINO VALLEY PHARMACY, Chino Valley, Arizona

While born and raised in Michigan, Jason Dykstra, Pharm.D., went to

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pharmacy school in Phoenix. He says that about five years ago he started to dream of opening his own pharmacy. After doing his homework, he opened Chino Valley Pharmacy in the fall of 2016. Chino Valley is a rapidly growing town of about 15,000 located 20 miles north of Prescott, Ariz.

In preparation for opening, he renovated an old bank on the corner of the town's main street, U.S. Route 89. The building is attractive, visible from the highway, and has a drive-up window. The front-end features OTCs (over the counters), a nice assortment of cash-and-carry home medical equipment, and a children's play area. Two niche areas he has ventured into with some success are pet meds and essential oils.

One thing Dykstra said during our visit that resonated with me was, "You can provide

At left, Chino Valley Pharmacy owner Jason Dykstra, Pharm.D., manages inventory to improve profitability. Above, the DME department, one of Chino's niche areas.

people with exceptional customer service. But if you're not making money, you won't be able to keep the lights on."

One tool he uses to remain profitable is the Scan & Toss. This is an ordering system provided by his group purchasing organization, American Associated Pharmacies (AAP). Because AAP runs its own warehouse, Dykstra says he can use the barcode reader provided and scan any item needing to be reordered. If the item is stocked in the AAP warehouse, he gets it from them at a

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lower price; if not, the item will come from his primary wholesaler.

To help improve profitability, he watches his cost of goods and reimbursement amounts on every script. When he sees he is about to get a low or negative margin, he digs deeper to find out why and what can be done to mitigate the loss. That includes double-checking his cost from various vendors or contacting the prescriber to discuss alternatives.

Dykstra says that balancing all the factors to find the lowest cost of goods while also maximizing his AAP and Cardinal Health rebates is critical to his profitability. But while buying right and managing to the numbers is critical, he is quick to add that building a team is even more important. He says that pharmacy is a people business — and that finding ways to gain the confidence and respect of his team, and then having them provide professional and friendly service to customers and prescribers, is the key to his success. As proof of his ability to build a team the pharmacy was just given "The People's Choice Award" by the area's daily newspaper.

HURRICANE FAMILY PHARMACY, Hurricane, Utah

Hurricane is a small but rapidly growing community in southern Utah, just outside of St. George. Cliff Holt, R.Ph., owns this pharmacy, along with three others in the region.

The Hurricane location is nothing short of amazing. Starting 10 years ago with four employees, Holt now has a team that includes six pharmacists, two full-time registered nurses, 16 technicians, and three delivery drivers. The pharmacy also operates four delivery vehicles.

Cliff Holt, R.Ph., above, has built the growth at Hurricane Family Pharmacy around his PioneerRx pharmacy system, which integrates well with his automation and manages his med sync program.

Holt has acquired a lot of technology: a robot, a pick-to-light will-call system, a pill-pouching system, and even a pick-to-light inventory storage system. He also has a state-of-the-art compounding lab. Still, he says, "I am not a technology guy. I only buy technology when it fills a real business need."

At the heart of his technology suite is his PioneerRx pharmacy system. Holt was an early customer of PioneerRx, and says that central to his need for a pharmacy system is that it integrate well with other technology he uses. He rates PioneerRx high on that attribute.

Holt is an outgoing, results-driven guy, and his charismatic personality is clearly a key element of his success. He also is a big proponent of getting out of the pharmacy and meeting with prescribers and healthcare agencies, and speaking at senior centers.

He says. "In order to make these visits effective you have to have something to say that lets them know you can help them solve their problems." For example, he says, doctors tell him they only hear from a pharmacist when they call for refills or to relay a problem with insurance coverage. So when Holt visits, he or one of the RNs working for him comes prepared to talk about how his med sync program can dramatically reduce the number of refill request calls his staff needs to make. He also says that since drug representatives can no longer bring note pads and pens, he does this, and they are well received.

Speaking of medication synchronization, Holt says his PioneerRx system's special module has empowered his pharmacy to be able to sync 70% of its prescriptions. "Syncing not only helps us with physicians and patients, it also helps with our delivery program," he says. His delivery drivers make 80 to 90 stops a day, and being able to schedule one delivery to a household per month helps control costs.

THE APOTHECARY SHOPPE, Salt Lake City, Utah

The Apothecary Shoppe is located in a densely populated downtown section of Salt Lake City, Utah. And as such it provides Kevin DeMass, R.Ph., its owner, with some unique challenges and opportunities.

The pharmacy is located in the basement of Salt Lake Regional Medical Center — one of the major hospitals in the area — and doesn't even have an exterior sign.

Still, the pharmacy is well laid out and attractive. The front end is clean, artfully merchandised, and well lit. In addition to the normal selection of OTCs, DeMass stocks refrigerated beverages, frozen microwave meals, and snacks that bring in members of the hospital staff. This is especially useful as networking with physicians helps the pharmacy with referrals for patients with complicated medication needs, such as for transplant, HIV/AIDS, fertility, and mental health issues.

The pharmacy specializes in immunizations, and DeMass networks in the community to find niche markets he can serve. One niche is foster parents. He has a referral relationship with one of the agencies that manages the area foster parent program and works with the foster parents to administer the vaccinations and provide the documentation they need. He also mentions that he pulled out all the stops, contacting dozens of clinics, health agencies, and other organizations to acquire enough SHINGRIX vaccine to administer the second dose on time to hundreds of patients, despite the shortage.

A special thanks to the sponsors whose financial support made this trip possible.

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At The Apothecary Shoppe, Kevin DeMass, R.Ph., above, trained his staff, below, to understand the importance of managing star ratings using PrescribeWellness.

One of the most important management skills DeMass mentions is the need to know how everything in the pharmacy works. That includes how to use the pharmacy computer, fix the phones, work the POS (point of sale) and IVR (interactive voice response), manage inventory, handle human resource issues, manage accounts receivable and payable, and fix rejected insurance claims, etc. He says, "Someone needs to know how to change the toner in the fax machine, reload printer labels, and discuss the therapeutic endpoints for insulin utilization with newly diagnosed diabetic patients."

DeMass is the chairman of the board for WSPC (formerly the Western States Pharmacy Coalition), his GPO (group purchasing organization). One major service he uses is the GPO's purchasing scorecard and alert system, which helps him maximize rebates from his primary wholesaler. He also tracks his EQuIPP scores and uses the PrescribeWellness refill reminder calls to improve his star ratings. He says that by getting his staff to understand the importance of managing to "the numbers," he was able to raise his star ratings from 2.8 last year to 5.0 this year.

HARMONS, Farmington, Utah

Harmons is an upscale family-owned grocery chain with 19 locations in the Salt Lake metropolitan area — and 18 of the stores have pharmacies. The Farmington location I visited is about 20 miles north of Salt Lake City and is impressive.

Rocky Parker, Pharm.D., is the pharmacy manager. The pharmacy is located in the front corner of the store and features a nice patient waiting area. Parker and his team provide patients with a number of enhanced care services, including a full array of immunizations, an automatic refill program, and a loyalty program. One thing he and the team are big on is medication flavoring, for which they use the FLAVORx program. He says they find that doing this not only improves customer relations but also helps kids to complete their full course of therapy. And, he adds, the team feels the flavoring is valuable enough that they charge $2.99 for the service.

