

February 2013: Vol. 38, No. 2
Pages 13-24

IN THIS ISSUE

- **New patient flow standards:** Joint Commission puts emphasis on psych, behavioral patient cover
- **Risky business:** The top risks for patients include IT issues you may not have thought of16
- **Med rec in the spotlight:** New studies show the problem persists, and potential solutions19
- **Ensuring safe compounding:** What the NECC tragedy can teach you21
- **Preventing readmissions:** Good communication, follow-up calls are key22

Follow us on Twitter
@HospitalQI

Financial Disclosure:

Editor Lisa Hubbell, Executive Editor Russ Underwood, Associate Managing Editor Jill Drachenberg, and nurse planner Paula Swain report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study. Consulting Editor Patrice Spath discloses she is principal of Brown-Spath & Associates.

Patient flow gets new look, standards

Report puts more emphasis on psych patients

Patient flow and boarding have been recognized for some time as problems that hospitals need to address. But whatever is being done isn't enough, and The Joint Commission (TJC) released a report in December outlining new standards in the Leadership section, some of which came into effect on January 1, and some of which will take effect in another year. The hope is that the new elements will help facilities take a more holistic approach and view the problem — and its potential solutions — in a more systemic manner. (*The entire report is available at http://www.jointcommission.org/assets/1/18/R3_Report_Issue_4.pdf.)*

Newly in effect are standards that require measurement and goal-setting of data such as the number of patient beds available, the throughput and safety of places where patients receive care and services, how efficient non-clinical services are (like housekeeping and transport), and patient access to services like case management and social work.

Coming into effect in January 2014 are standards that deal with the measurement and abatement of boarding patients from the emergency department, with a recommendation that the goal for time spent boarding not exceed four hours while taking into account the specific needs of the local community and resources available to the hospital. Leadership must review the goals and take action if they are not met, the new standards state. Teams involved in such review should include members of the medical staff, the hospital board, facility executives and senior management, and nursing.

Further, the new standards put special emphasis on dealing with the needs of patients experiencing psychiatric and behavioral health emergencies, to ensure they are not boarded for extended periods of time and that when they are, their care and safety and the safety of others in the facility are appropriately considered. If the hospital doesn't typically deal with this type of patient, the standards require plans to ensure quality care and a safe environment when they do present. Further, the hospital leadership is encouraged to coordinate with the wider community to ensure that the needs of this special patient group are met.

Shine the light

That The Joint Commission is putting further emphasis on the topic is great, says **Mary Baum**, MPH, RN, chief healthcare officer of Connexall, a Toronto-based company that makes software designed to help hospitals improve patient flow. “It is a tough problem to break apart because

Hospital Peer Review® (ISSN# 0149-2632) is published monthly and Patient Satisfaction Planner™ is published quarterly by AHC Media, a division of Thompson Media Group LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Website: www.ahcmedia.com. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to Hospital Peer Review®, P.O. Box 105109, Atlanta, GA 30348.

AHC Media is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 15 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider #14749, for 15 Contact Hours.

This activity is valid 24 months from the date of publication.

The target audience for Hospital Peer Review® is hospital-based quality professionals and accreditation specialists/coordinators.

Opinions expressed are not necessarily those of this publication.

SUBSCRIBER INFORMATION

Customer Service: (800) 688-2421 or fax (800) 284-3291. Hours of operation: 8:30-6 M-Th, 8:30-4:30 F EST. World Wide Web: www.ahcmedia.com. E-mail: customerservice@ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), \$499. Add \$17.95 for shipping & handling. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. Back issues, when available, are \$78 each. (GST registration number R128870672.)

Photocopying: No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact AHC Media. Address: P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421 or (404) 262-5491.

Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Editor: Lisa Hubbell

Executive Editor: Russ Underwood, (404) 262-5521, (russ.underwood@ahcmedia.com).

Associate Managing Editor: Jill Drachenberg, (404) 262-5508 (jill.drachenberg@ahcmedia.com).

Copyright © 2013 by AHC Media. Hospital Peer Review® is a trademark of AHC Media and is used herein under license. All rights reserved.

AHC Media

Editorial Questions

For questions or comments, call Russ Underwood at (404) 262-5521.

healthcare is so complex, with interdependent parts, and patients and staff that have the freedom to act unpredictably,” she says. The four-hour goal for boarding is particularly welcome, she adds. “For most patients, that four-hour window won’t be hard to meet. But for some patients — mental health patients particularly — it’s going to be very, very difficult.”

There are fewer beds for behavioral patients — 11% fewer than just a couple of years ago, says Baum. These patients are often too incoherent to help providers figure out what is wrong with them. Some are brought to an emergency room because law enforcement doesn’t know what else to do with them. She mentions a large hospital system on the West Coast that Connexall worked with recently. “They never divert for trauma, but they do for mental health often. They don’t have hallways space for any more patients. They need a security guard for each one. These are usually patients who don’t need an inpatient bed, but need some kind of treatment.” The average time for a mental health patient in the system was 17 hours. And the staff were trying desperately to move the patients through the system, Baum says. “But what can they do? Create new beds? Build a new wing? Those are long-term things.”

