Self-administered drugs may cause trouble for outpatient departments

Despite Part D benefit, hospitals must bill outpatients

Hospital outpatient departments are in for a rude shock on the first day of the new Medicare Part D prescription drug plan (PDP): patients complaining that their outpatient self-administered drugs aren’t covered under the new benefit.

It’s a serious operational and public relations issue and one that Valerie Rinkle, MPA, revenue cycle director for Asante Health System in Medford, OR, knows all too well. Rinkle has spent the past several months trying to warn the Centers for Medicare & Medicaid Services (CMS) and her local congressman about the impending problem as the January 1, 2006, deadline approaches, but to no avail.

“Hospitals should anticipate beneficiary phone calls with patient complaints,” Rinkle says.

Medicare update

Medicare releases new benefit plans, provides beneficiaries with choices

Every state except Alaska will have drug benefit plans charging premiums less than $20, and Medicare beneficiaries will have a choice between at least 11 plans when the drug discount program starts January 1, 2006, the Bush administration announced September 23.

Centers for Medicare & Medicaid Services (CMS) Administrator Mark McClellan released the names of approved prescription drug plans (PDP) for 2006 during a conference call September 23.

The plans, organized by state, are online at www.cms.hhs.gov/map/map.asp.

Competition a bonus

In addition to having lower premiums, several plans won’t charge deductibles, which will benefit consumers in the long run, McClellan told reporters.

“The competition between these organizations has resulted in lower costs than expected,” McClellan said.

Other highlights include the following:

- Eight companies will offer PDP options in every state
- Most Medicare-eligible beneficiaries will have eight to
Part D

The issue: Self-administered drugs not covered

When patients under the new Part D benefit go to the hospital for an emergency room visit or outpatient surgery, they are usually not allowed to bring prescription drugs from home.

“It’s typically viewed as [an unsafe] practice,” Rinkle says. “The hospital doesn’t know if the drug has been properly stored, and a hospital cannot use a drug if it’s not in its labeled prescription bottle.”

To offset this risk, hospitals will in most cases issue the same medications for a patient from its own stock in response to the physician orders. Medicare does not cover these outpatient self-administered drugs, and CMS mandates that hospitals bill patients for them as regular hospital charges.

“We try to tell patients that these drugs are noncovered when they’re [outpatients], but there’s no advance beneficiary notice or waiver requirement,” Rinkle says. “It’s a standard that [the patients are] not covered by Medicare.”

The bill patients receive is almost always a simple statement that reads “pharmacy” or “prescription drugs”—whichever description the hospital chooses to put on the statement—as well as a quantity associated with the number of pills and a total dollar amount.

The problem is that on January 1, patients under the new Medicare PDP will be under the impression that their new drug plan will cover these medications, experts say. And that’s not the case.

“Those drugs will be charged at a full hospital charge, and depending upon what the benefit structure is for the Part D benefit, there could be a sizable coinsurance obligation on the part of the beneficiaries,” says Andrew Ruskin, an attorney with Vinson and Elkins in Washington, DC.

And patients have a right to be angry, Rinkle adds. Medicare is supposed to cover outpatient prescription drugs issued by hospitals under the new Part D plan.

The January 28 Federal Register (p. 4268) says:

*Part D pharmacy plans can choose to include hospital pharmacies in their networks. If a hospital pharmacy is in the network, then the self-administered drugs would be covered by that plan . . . Medicare is mandating that all Part D pharmacy plans guarantee out-of-network access to covered Part D drugs dispensed by hospital and other institution-based pharmacies when [the beneficiaries are patients].*

“But that’s all we know—we don’t know how to help the beneficiary get that coverage from the [PDP],” says Rinkle.

Rinkle says most hospitals will assume that these drugs are an out-of-network benefit, which means that the beneficiary pays the hospital, then takes the invoice and sends it to the PDP to receive reimbursement.

But here’s the catch: Most hospital invoices read simply “Pharmacy, unit of five, $15,” for example, and without detail about the drugs themselves, the PDP won’t reimburse them.

“We’re not required to have detail,” Rinkle says. “That puts the beneficiary in the middle. No one at CMS has addressed this.”