Parker says that being in a grocery store provides him with some unique opportunities — one being having a registered dietician to provide professional nutritional counseling services. She offers one-on-one consultations on issues involving diabetes and weight loss. She also supports a program that puts special notices on shelf

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tags that highlight foods that are especially healthy, gluten free, or low in sugar.

Parker says that a major management tenet of Harmons is that employees come first — the idea being that if the company treats its employees right, they will treat the customers right. To that end the pharmacy department offers smoking cessation and weight loss classes to Harmons' employees. The weight loss program runs for 12 weeks, with one of the classes being taught by a pharmacist. The pharmacist discusses how a change in lifestyle can facilitate weight loss, as well as the medications recommended and their side effects. The program is only currently offered to employees, and if they complete the course and stop smoking, they get a meaningful discount on their health insurance premium.

Rocky Parker, Pharm.D., pictured at left, pharmacy manager at Harmons, a certified specialty pharmacy, which offers new services such as the medication flavor program from FLAVORx.

As a certified specialty pharmacy, Harmons is approved to dispense a wide variety of medications designed to treat inflammatory diseases, irritable bowel syndrome, and migraines. These programs require special certifications and for the pharmacy to follow carefully designed protocols, including face-to-face counseling and documentation. Parker says, "These new services are truly helping our customers get the medications they need, right here in our community."

If you've ever traveled with kids you've heard the cry, "Are we there yet?" Well, no, we are just halfway done. In the next issue of *ComputerTalk* we'll visit four more pharmacies, including a visit to a pharmacy in Calgary, Canada. And you'll be introduced to Josh Morris, Pharm.D., who owns the first telepharmacy in Montana.

While each pharmacy covered in this article, and the four to come, are all different, I think you'll see that they share some common attributes, and they have all found ways to adjust to diminished reimbursement by providing new, more, and better services. **CT**

Bruce Kneeland specializes in helping independent community pharmacies increase sales, improve profits, and simplify their lives. He writes regularly for ComputerTalk. *He can be reached at BFKneeland@gmail.com.*

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Remote Patient Monitoring: Pharmacy's Future?

by Timothy Aungst
Pharm.D., B.C.P.S.

THE ADVENT OF MULTIPLE DEVICES

using Bluetooth technology to sync with a user's smartphone has led to the widespread adoption of the internet of things (IoT) mentality to transform everyday objects into "smart" tools that can track use in real time. Data can be collected remotely, collated, and analyzed for a myriad of purposes. For some, this may lead to a smart home where the temperature is controlled by a smart thermometer to cut down on costs, or lights that can be programmed for different levels throughout the day, all based on a central hub (e.g., Amazon Alexa, Google Home).

Needless to say, start-ups and larger companies have leveraged such technologies to increase services that can be offered to patients.

At this time, we have multiple patient tools, such as blood pressure cuffs or glucose monitors, used for self-monitoring in the home setting that have been "upgraded" to integrate IoT services. This allows patients to tether their device to their smartphone to create an electronic log and track patterns. Lately, there has been a push to share such data with their clinicians for clinical purposes, but due in part to a lack of reimbursable rates, the uptake has been slow. Now the Centers for Medicare & Medicaid Services (CMS) has made drastic changes to remote patient monitoring (RPM) that may shift this mentality.

CPT Code	New/ Revised	Description	Payment (Approx.)*
99091	*Revised*	Collection and interpretation of physiologic data (e.g., ECG, blood pressure, glucose monitoring) digitally stored and/or transmitted by the patient and/or caregiver to the physician or other qualified healthcare professional qualified by education, training, licensure/regulation (when applicable) requiring a minimum of 30 minutes of time, each 30 days.	—
99453	New	Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; setup and patient education on use of equipment.	$21/month
99454	New	Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days.	$69/month
99457	New	Remote physiologic monitoring treatment management services, 20 minutes or more of clinical staff/physician/ other qualified healthcare professional time in a calendar month requiring interactive communication with the patient/caregiver during the month.	$53/month

*What You Need to Know About 2019 Medicare CPT Codes For Remote Patient Monitoring (RPM) – 99453, 99454 and 99457. Pillsy. Dec. 11, 2018. Available from https://www.pillsy.com/articles/remote-patient-monitoring-rpm-2019-cpt-codes-medicare-99453-99454-99457

NEW DEVICES, NEW CODES

Previously, there were provided codes from CMS on RPM, though they were found to be generally confusing, provided a minimal financial incentive for providers, and lacked the integration of use with newer tools that arrived on the market. To take these new technologies into consideration, and along with its push to expand billable technology services (e.g., telemedicine), CMS has released three new Current Procedural Terminology (CPT) codes and revised a previous one, as seen in the table at left. In essence, the new codes expand opportunities for reimbursement for providers, clinical staff, and qualified healthcare professionals to conduct RPM services. As seen in the table, these include a one-time setup and patient education fee, and 30-day cycle reimbursement for monitoring of physiological measurement devices and treatment management services.

It is self-evident that many in the tech industry have been preparing for this, with many new and novel devices now arriving on the market. Continuous glucose monitoring (CGM) has been making much headway, with new devices such as the FreeStyle Libre now available in many pharmacies. While CGM may have its own CPT codes, other devices will benefit under the expansion. One new example

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includes Omron's new HeartGuide, which is a wrist-mounted blood pressure device that can also track fitness, activity, and sleep. In essence, it is a new-model smartwatch that takes blood pressure monitoring beyond infrequent home measurements and into a semi-continuous model. This is also being seen with other new advancements, such as the Apple Watch Series 4 having an integrated electrocardiogram (ECG) sensor to detect atrial fibrillation in patients. While the costs of such devices are relatively high (over $400), the opportunity for payers to cover such devices in the near future and for providers to be able to bill for services may lead to increased adoption. The American Medical Association has recently released a digital health report that serves as a guide for physicians looking to use novel tools in clinical practice. The first item to be discussed in this guide (which will expand over time) was RPM services.

Future expansion of CPT codes is likely to be generated to account for the various amounts of technology coming to the market.

ADHERENCE FEEDBACK

For the pharmacy profession, one novel opportunity for RPM may be medication adherence tracking. New digital medicines are arriving in 2019, including Lilly and Novo Nordisk smart insulin pens, Teva ProAir Digihaler, and new drugs using Proteus Digital Health bioingestible sensors, such as Abilify MyCite. Tracking physiological data concurrently with medication adherence may prove to be a golden opportunity to give enhanced feedback to patients on their clinical status. An example could be a patient using a smart blood pressure cuff who does not take his or her medications tracked from a smart pillbox. As the patient's blood pressure increases, the pharmacist can verify that medications have not been taken, and appropriate intervention can be made for the patient to help improve clinical outcomes.

