Healthcare Benchmarks and Quality Improvement

The Newsletter of Best Practices

AHC Media LLC

IN THIS ISSUE

MARCH 2009
VOL. 16, NO. 3 • (pages 25-36)

Joint Commission paints detailed picture of 'Hospital of the Future'

Five core areas identified as targets for improvement

The project was nothing if not ambitious; The Joint Commission assembled a blue-ribbon roundtable of experts — hospital executives, clinical leaders, and experts in technology, health care economics, hospital design, and patient safety — and tasked them with analyzing how socio-economic trends, technology, the physical environment of care, patient-centered care values, and ongoing staffing challenges will affect the hospital of the future.

The result was a white paper entitled, "Health Care at the Crossroads: Guiding Principles for the Development of the Hospital of the Future," which discusses in depth the five core areas that will have the greatest impact on shaping the hospital of the future, and principles that health care leaders should follow to achieve the outlined goals. **(A complete list of these areas and principles can be found in the box on pg. 27. The entire white paper can be downloaded at www.jointcommission.org.)**

So, how will the "hospital of the future" differ from the "hospital of today?"

"I think you will see much greater attention paid to internal communications," predicts **Herbert Pardes**, MD, president and CEO, New York Presbyterian Hospital and New York Presbyterian Healthcare System and the roundtable chair. "The notion of the

Key Points

- Communication, teamwork will be key ingredients to improving quality.
- Quality managers will need to become much more informed about hospital design.
- Single rooms hold key to improved quality, safety, and patient and staff satisfaction.

isolated 'star' health provider is going to be modified, with a call for much more collaboration, teamwork, and attention to handoffs."

With the realization that communication is critical, he says, "I think you will see pressure to try to exploit — in the best sense of the word — IT to find various ways by which we can help people." He cites as an example a partnership his system entered with Microsoft to create the HealthVault, "so people can call up their health care information no matter where they are."

Much greater attention to safety issues also will be critical, Pardes continues."I think all hospitals will try to figure out how to be as efficient as possible, and to reach out to their community as much as possible," he says. "And in new hospital construction, we will see a bigger move toward single rooms."

This is an issue both of patient safety and patient-centered care, Pardes explains. "The notion of trying to make the hospital more person-centric will prevail," he says. "And even though some may say it will be more expensive to only have single rooms, I feel that the resulting drop in infection will trump that."

Other related issues, he says, include increased valuing of the centrality of the nurse and increased use of hospitalists (which we are already seeing). "I foresee a continued push on [reducing] length of stay," he adds. "Putting it all together, we're looking at care that is more centered on the comfort of the patient, an emphasis on both patient and staff satisfaction, as much improvement of quality and safety as possible, pressure for more systematic communication with each other, and playing a role in making the general health in our own local area better. It's moved a bit that way, but it will do so more profoundly going forward. We'll also see more attention to 'green' hospitals — energy conservation and using materials in a way that is environmentally sensitive."

Breaking new ground?

One or more of these core areas will represent terra incognita for some quality managers — for example, hospital design. **Terri Tye,** director of public affairs for The Joint Commission and primary author of the white paper, emphasizes the quality impact, for example, of the single room.

"Single rooms are being widely embraced in the hospital industry and I believe are part of the new AIA [American Institute of Architecture] guidelines for hospital design," says Tye. "Obviously, if you don't have two patients close together, you will reduce infection, but when doctors and nurses enter the room and go from one bed to another, there's also a great opportunity to spread microbes. Then there's the issue of the same ventilation system being shared by two patients."

Hospital-acquired infections, Tye points out, add significantly to health system costs. "And there's so much evidence to support single rooms — not just for safety but for outcomes," she says.

Another important design consideration, Tye continues, involves noise-reducing materials. "Obviously, with a lot of noise it's hard to get a good night's rest, so noise can be fatiguing for patients and for the health care staff," says Tye,

Healthcare Benchmarks and Quality Improvement (ISSN# 1541-1052) is published monthly by AHC Media LLC, 3525 Piedmont Road N.E., Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices. USPS# 0012-967.

POSTMASTER: Send address changes to ***Healthcare Benchmarks and Quality Improvement***, P.O. Box 740059, Atlanta, GA 30374.

Subscriber Information

Customer Service: (800) 688-2421. Fax: (800) 284-3291. E-mail: customerservice@ahcmedia.com. Hours of operation: 8:30-6 Monday-Thursday, 8:30-4:30 Friday, EST.