Ruskin notes that hospitals might be tempted to waive charges for self-administered drugs but will not be able to do so. “They don’t want to be accused of having created inducements that could cause trouble with the [Office of Inspector General],” he says.

Potential solutions burdensome

CMS may release additional guidance for hospitals between now and the January 1 start date of the new drug benefit. But Rinkle fears this forthcoming guidance may place added administrative burden on hospitals.

Possible fixes may include a requirement that hospital pharmacies put the national drug code on all patient
statements. It could mean that hospitals must submit a separate itemized bill with more specific drug detail.

Or worse yet, CMS may require that hospitals register the PDP and submit the claim directly to it.

“That would be horrendous,” Rinkle says. “That’s adding another layer of insurance to your registration system.”

Packaging a simple fix
Rinkle says the easiest and most practical fix CMS could make is to simply copy what it does under the Part A benefit of the Inpatient Prospective Payment System: Package the drugs. This would mean hospitals would receive no separate reimbursement for self-administered drugs, but Rinkle says it’s a small price to pay for not creating upheaval in hospital outpatient billing departments.

“We would rather not get separate payment and not have to bill and go through any additional administrative burden than change what we do for the sake of billing the drug plan—particularly when the additional reimbursement is likely to be minimal and over-the-counter drugs are still not covered,” she says.

Most importantly, Rinkle says packaging the drugs would also avoid placing beneficiaries in the middle.

“It would mean a loss of some degree of money, but that loss is much less than the cost of any possible administrative fixes,” she says.

Unfortunately, CMS does not wield the authority to make such a change. It would have to ask Congress for a technical amendment to the statute. Thus, a quick fix doesn’t appear to be coming.

“I’m hoping that between now and January 1, Medicare will have some answer,” Rinkle says. “But it’s so far down on people’s radar screens. CMS is just trying to get the basic benefit up and running.”

Beneficiaries might be able to put the issue on the CMS radar.

“There are so many implementation issues that have not been addressed yet, and this is one of them,” Ruskin adds. “When you get enough beneficiary outrage, someone might step in and come up with a policy for coordinating benefits.”

Tip: Develop a letter that prints out each time a Medicare outpatient registers at your facility. Disclose in the letter that the self-administered drugs won’t be covered.

Rinkle recommends the letter state something to the effect of the following: “We’re excited that you may have elected to enroll in the new Part D Medicare PDP. Please be aware that our hospital is still obligated to bill you directly for prescription and over-the-counter drugs administered to you during your visit to our hospital. You can file an out-of-network claim to your new PDP to be reimbursed for these drugs.”

Include the toll-free telephone number for general Medicare PDP information at the bottom for patient questions. Be prepared to explain to patients that the amount they will be charged might be different from the same drugs dispensed by an in-network pharmacy, Ruskin says.

Upcoming events

Audioconferences:

November 18—Tips to Implement SBAR (Q111805)
December 8—How to Manage Problem Physicians (MS120805)
December 13—Emergency Management and the JCAHO (A121305)
December 14—Reducing Ventilator-Associated Pneumonia (Q121405)

For more information, call 800/650-6787 and mention the source code for the audioconference.
Medicare update  < p. 1

20 options  
- Some plans will assist patients financially during the coverage gap  
- More than 40 states will offer 100% of Medicare-eligible beneficiaries access to PDPs through a Medicare Advantage organization  
- Medicaid recipients will be automatically enrolled (those plans are listed in the auto-enrolled category under each state)  
- CMS has received more than 3 million applications for the low-income subsidy program, inching close to actuarial projections of 4.5 million  
- No government fallback plans were needed  

Government fallback plans would have been required in areas where there were not at least two competing plans available for beneficiaries.

“I don’t expect there to be fallback plans even next year,” said Phil Patrick, president of Flemington, NJ–based consulting firm PharmaStrat, after the announcement. “My theory is that organizations have been approved, but only a small subset of them will be aggressive in marketing to seniors. They’ll get the patients they get during enrollment and maybe a year from now they will have to sell the patients’ coverage to the big players.”

Drug plans could start marketing to seniors October 1, with enrollment slated to begin November 15.

Some plans were approved for multiple designs, but they may decide to actively market only the plan that offers the lowest price and best chance for enrollment in their state, Patrick said.