THE VALUE OF PHARMACISTS' TIME

Needless to say, the issue then becomes, can pharmacists bill for such services? In the Federal Register document covering the new RPM CPT codes, there were several comments and responses noted dealing with what a "qualified health professional" is, and where pharmacists fall in the grand scheme. Two comments are worth mentioning here:

Comment 1: *One commenter stated that there was direct time spent by pharmacists for each patient, and the commenter requested that CMS factor pharmacist time into the practice expense (PE) valuation for CPT codes 99453, 99454, 99091, and 99457.*

Response: *We typically do not consider time spent by a pharmacist to be a part of the clinical labor time for purposes of direct PE. For additional information, we direct readers to the practice expense portion of this final rule (section II.B. of this final rule).*

Comment 2: *A few commenters suggested that additional medical professionals, including pharmacists, paramedics, chiropractors, physical therapists, occupational therapists, and dentists, should be allowed to bill Medicare for these services. Other commenters requested that CMS clarify the practitioners referred to as "other qualified healthcare professionals" in the code descriptor.*

Response: *We note that all practitioners must practice in accordance with applicable state law and scope of practice laws, and that some of the practitioners identified by the commenters are not authorized to bill Medicare independently for their services. We note that the term "other qualified healthcare professionals" used in the code descriptor is defined by CPT, and that definition can be found in the CPT codebook.*

As it stands, it does not appear that CMS has clarified outright what a qualified healthcare professional is, and instead is deferring to states' laws and boards to set the standard. While pharmacists can bill currently under specific codes (e.g., medication therapy management (MTM) billing codes [99605, 99696, 99607], transitional care management [99405, 99496], diabetes self-management training [G0108, G0109]), RPM may not be available for all pharmacists just yet. Instead, those in a collaborative practice agreement, consultant pharmacist roles, or involved in ambulatory care settings may be best able to fall under this rule.

Future expansion of CPT codes is likely to be generated to account for the various amounts of technology coming to the market. The expectation that CMS will keep up with a vastly disrupted health tech space may not come to fruition for some time. However, digital medicines and the increased ability to track medication adherence and biological impact may lead to pharmacist code expansion soon to help push such services for patient care. **CT**

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2019 Chain Market Report

Key findings from our annual survey on where the chains stand with technology.

by Bill Lockwood
Chairman, Publisher
wal@computertalk.com

Chains, both national and regional, are aggressive users of technology in order to improve workflow and help the bottom line. In this year's survey you will see where technology is being put to use to this end, and what the wish list is moving forward.

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IT IS NO SECRET THAT HEALTHCARE is becoming more expensive in this country. According to a McKinsey report last year, titled "Trends disrupting pharmacy value pools and potential implications for the value chain," consumer out-of-pocket payments for prescriptions are on the rise. Pharmacies are no longer enjoying the rich margins on generics, and pharma isn't raising the prices on brand drugs, which has been common practice. Moreover, there has been a lack of blockbuster drugs brought to market. This is putting unprecedented pressure on pharmacy profit margins across the board. DIR (direct and indirect remuneration) fees are compounding the problem with the after-the-fact clawbacks of prescription insurance reimbursements. And with Amazon's foot in the door, with its acquisition of online pharmacy PillPack, we have a scenario that doesn't bode well for brick-and-mortar pharmacy.

So how does all this play out for the technology that pharmacies have become so dependent on to increase workflow efficiency, better manage inventory, and add clinical services to remain profitable?

We took a look with our annual survey of the chain segment. What we found is that chains continue to install new technology. Approximately eight out of 10 chains fell into this category. The range of what was added included compliance-packaging technology, enhancing central-fill automation, the installation of a new interactive voice response (IVR) system, and upgrading to a cloud-based IVR system. Also mentioned were installing new computers and going to a perpetual inventory control system.

The above dovetails nicely with our finding that two-thirds of the chains stated that they plan to upgrade their existing systems and two chains reported plans to change vendors. One gave the reason for the change as "the current system is very slow and not user-friendly. Takes too long to fill prescriptions." Speed in processing prescriptions is to this day still a top-of-the-list priority.

WHAT'S MISSING?

If one enhancement could be added to the pharmacy management system, what would this be? Here we received a wide range of features. These ranged from biometric patient recognition, the ability to track controlled substances purchased versus dispensed for a given time period, and a way to quickly detect diversion. Also thrown into the mix was better electronic prescription processing, indicating that this isn't a seamless process for many. Adding functionality that addresses electronic care plans also made the list. This indicates an interest in having software that will support collaborative practice agreements.

TECHNOLOGY THAT MAKES A DIFFERENCE

IVR, as in past surveys, came out the winner again as having the greatest positive impact on pharmacy productivity. Not being interrupted by phone calls is what IVR addresses, and a byproduct of this is that with fewer distractions from phone calls, one can infer that this can lead to fewer prescription-filling errors.

Running a close second are prescriptions arriving at the pharmacy electronically, commonly referred to as e-prescribing. Having these prescriptions appear in the to-be-filled queue has also had a positive impact on productivity and improving workflow. Also in the e-prescribing category are electronic prescriptions for controlled substances, mentioned as contributing to better productivity. Robotic dispensing also made the list, as did electronic prior authorizations.

Central fill is being used to smooth out the workflow in pharmacies, but this approach to filling prescriptions for the pharmacy locations at a central site is justified in the larger chains, those with 100 or more locations. This was the finding in this year's survey, which paralleled findings in recent years where central fill was finally embraced as a productivity tool. Robotic systems are used here as well to handle the prescription volume at the central-fill location.

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WHAT COUNTS IN SELECTING NEW TECHNOLOGY?

When deciding to implement new technology or to add an interface to the existing system, a range of approaches is used.

With implementing new technology, the lead reason to justify it is the expected return on investment (ROI). Along with ROI, one person cited "the impact on productivity and on employees' work experience." Another stated, in addition to ROI, "the lasting partnership opportunity, with the vendor, in advancing future growth." Still another reason given was how well it integrates with existing systems and what the improved outcomes will be.

Adding interfaces had a slightly different set of criteria. Here we heard "ease of interface with most other applications," and "the ability to integrate with other applications for a comprehensive experience."

MEDICATION SYNCHRONIZATION

Synchronizing the refills for a patient to all come due on the same date is a way to improve patient compliance with the medication regimen. So what has been the uptake on med sync by the chains?

We found that close to 80% offer a med sync program, and in all but one case this has led to an increase in the number of prescriptions filled by the pharmacies.

The yield here is a double whammy. Med sync is a way to address compliance, while it also brings in prescription refills that otherwise would not have materialized.

There is extra work on the part of pharmacy staff to set up such a program and then manage it. But the payoff is apparently worth it.

SPECIALTY PHARMACY

The results showed that the chains in the survey were fairly evenly divided in responding that they were engaged in specialty pharmacy to manage these high-dollar, specialized drugs. And where this is the case, most reported that they have installed a different computer system/software for use in this area of the pharmacy.

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WHAT IS STILL NEEDED?

Questions about the software application needed to improve operating efficiency and patient safety produced a variety of replies. These provide insight into how chain management views the enhancement potential in which pharmacy can improve its position as a healthcare provider. For example, one chain would like to see pharmacist video consultations for mail and delivery patients. Further in this direction was the "continued advancement of our clinical management platform with more integration into workflow, allowing pharmacists and technicians to practice to their highest levels of patient engagement that will enhance patient outcomes and safety."

More along these lines was the comment of "scanning the prescription at the final pharmacist verification station that shows all interactions before the prescription is sent to will-call."

> Close to 80% of the chains in the survey said they offer a med sync program.

Another respondent felt that adding software for an eCare plan would go a long way toward addressing the patient safety issue.

A national chain in the survey reported that Appriss Health's NarxCare program was recently implemented, " to help our internal red-flag process to identify high-risk patients to drive better patient/pharmacist interactions." NarxCare assigns risk scores to patients for their opioid use based on data reported to prescription drug monitoring programs.

THE END RESULT

It is apparent that technology continues to be the backbone of pharmacy operations. But there is room for improvement that will help pharmacy step up its game in patient care management. This is apparent from what chains feel is still needed for the technology to better serve the pharmacy. What is clear is that chains are willing to invest in system upgrades, and when the current vendor isn't living up to expectations, moving on to a new vendor. **CT**

See more results of the survey, and share your thoughts, at wp.me/p9LtTd-27p.