Subscription rates: U.S.A., one year (12 issues), $549. 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 one month of the missing issue date. **Back issues**, when available, are $92 each. (GST registration number R128870672.)

Editor: **Steve Lewis**, (770) 442-9805, (steve@wordmaninc.com).
Associate Publisher: **Russ Underwood**, (404) 262-5521, (russ.underwood@ahcmedia.com).
Managing Editor: **Jill Robbins**, (404) 262-5557, (jill.robbins@ahcmedia.com).

Editorial Questions

For questions or comments, call **Steve Lewis** at (770) 442-9805.

Joint Commission report focuses on five core areas

The following is a list of the five core areas identified in the white paper "Health Care at the Crossroads: Guiding Principles for the Development of the Hospital of the Future" and principles to be pursued by hospitals in each of those areas:

Economic Viability

- Align performance and payment systems to meet quality- and efficiency-related goals.
- Use process improvement tools to increase efficiency and reduce costs.
- Pursue coverage options to ensure patient access to, and affordability of, health care services.
- Address how general acute hospitals and specialty hospitals can both fulfill the social mission for health care delivery.

Technology Adoption

- Make the business case and sustainable funding to support the widespread adoption of health information technology.
- Redesign business and care processes in tandem with health information technology adoption.
- Use digital technology to support patient-centered hospital care and extend that care beyond the hospital walls.
- Establish reliable authorities to provide technology assessment and technology investment guidance for hospitals.
- Adopt technologies that are labor-saving and integrative across the hospital.

Patient-Centered Care

- Make adoption of patient-centered care values a priority for improving patient safety and patient and staff satisfaction.
- Incorporate patient-centered care principles into the activities of hospital oversight bodies and transparency initiatives.
- Address barriers to patient and family engagement, such as low health literacy and personal and cultural preferences.
- Eliminate disparities in the quality of care for minorities, the poor, the aged, and the mentally ill.
- Improve the quality of care for the chronically ill through coordinated, multi-disciplinary care.
- Use robust process improvement tools to improve quality and safety.

Staffing

- Establish fair migration and compensation policies for countries facing shortages of health care workers.
- Expand health professional education and training capacity to accommodate the growing demand for health care workers.
- Create workplace cultures that can attract and retain health care workers.
- Develop professional knowledge and skills necessary in a more complex health care environment.
- Educate health professionals to deliver team-based care.
- Develop the competence of health professionals to care for geriatric patients.

Hospital Design

- Improve safety with evidence-based design principles such as single rooms, decentralized nursing stations, and noise-reducing materials.
- Address high-level priorities, such as infection control and emergency preparedness, in hospital design and construction.
- Include clinicians and other staff, patients, and families in the design process to improve staff workflow and patient safety, and create patient-centered environments.
- Design flexibility into the building to accommodate advances in medicine and technology.
- Incorporate "green" principles in hospital design and construction.

Source: The Joint Commission.

who recommends a visit to the web site of the Center for Health Design (http://www.healthdesign.org) for more information.

The white paper also espouses using process improvement tools "to increase efficiency and reduce costs." While organizations such as the the Institute for Healthcare Improvement have been promoting improved efficiency as quality

value, it has certainly not achieved universal adoption among hospitals.

"When there is waste or there are inefficient processes there are often greater opportunities for safety to be compromised," Tye asserts. "If you have 10 steps in a care process where three are really optimal, the seven steps you don't need create seven more opportunities to make an error."

The "tools" to which the white paper refers include some that are familiar to many quality managers, such as Lean and Six Sigma. "Everyone in health care is interested [in efficiency] now that costs are so high and the country is in such a dire economic condition, and it's even more important to drive out waste," says Tye. Coordinated care, she adds, is another way of improving efficiency. "When care is not coordinated, it increases utilization and re-hospitalization," she asserts. "Take, for instance, caring for chronically ill patients — or any patient that has to go through hospitalization from admission to discharge. When care is not coordinated, it leads to errors and waste and inefficiency — for example, medications are prescribed but not reconciled."

Nursing significantly impacted

As indicated above, nurses will play an increasingly important role in the "hospital of the future." They also are facing some of the toughest challenges, notes **Rita Munley Gallagher**, PhD, RN, senior policy fellow, department of nursing practice and policy for the American Nurses Association, and a member of the roundtable.

"If you look at the guiding principles, a significant number of them were devoted to addressing the staffing challenge, and we're absolutely supportive of those guidelines," says Gallagher. "The first thing that our group addressed was the issue of broad distribution of workers around the world; it's almost a revolving door going from one country to another, and it's not exclusive to the U.S.; so in order for hospitals of the future to meet the needs of patients in the U.S., this global issue has to be addressed."