One concern that Aileen Harper, executive director of the Center for Health Care Rights, has is that some Medicare beneficiaries choose not to read information sent to them, leaving them in the dark about the drug benefit and the choices available.

“We are pretty concerned that those people might be harder to reach and either . . . may lose the opportunity to enroll because they do not know much about it or might enroll, not realizing how it fits with their drug options and may make wrong choices,” Harper says.

That could place more responsibility on healthcare providers and the government to reach out to beneficiaries, she says.

Costs still an issue  
The federal government now estimates the cost over the first 10 years of the program to be $720 billion, up from the nearly $400 billion price tag the Bush administration promised when the Medicare reforms passed in December 2003, according to the Associated Press.

Some members of Congress called for delaying the benefit to help offset recovery costs in the wake of hurricanes Katrina and Rita, but McClellan rejected those pleas.

“This program is going forward on schedule,” said McClellan. “Enrollment will begin November 15—on schedule.”

Editor’s note: Information from a September 23 breaking news e-mail from the newsletter Medicare & Reimbursement Advisor Weekly was used in this report. For more information about the newsletter, call customer service at 800/650-6787.

The medication-reconciliation deadline looms  
Are your staff ready to handle the JCAHO’s medication reconciliation requirement? If not, HCPro offers your best hope for meeting the deadline. Check out the video “Medication Reconciliation: Communication Strategies for Staff Compliance” and get the essential compliance tips and strategies. Visit www.bcmarketplace.com for more information.
Hospital drug billing already problematic

Many hospitals already have considerable trouble charging and billing for drugs and biologicals. An analysis of Outpatient Prospective Payment System (OPPS) drug charge data in 2003 revealed that hospitals reported drug charges that were less than their acquisition cost of the drug, says John Carlsen, MHA, a principal at Covance Market Access Services, Inc., in Gaithersburg, MD.

Carlsen says the reasons for this are threefold:

1. The OPPS payment system is only five years old, as opposed to the diagnosis-related group (DRG) system (almost 23 years old), which means that some providers still might be getting used to coding and billing under the system
2. As compared to the previous cost-based hospital outpatient reimbursement system, OPPS is more complex in terms of coding and billing, which may result in confusion among providers
3. “Charge compression,” in which hospitals mark up high-cost items (e.g., high-price drugs and biologicals) less than low-cost items, may distort the costs that Medicare derives from its OPPS charge data

Most pharmacies do not cope well with the intricacies of OPPS, and much of the blame can be traced to poor software interface and incorrect charging from the charge description master (CDM), says Arlene Baril, MS, RHIA, vice president of health information management and software services for UASI in Cincinnati.

“When we do [CDM] review and auditing, we constantly find that their units of service are being charged incorrectly,” says Baril. “They don’t have correct HCPCS [Healthcare Common Procedure Coding System] set up, or they’re billing pass-through drugs as general pharmacy [revenue code 0250], so they’re not getting pass-through payment.”

Most pharmacies use a separate system for dispensing their drugs, which is then interfaced through the various hospital systems. Baril says the process of ensuring that all billable and dispensed drugs are captured and charged appropriately is a struggle for most hospitals.

“Many times it’s an underpayment, not an overpayment,” Baril says.

Charging from the CDM is another common source of error in pharmacies. For example, a CDM coordinator will assign a particular J HCPCS code, but the charging or order entry staff may not realize that the J HCPCS code is per 1,000 units and the dose dispensed was 5,000 units.

“You have to adjust your units of service to five, or you’ll get four [ambulatory payment classification] underpayments if this was a pass-through drug,” Baril says.

The inability to find good software solutions leads many hospitals to underreport or otherwise charge conservatively for pharmacy, says Marion Kruse, BSN, RN, MBA, director of clinical consulting for OhioHealth Corporation in Columbus. And adding three new C codes to the mix will make a difficult situation even worse.

“Pharmacy charges are already complex and very hard to implement, and now we’re going to have to create a whole new section of the CDM to accommodate these changes [if the proposed changes are finalized],” she says. “To ensure accurate data collection, CMS needs to give more detail to hospitals regarding how to use the handling charges and allow a reasonable time frame for implementation.”

Questions? Comments? Ideas?