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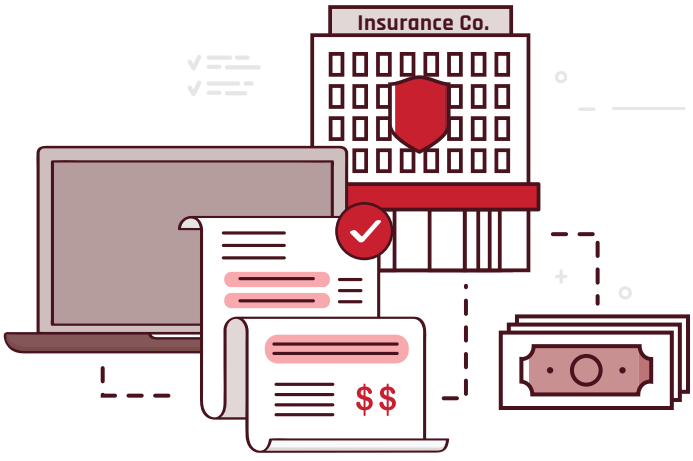

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George Pennebaker, Pharm.D.

The Last One

I HAVE BEEN WRITING THIS COLUMN SINCE 1985, and I have enjoyed writing it and receiving occasional comments from readers. However, the premises that have generated these columns are no longer part of my life. I have truly retired from working with pharmacy computer systems. In fact, I no longer do what pharmacists do. The one exception is the medicines that are needed to keep me functioning. Those medications, along with sharing time with my family members and my musical activities, are supporting my "retired" status quite nicely.

I am glad to report that none of the medications involve diseases that worry me. They are maintaining a steady control of relatively minor medical situations that should be expected at my age.

My career in pharmacy has been very rewarding. Staying active in associations and alumni activities has opened many fascinating doors. Because of my involvement I have served on the University of California's governing board, which created a deep appreciation of my alma mater's service to California, our nation, and many other parts of the world.

A number of the positions I held gave me the opportunity to move our profession forward. For example: While I was on the staff of the California Medicaid program (Medi-Cal), we needed to set up a prior authorization system that allowed nonformulary drugs to be covered when individual circumstances required them. The physicians I worked with agreed when I suggested that pharmacists do the authorizations. It worked well because we made sure that the pharmacists were familiar with practices in the geographical area that they were covering. (However, one pharmacist did get a bit too aggressive in his desire to "correct" the practices of some local physicians.)

I am proud that we implemented a cost-plus-professional-fee reimbursement system that pointed out that the service pharmacists provide is not just a function of the cost of the drug. It is also gratifying to see how that system has been adopted by every private and public third-party drug program.

We also had some opportunities to reduce expenses generated by manufacturer manipulations. At the time there were several tetracycline antibiotics made by several manufacturers and combination products of tetracyclines and antifungals. As I recall the numbers, the plain tetracyclines cost about $12.00 for 100 pills and the combination products were about $18.00 per 100. One of the leading manufacturers changed its tetracycline HCL price to about $4.00. We brought this to the attention of our advisory committee, and they responded by saying that we should establish a ceiling price of $4.25 per 100. They added that the other tetracyclines had the same action and should be deleted from the formulary. The antifungal prices were about $7.00 per 100, and the committee said to drop the combination products. They were of the opinion that the antifungals were seldom really needed, and if they were, they could be prescribed separately at a saving price. The bottom line was that the Medi-Cal program deleted all of the combination products and the expensive members of the tetracycline family.

We were surprised when, within a year, all of the combination products were discontinued by their manufacturers.

In the late 1960s we needed to redo the reimbursement system for pharmaceuticals. At the time the pharmacies were telling the program how much they paid for the drug product. A percentage markup and a small fee were added on to create the total

payment. The problem was the lack of a standard cost for individual products. The thousands of pharmacies in California knew that we could never get around to auditing all of them, and many abused the system.

We knew we needed to establish a good definition of the cost of the drug — one that could be explained and understood and not meet too much resistance. We knew the cost needed to be the price at the wholesale level to the pharmacies and that it needed to be a standard regardless of who was the wholesaler. So we decided to call it the "average wholesale price," soon to be known as the AWP. We announced that we would pay the average wholesale price plus a fixed fee. Thank goodness the publishers of the *Red Book* and *Blue Book*, in their next editions, listed an AWP price along with the other data in their well-referenced publications. The AWP system has significant problems. However, despite many attempts, a better system has yet to be created.

I am proud that we implemented a cost-plus-professional-fee reimbursement system that pointed out that the service pharmacists provide is not just a function of the cost of the drug. It is also gratifying to see how that system has been adopted by every private and public third-party drug program.

So it seems that this last column is an attempt to relive parts of a career that has been very rewarding and satisfying. I have been in positions that enabled me to develop and implement changes that I am proud of.

This also has been a good time to sort of sum things up while I evolve into an age where I get joy from being with my memories of the past, while enjoying my daily life of miscellaneous putterings. **CT**

George Pennebaker, Pharm.D., is a consultant and past president of the California Pharmacists Association. The author can be reached at george.pennebaker@sbcglobal.net; 916/501-6541; and PO Box 25, Esparto, CA 95627.

The *AMA Digital Health Implementation Playbook:* A Good Fit for Pharmacy

Brent I. Fox
Pharm.D., Ph.D.

Joshua C. Hollingsworth
Pharm.D., Ph.D.

TODAY'S PHARMACISTS HAVE seen wave after wave of technological innovations touted as the next greatest tool to improve [fill in the blank]. Whether the target pain point was a workflow bottleneck, reimbursement inefficiency, or patient care practice that was not up to expectations, innovations have promised to address a myriad of issues in the pharmacy. How many innovations that did not live up to expectations can you think of in 10 seconds? *ComputerTalk* readers with a few decades of practice experience can likely generate a list of 10 to 15 innovations in this time frame. These same readers can also likely identify innovations explored in this column that did not live up to expectations.

One of the most-hyped innovations today is digital health, which has been defined as "the cultural transformation of how disruptive technologies that provide digital and objective data accessible to both caregivers and patients leads to an equal level doctor-patient relationship with shared decision-making and the democratization of care." (See the September 2017 issue of the online journal *mHealth* for the article titled "Digital health is a cultural transformation of traditional healthcare.") We have previously addressed digital health in this column. As pharmacists, we know that our colleagues are sometimes skeptical when faced with new innovations like digital health. We acknowledge that this skepticism is often rooted in experiences with failed innovations. The good news (or is it bad news?) is that your physician colleagues have similar scars that they can share from their experiences with new innovations. As an example, while electronic health records (EHRs) are essentially commonplace in today's hospitals and physician clinics, the previous decade's effort of implementing EHRs caused considerable turmoil for the end users, especially those in small to medium-sized community practices. Even successful innovations can be painful.

Turning our attention to digital health, the American Medical Association (AMA) created a guide to help medical practices of all sizes and specialties navigate digital health technology implementation. Formally known as the *Digital Health Implementation Playbook* (available at www.ama-assn.org/amaone/ama-digital-health-implementation-playbook), the guide was developed through consultation with physicians and thought leaders representing the gamut of medical practices. Digital health is an umbrella term that includes mobile health, telehealth, wearables, and other technologies. Arguably, one of the most well-known digital health areas is individuals' use of wearables (sensors, trackers, etc.) to monitor a variety of parameters throughout their day (and night), often focused on chronic disease or wellness. While the *Playbook* provides general strategies and tactics applicable to all digital health technologies, remote patient monitoring serves as a use case relevant to today's patients.