In addition, she says, "it's real clear we need to expand education and training opportunities here in the U.S."

Finally, notes Gallagher, "the workplace is not — in many instances — a particularly attractive place. We see people leaving in a very short period of time. We need to develop the people who will be providing care because the environment is becoming more and more complex."

One example of this complexity, she continues, is the aging population. "As we all begin to age, hospitals will have more and more gerontological patients, so the workforce really needs to have competence; there's a critical need for health care professionals to understand the differences in caring for this population."

Some of those differences may be fairly obvious, such as the need for fall prevention strategies, while others, Gallagher says, may not. "For example, medications work differently in many instances, and that is a clear risk management issue," she notes. "There is a need to ensure that meds being prescribed and administered are in the first place appropriate and that the dosage is correct."

Sometimes, she explains, medications need to be titrated in different doses for elderly patients because their metabolisms are different — and this may vary from patient to patient. "In some respects, this is a very individualized approach," she says. "It's not cut and dried; you need to be vigilant as you provide care to be sure the medications are working as they are supposed to, and then if you identify some different responses, you need to ensure they receive different doses; it's a matter of vigilance and monitoring."

[For more information, contact:

***Rita Munley Gallagher**, PhD, RN, Senior Policy Fellow, Department of Nursing Practice and Policy, American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, MD 20910-3492, Phone: (301) 628-5062, Fax: (240) 363-4919, E-mail: Rita.Gallagher@ANA.org;*

***Herbert Pardes**, MD, President and CEO, New York Presbyterian Hospital, New York Presbyterian Healthcare System, New York, NY, Phone: (212) 305-8000;*

***Terri Tye**, Director of Public Affairs, The Joint Commission, One Renaissance Boulevard, Oakbrook Terrace, IL 60181, Phone: (630) 792-5000.]* ■

How do you get from 'here' to 'there'?

No doubt quality managers are eager to sign on to many of the goals outlined in The Joint Commission's white paper, "Health Care at the Crossroads: Guiding Principles for the Development of the Hospital of the Future," but in a

number of cases, getting from "here" to "there" will require some detailed and well-thought-out strategies. Members of the roundtable who put the report together have some valuable insights to share in this regard.

For example, notes **Herbert Pardes**, MD, president and CEO, New York Presbyterian Hospital and New York Presbyterian Healthcare System and the roundtable chair, if you want to see improvements in your hospital's design, "there are people whose expertise is the architectural design of hospitals; bring them in, do a review, ask what you can do to make your facility more patient friendly," he suggests.

For example, he notes, when his system built a new children's hospital "we designed it to include pictures of things kids like — such as kids playing or nature scenes. We had a play room and a central area for entertainment to be beamed to the rooms. When we first opened, a six-year-old patient who had been in our other hospital said, 'I guess this one's for kids.'"

What's the best way to approach administration or the board to convince them of the necessity of making such changes — be it redesign or expansion? "I would bring the administration whatever information is out there about hospitals doing this, and the results and impact the changes had," Pardes recommends. "Tell the CEO it will be valuable to have 'X' person come in and make a presentation, which can include pictures of other facilities."

The implementation of the teamwork concept is another change recommended in the white paper. "The quality manager could begin by engaging in a review of the literature on the teamwork concept so he or she becomes much more aware of benefits," suggests **Rita Munley Gallagher**, PhD, RN, senior policy fellow, department of nursing practice and policy for the American Nurses Association and a member of the roundtable. "For some quality managers, much of that search might focus on the reduction of complications through the implementation of teamwork. He or she would see the bottom line dollars and sense a real benefit."

Once the quality manager feels he or she is able to provide a sufficient level of evidence, Gallagher continues, "there needs to be a movement toward inservice education to the existing staff, because there are specific competencies required for people to really engage in teamwork."

Another strategy recently implemented at New York Presbyterian, says Pardes, is "Patient Safety Fridays." About 1,000 employees get together every Friday, suspend their other activities, and identify areas of patient safety and go around the hospital to see how people are doing in these areas. "When you get hundreds of people together, they get excited about seeing how they can do better," says Pardes. ■

Study: In ICU prophylactic antibiotics save lives

Could practice contribute to drug resistance?

A recent study conducted in the Netherlands shows some positive results in the ICU when antibiotics are given to patients before any infection develops,[1] but it also raises a question that the researchers are not prepared to answer: whether the strategy could have unintended consequences in the form of increased drug resistance. However, the researchers did assert that, at least in the case of the facilities they studied, the benefits outweighed the risks that people will develop resistance to the drugs.