Contact Managing Editor Matt Bashalany

Telephone: 781/639-1872, Ext. 3726  E-mail: mbashalany@hcpro.com

For permission to reproduce part or all of this newsletter for external distribution or use in educational packets, please contact the Copyright Clearance Center at www.copyright.com or 978/750-8400.
Company provides relief for hurricane-stricken hospital

Basil Thoppil, MSc, PharmD, had worked at West Jefferson Medical Center in Marrero, LA, during every hurricane since 1986, and as pharmacy director, he never needed to stock more than a 48-hour supply of medications to weather the storms.

Five days after Hurricane Katrina struck the Gulf Coast on August 29, his pharmacy had distributed more than 2,000 prescriptions—not counting ones for the hospital’s 200 or so patients—and his supply was dwindling.

“This pharmacy became the only source for medication supply for almost seven days,” Thoppil says. “That was probably the most trying time that we had as a pharmacy. We couldn’t call anyone to bring supplies.”

The lack of power, communication, and functioning hospitals and pharmacies stressed West Jefferson’s capacities, showing the importance of proper planning and creativity to prepare for a potential disaster and get help from vendors and other sources during an emergency.

Preparing for the storm
Once the power went out and the floodwaters rose, West Jefferson—located nearly 10 miles west of downtown New Orleans—was one of only three area hospitals to remain open, and it had the only functioning pharmacy for nearly 90 miles, Thoppil says. The hospital remained open because flooding was not severe in the area, he says.

Residents who did not evacuate ahead of the storm and emergency workers alike flocked to the hospital, seeking prescription refills. Thoppil’s pharmacy staff made sure patients could obtain a one-, two-, or sometimes three-day supply of critical medications, such as cardiovascular and respiratory drugs or insulin, he says.

Thoppil and his purchasing personnel on August 27 sent out an emergency order to his supplier for medications such as antibiotics and vaccines. That order arrived late in the evening on August 28, the night before Katrina hit land, he says.

That was his last shipment for six days.

After the storm hit, the power and phone lines went out, meaning Thoppil couldn’t contact his vendors, and vice versa. But quick thinking a few days after the storm kept the pharmacy from draining its stock.

Ingenuity pays off
All phone numbers with a 504 area code in the New Orleans region were dead. But a hospital employee discovered that calling cards would access an outside line because they went through a toll-free 800 number, Thoppil says.

Staff could go to pay phones at the hospital to place calls to vendors, Thoppil says.

“I don’t know how that thing worked when all the other phones did not,” Thoppil says of the pay phones. “That’s how I got my first contact out to the wholesaler.”

Thoppil was able to place an order, and the first shipment showed up under National Guard escort just prior to Labor Day weekend.

Making a call for help
Patients showed up at the hospital describing the pills they took or showing pharmacists their empty prescription bottles, Thoppil says. Pharmacists used their best discretion and judgment when giving out medications, and Thoppil used the term “giving” literally—the hospital did not charge walk-up patients for the drugs.

Pharmacists also provided drugs to the disaster medical assistance team that operated out of tents on the hospital campus, Thoppil says.

The need for drugs became so desperate that Thoppil contacted the Louisiana Board of Pharmacy to alert officials about the situation at West Jefferson, he says.
Thoppil says he needed guidance from the state.

“I wanted to let them know we were doing the best we could to serve patient needs—not just the inpatients, but the community needs,” Thoppil says. “The board of pharmacy didn’t quite understand what was going on.”

Prior to Thoppil’s call for help, Medco Health Solutions, a pharmacy benefits manager based in Franklin Lakes, NJ, contacted the state board of pharmacy with an offer to set up a mobile field pharmacy in the affected regions, says Barry Boudreaux, Medco’s pharmacy practices director in Las Vegas.

Rich Palombo, RPh, a member of the National Association of Boards of Pharmacy executive committee and director of professional practice at Medco’s Willingboro, NJ, pharmacy, contacted the state pharmacy board on Labor Day weekend to see whether the need existed for a mobile pharmacy. Palombo then contacted Thoppil after receiving his name from the state, he says.

Nearly 250 Medco employees volunteered upon hearing about the relief effort, Boudreaux says.

When the pharmacy board told Thoppil about the Medco offer, he jumped at the chance.

“That was a godsend,” Thoppil says. “I had limited staff, limited supply. [Medco] basically took over our outpatient needs from that point on.”