The *Playbook* was written for physicians and their practices. However, many of the principles are relevant to pharmacists, pharmacy, and pharmacy vendors. The playbook theme is used throughout the guide, with 12 steps divided into four sections: warmup, pre-game, game time, and post-game (Table 1). We will highlight several of the relevant steps here.

While the first step (identifying a need) may seem obvious, developing a clear understanding of the end goal is crucial to digital health implementation success. Specifically, implementing a technology simply because of the gee-whiz factor usually does not end well. The decision in this first step is essentially a question of, what are my wants versus my needs? Identification of needs begins by collecting feedback from staff members who know the operations. Patients can serve as a key source of information as well. Does your practice have a specific patient population who would be interested in a specific digital health innovation? Conversations with patients are critical at this step.

INVOLVING YOUR SYSTEM VENDOR

Conversations with pharmacy management system (PMS) vendors are also important in the first step. To optimally use digital health data, it should be integrated in the PMS to ensure the pharmacist has a complete view of the patient's health. Vendor collaborators are key to overcoming the technical hurdles to integrate these

data. Accordingly, vendors should be consulted to help prioritize the list of needs identified in step 1. The pharmacist's number-one priority may not match the vendor's development road map. These discrepancies must be addressed.

Stephen Covey, author of the popular book *The 7 Habits of Highly Effective People*, says, "begin with the end in mind." This is a variation on step 3, which is the process of defining the conditions for success in digital health implementation. The focus here is the outcomes of the innovation. Many are familiar with the triple aim of healthcare: improved patient outcomes, enhanced patient experience, and reduced costs to the system. Recently, caregiver satisfaction has been suggested as a fourth aim. In this context, caregivers are trained professionals, family members, and anyone who provides care for another person. Regardless of the desired outcome, a clearly measurable endpoint is a necessity, because subsequent steps are built around the desired outcome.

If pressed to pick the most important steps in the guide's plan for digital health implementation, we would certainly include step 7 in our top three. Pharmacy practice is highly workflow dependent. At a minimum, workflow alterations can negatively impact efficiency. In the worst-case scenario, workflow alternations can lead to patient harm. While we acknowledge that redundancies and existing technologies can address negative impacts from workflow alterations, we also know that workflow is critical to pharmacy operations. In the case of remote patient monitoring, patients play an even greater and more direct role in the pharmacy's workflow because they are generating and sharing data with the pharmacy. On the pharmacy side, new workflow must be defined in terms of when, how, and by whom data are reviewed. Additionally, critical values that trigger intervention must be defined. And workflow should be developed for alerting other providers, and include the context under which they are notified.

Ultimately, digital health innovations allow patients to be more engaged in their care. This is represented in step 9, patient partnership. An advisable approach is to begin with patients likely to be successful in the rollout. This will require talking with patients to identify those who are inclined to digital health technologies, or identify patients with a family member who can help with the technology. Beginning with motivated patients will allow staff and patients to implement and revise training materials, including providing patients with what-if scenarios specific to their conditions.

Table 1. From *Digital Health Implementation Playbook*

Step 1	Identifying a need
Step 2	Forming teams
Step 3	Defining success
Step 4	Evaluating the vendor
Step 5	Making the case
Step 6	Contracting
Step 7	Designing the workflow
Step 8	Preparing the staff
Step 9	Patient partnership
Step 10	Implementing
Step 11	Evaluating success
Step 12	Scaling

Motivated patients can also help determine the impact of the innovation's complexity on patient uptake. As complexity increases, the need for changes in the patient's behavior also increases. This can impact patient engagement. Methods for identifying, communicating, and enrolling patients can also be tested with an initial group of motivated patients. Full-scale implementation, evaluation, and scaling are the final three steps.

Readers know that implementation of any new technology is not as simple as depicted here. Readers also know that their patients' desires and capabilities to engage in their own care are changing. We encourage readers who are considering incorporating digital health in their practices to head over to the URL we have provided and download the *Playbook*. It is freely available and includes numerous checklists, worksheets, and other guidance documents. We also encourage readers to contact us with their questions or comments. **CT**

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Impact of Biologic and Biosimilar Naming Suffixes

by Ann Johnson
Pharm.D.

THE FDA'S FINAL GUIDANCE

on "Nonproprietary Naming of Biological Products Guidance for Industry" requires the use of a four-character suffix on all original biologics approved via 351(a) applications, and biosimilar products approved via 351(k) applications. For originator biologic products without a suffix that are already on the market, a recent 2019 statement from the FDA makes it clear that these products will not need a retrospective name change to add a suffix.

Because biologics and biosimilars can have different indications for use, suffixes act to differentiate similar products sharing the same chemical name. Ideally, these suffixes would allow practitioners to prescribe agents covering a patient's specific indication needs. For tracking and adverse event reporting purposes, having a unique suffix allows for manufacturer-specific reports and provides greater clarity.

For new biologics and biosimilars, manufacturers should propose up to 10 suffixes to the FDA, in the order of preference. Suffixes are proposed at the time of licensure, either during the investigational new drug application (IND) stage or at the time of BLA (biologics license application) submission. See the box at right for suffix requirements.

Each suffix is associated with a different manufacturer's product, and it is highly likely that not all healthcare providers will be familiar with the individual suffixes and the corresponding manufacturers and product indications. Based on this mindset, it is conceivable to expect many healthcare providers to simply select the first agent listed when looking to prescribe. Because of the propensity of electronic health records (EHRs) and pharmacy management systems to list agents in alphabetical order, manufacturers may wish to submit suffix options that appear early in the alphabet. For originator biologics on the market, not having a suffix may give these products an unfair advantage over biosimilars, as the originators will be listed first in systems displaying products alphabetically by chemical or generic name (i.e., "nothing" listed before "something"). Currently, no biosimilars have been deemed "interchangeable" by the FDA. Biosimilars and originator biologics also have different GPIs (generic product identifiers), GCNs (generic code numbers), and RxCUIs (RxNorm concept unique identifiers), meaning that most software systems do not currently link the products for prescribing or dispensing purposes. If an originator product without a suffix is initially selected, biosimilars are unlikely to be shown as alternatives.

Between the FDA's *Purple Book* and a review of Wolters Kluwer (Medi-Span's) drug compendia database, I identified 51 products that contained a four-character suffix attached to the chemical name via a hyphen. As expected, a high number of these suffixes begin with "a" or another letter seen early in the alphabet. A breakdown of suffixes for these 51 products is shown in the chart on the next page.

Based on these findings, it is apparent that

Per the FDA, suffixes must be:

Unique.

Devoid of meaning.

Four lowercase letters, of which at least three are distinct.

Nonproprietary.

Attached to the core name with a hyphen.

Free of legal barriers that would restrict its usage.

Suffixes should not:

Be false or misleading, such as by making misrepresentations with respect to safety or efficacy (e.g., drugumab-best).

Include numerals and other symbols, aside from the hyphen attaching the suffix to the core name (e.g., drugumab-1#go).

Include abbreviations commonly used in clinical practice in a manner that may lead the suffix to be misinterpreted as another element on the prescription or order (e.g., drugumab-caps).

Contain or suggest any drug substance name or core name (e.g, drugumab-mdma.)