The new standards are great, Baum says, but no single entity can solve the problem of mental health patients boarding in the ED by itself. It’s the language that calls on leadership to work in the wider community to serve the needs of this patient population that she hopes will energize action. “Acuity levels and volumes are up; there are fewer beds. One in ten suicides is seen in the ED within 60 days of the suicide. There is a tangled web of homeless people with drug and alcohol issues, who are uninsured and often present with grave comorbidities.”

What worries Baum is the emphasis on how other industries deal with workflow and how to apply those lessons to healthcare. While noting there are certainly lessons to learn and ideas to implement from others, “we aren’t Toyota,” she says. “Patients move in erratic ways, they come from a variety of places, and we don’t know their acuity level before we see them.” How can you put a flow system together for that kind of environment? “It has to be a systemwide thing. And these standards might help by shining a light on it. But every ED out there is already looking at throughput and growing volume. They do it, too, with limited dollars because so much of the avail-

able funding is going to technology ‘solutions’ like electronic records. But those things don’t change throughput or connectivity or how we work together in meaningful ways that solve this problem.”

Four hours is a goal, but not something that hospitals will be surveyed against, says **Lynne Bergero**, MHSA, project director at TJC’s Department of Standards and Survey Methods, Division of Healthcare Quality Evaluation. “Hospitals will set their own goals, based on their own reality,” says Bergero.

It’s particularly important for care to be delivered and dispositions made for mental health patients in a timely manner, Bergero says, since just being in an unfamiliar, noisy, and hectic environment can lead to a deterioration in that group’s mental condition. “But if a hospital can’t meet that four-hour goal as a practical matter, they can set their own goal. The surveyor will ask how they came to make that number and how they ensure safe and timely care for patients.”

For the elements related to working within the community to address the problems of psychiatric and behavioral health patients, Bergero recommends using the American Hospital Association’s resources related to finding community solutions to caring for them, such as a report from a year ago that not only outlines the issues, but examines some success stories from around the country (<http://www.aha.org/research/reports/tw/12jan-tw-behavhealth.pdf>).

The hope is that hospitals will start to think strategically about the continuum of care and the elements in it that affect how patients move through the hospital and the wider healthcare system, Bergero says. “This isn’t going to get easier and the pie won’t get any bigger, so don’t act like you are in a silo.”

Steps to take now

Baum reiterates that the new standards are a good thing, but don’t expect them to have a huge impact right away. And don’t be discouraged if it takes more time to get this right than you’d like, she says, because there are steps a facility can take to set goals that are meaningful, achievable, and will benefit both the hospital and the wider community.

“Think about how you work together across functions,” she says. “Look at your wider community for novel ways to address the needs, par-

ticularly of the mental health patients. The ED is just the door they access for care. Most don’t need hospitalization, and with proper treatment have the same risk of harming themselves or others as the rest of the population.” Involve police, social workers, EMTs, and community services for at-risk populations in your discussions. Hospitals can’t do it alone, Baum says, and there isn’t really best practice out there for what can work with this patient subset. “Best practice is not a security guard on each person. Putting them in hallways isn’t best practice.”

For more general throughput issues, Baum recommends taking time to go see what really happens in the ED, versus what your workflow charts say should be happening. “Patients don’t come in neat rows. This isn’t a linear problem that Lean and Six Sigma can solve. Reality is messier,” she says.

One option is to hire experts to do ethnographic studies on what really happens in your ER. It’s time-consuming, and it’s not cheap, Baum notes, but the results of such current state analyses can be eye-opening and provide ideas for simple fixes that will lead to meaningful improvements. Among the things that an expert can determine, says Baum, are how transitions are made, what happens when you send a nurse with a patient for imaging or other tests, and how moving that nurse with the patient impacts the care other patients or new admits get. “How does having a pharmacist in the ED impact flow? What’s the mean bed turnover time? Does admissions staff know how many patients are waiting for beds? Where are the bottlenecks and barriers to flow?”

Technology can capture some of this information, but Baum notes that often it’s put in separate systems, sent to different departments, and not shared with the wider audience whose work the data impacts. “Not everything even gets put in the computer in the ED. Providers shout information and write on their hands and on paper towels. How can other people access this information? If someone is shouting lab results to a doctor, and he puts the results in later, what does that do to your time from the order to a meaningful clinical decision?”

It’s all doable over time, but you have to prioritize, Baum says. “Map your reality with a huge degree of honesty, ideally with an objective person doing the mapping. Put teams together, including people from the community to find the

root causes of the issues you face for all kinds of patients that lead to throughput problems. Then figure it out. It's not going to all be about the ED."

Most people who work in the ED know that already. But Baum thinks it's great that others are getting this message from TJC, too.

For more information on this topic, contact:

• Mary Baum, MPH, RN, Chief Healthcare Officer, Connexall, Boulder, CO. Email: mbaum@connexall.com.