In the study, published in the *New England Journal of Medicine*, **Anne Marie de Smet**, MD, and her colleagues at University Medical Center Utrecht compared the effects of different antibiotic treatments in 5,939 men and women who were cared for in intensive care units for at least two days at 13 hospitals in the Netherlands.

The patients were divided into three groups: One group (2,045 patients) received infection prevention measures called selective digestive tract decontamination (SDD); another (1,904) received selective oropharyngeal decontamination (SOD); while a third group (1,990) received standard care. SOD involves the application of topical antibiotics in the oropharynx only, while SDD aims to prevent secondary infections through the additional use of IV antibiotics. "In the standard care protocol, you don't use antibiotics in a preventive way at all, but only when there is a proven infection or the clinical suspicion of an infection," Smet explains.

After 28 days, the mortality rate associated with standard care was 27.5%. This was reduced by an estimated 3.5 percentage points with SDD, or a 13% reduction, and by 2.9 percentage points with SOD, or an 11% drop. For this time period, say the researchers, the number of antibiotic-

resistant bacterial infections did not increase among the people on the drugs. They acknowledged, however, that this issue should be studied on a longer-term basis.

Closer look at protocols

The rationale for the study, says Smet, was to take a closer look at these protocols, which have been the subject of much discussion in the Netherlands. "We started using this system in Holland almost three years ago for leukemia patients; it has been a hot topic among both believers and non-believers," she shares. "We wanted to see if we needed all parts of SDD, which had shown much lower rates of bacteremia [bacteria in the blood] than SOD, so we brought it to the ICU."

The rationale for combining oral and IV antibiotics was derived from the literature, she continues. "If you look at other publications, such as *The Lancet*, you will see much more discussion," says Smet. "You can kill gram-negative bacteria in the gut with antibiotics so they will not be resorbed into the blood, so you usually have to give them intravenously. These antibiotics we use are antibiotics that stay in the gut and are not resorbed into the blood."

Would it stand to reason that if the patients only receive IV antibiotics that the mortality rates would be lower? "We didn't look at only IV, so we don't know," says Smet. "However, we do know that one of the hospitals in Holland tried it a long time ago and saw a lot of [drug] resistance, although the study was not published. But that's not the next question we're going to ask."

Looking at resistance

What Smet and her colleagues plan next is a new trial comparing SOD and SDD to look at resistance, she shares. "You need to do it at least for a year," she explains. "In general, the more antibiotics you use, the higher the resistance you will see, so if you consider it from that point of view, it might be better to use SOD. But on the other hand, [in this trial] it seemed even lower in SDD, so we'd like to do a new trial."

She adds, however, that it is very important for a similar trial to be conducted in the United States. "The Netherlands is a country where there is a very low antibiotic resistance level — it's not like southern Europe and the U.S., and it might be different for other countries," she explains.

Key Points

- Oral and IV antibiotic combination more effective than oral antibiotics alone.
- Researchers assert benefits outweigh the risks of drug resistance.
- At least 12 months needed to get accurate read on risks of resistance.

"We have hardly any MRSA [methicillin-resistant *Staphylococcus aureus*] here, so I suggest you should have a separate look at a trial yourselves."

Because of these differences between the United States and the Netherlands, Smet does not suggest that quality managers in the United States begin advocating for prophylactic antibiotics in the ICU. "In the Dutch situation we said we were OK, but in the United States you still have to look at your own level of resistance; do a trial and have a very proper look to see if you have an emergence [of cases]. We do know that this approach is positive in terms of reducing mortality."

Reference

1. Smet AMGA de, Kluytmans JAJW, Cooper BS, Mascini EM, et al. Decontamination of the Digestive Tract and Oropharynx in ICU patients. *N Engl J Med* January 2009, 360;1:20-31.

[For additional information, contact:
***Anne Marie de Smet**, MD, University Medical Center Utrecht. Phone: +31-88-7555555; ask for beeper 1368. E-mail: asmet@umcutrecht.nl]* ■

Pain management model has safety advantages

Developing inpatient pharmacy model is challenge

Hospitals could improve the overall care of patients who are admitted for surgery, palliative care, or for diseases that result in chronic pain if they employ a pharmacist to assist with medication utilization and develop defined medication plans for the more complex cases, an expert suggests.