Look similar to or be capable of being mistaken for the name of a currently marketed product (e.g., should not increase the risk of confusion or medical errors with the product and/or other products in the clinical setting).

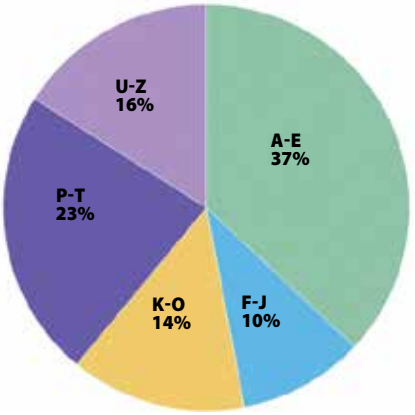
Look similar to or otherwise connote the name of the license holder (note that Sandoz's biosimilar filgrastim-sndz was approved prior to the FDA guidance).

Be too similar to any other FDA-designated nonproprietary name suffix.

manufacturers are evaluating how suffixes will affect their product appearance and the order in which their product is displayed in EHRs, pharmacy management systems, and wholesaler ordering systems. In order to increase the likelihood of having their products listed before a competitor's product, biosimilar manufacturers are even more likely to begin suffixes with an "a." Of the 19 biosimilars listed in the *Purple Book*, seven (37%) begin their suffix with an "a."

As insulins are transitioned to biologics in 2020, expect the number of biosimilars, and consequently the number of suffixes, to increase. Although no products have obtained the elusive "interchangeable" status yet, the increasing number of biologics and biosimilars means that drug compendia and their subscribers will need to develop ways to deal with the lack of product linkages and substitution/interchange options. In the future, we expect the compendia to include information on a biologic's biosimilar or interchangeable status. Whether this will be done in the *Orange Book* TEE (therapeutic equivalence evolutions) code field or another field remains to be seen. Wolters Kluwer has announced plans for a file that helps customers determine potential substitution options for biologics, so it is probable that other compendia will follow suit. As more products launch with suffixes starting with an "a," it will be interesting to see how the FDA's approval of proposed four-character suffixes changes. For practicing pharmacists, this information will hopefully be used to better understand the suffix assignment process and recognize how these products will be displayed in wholesaler ordering and pharmacy management systems. **CT**

Biologics/Biosimilar Suffix Names Beginning with...



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Lack of Access to Pharmacies Impacts Adherence

Marsha K. Millonig
B.Pharm., M.B.A.

EARLIER THIS YEAR, THE Centers for Medicare & Medicaid Services (CMS) Office of the Actuary's estimated that national health expenditures may reach $6 trillion in the next eight years, which would equate to health expenses reaching 19.4 percent of gross domestic product (GDP). The move of baby boomers into Medicare and an increase in medical goods and services prices are key factors in the estimate. Of significant concern to me is that medication-related problems, including nonadherence to medication regimens and nonoptimized medication therapy, may be as much as $672 billion.

Pharmacists have an important role to play in addressing medication use by providing comprehensive medication management services. Yet, increasingly, policies employed by the nation's pharmacy benefit managers (PBMs) are negatively impacting pharmacies around the country, and a new study has shown that patients' adherence to their medications decreases when pharmacies close.

In the study, published April 5 in the *Journal of the American Medical Association* (*JAMA*, see https://www.ncbi.nlm.nih.gov/pubmed/31002324), the authors conclude that pharmacy closures led to a significant drop in adherence to essential cardiovascular medications among older Americans that persisted for a full year of follow-up. How significant? Rates of nonadherence were nearly 6% for patients taking statins and over 5% for those taking beta blockers and anticoagulants, among patients at all pharmacies. The decline in adherence was even more pronounced for patients using independent pharmacies, nearly 8%.

The retrospective cohort study included 3.1 million men and women age 50 and older who were prescribed statins, beta blockers, or oral anticoagulants. Researchers found no differences in monthly adherence between the cohorts until pharmacy closures impacted 3% of the study population.

In the majority of cases, medication adherence declines reflected a complete discontinuation of medicine rather than worsening or partial adherence. The authors note, "Declines in adherence were most pronounced among older adults using independent pharmacies, purchasing from a single store to fill all their prescriptions, or living in low-access neighborhoods with fewer pharmacies and were consistent across several classes of cardiovascular medications." They conclude that "Efforts aimed at reducing barriers to prescription medication adherence should consider the role of pharmacy closures, especially in patients at highest risk."

NCPA SPEAKS OUT

Doug Hoey, CEO of the National Community Pharmacists Association (NCPA). noted in a recent newsletter that the impact of this finding is "a big deal." (https://www.ncpanet.org/newsroom/ncpa-executive-update/2019/04/26/opening-eyes-to-the-patient-impact-of-pharmacy-closures-ncpa-executive-update-april-26-2019). He notes that the CDC Foundation says cardiovascular disease is the number-one cause of death in the United States and results in healthcare costs of $1 billion each day. "That makes the results of the new study a very big deal," says Hoey. "Nonadherence to cardiovascular medications leads to more people dying and higher costs. In the *JAMA* study, 46.7% of the patients were covered by either Medicare (43.4%) or Medicaid, so declines in adherence not only have an impact on those patients' health, but a detrimental impact on taxpayer dollars used to subsidize those programs as well."

As many of us in the profession are aware, PBM policies regarding preferred pharmacy networks; inappropriate use of quality measures and performance metrics in direct and indirect remuneration fees (DIRs) under the Medicare Part D plan; gag clauses keeping patients from paying the lowest cost for their medication and other pricing tactics; and steering beneficiaries to mail order, specialty, and other pharmacies in which they have an ownership interest are having a huge negative impact on patients, pharmacies, and the government.

Let's go back to Doug Hoey's recent remarks, where he notes, "Medication affordability is often the first place people go to try to solve nonadherence." But in the *JAMA* study 59% of the co-pay amounts were under $5, and 75% were under $10. Doug says that the study cited value-based insurance plan designs with low patient cost sharing increasing adherence by 5% to 6% and preferred networks increasing adherence by 1% to 2%. "Both

of these tactics have been manipulated by PBMs to steer patients into their own retail and mail-order pharmacies and to pay pharmacies significantly below their cost to dispense the drug." He points to resulting pharmacy closures: "3,622 between 2011 and 2016. Many assume those closures were limited to independent pharmacies, and 42% of them were; however, big-box and grocery store drug stores were also affected. In the last 12 to 18 months, Walgreens closed 750 of the Rite Aid stores it purchased. Fred's will close 159 stores by next month. Shopko auctioned its 146 pharmacies. Kmarts continue to close. Regional chains in Missouri and Ohio were sold to CVS, which then closed most of those locations. Those are just some of the notable recent market exits."

The negative practices that are contributing to these closures are being addressed around the country by state legislators based on growing media reports of inappropriate spread pricing and other tactics. Prescription drug benefit manager reform is spreading across states and is also being addressed as part of the Trump administration's 2018 blueprint for lowering drug pricing.

And these efforts cannot come soon enough. Pharmacies have seen the retroactive DIR fees climb through the roof, and correcting these ills is part of the National Association of Chain Drug Stores' (NACDS) campaign for change highlighted at its annual meeting in April. Mark Panzer, NACDS chairman and Albertsons senior vice president of pharmacy, health, and wellness, and NACDS president and CEO Steve Anderson said that achieving results on relief from DIR fees; fair pharmacy reimbursement; opioid abuse prevention; and enhancing pharmacies' scope of business are the four most crucial issues that are part of that campaign.