• Lynne Bergero, MHSA, Project Director, Department of Standards and Survey Methods, Division of Healthcare Quality Evaluation, The Joint Commission, Oakbrook Terrace, IL. Telephone: (630) 792-5175. ■

Health IT: Avoiding potential pitfalls

ECRI report names potential safety hazards

We look at technology as a tool that has given us an edge — over weather and darkness, over toil and disease. It is here to make our lives easier, better, safer. And there is a lot of technology that does just that. But there are also technological advances that are right now causing harm to patients in the best-regarded hospitals. It's not that the technology was bad, but that there are often unintended consequences that come with advances.

ECRI, an independent health research organization based in Plymouth Meeting, PA, released a list of 10 health technologies that can — and do — harm patients. The list includes:

- alarm hazards;
- medication administration errors using infusion pumps;
- unnecessary exposures and radiation burns from diagnostic radiology procedures;
- patient/data mismatches in EHRs and other health IT systems;
- interoperability failures with medical devices and health IT systems;
- air embolism hazards;
- inattention to the needs of pediatric patients when using "adult" technologies;
- inadequate reprocessing of endoscopic devices and surgical instruments;

- caregiver distractions from smart phones and other mobile devices;
- surgical fires.

Over the next few months, *Hospital Peer Review* will look at these risks and talk to experts who can point you to the best information on the potential danger and help you develop strategies for minimizing the risk. This month, we look at issues related to data errors in electronic health records.

Ross Koppel, PhD, a sociology professor at University of Pennsylvania and its associated school of medicine, didn't expect to find his wife dehydrated and shivering near a hospital elevator hours after she should have returned to her room from surgery. After all, it was one of the best hospitals in the country. But that's where he found her. Computers at the nurses' station said she was in her room, but she never arrived, and it wasn't until Koppel frantically searched for her that she was found.

Lost patients aren't supposed to happen with bar-coded wrist bands that are scanned at every step. But they do. Another story Koppel — whose book *First Do Less Harm* examines many of the technology-driven risks to patients — tells is about a man who was told he was dying one day, only to be told it was all a mistake the next. Someone put the wrong information into his electronic health record. There are legions of such stories.

The promise of health information technology (HIT) was that it would make hospitals more efficient, care more uniform (and thus better), and prevent common errors such as errors in medication dosing. But for every technology designed to help patients and providers alike, there is an unforeseen consequence that leads to some off-the-books work around, which leads to potential (and actual) patient harm, says Koppel.

A study by Koppel and colleagues in the July 2008 issue of the *Journal of American Medical Informatics Association* (see box of further reading page 17) lists 15 instances they found of providers circumventing bar-coding technologies related to medication administration and dozens of potential kinds of harm that could arise as a result. They often have great reasons for not using the systems as intended — for example, misplaced stickers that cover up patient bar codes, dead batteries in the scanners, or computer carts that won't fit in patient rooms. But

that doesn't make it any better.

The results can be horrific — like a case in Illinois where a patient was given 60 times the recommended medication dose. The patient died, the family sued, and the payout was in the millions of dollars, says **Kimberly Reich**, MBA, MJ, PBCI, RHIA, CPHQ, FAHIMA, the compliance

Further reading

- ECRI Top 10 Health Technology Hazards 2013: https://www.ecri.org/Documents/Secure/Health_Devices_Top_10_Hazards_2013.pdf
- *First Do Less Harm*, by Ross Koppel and Suzanne Gordon (2012) — http://www.amazon.com/s/ref=nb_sb_noss_1?url=search-alias%3Daps&field-keywords=first+do+less+harm
- AHRQ Morbidity and Mortality on the Web: EMR entry errors (2009) — <http://www.webmm.ahrq.gov/case.aspx?caseID=199>
- JAMIA article on issues with medication bar codes: Koppel R, Wetterneck T, Telles JL et al. Workarounds to Barcode Medication Administration Systems: Their Occurrences, Causes, and Threats to Patient Safety. *J Am Med Inform Assoc* v.15(4); Jul-Aug 2008 — <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2442264/>
- *Improving Medication Use and Outcomes*, by Jerome A Osherhoff, MD (2009) — http://www.amazon.com/Improving-Medication-Outcomes-Clinical-Decision/dp/0980069734/ref=sr_1_1?ie=UTF8&qid=1358251458&sr=8-1&keywords=improving+medication+use+and+outcomes
- IOM: Health IT and patient safety: building safer systems for better care. Washington (DC): The National Academies Press; 2012. http://books.nap.edu/openbook.php?record_id=13269.

and case manager for Lake County Physicians Association in Waukegan, IL. “It’s frighteningly easy to give a wrong dose,” she says. “The devices don’t stop those kinds of errors.” That’s particularly true if providers turn off irritating alerts that might warn of a bad dose or wrong medicine, she says. It could be an error input into an infusion pump that leads to over- or under-dosing. Or it could be a provider just not using a system the way it should be used.