"There are a lot of safety issues associated with opioids and other narcotics," says **Virginia Ghafoor**, PharmD, a clinical pharmacy specialist

in pain management at the University of Minnesota Medical Center-Fairview in Minneapolis. The health system, which is the largest in Minnesota, has nine hospitals and the university medical center.

"Pharmacists monitor medication doses and review the combined medications used with patients to follow safety practices for preventing over-sedation and overdosing of patients," Ghafoor adds.

Ghafoor works at the University of Minnesota Medical Center, which has 800 beds, and on Mondays and Thursdays at a community hospital that has 180 beds in a pain and palliative care service model that includes pharmacy support.

"My challenge has been to look at the development of an inpatient pharmacy model in the community hospital setting," Ghafoor says.

"Our university has a unique model for pain service, and the university has three different pain services, including a general pain service with an outpatient clinic where they see acute and chronic pain patients," she explains. "Then there's a palliative care service that sees a lot of patients mostly with terminal diseases, and then there's an anesthesia service that sees patients who have an epidural."

The institution follows a model, called Mid-Level Practitioner Model for Pain and Palliative Care Services-Clinical Pharmacy Services, which is illustrated in a flow chart.

"I've been trying to see how a pharmacist could integrate into this model on an inpatient basis and help with activities that provide a more appropriate utilization of resources," Ghafoor says.

The pain services model suggests a variety of services a pharmacist could provide, including the following:

• **Finding the right drug for the patient:** "A lot of patients seeking pain management are really ambulatory, primary care patients and could be seen in a primary care setting," Ghafoor says. "So how many of them are coming through the emergency room with chronic pain needs that could be handled in an ambulatory care setting? We're looking at models to restructure that process."

For example, a pain service could develop a pain management plan for a patient with high opioid needs with the goal of reducing his or her emergency room visits.

"Opioid medications have to be adjusted for each patient," Ghafoor notes. "These doses are all individualized, and there are a lot of safety issues regarding that."

Key Points

- Pain and palliative care service model includes pharmacist interventions.
- Pharmacists assist with improving safety and compliance.
- Pharmacists will help educate patients on drug side effects and interactions and provide follow-up monitoring post-discharge.

The front-line pain management staff check out a patient's pain medication history when the patient comes through the door, Ghafoor says.

"If a patient hasn't been on pain medicine before coming into the hospital then we have a whole different set of prescribing practices," she says. "Those who have not been on pain medication are at more risk of side effects."

Alternately, the patients who have been on pain medication may have pain control issues, Ghafoor says.

"Those patients will have higher opioid needs and have more difficulty controlling their pain," she says.

"Those patients can be very challenging because clinicians don't always recognize all the problems they've had with their pain and doses," Ghafoor adds. "So it's the job for the pharmacist right up front to make sure everything is checked out and we're using the right drug at the right dose for the patient."

On a pain management team, it often is the pharmacist who finds the right drug by assessing drug properties and the patient's medical condition.

• **Improve safety and prevent drug interactions:** A hospital pharmacist who specializes in pain management also could help alert hospital staff to potential side effects when palliative care or hospice patients are admitted and treatment is prescribed for droperidol. When combined with the patients' likely methadone use, droperidol could result in QT prolongation and cause a fatal heart problem, Ghafoor says.

Hospice patients typically are prescribed methadone because hospice reimbursement is low and the cost of some alternative treatments is many times greater than methadone, Ghafoor notes.

"The cost of methadone is 65 cents per day," she adds. "So if hospice or palliative care patients come into the ER, they're most likely on methadone already."

In addition, methadone is a much more difficult drug to dose correctly, so hospitals will need phar-

macists' help with these patients, Ghafoor says.

"We've been working to have all clinical pharmacists work together to achieve National Patient Safety Goals around narcotic use both in the ambulatory and hospital setting," Ghafoor says.

"All of our patients are required to check orders for patient-controlled analgesia," she adds. "Pharmacists have to make sure the physician ordered doses appropriately."

• **Help develop better compliance protocols:** This ties in with safety issues, Ghafoor notes.

"Physicians cannot order large ranges of opioid drugs," she says. "They have to keep it within a two-fold range, and that's partially driven from the National Patient Safety Goals."

So if an order is outside of the two-fold range, the pharmacist has to call the physician to get it changed, Ghafoor adds.

Another compliance issue at the hospital system is a requirement that a pharmacist check a patient's opioid history when there is any Sentinel patch prescription of more than 50 mcg/hour, Ghafoor says.

"These patches are not to be used in patients who have never been on opioids prior to coming into the hospital," she adds. "If you put a patch on someone who isn't tolerant to opioids, the patient could become over-sedated and have life-threatening respiratory depression."