NCPA and NACDS have both worked tirelessly to educate the administration, and those efforts continue in spite of recent disappointments in the lack of DIR reform. Recent exposés on PBM behavior have made reform reach the tipping point, with Ohio firing its PBM in the last year and West Virginia carving out and managing its own drug benefit with millions in savings. (See https://www.axios.com/states-going-after-pharmacy-benefit-managers-pbm-e184b28c-c688-4254-a523-49508b10cbfa.html.)

The *JAMA* researchers discuss several suggestions to address the decline in adherence related to pharmacy closures, including:

- Policies that ensure sufficient pharmacy reimbursement for prescription medications.
- CMS mandating minimum standards for pharmacy reimbursements.
- Conversion by health plans to an open pharmacy network.

Most in the pharmacy community would welcome such policies. In my home state of Minnesota, this study helped add more fuel to the fire that caught on in our legislature this past year and resulted in the passage of comprehensive PBM reform, including licensure and regulation. Providing proof of the impact of these negative policies often produces jaw-dropping exclamations from policymakers, who simply cannot believe these types of business practices continue at the expense of patients, pharmacies, and payers, including in every state.

While the dust settles on many state legislative sessions, I look forward to reviewing forthcoming analyses of how much progress was made to address this nontransparent and murky part of the healthcare arena. **CT**

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It's All in the History:
An Introduction to Inventory Forecasting

Are there still pharmacies relying on a single person to manage inventory manually? Does that person have a great deal of head knowledge for this process? Is he or she still using a spreadsheet-style "database"? Pharmacy owners and managers should be concerned that this is leaving the business open to an untold number of manual inputs, manual data, formula manipulation, and an increasing lack of specificity. In other words, errors creep in over time, making it very difficult to find and remove those errors.

This approach could be costing a pharmacy a great deal of profit. Using a manual approach to inventory and ordering makes the process much more difficult. The ability to research order and sales history is very limited. Limits include the lack of ready data, the difficulty of comparing any evidence manually, and the specific knowledge of what may be driving anomalous sales spikes. It's just too hard to wade through what information is available.

It has been said that the further into the past accurate records extend, the more precise the basis for predicting trends. Digging back into the inventory history often returns a number of patterns that could give insight into the future. Usually it is easy to identify some regular historical patterns, such as allergy season or a holiday sale period. However, more than a manual approach is needed to drive a specific ordering strategy and maintain appropriate store stock levels to produce the most substantial profit through appropriate inventory management.

Dispensing history matters when considering specific items and quantities to stock and for determining the timing of an order. The process to evaluate these factors can make or break profit. In the vast majority of situations, it's generally cost-effective to remove the opportunity of introducing human error as much as possible.

No matter what inventory and ordering system a pharmacy uses, it is virtually impossible to predict the first time a medication will be dispensed. This is also an opportunity to begin establishing the patterns necessary in the order/inventory cycle to determine the extent to which order automation can be used.

> Inventory is a pharmacy's most valuable asset, but also the primary determining factor in overall profitability.

While no one can predict the first use of a product, it is effortless to predict seasonal patterns. For example, during the spring and summer, it is much more likely that there will be a significant recurring customer need for allergy medications, both OTC (over the counter) and prescription. It is important to remember that these types of patterns exist year-round, and it is usually possible to plan for them. With manual ordering and inventory, this process is a bit more difficult. The ability to predict needed products and quantities becomes less effective because of the need to compare data that may be found in multiple locations. Inventory forecasting software can streamline the process.

Sporadic product sales can be comparably easy to consider. Usually, there is a known need for an item, but not necessarily in large quantities or in a regular rotation. Unfortunately, this often means that products are on the shelf or in a storage location waiting to be sold. The difficulty in this situation is tracking products that have an expiration date or those that can be returned to the supplier based on purchase date. This requires some mechanism for following up on that information, whether it is done by manual means or by an electronic inventory control program.

Inventory is a pharmacy's most valuable asset, but also the primary determining factor in overall profitability. Indeed, a specific driver of profit is the ability to manage ordering and inventory appropriately. The easiest way to account for that potential profitability is through the proper management of inventory. Controlling inventory requires efficiency on many levels. With so many moving parts it is often difficult to keep that control.

No matter how inventory is managed, there is going to be some risk, such as out-of-stock/overstock situations, potentially expiring products, or loss due to shipping damage. There are several methods to manage that risk, such as spreading product needs out over multiple locations or carrying more than one similar product.

Another method to reduce inventory risks is the use of algorithm software. This is a more automated process that accounts for product use over time, as well as inventory and order history. Often in an automated system, there are the control mechanisms of cycle counting and preset parameters that can be adjusted based on specific needs. Advanced algorithms can take much of the guesswork out of inventory management while still allowing pharmacy owners and managers flexibility.

Datarithm's advanced algorithms account for trend analysis, historical dispensing patterns, and adjustable preferences to generate reliable forecasts for single- or multiple-location pharmacy operations. The customizable program integrates with leading pharmacy management systems. We work with pharmacy owners and managers to create uniquely flexible decision-making tools to help achieve service and profit objectives. **CT**

Content courtesy of Datarithm, www.datarithm.co. Interested in learning more? Visit https://wp.me/p9LtTd-1xq to read an article on perpetual versus non-perpetual inventory.

Hazardous Drugs: What a Retail Pharmacy Needs to Know Now

As we approach the December 1 implementation date for USP <800> hazardous drugs (HDs), there are some basic questions that independent pharmacists haven't had clear answers to: Will USP <800> affect my retail pharmacy? Can I still provide nonsterile compounding services to my patients? Who is monitoring compliance with USP <800>?

To date, most of the focus for USP <800> has been on HDs used in compounding, and the possible need for a negative pressure room. So let's answer those questions and clear up a few other items. First, any pharmacy that has any type of HD, as identified on the *NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016*, needs to comply with USP <800>. Second, in USP <800> there are different elements for those retail pharmacies that only dispense HDs, those where HDs are being compounded in a nonsterile environment, and those where HDs are being compounded in a sterile environment.

If the pharmacy compounds hormones, or is doing sterile compounding, there must be a negative pressure lab/room. Are there enough hormone prescriptions to justify the cost of installing a negative pressure room?

If the facility doesn't do compounding, but is a retail or a long-term care (LTC) pharmacy, does it need a negative pressure lab/room? What requirements of USP <800> need to be met? Better yet, how and where do we begin? Start with identifying all HDs in the inventory that are on the NIOSH list. There are three tables within the NIOSH list: Table 1 – Antineoplastic drugs; Table 2 – Non-antineoplastic drugs; and Table 3 – Non-antineoplastic drugs that primarily have adverse reproductive effects. Next, inventory all of the HDs on the pharmacy shelves, noting the drug name, form (tablet, capsule, liquid, or manufacturer packaging), and on which NIOSH table it appears. Then, we recommend creating a designated spot for the HDs away from the other stock, complete with an HD storage area sign.

R. Jeffrey Hedges
President and CEO
R.J. Hedges & Associates

The next step is the most crucial from a regulatory point of view for retail and LTC facilities: The pharmacy must have performed an assessment of risk.