How often do hospitals check the devices they use with patients to make sure they are functioning properly, Reich asks? How easy is it to override safety features?

In her 30-plus years in healthcare, **Jean S. Clark**, RHIA, CSHA, has seen a vast influx of new technology, all promising to make things better. Until her January retirement, Clark was the accreditation director at Roper St. Francis Medical Center in Charleston, SC, and she remembers the days when there was a single master patient index that had one medical record number for each patient. Everything that happened to that patient was tied to that number.

Electronic records were supposed to make things faster and easier, but Clark says people would come in with a new last name, a different spelling, or a nickname. The addition of a middle name or initial could lead to duplicates of records. Some departments might use the patient name as the main identifier, while others might look patients up based on address, phone number or Social Security number, says Clark.

Koppel points to an article in which he outlined the 24 different ways a patient name Jonah Noel Tobias could be entered into a system. Clark all but calls out a hallelujah. “There is a great potential for all of those different names to not map to the right record, the right person,” she says. “You have to regularly audit and see if records with the same name share other things — addresses, patient identifying numbers. If so, those multiple records might be rightly a single one.” Do this at least every week, and if your system has this built in, there’s no reason not to do it daily. “Not having the right information on the right person at the right time can be extremely dangerous.”

A lot of issues would be solved if there was a single universal medical identity number for each person. “So you have a system where a specimen might have one number on it, but it

might be based on fraud from someone stealing his grandmother's Social Security number. Or a patient comes into the hospital and you find he has seven different patient records." And then there are typos. There are about 2,000 data entry errors per day at a typical hospital, he says. Most don't cause harm, but some could, some do.

Add to that the fact that your typical hospital might have as many as 117 devices that can be used in the intensive care unit, or that there are between 30 and 800 different IT systems in use in every hospital. None of these necessarily interact with the electronic health record a particular hospital chose, never mind the one that a hospital in another state used when that patient was there last year. There is no sharing of medical information in a meaningful way because there are no overarching data standards, no requirement that different systems talk to each other.

Koppel says that after spending \$200 million on a new EHR system, and spending 5 years and maybe another \$800 million to implement it, hospitals aren't interested in hearing that what they have doesn't work because the cost of adding something on at the end or doing the kind of revamping that might make it safer and more useful is prohibitive. So they make do, and making do makes for mistakes. "There are 40 different ways of recording blood pressure. There are eight major suppliers of EHRs for enterprise systems. We have hundreds of data standards and lexicons in use, which is as bad as none. It's a thousand towers of Babel."

There was a time in centuries past when it just took a strong president to look at other Babel-like systems such as railroads, which had about a dozen different gauges in the country, and tell them that on such a date, they would all use the same one. There were 115 time zones in America once, Koppel says. "Imagine if we were able to have just one system. Think of the savings in duplicated tests and doubled doses. Think of the lives saved if you could show up in any ED in any state and have your complete medical record available."

Not going to happen, though, Koppel says. So providers write on their hands and sticky notes, because information that should be contiguous in a record isn't and they have to click through a dozen times and scroll way down to the bottom to find what they are looking for. "Bad inter-

faces obscure information," he says.

And should you want to take your vendor to task for bad design, you can't, because most of the vendors of EHRs have required buyers to sign hold-harmless and non-disclosure agreements. The Institute of Medicine and the American Medical Informatics Association call such contracts unethical, and Koppel says the first thing a hospital can do is stop saying OK when a vendor asks you to sign one. If you're spending the kind of money you have to spend for a system, make sure the vendor knows who works for whom. Make them work out unified standards for your institution and your allies. Insist that there is a code book and dictionary associated with crosswalks between the various parts of the systems — those places where you call something by one name and another department or hospital in your system calls it something else. Push for interoperability.

Send out the clones

Meanwhile, QI and patient safety professionals have to be diligent about making sure that providers are using systems as they ought. Koppel says getting a good nurse or sociologist to study in real time how HIT is being used and ask questions of users about what they do and why they do it is something worth the investment. Residents are happy to talk to people who aren't senior physicians or attendings, and they do most of the orders in a typical hospital.

Be on the lookout for cloned data, too — that is, information on a single patient's record that is identical from one day to the next. The Office of Inspector General will be looking for that kind of cutting and pasting and may refuse to pay if it's not evident that additional work was done. Perhaps scarier is the fact that there are some instances of cloning of notes from one patient to another. While Koppel acknowledges that it's possible two similar patients might have the exact same progress in their relative conditions, it's also possible that a provider is cutting and pasting from one record to another inadvertently, or on purpose as a way to save time.

It's another unintended consequence of electronic records: Rather than thinking holistically about the patient, a provider is thinking in terms of boxes to fill out, says **Bob Wachter, MD**, professor at UC San Francisco and head of the

hospitalist program at the institution's hospital. "The systems make it easy to be lazy," he says. Writing a new note every time you see a patient is a way to get the juices flowing about that patient's particular set of problems. That said, there's another problem about making notes so long and in-depth that you lose vital information in the morass of verbiage.