Reinforcements arrive

Louisiana Governor Kathleen Blanco had declared a state of emergency and signed an order allowing out-of-state licensed pharmacists and technicians to operate temporarily in Louisiana, Boudreaux says, which allowed Medco volunteers to set up shop quickly.

By the weekend of September 9, Medco opened a mobile pharmacy in a doublewide trailer on the West Jefferson campus. At first, pharmacists distributed critical medications, including antibiotics, heart medicine, and oral diabetic drugs, Boudreaux says.

Pharmacists were able to get a better handle on prescription needs after filling several prescriptions, and they had one drug in each pharmacological class after a few days, Boudreaux says.

Getting to work

Medco pharmacists completed health and allergy forms for patients as well as conducting counseling on medications, Palombo says. And although pharmacists needed to obtain as much information as they could to help patients, it wasn’t difficult.

“Most of the people [who] came up, although they had gone through total devastation, felt comfortable sitting down and talking to people,” Palombo says. “They told us their stories. They thanked us for filling their prescriptions.”

Communication is the key

The Medco operation at West Jefferson wrapped up on September 21, Thoppil says. Area retail pharmacies opened, and patient needs began to subside, he says.

The trailers that served as a makeshift pharmacy and housing for volunteers still remained through the end of September, Thoppil says, although Medco discussed moving them to areas in southwestern Louisiana or Texas that were devastated by Hurricane Rita.

Through everything, Thoppil learned that communication is one of the most critical aspects of disaster planning and receiving help.

“Unless you can communicate your needs, none of this is going to happen,” Thoppil says.

Compliance with CMS regulations is just as important as JCAHO standards.

Quickly and easily navigate The CMS Hospital Conditions of Participation and The CMS’ Interpretive Guidelines for the Hospital Conditions of Participation with easy-to-read hard copies of these critical documents. For more information, call 800/650-6787 and mention source code MB31560A.
Case study: Bar code system cuts medication errors

Points to ponder before going live at your hospital

Although a multidisciplinary team at St. Marys Hospital Medical Center in Madison, WI, had been trying to reduce the organization’s medication error rate for years, nothing it tried seemed to make much difference. More than 60% of the hospital’s medication errors occurred at the point of administration.

“We knew if [we] influenced the administration phase, we could definitely impact our medication error rate,” says Wendy Wittwer, RN, BSN, coordinator of the hospital’s bar-code system initiative.

Installing a bar code system looked like the natural next step, so in 1999, St. Marys signed on to test and implement Bridge Medical’s nascent “MedPoint” software. By fall 2000, the hospital’s pilot units were up and running. Now five adult inpatient units, including medical/surgical, intermediate care, and neuro-intensive care units use the system—and the hospital is working to expand it to the rest of the facility.

Benefits have been well worth the effort. Within six months of implementing the software on the first nursing unit, medication errors had decreased by 59%, says Wittwer.

The American Society of Health-System Pharmacists noted that only 4.4% of hospitals use machine-readable coding to verify the patient’s identity and accuracy of the drugs administered. As with any new technology or system, implementation was—and still is—a challenge.

For example, St. Marys did not initially dedicate enough staff to the project, says Wittwer. It should have established a lead person from the information systems (IS) and pharmacy departments, as well as dedicating someone with a nursing background to coordinate and train staff on the new system full-time, she says.

Are you considering implementing a bar code system at your hospital in the future? Consider some of the other lessons staff learned:

- **Budget plenty of pharmacy time.**
  The hospital underestimated how much time it would take pharmacists to set up and maintain a formulary, says Denae Bachmeier, RPh, a clinical pharmacist at St. Marys and the pharmacy lead for the MedPoint project. “Initially we thought, ‘Oh, it’s just a nursing documentation system. It has nothing to do with us,’” she says. “And we’ve learned that’s not the case.”

Bachmeier estimates that maintaining the formulary alone takes her and another pharmacist about a quarter of a full-time position. In addition, the hospital’s approximately 30 pharmacists must now enter all orders into the computer system and help nurses troubleshoot.

---

What to look for in a bar code system

Are you thinking about purchasing a bar code system? Wendy Wittwer, RN, BSN, coordinator of Madison, WI–based St. Marys Hospital Medical Center’s bar-code initiative, suggests that you look for a system that

- **allows you control** over how many and what type of warnings the end user will receive.