Sometimes a patient will come out of surgery and a patch will be prescribed without anyone having full knowledge of the patient's past opioid use, she notes.

"These situations come up, and the pharmacist has to talk with the physician about the safety issues regarding this, Ghafoor says.

• **Educate patients and plan for follow-up monitoring:** Pharmacists could educate patients before they're discharged through short visits that alert the patient about changes in their medications, Ghafoor suggests.

"You have patients who are on anticoagulation medications, and you have to tell them that you know they have acute chronic pain, but they can't take ibuprofen because it can increase their bleeding time," she adds. "We try to give patients a little bit of advice on medications that could become problematic."

Also, patients need some kind of medication follow-up at the outpatient site, Ghafoor says.

"We've been trying to develop some outpatient collaboration with primary care pain management clinics," she says.

Among the patients who will benefit from follow-up monitoring are those with pain as a primary problem and who are on a terminal progression with their disease, but they're not ready for hospice care, Ghafoor says.

"Those are the ones where I'll work with nurses on an outpatient model," she explains. "A lot of these patients will leave the hospital to go back home, but they want a connection with the clinician in the hospital because they won't have access to a lot of services outside the hospital." ■

Experts discuss pain management issues

Troubleshooting is big part of job

Hospitals that have pain management teams with pharmacists on board benefit from having a medication specialist help improve safety and improve patient outcomes, experts say.

It's a complex issue, says **David Craig**, PharmD, BCPS, clinical pharmacy specialist and residency director in psychosocial, palliative care, and integrative medicine at Moffitt Cancer Center in Tampa, FL.

"How do you control and provide safety for patients with these medicines that can cause harm?" Craig says. "But on the other hand, how do you better manage patients with all types of pain?"

A start would be to hire a pharmacist pain specialist or at least include a pharmacist on a pain management team, says **Lee Kral**, PharmD, BCPS, a clinical pharmacy specialist in pain medicine at the University of Iowa Hospitals and Clinics in Iowa City, IA.

"A lot of hospitals don't have the resources to have someone do pain management full-time," Kral notes. "We're often called upon as pharmacy team members to come up with unique ways to treat pain."

Kral became interested in pain management after practicing in primary care and neurology.

"Most of my day is seeing chronic, noncancer pain patients in the clinic setting, and I also work with the palliative care team at the hospital," Kral says. "We see some cancer patients and some post-operation patients.

"My job here is 80% troubleshooting," Kral says.

For example, Kral had a patient a couple of

Key Points

- Pharmacists on a pain team help better control pain and symptoms.
- With training, pharmacists can help patients adjust their expectations.
- Pharmacists can come up with novel solutions to pain problems.

years ago who had been prescribed a medication that was contraindicated in patients with liver insufficiency.

"I looked at this patient and saw that the person had hepatitis and was having some liver insufficiency," Kral recalls.

So she helped get the patient's prescription changed.

"If pharmacists are consulted for pain management in a patient with congestive heart failure, then we'd be reluctant to prescribe an anti-inflammatory because it might cause fluid build-up," Kral says.

In another case, a woman with gynecological cancer and who had a toddler was unable to tolerate high doses of opioids because it left her sedated and constipated, Kral recalls.

"We wanted to make her comfortable and mobile with a better quality of life," Kral says. "So we utilized an intrathecal pump to deliver pain medication to the central nervous system to control her pain."

By sending opioids directly to her cerebrospinal fluid, the treatment dose was effective at a considerably smaller dose, and it did not impact the woman's ability to think, Kral says.

"Her bowel function got better, her pain improved, and she was doing great," she adds.

These are only a few examples of how a pharmacist can help improve safety.

But pharmacists also can help patients achieve better pain control by coming up with pharmaceutical solutions, Kral says.

"We had a patient referred to us for refractory hemorrhoidal pain," Kral says. "We couldn't give the patient opioids because that would cause constipation and make passage more difficult and painful, making the hemorrhoids worse."

So when the patient was referred to the pain management team, Kral suggested that they try using a topical medication.

"Opioid receptors are expressed in areas of inflammation, so we could use a topical treatment and add morphine to that to see if we could utilize those opioid receptors that are expressed in the hemorrhoidal inflammatory area," Kral says. "So I called up a compounding pharmacy that's outside the hospital, and the pharmacy made a formulation."

The patient used the topical treatment, and when he returned for a visit six weeks later he reported no pain, Kral adds.

Hospital pharmacists also can assist with the complex psychosocial and regulatory issues related to pain management.