It's not just a lot of stuff to read that's the problem. There is the real chance of harming a patient, Wachter notes. If a doctor cuts and pastes information from day one — where there is mention of the potentiality of a particular problem — into the space for day four, the new attending may view that potentiality as an actuality, he says.

Wachter says it needs to be easier to find the information that is relevant to the care you give to the patient today, while also providing immediate access to information that might impact what a physician does — allergies, drug interactions, what the patient's specialist thinks the plan of action should be. And the copy and paste function is too useful to get rid of, but only if providers know that what they paste should just be the prompt for more thorough and current notes on patient care.

Koppel says that the early claims about the potential for electronic records was "grotesquely overblown," and that the "HIT emperor is mostly naked now." But that doesn't mean that what we have already invested trillions of dollars in should be chucked onto the rubbish heap. "It's still better than paper. But it is not as good as it needs to be or as good as it could be. Universal medical IDs would solve a lot of the problems. A coherent system for drug nomenclature would be good. Residents at my hospital came up with 100 ways to spell acetaminophen. I was rather proud." He notes that in the Netherlands and several Australian states, there is a single drug/drug interaction database run by pharmacists and doctors. "It is beloved by everyone."

Until some of these things change, there will be cases like one gentleman who retired to be near his daughter. He had a cardiac issue and was in the ED 17 times in about 18 months. The decision support program said the man was a good candidate for a pneumococcal vaccine. It said that every single time he went to the ED. So he had 17 vaccines. "It was a great fancy system that could correctly identify relevant characteris-

tics of this patient, but it had no memory."

For more information on this topic, contact:

• *Ross Koppel, Ph.D., FACMI, Professor, University of Pennsylvania School of Medicine and Department of Sociology and Harvard University School of Medicine. Philadelphia, PA. Telephone: (215) 576-8221.*

• *Jean S. Clark, RHIA, CSHA, Former Accreditation Director, Roper St. Francis Medical Center, Charleston, SC. Email: Jeansmithclark@yahoo.com.*

• *Kimberly Reich, MBA, MJ, PBCI, RHIA, CPHQ, FAHIMA, Compliance and Case Manager, Lake County Physicians Association, Waukegan, IL. Email: kbstried@aol.com. Telephone: (847) 360-2883.*

• *Robert M. Wachter, MD, Professor and Associate Chairman, Department of Medicine, Chief, Division of Hospital Medicine, UC San Francisco. Telephone: (415) 476-5632. ■*

Cut readmissions through med adherence

Educate patients at risk for noncompliance

Good medication reconciliation is like the Holy Grail in healthcare. If only we could make sure that the old, sick, frail patients understand what they need to take, when and why, we could keep them from bouncing back to the hospital.

Vanderbilt hospitalist and researcher **Amanda Salanitro, MD**, is working on a six-hospital study that is designed find potential answers. Among the theories Salanitro has developed: improved and increased inpatient teaching to patients about their medication regimens, what has changed in them since they entered the hospital and what will be different when they get home. "But the thing is, discharge is a really confusing time, and the patients are already sick when they are with us. Even when they get home, they may not be at their normal baseline cognitive level. It can take up to a year to completely recover from an illness and hospitalization."

What seems to work is a toolkit being used by the ongoing Multi-Center Medication

Reconciliation Quality Improvement Study (MARQUIS), says Salanitro. It includes getting patients to “own” their medications. Point patients to the online templates available at the AHSP (<http://www.ashp.org/menu/PracticePolicy/ResourceCenters/PatientSafety/MyMedicineListtrade.aspx>).

Encourage providers to learn to take a good medication history, she says. The Society of Hospital Medicine has some good resources, including a video that can help, at http://www.hospitalmedicine.org/Content/NavigationMenu/QualityImprovement/QIResourceRooms2/MARQUIS/Medication_Reconcili.htm.

Risk stratify your patients. If they are taking one or two medications, they aren't likely to be the problem. It is the frail, the elderly, and those on multiple medications, and patients on high-risk medications like warfarin or insulin who are most likely to have issues that could bring them back to the hospital. Pharmacists are often the best at taking medication histories. If you don't have a lot of pharmacist resource, be sure to let them take on these riskier patients.

Use your marketing department to do community campaigns that encourage patients to bring in their medication lists and a bag with their actual medications in them.

Even if you do all of this, it may be hard to tell if what you are doing is working at keeping patients from unplanned readmissions. Salanitro says she did a systematic review last year looking at models that predict readmissions and none worked very well. “Medications have a small role. It's not trivial, but it's not the only thing,” she says. “If we play around with their medications while they are here and they don't learn enough about the new regimen, they're more likely to come back.”

Streamline the drug regimen

In Pittsburgh, Wheeling Hospital has created the “Seven or More” project, says Lisa Schatz, PharmD, BCPS, senior director of clinical services. Patients are screened, and those who are taking seven or more medications get a higher-level screening with a skilled pharmacist interviewer who can help determine if the patient is having trouble with what to take when or how much to take with what food and drink.