The assessment of risk must contain the following information: the drug name; the NIOSH table it is listed on; if the HD is in the manufacturer's packaging; what form the HD is in (tablet, capsule, liquid); whether the pharmacy staff has to "manipulate" the product or not; and what "containment strategies" are required. We are recommending the assessments of risk be kept in a binder so they are easily accessible for annual recertifications and inspections. If a pharmacy fails to have this assessment for each HD, the retail or LTC pharmacy cannot dispense any HD without the negative pressure lab/room. Please note: This assessment will be the first document a state board of pharmacy inspector or state environmental protection inspector will request. And yes, there are two different state agencies inspecting pharmacies for compliance with USP <800>.

At this point, the HDs have been identified, inventoried, and segregated, and the assessments of risk have been completed. From now on, the pharmacy must maintain separate counting tools for HDs. We recommend keeping counting trays and spatulas in the HD storage area, so when an HD is pulled to dispense, the counting tools are conveniently located. You may be wondering, "How do I clean and dispose of these items?" Clean the tools with a cleaning wipe, such as Cavicide or Clorox wipes.

Hazardous drugs cannot be used in mechanical pill counters or robots, as per USP <800> Section 12. Why? HDs can chip and create a powder residue left in the mechanical parts that cannot be reached for decontamination. State environmental protection agencies can cite the pharmacy and publicly declare that the pharmacy has dispensed contaminated medications. Beware: These agencies are already visiting pharmacies across the country, asking where the pharmacy stores warfarin and what happens to expired warfarin.

Did you know expired hazardous drugs become hazardous waste? If you do have an expired HD, it needs to be disposed of in accordance with the RCRA. Disposal costs can make DIR (direct and indirect remuneration) fees look small. Talk to your returns company to see if it has an EPA disposal process and a permit. If not, contact Stericycle for the disposal of hazardous waste. The pharmacy also must update its OSHA Hazard Communication Program and annual training. To save money and stress, ensure HDs received from your wholesaler have an expiration date at least a year away. If less than a year, the pharmacist in charge must determine if the pharmacy can use the contents within the next nine months; if not, return to sender.

In summary, USP <800> affects every pharmacy, no matter what type of practice setting. Now is the time to start preparing. Take the time to read the USP <800> guidelines; create the required policies and procedures; complete an assessment of risk form; and update your hazardous communication program and training. R.J. Hedges & Associates can provide a complete solution for hazardous drugs; please reference our ad on page 20 or go to www.RJHedges.com/HazardousDrugs. **CT**

Jeff Hedges, C.D.M.E., is president and CEO of R. J. Hedges & Associates of New Florence, Pa.

Integra 2019 Conference Recap

This year marked the 12th year for the Integra User Conference. More than 150 attendees joined Integra staff in the greater Seattle area — home of Integra's corporate office. The conference kicked off with well-known TED Talks speaker Jia Jiang, who motivated all with a powerful message about having the courage to overcome the fear of rejection. The conference allowed attendees to meet fellow pharmacists and Integra experts to enhance their expertise and take their pharmacy to new levels of business success. Integra hosts its next conference in May 2020 in Louisville, Ky.

Integra President Kevin Welch provided attendees with the company's vision and outlook for the future.

Integra experts were on hand in the exhibit hall to educate attendees about Integra's product suite.

Jia Jiang, TED Talks speaker, motivated the crowd to have the courage to overcome the fear of rejection.

During the welcome reception, attendees participated in a Pacific Northwest-themed "Fish Toss."

Ryan Hobbs, assistant product manager at Integra LTC Solutions, led one of the 25-plus classes and 8 CEU classes to further attendees' knowledge of industry trends and Integra products.

The weather held out for all to enjoy a three-hour cruise on beautiful Lake Washington.

PioneerRx Connect 2019 Customer Conference

PioneerRx hosted an innovative and inspiring Connect 2019, bringing together almost 500 independent pharmacies from around the country. The annual user conference was held in Orlando, Fla., May 31 to June 2. Attendees learned about new trends in pharmacy and ways to remain ahead of their competition. Class topics ranged from med sync and care plans to inventory management and operational efficiency.

For the first time in Connect history, attendees could earn 7.5 CE contact hours by attending the NCPA (National Community Pharmacists Association)-sponsored enhanced services boot camp pre-conference. The Avant Institute also hosted a post-Connect clinical services workshop and offered a subscription to its online learning platform. Mark your calendars! Be sure to join the PioneerRx team in Diego, Calif., June 5 to 7, 2020, for Connect 2020!

Keynote speaker David Contorno, CEO of E Powered Benefits, discussing transparency in employee benefits.

Nicolette Mathey, Pharm.D., from Palm Harbor Pharmacy presents on the importance of finding a niche outside of dispensing.

Joe Moose, Pharm.D., Moose Pharmacy, spoke on the importance of independent pharmacists keeping up with five-star ratings and medication therapy management, both trends in pharmacy that are affecting the entire industry.

Amina Abubakar, Pharm.D., Rx Clinic Pharmacy, shares her experience in building a pharmacy to be more than just a dispenser, with a big push for clinical services.

The PioneerRx Connect team ready for the conference to begin.

Connect attendees gathering after day one sessions.

Jeff Key, president of PioneerRx, and Marsha Bivins, marketing director, welcoming attendees to Connect 2019.

Rx Clinic Pharmacy technicians speak about how to manage patient profiles and enhance workflow.

Users discussing new ideas for their pharmacies.

QS/1 2019 Customer Conference

The 2019 QS/1 Customer Conference brought customers from around the country to Hershey, Pa., to learn about system enhancements and get inspired by fellow pharmacists. The three-day conference had speakers from QS/1, vendor partners, and QS/1 customers leading sessions on business analytics, the benefits of CPESN, NCPDP's new SCRIPT standard, prescription drug monitoring programs, workflow and POS, pharmacogenomics, audit preparedness, and more. There was plenty of time in the expo to check out vendor partners and get questions answered by QS/1 staff. Featured speakers included Brad Kile, who gave a legislative update, as well as the keynote by inspirational speaker Chip Eichelberger, who encouraged everyone to "Get Switched On."

QS/1's Director of Pharmacy Professional Affairs Ed Vess, left, with UpDox VP Sean Ramsey. UpDox was one of more than 25 partner vendors in the expo.

Brad Crawford, left, of Miller's Pharmacy, caught up with QS/1's product manager Jon Bell.

Waiting to attend the evening dinner at the AACA Museum are, from left, Jeff Romano, Michelle Kirk, and Ian Matthews of HomeTown Pharmacy.

Alex White, of White's Pharmacy, left, with technician Hope Simmons. White's grandfather was the first QS/1 customer in Mississippi 40 years ago. White accepted an award on her grandfather's behalf.

Megan McCaskill, of Horizon Pharmacy, and Hector Mejia, of Salud Pharmacy, during a break in the CE programming.

Speaker Brad Kile, center, gave a legislative update. He is pictured with QS/1's Dina Cooksey, left, and Dale McDonald.

Attendees had plenty of time to visit exhibitors in the expo and product hall. Here, Kris Irwin, left, of Smith Drugs answers questions.

Representing Nutmeg Pharmacy, from left, are Alicia Cope, Samantha Heroy, Ronald Soper and Megan McLaughlin.

Attendee regulars from Health Spectrum Pharmacy are, from left, Ryan Sutliff, Alfonso De Santo, guest Jenn Tran, and Tim Lockard.

Carl Gaspar, left, and Angelo Gonzaga of OneWorld Pharmacy exploring the cars on exhibit at the AACA Museum, which features vehicles from throughout history.

QS/1 staff during a break in the expo: from left, Wayne Palmore, strategic account representative; Jo Walker, HIPAA compliance officer and product manager; and Mike McManus, VP of sales.

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