- **interfaces well** with your pharmacy order entry system.

- **does not require specific hardware.** You may want to use different types on various units.

- **processes information quickly,** “I do know human nature and interacting with computer systems—if they’re not fast, forget it,” says Wittwer.

- **allows users to exercise their clinical judgment.** They should have the ability to bypass a warning and justify why they are doing it.
blesshout interface problems (e.g., medications not appearing on the screen properly).

**Tip:** Facilitate troubleshooting by tracking recurring problems. St. Marys’ MedPoint planning group now logs all of the calls it receives about system issues. Group members document each problem and how it was resolved.

Pharmacists welcomed a proposed rule by the FDA in 2004 that would require manufacturers to place bar codes on all drugs and blood products. Placing bar codes on medications eats up technicians’ time because they must run a machine that affixes the bar codes to containers, and it is also time-consuming for the pharmacists, who must then check the labels.

Although having bar codes on all medications would be ideal, the hospital hasn’t yet been able to accomplish this task. So if a medication doesn’t have a bar code, nurses pick the correct medication from a touch screen.

“It still documents that [a nurse] gave it, but it doesn’t check that it’s the right medication, which is the number one thing that you’re trying to [do],” Bachmeier says.

In addition, staff cut down on bar coding time by purchasing medication in bulk rather than unit dose, and bar coding the whole bottle at one time. They also try to purchase more medications from manufacturers that supply their own bar codes.

- **Allocate training time.**

Training is no small task. Wittwer and another nurse must train not only nurses, but also respiratory therapists, student nurse instructors, float pool staff, housekeepers, and pharmacists and information systems staff. Students—about nine at a time—review a study guide for about an hour, and then attend a three and a half hour training class.

“I try to train people within two weeks of their go-live date so that [the information is] reasonably fresh,” says Wittwer.

**Tip:** Consider all of the departments that will need to be aware of the new system when you plan your training.

---

**How the system works**

Laptops, a scanner, and a mouse in every patient room comprise the hardware for the bar-coding system at Madison, WI–based St. Marys Hospital Medical Center.

Nurses preparing to administer medications scan their own identification badge and enter a password. Then they scan the patient's bracelet to identify the patient and pull up the patient's medication profile on the laptop. If anyone has entered a new order into the pharmacy system for the patient, these pop up immediately, allowing nurses to decide when and how to deal with them.

Nurses then scan the bar code on the medication they are preparing to administer. At this point, any other important issues may appear on the screen.

For example, the nurse might not be aware that just 10 minutes earlier, another person had administered the same pain medication she is preparing to give a patient. In that case, the system would inform the nurse that the patient should not yet receive another dose of the medication.

The system documents the administration, and staff print a paper record every 24 hours to place in patients' charts. Managers study the data to find out about trends in practice related to specific individuals, units, or medications.
extra step to the care-giving process, nurses save time in other areas.

For example, the system automatically produces documentation when nurses confirm that they have administered a medication.

“They don’t have to physically transcribe orders, which [also] helps with transcription errors,” says Wittwer.

**Tip:** Look for informal leaders among nurses. They can help you get everyone on the same page, identify problems their peers experience during implementation, and communicate the information to the entire nursing staff.

Most nurses at St. Marys eventually came to like the system. In fact, some nurses have told Wittwer that they now feel uncomfortable working in units that haven’t yet installed bar coding scanners, she says.

**• Prepare for the future.**

St. Marys chose laptops for its bar coding system hardware, so it will be able to add additional applications more easily in the future.

For example, it hopes to integrate a pharmacy order entry system that will allow clinicians access to labs and teaching tools. It also hopes to eventually use electronic medical records.

**Tip:** Even if they’re not directly affected, keep physicians in the loop when you implement electronic systems. Some physicians at St. Marys have recently expressed interest in looking at patient information online in real time.

Wittwer cautions other hospitals not to try to install the system in the whole facility at once. Because it is a big change, staff need a fair amount of hand-holding and support—and most facilities won’t have the resources to focus on more than one unit at a time.

Has it all been worth it? “It’s a step in the right direction,” says Bachmeier. “I’ll be surprised if most hospitals within the next five to 10 years don’t have some sort of bedside verification.”