The pharmacist will look for ways to streamline or simplify the drug regimen, says Schatz.

Since so many patients at the hospital come from nursing homes or are of an age when they might, providers make it a point to look more carefully at those patients. “We look to see if they are taking multiple drugs for the same indication. We look at the diagnoses, and whether the drugs they were prescribed actually work for the condition.”

Every drug has a monitoring parameter, Schatz says. “If they are on a blood pressure drug, take their BP. Is the drug working? Is it working too well?”

If it isn't then find a way to eliminate the drug, change the dosage or combine it with another. These are things that a pharmacist is particularly trained to consider. “This isn't something we decided to do because something triggered it, or something bad happened,” Schatz explains. “This is just good care.”

The Seven or More project just began, and although readmission rates are pretty low at 22%, they are hoping to see a reduction. “If you aren't getting paid for them, then any improvement becomes important.”

Wheeling is ramping up patient teaching, too, providing both teach-back style sessions and written information, including calendars for complex cases. “Patient understanding can be hard to measure, but if we get them to say it out loud and they have it in writing, it can help us verify that they understand what we have explained.”

The medical record reinforces the need to teach about new medications by including it on a nurse task list if a new medication is added. “The objective is that as soon as something is prescribed, the nurse teaches. On discharge, we have a retail pharmacy on site — open until midnight daily — so that the pharmacist can deliver medications for home use and do some more teaching.” A pharmacist is in the ED until midnight, too.

Lastly, patients are phoned post-discharge to see if they have any questions. “It's good business and good care,” says Schatz.

For more information on this topic, contact:

• *Amanda Salanitro, MD, Vanderbilt University, Nashville, TN. Telephone: (615) 936-3710.*

• *Lisa Schatz, Pharm.D., BCPS, Senior Director of Clinical Services, Wheeling Hospital, Pittsburgh, PA. Telephone: (412) 749-1070. ■*

Using a compounder?

Do your research

Tips to ensure compounding pharmacy safety

Scores of people have died in an outbreak of fungal meningitis that has been linked to steroids compounded by the New England Compounding Center (NECC). The incident is shining a light on an area of business that many in the healthcare world use, but which has not been closely monitored in the past.

“Many hospitals are asking themselves if they used NECC,” says **Christian Hartman**, PharmD, MBA, FSMSO, president of the American Society of Medication Safety Officers, director of clinical quality and patient safety at Wolters Kluwer Health, and a partner at Lucian Metrics in Boston. Hartman, a former medication safety officer at UMass Memorial Health System in Worcester and pharmacist at Brigham and Women’s Hospital, is heading up commission created by Massachusetts Governor Deval Patrick to look into compounding pharmacies and recommend any regulatory changes necessary to ensure its safety going forward.

“And if they did not use that one, then they are asking who they used, because compounding pharmacies are commonly used by hospitals,” he says, noting that this compounding business has taken off in the last six years.

Hospitals use them for several reasons. They use them to make up for drug shortages, like the shortage of methotrexate that hit the country’s cancer patients last year. “If the drug manufacturers are unable to meet the patient needs then compounding pharmacies have filled the gap in many cases.” Hospitals may tap compounders because they don’t have the capability themselves to compound what the hospitals need using the standards they demand. “Many hospitals don’t have the infrastructure, the appropriate policies, or testing capabilities to sterile compound appropriately,” he explains.

Another impetus for that growth is that healthcare is trying to standardize as much of what it does as possible. “That way, we can minimize risk. And if a compounder can produce a compound using safe practices and standards in a more efficient manner than hospitals can achieve, then the industry is here to stay.”

It’s a tough spot to be in, he says. “There is

a need for these organizations, but we need to ensure they are safe to use.” The kind of compounders that hospitals use, who create large batches of a product and distribute it in bulk, are licensed by the FDA. The first thing you should do when looking for a compounder is to determine whether they are licensed. If they aren’t, don’t use them.

Second, Hartman says to look on the FDA website (<http://www.fda.gov/ICECI/EnforcementActions/default.htm>) to see if regulators have taken any actions against them. If they have a clean record, make sure they are using known standards around manufacturing. The FDA refers to Good Manufacturing Practices (GMP), and US Pharmacopoeia uses the 797 standards.

If possible, travel to the site. Take your head of pharmacy and see what the business looks like. “If you are going to look at working with a high-risk sterile compounding practice, you should go there and see it for yourself,” Hartman says.

While state regulations differ, you can also check the state board of pharmacy website to see if any state actions were taken. The recent tragedy has already led state boards of pharmacy to make some big changes, including tracking how much compounders are making and distributing, requiring them to report if they are subject to any investigation by a state or federal agency, and implementing financial penalties for organizations that don’t obey the rules.

Even if your state board of pharmacy doesn’t have a database, give it a call and see if anyone has any information on the business you are looking to use. “Do all the fact checking you can,” Hartman says.