"We need to have more clues and more information about patients and their disease states to do a better job of pain control," Craig says. "Both patients with chronic pain from cancer and noncancer need better pain control."

The challenge is helping patients with severe, noncancer pain achieve optimal pain control within regulatory boundaries, he notes.

Regulations limit the dosage patients can receive, although there are some exceptions for patients with cancer pain, Craig adds.

"Everyone's greatest concerns are diversion and abuse," Kral says.

"The medication isn't available to patients usually, and the drugs are locked up with a controlled substances monitoring sheet," Kral says.

"So that aspect [of potential abuse] doesn't concern us as much as having a patient bring in a substance to the hospital or having a family member or friend bring it in."

The patient might have been abusing pain medications at home and is doctoring his hospital regimen with the home-based products, she adds.

Or another problem is staff diversion, Kral says.

"That's a bigger issue," she notes.

Although the security procedures work well, there is an opportunity in a night shift for a hospital employee to sign out a pain medication for a patient and then not give it to the patient, although it's documented that the patient received it, Kral explains.

"That kind of problem is hard to track down," she adds.

Another reason why pain management is so complex is because of the psychosocial aspect to pain.

"Pain is very subjective," Kral says. "Multiple factors go into how a patient perceives pain, and sometimes there isn't any medication that's going to relieve their pain if the pain is contributed to by a concurrent depression or by social stressors."

This is why pain teams need a pain psychologist who will help patients with chronic pain cope with it and deal with it.

Also, pharmacy pain specialists need to develop skills for dealing with patients' psychosocial issues.

"I tell patients, and they're not very happy when I tell them this, but my personal professional recipe for pain management is 10% interventional, 10% medication, 20% rehabilitative, 20% cognitive therapy, and 40% the patient's motivation and drive," Kral says.

Patients with chronic pain often want a magic pill that will make all of their problems go away, Kral says.

"So it's important to be realistic and pragmatic up front, telling them that we'd like to try this combination of medications for these reasons," Kral explains.

A pharmacist specializing in pain management could educate patients about how the medication will do its part, but the patient also will need to continue improving with his rehabilitation and develop realistic expectations, she says.

"They have to be invested in their own recovery, and many times it's up to me to very gently and supportively say that I don't think whatever medication we give them will be a magic pill, but we're optimistic it will blunt the pain," Kral adds.

"We may not be able to get rid of the pain 100%, but we can help patients get back to a level of functioning that allows them to have their life back," Kral says. "So they can do their jobs and be an active member of their family and friendship circle." ■

Communication with home care staff part of transition

Problems may arise during transition

The transition from hospital to home health can be a rocky one, which is why hospital discharge planners need to make communication with home health staff a priority, experts say.

"Sometimes it doesn't seem as if anyone has been allowed the time needed to prepare for discharge," notes **Lin J. Drury**, PhD, RN, an associate professor in the Lienhard School of Nursing at Pace University in New York. Drury recently published a paper on what gets lost between the discharge plan and the real world when hospital patients are transferred to home care.[1]

"It seems the amount of time for preparing for discharges is decreasing," Drury says.

This has become a more urgent problem as increasing numbers of hospital patients need home health care after their discharge, according to data from the Agency for Healthcare Research and Quality (AHRQ).

AHRQ released a summary in October 2008, showing how the rate of patients discharged from hospitals who still needed home health care increased 53% between 1997 and 2006. The same summary, which can be found at the web site, www.hcup-us.ahrq.gov/reports/factsandfigures/HAR_2006.pdf, noted a 30% increase in the rate of patients discharged to nursing homes or rehabilitation facilities during the same period.

Another new study shows that physicians are not referring high-risk patients to home care and other post-acute services as frequently as is needed.

"I did an analysis of these patients to look at their medical characteristics and found that these people were pretty darn sick and had lots of needs, and yet they did not get post-acute referrals," says **Kathryn Bowles**, PhD, RN, FAAN, an

associate professor at NewCourtland Center for Health and Transitions in Philadelphia.

In all, 56% of patients who had medical needs that experts agreed indicated a post-acute care referral did not receive one, Bowles adds.

From a home care professional's perspective, inefficient communication between the hospital and home care agency can be a problem, says **Mary Kim**, LMSW, a clinical liaison at Attentive-Primecare Home Health in Plano, TX.

"I used to be a social worker in the hospital and have knowledge of both sides," Kim says. "It's a disadvantage to patients and family if the home care agency does not lay their eyes on patients while they're still in the hospital."