*Editor’s note: St. Marys Hospital Medical Center in Madison, WI, is a 350-bed level two tertiary community hospital. It was awarded the Magnet Recognition for Nursing Excellence in 2002 and is part of SSM Health Care, which won the Malcolm Baldrige National Quality Award in 2002.*

Computerized order system matches lab values, medications to catch adverse events

Computerized order systems may help prescribers and pharmacists catch interactions that could lead to adverse drug events, but hours of manual labor may be required to recognize potential errors once the patient starts a medication.

Catching an adverse drug event after the patient receives the medication would require a pharmacist or physician to review the patient’s chart, which is time-consuming—if hospitals even dedicate staff time for that task.

“If you are relying on a pharmacist or doctor to notice anything, that could take hours to manually review,” says John Russillo, RPh, clinical pharmacy coordinator at Mt. Diablo Medical Center in Concord, CA.

The St. Paul, MN–based VigiLanz Corp. developed the Dynamic PharmacoVigilance system to monitor a patient’s lab values and compare them to the patient’s medications, which can help identify potential adverse drug events. Hospitals can develop their own rule sets.
to identify a potential adverse reaction, and an alert will notify the pharmacist to the problem, says VigiLanz CEO David Goldsteen, MD.

Reduce adverse drug events
VigiLanz launched the Dynamic PharmacoVigilance system in June during the American Society of Health-System Pharmacists Summer Meeting in Boston, says Goldsteen. Goldsteen notes that the system differs from computerized physician order entry (CPOE).

"This is significantly different from what’s out there," Goldsteen says. "There is nothing monitoring the drug once it gets through CPOE."

The VigiLanz system interfaces with a hospital’s existing computer system, Goldsteen says. When it compares a patient’s pharmacy file with the lab files, it can generate alerts if necessary to recommend that the pharmacist or physician raise or lower the drug dose, discontinue the drug, order another lab test, or take other actions.

With a limited set of rules outlining how to compare lab values to medications, the system can reduce adverse drug events by 25%, says Paul Lentz, the company’s business development and sales director.

With a full set of rules, that reduction could go as high as 50%, he says.

Prioritize actions
Faulkner Hospital in Boston piloted Dynamic PharmacoVigilance for VigiLanz and has used the system for nearly 18 months, says John Poikonen, PharmD, a medication safety pharmacist at Partners HealthCare, Faulkner’s parent system.

The hospital has the ability to determine which rules it should create to monitor lab values based on the patient population, Poikonen says. The pharmacy and physicians can set up a system to prioritize alerts, allowing them to determine which ones are real and which may be false positives, he says.

"It helps you work through what your priorities are," Poikonen says. "You can say, ‘This is happening on this patient, so this is what I’m going to do.’

Safety at a fraction of the cost
A CPOE system may cost a hospital between $3 million and $8 million and take two to three years to see any benefits, Lentz says. VigiLanz charges hospitals based on bed size, but a 150-bed hospital would spend about $46,000 each year for Dynamic PharmacoVigilance, he says.

Every facility must pay a one-time $47,000 installation fee. VigiLanz maintains all of the necessary hardware and software, with the typical installation

> p. 12
taking 90 days, Lentz says.

**Improve JCAHO compliance**
The VigiLanz system can also help hospitals with JCAHO compliance, Lentz says. Hospitals can document intervention details, showing the intervention and the outcome for the patient, he says.

Organizations can also document potential adverse drug events, which is helpful for reporting errors, Lentz says.

**Use with CPOE**
Although VigiLanz has yet to work with CPOE manufacturers, the system could complement a CPOE tool. The hospital of the future may have room for both technologies, Lentz says.

“We see the optimal hospital in the future to have a CPOE system with a [Dynamic PharmacoVigilance] system that can monitor labs,” Lentz says. “The system is only as good as the hospital’s willingness to listen to it and use it.”

But technology—CPOE or lab monitoring systems included—is only a piece of the solution, Poikonen says.

“It’s one of the many strategies to reduce adverse drug events,” Poikonen says. “You can’t just plug it in and all the adverse drug events go away. It’s not going to happen.”

Editor’s note: Visit www.vigilanzcorp.com for more information.