RESOURCES

- Association of Health System Pharmacists: <http://www.ahsp.org>
- International Journal of Pharmaceutical Compounding: <http://www.ijpc.com>. They have a great gap analysis tool available — <http://www.ijpc.com/USP/IJPC%20USP%20797%20GAP%20Analysis.pdf>
- CDC Multistate Outbreak Investigation: <http://www.cdc.gov/HAI/outbreaks/meningitis.html>
- NECC Customer List: <http://www.fda.gov/downloads/Drugs/DrugSafety/FungalMeningitis/UCM325467...>
- USP 797 QA Management System: <http://www.pharmacyo-nesource.com/applications/simplifi797/>
- USP 797 State Requirements: <http://www.clinicaliq.com/797-state-survey>

For more information on this story, contact Christian Hartman, PharmD, MBA, FSMSO, President American Society of Medication Safety Officers, Boston, MA. Email: christian.hartman@gmail.com. ■

Preventing readmissions benefits patients

Good communication, follow-up calls are key

In a concerted effort to improve patient care, payers and providers are collaborating to improve transitions of care and reduce readmissions.

A study in the *New England Journal of Medicine*¹ showed that one-fifth (19.6%) of Medicare beneficiaries were rehospitalized within 30 days of discharge, at a cost of \$17.4 billion. The study concluded that the average stay of rehospitalized patients was 0.6 days longer than patients in the same diagnosis-related group whose most recent hospitalization had been at least six months prior.

“It’s clear that keeping patients from being readmitted benefits the patient and saves the healthcare system money as well. When you add 0.6 days onto the typical diagnosis, it adds up to a lot of money. In addition, hospitalization can expose patients to infections and put them at the risk for falls,” says **B.K. Kizziar**, RN-BC, CCM, CLP, owner of B.K. & Associates, a Southlake, TX, consulting firm specializing in hospital case management.

Reasons for avoidable readmissions include poor or inadequate discharge plan, discharging the patient too soon, no plan for follow up care, medication compliance issues, and the patient’s failure to see a primary care physician for follow-up within a week after discharge, according to **Toni Cesta**, RN, PhD, FAAN, senior vice president, operational efficiency and capacity management at Lutheran Medical Center in Brooklyn, NY, and health care consultant and partner in Case Management Concepts, LLC.

“When people are readmitted within 30 days, it means that somewhere the system has failed. Either the patient didn’t get appropriate ambulatory or inpatient care, they didn’t receive care at

the appropriate level of care at the most appropriate time, or there were problems with the transition of care,” says **Tracy Langlais**, RN, vice president of medical affairs operations for Capital District Physicians Health Plan (CDPHP), based in Albany, NY.

Since studies have shown that one cause of readmissions is lack of follow-up care, case managers should make sure that patients have an appointment to see their doctor for follow up within seven days of discharge and should make sure they understand the importance of keeping the appointment, Cesta says.

Make a follow-up phone call shortly after discharge to make sure the patient is taking his or her medication, has a doctor’s appointment, and is not having problems, she says.

Following up after discharge helps the case managers identify issues that could mean problems down the road for patients, says **Mary Hickie**, RN, case management services director for Blue Cross Blue Shield of Arizona Advantage. The health plan makes follow-up calls and home visits after discharge to patients who qualify for case management.

“Patients are given so much information at discharge that they often don’t remember everything. The case managers have access to the electronic medical records at Banner Health facilities and can review the discharge instructions to make sure the patient understands them. They get information about the medication prescribed and can conduct medication reconciliation over the telephone,” she says.

In one instance, when a case manager made a follow-up call the day after discharge, the patient didn’t remember getting two prescriptions, one of which was for an antibiotic. The case manager asked the patient to check the bag he received at discharge and he found the prescriptions. When she called back the next day, the patient reported getting his prescriptions filled and taking them as instructed.

If the patient hadn’t found the prescriptions, the next step was for the case manager to visit the home the next day and go over all the paperwork with the patient.

Communicating with the patient and family before and after discharge is an important part of reducing readmissions, but don’t overwhelm them, Kizziar says.

“When patients leave the hospital, they sometimes get follow-up calls in a matter of days from

the hospital, their health plan, their doctor, and in some cases, someone doing a patient satisfaction survey. It is overwhelming and confusing and may annoy patients and family members to the point that the calls are ineffective and it certainly doesn't speak well for the healthcare industry," she says.

She advises case managers making follow-up calls to ask open-ended questions rather than those that can easily be answered "yes." Ask them to tell you what medications they are taking and when they are taking them. Instead of asking heart failure patients if they are weighing themselves daily, say "tell me your morning routine."

Payers and providers need to work together to coordinate phone calls and improve transitions, Kizziar says.

Capital District Physicians Health Plan partners with physicians to ensure that patients receive follow-up appointments and provides in-home case management for frail elderly members at highest risk. In addition, case managers call at-risk patients at regular intervals for 30 days after discharge and provide daily discharge reports to physicians.