Often, the communication between the two consists of the home care agency asking the hospital to fax over some information about the patient, Kim notes.

"But what you see on paper is not the same as actually seeing the patient," Kim says. "And that obviously can be a big barrier to the patient care."

Attentive-Primecare Home Health encourages hospitals to let Kim and other staff meet the patient to speak with him or her and evaluate the patient's needs, Kim says.

"We try to get an idea of what their expectations are and to see if there are any issues that need to be dealt with prior to the patient being discharged home," Kim says. "The only way we can do this is to literally lay our eyes on them and talk to them."

It's becoming increasingly rare for hospitals and home care agencies to communicate well during a patient's transition in care, Drury says.

"It seems that the number of clients each discharge planner has to handle is so much greater now that they don't have much time do anything more than say, 'Do you have a space for this guy or not?'" Drury explains.

Institutions need to recognize the importance of the discharge planner's role and give them enough time to do what they need to do to take care of people when they're discharged, because the alternative is to have patients who return to the hospital in a medical crisis, she says.

"Institutions are going to need to invest in allowing somebody to really do the discharge planning that's required," Drury says.

Since the typical hospital patient now is older and more frail than a decade ago, patients also are exceedingly ill at the point of discharge, Drury says.

"And the family is completely overwhelmed," she adds. "So unless the discharge planner has time to work with the family, all of the things listed on the discharge planning sheet do not have a chance of being followed."

For instance, during the stressful period of a patient being discharged from the hospital, it's often true that no one thinks about how the patient will obtain his or her medications, Drury says.

"They'll arrive home and realize they don't have any of their medicines," she explains. "Or they'll think they had a bottle of pills at home, but they're not what they thought they were, or they have the wrong dose."

Once upon a time, there might even have been a person connected with a health care system who would visit the client's home before discharge to see what it is like, but that role disappeared over 10 years ago, Drury says.

Instead, problems related to a patient's home environment are dealt with when they crop up as an emergency situation. For example, Drury knew a case where a patient was brought home on a stretcher and carried up three flights of stairs to his bedroom, but no one had considered that the house's only bathroom was on the second floor.

From the home care agency's perspective, staff often arrive at a new client's home only to find that the patient doesn't have the proper medication and equipment, Drury says.

"Or even if they have the right things in place, they don't know what to do with them," Drury says. "They thought they understood things before they left the hospital, but they're not able to implement the instructions."

COMING IN FUTURE MONTHS

- Do hospitals need a 'bailout' to maintain quality of care?
- Joint Commission 'Sentinel Event Alert' cautions hospitals about implementing health IT
- Five hospitals to participate in CMS bundled payment demonstration

Also, patients and their caregivers often assume that someone else is going to help them with immediate care, and no one is waiting for them when they arrive home, she adds.

"The home health aide won't be with them for a majority of the time they're home recovering, and for the rest of those hours, the family is completely stumped," Drury says. "Home care services are time-limited, and you must be demonstrating definite progress in order to continue to obtain that care."

This is a Catch-22, because the kinds of patients who typically receive home care services are chronically ill, and they often will get worse when they return home, she says.

"And there's not a lot of reimbursement that will allow for continuing care to somebody who is not going to get better," Drury explains. "Your typical Medicare reimbursement for home care after a hospital stay is very, very limited and very time-sensitive, so people often do not receive the full extent of services they would need to get better."

Not only do discharge planners need to work harder to anticipate problems and prevent them during the transition to home, they need to find home care agencies that are willing to go the extra mile.

Kim recently worked with an elderly woman and her caregiver daughter who were very anxious about being transitioned to home care because of the patient's history of having falls in the home.

"The daughter had been making many excuses to delay the discharge, so the hospital's social worker told me that this was a very difficult family," Kim recalls. "The social worker said they needed a home care agency that would connect with the patient and caregiver and take care of them."

Kim spoke with the daughter who had valid concerns about her mother's safety at home.

"We said we'd go to the home and do a safety evaluation, even though Medicare doesn't pay for those now," Kim says. "We had a physical therapist evaluate the patient at home, and we showed the family that they were going to be okay."

The home care staff outlined the steps the family had to take to ensure the patient's safety and agreed on a plan that made each person involved accountable, she adds.

"We would not have known the extent of the family's anxiety if the social worker hadn't given me a heads up about the patient's fears," Kim notes. "This is the collaboration that is needed between the hospital and the home care agency so that we can better serve patients and their families."

Reference

1. Drury LJ. *J Contin Educ Nurs*. 2008;39(5):198-199. ■