"Everybody in health care is trying to reduce readmissions, but those who are the most suc-

Hospital Report blog

For further analysis and discussion of topics important to hospital professionals, check out **Hospital Report**, AHC Media's new free blog at <http://hospitalreport.blogs.ahcmedia.com/>. *Hospital Peer Review's* executive editor Russ Underwood and associate managing editor Jill Drachenberg both contribute. ■

COMING IN FUTURE MONTHS

- Surgical fires — more common than you might think
- Accreditation field report
- Imaging and patient safety
- When is ethnographic research worth the money?
- More top safety worries of 2013

CNE QUESTIONS

1. Which statement is true about suicides?
 - A. A tenth of them were at the hospital within 30 days of death
 - B. There has been an 11% reduction in suicides in the last few years
 - C. One in 10 suicides was in an ED within 60 days of the suicide
 - D. 30% of suicides need inpatient care
2. What is the range of the number of computer programs a typical hospital has running?
 - A. 30-800
 - B. 117
 - C. 800
 - D. 200
3. US Pharmacopoeia has a set of standards related to safe manufacturing. They are:
 - A. 777
 - B. 787
 - C. 877
 - D. 797
4. According to Toni Cesta, RN, PhD, FAAN, senior vice president, operational efficiency and capacity management at Lutheran Medical Center in Brooklyn, reasons patients are readmitted within 30 days of discharge include which of the following?
 - A. Poor or inadequate discharge plan and discharging the patient too soon.
 - B. Having to plan for follow-up care and medication compliance issues.
 - C. The patient's failure to see a physician for follow-up within a week after discharge.
 - D. All of the above

CNE OBJECTIVES

Upon completion of this educational activity, participants should be able to:

- Identify a particular clinical, legal, or educational issue related to quality improvement and performance outcomes.
- Describe how clinical, legal, or educational issues related to quality improvement and performance outcomes affect nurses, health care workers, hospitals, or the health care industry in general.
- Cite solutions to the problems associated with quality improvement and performance outcomes based on guidelines from relevant authorities and/or independent recommendations from clinicians at individual institutions.

cessful are those that are collaborating with other organizations. When the payer, the hospital, and the primary care provider come together, they are able to make a program happen," she says.

REFERENCE

1. *N Engl J Med* April 2, 2009;360:1481-28 ■

BINDERS AVAILABLE

HOSPITAL PEER REVIEW has sturdy plastic binders available if you would like to store back issues of the newsletters. To request a binder, please e-mail binders@ahcmedia.com. Please be sure to include the name of the newsletter, the subscriber number and your full address.



If you need copies of past issues or prefer on-line, searchable access to past issues, you may get those at www.ahcmedia.com/online.html.

If you have questions or a problem, please call a customer service representative at **(800) 688-2421**.

CNE INSTRUCTIONS

CNE INSTRUCTIONS

Nurses participate in this CNE/ CME program and earn credit for this activity by following these instructions.

1. Read and study the activity, using the provided references for further research.
2. Log on to www.cmecity.com to take a post-test; tests can be taken after each issue or collectively at the end of the semester. *First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice or renewal notice.*
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly. ■

EDITORIAL ADVISORY BOARD

Consulting Editor
Patrice Spath, RHIT
Consultant in Health Care Quality
and Resource Management
Brown-Spath & Associates
Forest Grove, OR

Kay Ball
RN, PhD, CNOR, FAAN
Perioperative Consultant/
Educator, K&D Medical
Lewis Center, OH

Catherine M. Fay, RN
Director
Performance Improvement
Paradise Valley Hospital
National City, CA

Susan Mellott, PhD, RN,
CPHQ, FNAHQ
CEO/Healthcare Consultant
Mellott & Associates
Houston, TX

Martin D. Merry, MD
Health Care Quality
Consultant
Associate Professor
Health Management
and Policy
University of New
Hampshire
Exeter

Kim Shields, RN, CPHQ
Clinical System Safety
Specialist
Abington (PA) Memorial
Hospital

Paula Swain
RN, MSN, CPHQ, FNAHQ
Director of Accreditation
and Regulatory
Novant Health,
Presbyterian Hospital
Charlotte, NC

To reproduce any part of this newsletter for promotional purposes, please contact:

Stephen Vance

Phone: (800) 688-2421, ext. 5511

Fax: (800) 284-3291

Email: stephen.vance@ahcmedia.com

To obtain information and pricing on group discounts, multiple copies, site-licenses, or electronic distribution please contact:

Tria Kreutzer

Phone: (800) 688-2421, ext. 5482

Fax: (800) 284-3291

Email: tria.kreutzer@ahcmedia.com

Address: AHC Media LLC

3525 Piedmont Road, Bldg. 6, Ste. 400
Atlanta, GA 30305 USA

To reproduce any part of AHC newsletters for educational purposes, please contact:

The Copyright Clearance Center for permission

Email: info@copyright.com

Website: www.copyright.com

Phone: (978) 750-8400

Fax: (978) 646-8600

Address: Copyright Clearance Center
222 Rosewood Drive
Danvers, MA 01923 USA